ОБРАЗОВАНИЕ И САМОРАЗВИТИЕ
EDUCATION AND SELF DEVELOPMENT

Том 15, № 3, 2020
Volume 15, №3, 2020

Казань – Kazan, 2020

Александр Дж. Ромишовски
Доцент Школы Образования,
Сиракузский университет, США
ajromisz@syr.edu

Alexander Romiszowski
Adjunct Associate Professor, School
of Education, Syracuse University, USA
ajromisz@syr.edu

Ибрагимова Елена Николаевна
Кандидат психологических наук,
доцент кафедры психологии личности
Института психологии и образования
Казанского (Приволжского)
федерального университета
esandakova@mail.ru

Ibragimova Elena Nikolaevna
Candidate of psychological Sciences,
associate Professor of Department
of personality psychology, Institute
of psychology and education Kazan
(Volga) Federal University

Дина Бирман
Доктор наук, Доцент Факультета
педагогических и психологических наук,
Университет Майами, США.
d.birman@miami.edu

Dina Birman
PhD, Associate Professor of the Educational
and Psychological Studies Department,
University of Miami, USA
d.birman@miami.edu

Рут Гэннон-Кук
Доцент, Школа Нового Обучения
(Университет Де Поля).
Редактор Журнала Онлайн
Педагогов (Journal of Educators Online)
rgannonc@depaul.edu

Ruth Gannon-Cook
Ed.D., Associate Professor, the School
for New Learning (DePaul University).
Editor of the Journal of Educators Online.
Chicago, the USA.

Лиу Мейфенг
Профессор, Школа Образовательных
Технологий (Пекинский Педагогический
Университет).
mfliu@bnu.edu.cn

Liu Meifeng
Professor, School of Educational
Technology (Beijing Normal University).
Beijing, China.

Сом Найду
Профессор Университета Монаша,
Мельбурн (Виктория), Австралия
sommnaidu@gmail.com

Som Naidu
PhD, D.Litt (Honoris Causa), Monash
University, Parkville, Victoria, Australia

Йоханесс Кронье
Декан факультета информатики
и дизайна Технологического университета
полуострова Кейп, Кейптаун, (ЮАР)
johannes.cronje@gmail.com

Johannes Cronje
Dean of Informatics & Design at Cape
Peninsula University of Technology.
Cape Town, South Africa

Мария Петровна Жигалова
Доктор педагогических наук,
профессор Брестского государственного
университета (Республика Беларусь)
zhygalova@mail.ru

Maria Zhigalova
Doctor of Pedagogics, Professor,
Brest State University (Belarus)

Андреа Истенич Старчич
Доктор философских наук, профессор
дидактики и заместитель декана
университета Приморска и Университета
Любляны (Словения)
andreja.starcic@pef.upr.si

Andreja Istenic Starcic
Doctor of Philosophy, Professor of didactics
and Vice Dean of University of Primorska,
University of Ljubljana (Slovenia)

Мария Кристина Попа
Доктор педагогических наук, доцент
кафедры педагогики факультета
социальных и гуманитарных наук
Университета имени Лучиана Блага
в Сибиу. Президент ассоциации
молодых педагогов Сибиу
maria_cristina_popa@yahoo.ca

Maria Cristina Popa
Doctor of Educational Sciences, assistant
lecturer at the Teacher Training Department
of the Faculty of Social and Human Sciences,
Lucian Blaga University of Sibiu.
President of Young Pedagogues Association
of Sibiu (https://www.atps.ro/)

Мустафина Джамиля Насыховна
Заместитель главного редактора, доктор филологических наук, профессор, заведующий кафедрой иностранных языков Набережночелнинского института Казанского федерального университета
muss_jane@mail.ru   +7 843 233 75 12

Jamila Mustafina
Journal's Deputy Editor in Chief, Doctor of Philology, professor, Head of Foreign Languages Department, Naberezhnochelninsky Institute, Kazan Federal University (Kazan, Russia)

Мурат Аширович Чошанов
Доктор педагогических наук, профессор кафедры высшей математики и кафедры подготовки учителей Техасского университета в Эль Пасо (США)
mouratt@utep.edu

Murat Tchoshanov
Doctor of Education (Ph.D.), professor of the Department of Advanced Mathematics and Teacher Education Department at the University of Texas at El Paso (USA)

Булент Оздемир
Доктор наук, Профессор, Декан педагогического факультета Университета Балыкесир, Турция
BO@fabplace.com

Bülent Özdemir
Doctor, Professor, Dean of Pedagogical Department at Balıkesir University, Turkey
BO@fabplace.com

Леонид Михайлович Попов
Доктор психологических наук, профессор, заведующий кафедрой психологии личности Института психологии и образования Казанского федерального университета (Казань, Россия)
leonid.popov@inbox.ru

Leonid Popov
Doctor of Psychology, professor, Head of Psychology of Personality Department, Institute of Psychology and Education, Kazan Federal University (Kazan, Russia)

Александр Октябринович Прохоров
Доктор психологических наук, профессор, заведующий кафедрой общей психологи Института психологии и образования Казанского федерального университета (Казань, Россия)
alprokhor1011@gmail.com

Aleksander Prokhorov
Doctor of Psychology, professor, Head of the Department of General Psychology, Institute of Psychology and Education, Kazan Federal University (Kazan, Russia)

Вера Петровна Зелеева
Кандидат педагогических наук, доцент кафедры педагогики Института психологии и образования Казанского федерального университета (Казань, Россия)
zeleewy@yandex.ru

Vera Zeleeva
Candidate of Pedagogy, associate professor of the Department of Pedagogics, Institute of Psychology and Education, Kazan Federal University (Kazan, Russia)

Елена Владимировна Асафова
Кандидат биологических наук, доцент кафедры педагогики высшей школы Института психологии и образования Казанского федерального университета (Казань, Россия)
elasaf@mail.ru

Elena Asafova
Candidate of Biology, associate professor of the Department of Higher School Pedagogy, Institute of Psychology and Education, Kazan Federal University (Kazan, Russia)

Эльвира Габдельбаровна Галимова
Выпускающий редактор, старший преподаватель кафедры педагогики высшей школы Института психологии и образования Казанского федерального университета
elyagalimowa@yandex.ru   +7 843 2213475

Elvira Galimova
Commissioning editor, Senior lecturer of the Department of Higher School Pedagogy, Institute of Psychology and Education, Kazan Federal University (Kazan, Russia)

Подготовка учителей в классическом университете: кейс десятилетней современной истории КФУ

Ильшат Р. Гафуров

Казанский федеральный университет, Казань, Россия
E-mail: public.mail@kpfu.ru
ORCID: https://orcid.org/0000-0001-7744-2067

В 2020 году Казанский университет получил первую значимую оценку своих преобразований в области подготовки учителей, осуществлявшуюся в течение нескольких последних лет. Согласно версии Международного рейтингового агентства Times Higher Education КФУ вошёл в число 100 лучших университетов мира в предметной области «Образование». На сегодняшний день это лучший показатель не только в России, но и в странах Восточной Европы и СНГ. Это является подтверждением правильности стратегии университета в области педагогического образования, которую последовательно внедряли в последние десять лет. 2020 год является особенным в истории университета, потому что подводит итоги 10-летней трансформации учебного заведения в статусе федерального университета, созданного Указом Президента Российской Федерации. На сегодняшний день КФУ входит в число десяти крупнейших университетов страны, здесь обучается порядка 50 тысяч студентов и аспирантов по большинству направлений подготовки высшего образования современной России. Университет участвует во многих государственных научных и образовательных программах, в том числе в государственном проекте, направленном на повышение международной конкурентоспособности ведущих российских высших учебных заведений.

Педагогическое образование является одним из важнейших направлений деятельности КФУ. С 2015 году оно определяется как один из приоритетов развития университета. Казанский университет стал одним из ведущих мировых мультикультурных и мультилингвальных научно-образовательных центров подготовки высококвалифицированных педагогических кадров для всех уровней образования: дошкольного, школьного, высшего и послевузовского. На сегодняшний день только два российских вуза – Московский и Казанский университеты – представлены в двух ведущих международных рейтингах QS и Times Higher Education.

Российские и зарубежные эксперты рассматривают Казанский университет в качестве одного из международных лидеров в области педагогического образования (Menter, Valeeva, & Kalimullin, 2017). Это связано, в частности, с тем, что университету удалось создать сильную команду из авторитетных международных и отечественных исследователей, объединённых совместными проектами.

Одним из таких проектов является традиционный Международный форум по педагогическому образованию (IFTE) (http://ifte.kpfu.ru/ru/glavnaya/). В 2020 году в нем приняли участие более 860 ученых из 275 научных и образовательных организаций, в том числе из 79 зарубежных университетов, в частности, из Великобритании, США, Ирландии, Австралии. Партнерами Форума выступили Российская академия образования и ряд международных научных ассоциаций. Компания Microsoft поддержала IFTE-2020. За 10 дней на 136 виртуальных сайтах было представлено 536 работ, осветивших лучший опыт подготовки преподавателей в России и мире. Организаторам удалось на высоком уровне провести первый виртуальный

форум по педагогическому образованию в России. Избранные материалы Форума-2020 представлены в данном специальном выпуске журнала.

За свою более чем 200-летнюю историю Казанский университет пережил несколько реорганизаций, но ни одна из них не сравнима с масштабными изменениями последних десяти лет: объединение 7 независимых учебных заведений, медицинских клиник, научно-исследовательских центров, лицеев завершилось созданием университетского холдинга, каким сейчас является Казанский федеральный университет (Gafurov, Safiullin, & Elshin, 2017). Благодаря включению в его состав двух специализированных педагогических вузов КФУ стал одним из трех крупнейших центров подготовки учителей в стране.

Подчеркнем также, что Казанский университет является одним из старейших в России в этой сфере. С 1812 года в структуре Казанского императорского университета действовал Педагогический институт, который в течение длительного времени был практически единственным по подготовке учителей для значительной части территории страны к востоку от Москвы. Спустя два столетия Казань вновь заняла важное место в педагогическом образовании страны, прежде всего благодаря собственным подходам к реформированию образовательной системы России (Gafurov, 2013).

Включение Казанского университета в сферу педагогического образования было продиктовано, с одной стороны, проблемами специализированных вузов, а с другой – общемировыми трендами, связанными с участием университетов различного типа в подготовке учителей (Ellis & McNicholl, 2015; Elstad, 2010; Fancourt, Edwards, & Menter, 2015; Beauchamp & Clarke, 2016; Menter & Hulme, 2011). Все это сделало актуальной задачу подготовки высококвалифицированных кадров для современной российской школы в академическом вузе.

Среди высших учебных заведений, реализующих программы подготовки учителей, Казанский федеральный университет – это особый феномен, который сформировался в течение нескольких последних лет. КФУ является первым классическим университетом в современной России, создавшим собственную модель педагогического образования, отличную от тех, что приняты в педагогических университетах и остаются неизменными на протяжении многих десятилетий (Kalimullin, 2014; Valeeva & Gafurov, 2017).

По оценкам российских и зарубежных экспертов, система педагогического образования КФУ демонстрирует пример успешной модернизации этой сферы, что может быть полезно и для других вузов.

Проанализировав приобретённый опыт, мы выявили две группы позитивных факторов. Первая группа включает те эффекты, которые возникли от объединения классического и педагогического университетов, что позволило закрыть многие болевые точки в системе подготовки учителей. Сильная материально-техническая, лабораторная и кадровая база университета позволила улучшить содержательную сторону педагогического образования, а традиционные преимущества педагогических вузов – глубокая методическая подготовка и воспитательная работа, что в целом можно назвать педагогической атмосферой, – ориентировали профессиональную подготовку студентов на практическую деятельность. Так модель педагогического образования в КФУ включила в себя всё самое лучшее и необходимое для качественной реализации образовательных программ.

Присоединение специализированных педагогических вузов к крупному многопрофильному университету позволило решить и многие экономические проблемы. Речь идет не только об инфраструктуре (состояние зданий, наличие современного оборудования, доступ к информационным ресурсам, качественные образова-

тельные и бытовые сервисы для студентов и др.), но и о конкурентной заработной плате, о возможностях привлечения высококвалифицированных преподавателей и ученых, талантливых молодых исследователей, об условиях для их профессионального совершенствования.

Все это позволило сделать нашу систему педагогического образования самой вариативной и разветвленной в стране. В настоящее время Казанский университет является одним из немногих российских университетов, имеющих все уровни подготовки учителей по всем дисциплинам современной школы. По программам педагогического образования в университете обучаются почти 10 тысяч студентов, что составляет 18 % всех студентов КФУ. Кроме того, более 10 тысяч практикующих учителей ежегодно проходят через программы повышения квалификации, что способствовало созданию реальной системы непрерывного педагогического образования.

Нами созданы три основные модели подготовки учителей. В филиале КФУ в городе Елабуга была сохранена традиционная модель подготовки учителей. Она предполагает наличие профильных факультетов (физико-математического, иностранных языков и др.), которые самостоятельно готовят учителей в той или иной области, но и вовлечены в общую систему КФУ благодаря возможностям использования его сервисов, ресурсов, а также академической мобильности. С 2011 года в Елабужский филиал были сделаны значительные финансовые вливания, направленные на повышение квалификации профессорско-преподавательского состава, привлечение перспективных исследователей, оснащение лабораторной базы, обустройство и приобретение современных учебных корпусов, общежитий и др. В результате повысилась экономическая стабильность учебного заведения, выросли научные показатели, средний балл поступивших по результатам ЕГЭ и популярность среди абитуриентов. Елабужский институт стал известен за рубежом, и сегодня порядка 40 % его студентов – иностранцы. Здесь формируется современный школьно-университетский комплекс, который включает в свою структуру общеобразовательную школу. Задача не только в совершенствовании образовательного и воспитательного процесса в этом среднем учебном заведении, но и в отработке технологии развития подобного типа школ.

В Казани – в главном кампусе – создана распределённая модель подготовки учителей. Каждый профильный институт КФУ стал узловым звеном работы с учителями в соответствующей предметной области. Погружение в предметную среду, когда будущие учителя физики (химии, математики и др.) готовятся вместе со студентами классических направлений подготовки, является важнейшим фактором получения предметных компетенций.

Знания по педагогическим, психологическим дисциплинам и технологиям обучения студенты оттачивают в Институте психологии и образования, являющемся координирующим ядром нашей системы подготовки учителей. Понимая значимость не только фундаментальной, но и методической подготовки будущего учителя, мы уделяем особое внимание методикам преподавания учебных дисциплин. Методическая подготовка осуществляется и в базовых институтах, и в Центре практических компетенций Института психологии и образования, где оборудованы новейшие школьные лаборатории и кабинеты по ряду дисциплин. Созданные по принципу модельных (в какой-то степени идеальных), они аккумулировали современное учебное оборудование, которое используется в современной школе.

На базе Института психологии и образования успешно апробирована еще одна новация – единый Центр педагогической магистратуры, объединивший большую часть магистерских программ по педагогическому образованию (обычно они при-

креплены к кафедрам). Это позволило нам не только устранить дублирование и провести оптимизацию, но и установить единый менеджмент, контроль качества и востребованности программ. Такой подход позволил значительно быстрее реагировать на потребности динамично меняющейся конъюнктуры рынка труда (Gafurov, Valeeva, Kalimullin, & Sakhieva, 2018).

В последние годы в КФУ активно формируется новая цифровая инфраструктура учебного процесса и исследований в сфере образования: открыт «Центр цифровых образовательных технологий EduTech», практически во всех институтах созданы аудитории проектирования цифровых образовательных сред, видеостудии разных типов, сформирован Институт передовых образовательных технологий, задающий тенденцию на дистанционное обучение и проектирование онлайн-курсов в рамках всего учебного заведения.

Развитие данной инфраструктуры обеспечивает условия для успешной работы исследовательских групп по тематикам, связанным с цифровизацией образования. Одновременно мы привлекаем крупнейших отечественных и зарубежных производителей программных и аппаратных решений в образовании к процессу подготовки и повышения квалификации учительских кадров. Показателем эффективности такой политики в этой области стал достаточно быстрый и эффективный переход на дистанционное обучение в марте 2020 года в условиях пандемии коронавируса. Часть наших образовательных программ к этому времени уже преподавалась в режиме смешанного обучения, поэтому и преподаватели, и студенты имели необходимые компетенции для участия в образовательном процессе в удаленном формате. Отрадно, что более 90 % наших студентов положительно оценили качество организации учебного процесса в дистанционном формате. Большинство из них сделали ставку на платформу Microsoft Teams. Мы намерены продолжить сотрудничество с этой компанией, для чего в ближайшее время предполагается создать Центр компетенции (центр превосходства) компании Microsoft, который возьмёт на себя функции администрирования, методического сопровождения, обучения и переподготовки преподавателей и методистов.

Для учащихся общеобразовательных школ в КФУ разработана база инновационных мультимедийных образовательных ресурсов по физике и система-конструктор учебных элементов «Учебная среда XXI+», которая широко используется для создания мультимедийных образовательных ресурсов. Для издательства «БИНОМ. Лаборатория знаний» был разработан мультимедийный учебник «Физика. 10 класс», к которому был открыт свободный доступ в период пандемии коронавируса. В процессе реализации – проекты по созданию интерактивных учебников по физике с 7 по 11 класс, по астрономии (базовый и углубленный уровни), а также мультимедийного ресурса «География из космоса».

Третья модель подготовки учителей – интегративная. Её реализация возможна только в условиях многопрофильного университета. Эта модель подразумевает наличие гибких учебных планов для бакалавров классических направлений подготовки с целью возможного перехода на обучение по педагогическим профилям после первого или второго года обучения. Дополнительно в рамках этой модели реализуются разнообразные программы профессиональной переподготовки для тех, кто обучался на классических профилях (физика, химия, биология и др.). Этот подход соответствует предложению Президента Российской Федерации Владимира Владимировича Путина, высказанного 15 января 2020 года в Послании к Федеральному собранию о предоставлении возможности студентам после второго курса выбирать новое направление или программу обучения.

Еще одним преимуществом развития педагогического образования в составе крупного университетского комплекса стало создание уникальной формы школьно-университетского партнерства. Помимо елабужского опыта, также и в Казани университет имеет два хорошо зарекомендовавших себя общеобразовательных лицея, с которыми сотрудничают преподаватели университета. Эти лицеи входят в ТОР-100 лучших российских школ. Они региональные лидеры по числу победителей олимпиад различных уровней. В этом году начинает работу детский сад для детей с расстройствами аутистического спектра, ориентированный в том числе и на активную исследовательскую деятельность не только педагогов и психологов, но и дефектологов, медиков, физиологов, генетиков, фармацевтов.

Все наши образовательные учреждения дошкольного, начального и среднего звена мы рассматриваем, с одной стороны, как высококачественную базу для практики студентов, а с другой – как площадку для исследовательской работы, которая может быть недостаточно представлена в традиционных педагогических университетах. В этой области мы активно сотрудничаем с ведущей в России научной организацией в области образования – Российской академией образования. В 2016 году она создала в нашем университете специализированный научно-исследовательский центр, который постоянно наращивает свой потенциал. Только в 2019 году в структуре Приволжского Регионального научного центра РАО были созданы три новые лаборатории: «Цифровые образовательные решения», «Когнитивные исследования в образовании», «Управление образованием». Подобная организационная структура позволила консолидировать ресурсы и тематически объединить проводимые в Казанском федеральном университете научные изыскания.

Мы осуществляем тесное взаимодействие с региональным Министерством образования и науки, являющимся основным работодателем для выпускников педагогических программ университета. Совместно с ним мы создали Координационный Совет по педагогическому образованию в Республике Татарстан.

Вторая группа благоприятных факторов, оказавших позитивное влияние на успешное развитие кейса КФУ в области педагогического образования – это ориентация педагогов КФУ на активное международное сотрудничество, изучение лучших практик ведущих зарубежных университетов. С этой целью в КФУ были созданы специальный ситуационно-аналитический центр и ряд научных лабораторий.

В 2015 году КФУ стал тем участником Проекта 5-100, который увидел в педагогическом образовании одну из своих главных социальных миссий, и подготовка учителей стала одним из приоритетов нашего университета. Это дало нам возможность сконцентрировать ресурсы и нарастить исследовательский потенциал. В 2019 году в 3 раза возросло финансирование наших исследований в сфере образования от крупнейших национальных научных фондов и частных компаний. Многие проекты ученых КФУ имеют междисциплинарный характер, объединяя исследователей из области педагогики, психологии, медицины и компьютерных технологий. Благодаря развитию экспертной репутации КФУ активизировались научные исследования и экспертизы по заказу частных организаций (Яндекс, МТС и др.).

КФУ фактически является единственным российским университетом, последовательно и масштабно представляющим российское педагогическое образование мировому научному сообществу. Мы участвуем в работе многих Международных ассоциаций по образованию, конференций, представляя лучший опыт подготовки учителей. Высокий уровень исследовательской деятельности казанских ученых получил позитивную оценку в международном образовательном сообществе. По таким ведущим критериям, как средневзвешенное цитирование, цитирование

каждой публикации, h-index (хай-индекс) цитирования, КФУ значительно превосходит все российские университеты и приближается к показателям референтных университетов Хельсинки, Рочестера и др. В Оксфордской энциклопедии «Oxford Research Encyclopedia of Education» опубликован раздел «Teacher Education in Russia», подготовленный профессорами КФУ Р. Валеевой и А. Калимуллиным (Valeeva & Kalimullin, 2019).

Международное продвижение КФУ в предметной области «Образование» сказалось на повышении конкурентоспособности программ по подготовке учителей. По итогам приемной кампании 2019 года направление обучения «Педагогическое образование» стало ещё более востребованным среди абитуриентов с высокими баллами ЕГЭ. Другим важным индикатором являются масштабы коммерческого набора, по которому наш университет стал общероссийским лидером в 2019 году.

В Казанском федеральном университете создана эффективная модель подготовки учителей, которая позволяет не только решать общие задачи, стоящие перед педагогическим образованием, но и создавать механизмы роста талантливой молодёжи. У сотрудников университета есть планы по дальнейшей модернизации этой сферы и по распространению приобретённого опыта, что крайне важно в условиях глобальных, национальных и региональных вызовов, стоящих перед системой школьного образования современной России.

Список литературы

Гафуров И. Р. Педагогическое образование в Казанском федеральном университете // Universum: Вестник Герценовского университета. – 2013. – №. 2. – С. 19-24.

Гафуров И. Р., Валеева Р.А., Калимуллин А.М., Сахиева Р.Г. Опыт апробации практико-ориентированной программы магистратуры по направлению подготовки «Образование и педагогические науки» (Педагог основного общего образования) // Психологическая наука и образование. – 2018. – Т. 23. – №. 1. – С. 25-37. doi: 10.17759/pse.2018230102

Гафуров, И. Р., Сафиуллин М.Р., Ельшин Л. А. Механизмы и направления развития высшего образования в системе инновационно-технологического развития национальной экономики. // Альма матер. – 2017. – №11. – С. 5-10.

Beauchamp G., Clarke L. Teacher education in times of change. – Policy Press, 2016.

Ellis V., McNicholl J. Transforming teacher education: Reconfiguring the academic work. – Bloomsbury Publishing, 2015.

Elstad E. University-based teacher education in the field of tension between the academic world and practical experience in school: a Norwegian case // European Journal of Teacher Education. – 2010. – Т. 33. – №. 4. – С. 361-374.

Fancourt N., Edwards A., Menter I. Reimagining a school–university partnership: The development of the Oxford education deanery narrative // Education Inquiry. – 2015. – Т. 6. – №. 3. – С. 353-373.

Kalimullin, A.M. Processes of reforming teacher training in modern Russia (experience of the Kazan federal university) // American Journal of Applied Sciences. – 2014. – 11(8). – 1365-1368. doi: 10.3844/ajassp.2014.1365.1368.

Menter I., Hulme M. Teacher education reform in Scotland: National and global influences // Journal of Education for Teaching. – 2011. – Т. 37. – №. 4. – С. 387-397.

Menter I., Valeeva R., Kalimullin A. A tale of two countries–forty years on: politics and teacher education in Russia and England // European Journal of Teacher Education. – 2017. – Т. 40. – №. 5. – С. 616-629.

Valeeva R. A., Gafurov I. R. Initial teacher education in Russia: connecting theory, practice and research //European Journal of Teacher Education. – 2017. – Т. 40. – №. 3. – С. 342-360.

Valeeva R., Kalimullin A. Teacher Education in Russia // Oxford Research Encyclopedia of Education. – 2019. doi: http://dx.doi.org/10.1093/acrefore/9780190264093.013.446 42-360.

References

Beauchamp, G., & Clarke, L. (2016). *Teacher education in times of change*. Bristol: Policy Press.

Ellis, V., & McNicholl, J. (2015). *Transforming teacher education: Reconfiguring the academic work*. London: Bloomsbury Academic Publishing Plc.

Elstad, E. (2010). University-based teacher education in the field of tension between the academic world and practical experience in school: a Norwegian case. *European Journal of Teacher Education*, *33*(4), 361-374.

Fancourt, N., Edwards, A., & Menter, I. (2015). Reimagining a school–university partnership: The development of the Oxford education deanery narrative. *Education Inquiry*, *6*(3), 353-373.

Gafurov, I. R. (2013). Teacher education in Kazan federal university. *Universum: Vestnik Gertsenovskogo universiteta - Universum: Bulletin of the Herzen University, 2*, 19-24.

Gafurov, I. R., Safiullin, M. R., & Elshin, L. A. (2017). Mechanisms and directions of higher education development in the context of innovational and technological development of national economy. *Alma mater, 11*, 5-10.

Gafurov, I. R., Valeeva, R. A., Kalimullin, A. M., & Sakhieva, R. G. (2018). Testing practice-oriented master's programme in "Education and Pedagogical Sciences" (Teacher of Basic General Education). *Psikhologicheskaya nauka i obrazovanie - Psychological Science and Education, 23*(5), 25-37. doi:10.17759/ pse.2018230102.

Kalimullin, A. M. (2014). Processes of reforming teacher training in modern Russia (Experience of the Kazan Federal University). *American Journal of Applied Sciences, 11*(8), 1365-1368. doi: 10.3844/ajassp.2014.1365.1368.

Menter, I., & Hulme, M. (2011). Teacher education reform in Scotland: National and global influences. *Journal of Education for Teaching*, *37*(4), 387-397.

Menter, I., Valeeva, R., & Kalimullin, A. (2017). A tale of two countries – forty years on: politics and teacher education in Russia and England. *European Journal of Teacher Education*, *40*(5), 616-629.

Valeeva, R. A., & Gafurov, I. R. (2017). Initial teacher education in Russia: connecting theory, practice and research. *European Journal of Teacher Education*, *40*(3), 342-360.

Valeeva, R., Kalimullin, A. (2019). Teacher Education in Russia. In *Oxford Research Encyclopedia of Education*. Ed. Jo Lampert. New York: Oxford University Press, doi: http://dx.doi.org/10.1093/ acrefore/9780190264093.013.446 42-360.

Teacher Training at Kazan Federal University: Ten Years of Modern History

Ilshat R. Gafurov

Kazan Federal University, Kazan, Russia
E-mail: public.mail@kpfu.ru
ORCID: https://orcid.org/0000-0001-7744-2067

In 2020, Kazan University received a notable token of recognition for its work in teacher education in the past five years. According to the *Times Higher Education*, our university is now among the top one hundred in the Education subject rankings. Currently, this is the best position among the universities of Russia, CIS, and Eastern Europe. This validates the strategy in teacher education that the university has been implementing over the past years. 2020 is also a special year because it marks ten years of our federal status – the status granted by an executive order of the President of Russia. Currently, KFU is among the ten largest Russian universities; we have about 50,000 students in the majority of the existing higher education specializations. The University collaborates in many scientific and educational programs, including a federal project for boosting the international competitiveness of Russian universities.

Teacher education is one of the most important parts of our activities. In 2015, we positioned it as one of the university's priorities, and we have been moving towards making Kazan University one of leading global multicultural and multilingual scientific and education centers for teacher training of all levels, including preschool, secondary school, tertiary and postgraduate education. That was our response to the challenges of a fast-changing world.

Thanks to this ambitious goal setting, productive efforts, and active cooperation, we have managed to increase our potential and international reputation in teacher education. Notably, only two Russian institutions – Moscow State University and Kazan Federal University – are represented in Education subject rankings in QS and Times Higher Education.

A number of Russian and international experts consider Kazan University to be one of the emerging global leaders in pedagogical education (Menter et al., 2017). This is a direct result of creating a strong team of renowned Russian and international researchers, both based in Kazan and at other institutions, and with whom we work on joint projects. One of these is the International Forum on Teacher Education (IFTE, 2020). In 2020, more than 860 scientists participated, representing 275 universities, scientific and educational organizations, 79 of whom were from abroad. Key reports were made by well-known international researchers from leading universities in Russia, the UK, USA, Ireland, Australia and other countries. The partners of the Forum were the Russian Academy of Education and a number of international scientific associations and it was supported by Microsoft. Over ten days, 536 papers on the best experiences in teacher training in Russia and the world were presented on 136 virtual sites. The Forum participants and organizers achieved a first virtual forum in the history of teacher education in Russia, of the highest quality.

In its 200 years of history, Kazan University has lived through several transformations, but none has been so large-scale as the one we have gone through in these past ten years. The

13

history of higher education in Russia has no precedent to this merger – seven independent higher education institutions, as well as medical centers, research centers, and secondary schools were united in a vast university holding – Kazan Federal University (Gafurov, Safiullin, Elshin, 2017). Thanks to a merger with two teacher education universities, we became one of the three largest teacher training centers in the nation. Interestingly, we are also one of the oldest in this regard. Since 1812, Imperial Kazan University included a pedagogical institute, which for a long time was basically the only such institution on the vast Russian territory to the east of Moscow.

Two centuries later, we are once again a sizable force in the Russian pedagogical education, mostly due to creating our own organizational and content approaches to teacher training aimed at solving pertinent tasks of educational reform in Russia (Gafurov, 2013).

This return to teacher education was caused by, on one side, problems of the traditional specialized university model, and on the other side, by global trends of teacher education at various universities (Ellis & McNicholl, 2015; Elstad, 2010; Fancourt, Edwards, Menter, 2015; Beauchamp, 2015; Menter & Hulme, 2011). All this made the objective of teacher training more interesting.

Among the types of teacher education institutions, Kazan Federal University stands as a unique phenomenon, one that has been gradually taking shape in the past few years. KFU was the first classical university in Russia to propose its own teacher education model, different from the one offered by specialized pedagogical universities (which remained basically unchanged through most of the 20th century) (Kalimullin, 2014; Valeeva & Gafurov, 2017).

According to Russian and international experts, KFU's teacher education system is a successful local example of modernization. We hope that our experience can be of use to other Russian universities.

While analyzing our work, we have found two groups of factors contributing to the formation of our system. The first group unites synergistic effects of the strong suits of a federal university and a pedagogical university, which helped alleviate some of the problems of the existing teacher training system. Here, I would like to draw your attention to the technological infrastructure, our labs, and our staff, all of which contributed to increasing the fundamental nature of pedagogical education. That was organically supplemented by the traditional advantages of pedagogical institutions – professional targeting, deep methodological training, preparedness for instructional work, - which, taken in total, are the pedagogical atmosphere necessary to educate future teachers. In our model, we tried to incorporate everything of the best and most necessary for quality education.

Merging pedagogical university with a multidisciplinary university also helped solve their financial problems, which, if we are being honest, were quite serious for this category of higher education institutions in Russia. I am not only talking about infrastructure (such as building, access to information resources, educational and everyday services for students, etc.), but also about competitive remuneration, opportunities to attract top talent, and conditions for professional growth.

All this contributed to making our pedagogical education the most variable and the most diverse in the country. Currently, Kazan University is one the few Russian universities preparing teachers in all the levels of higher education and in all the subjects of the standard secondary school curriculum. In total, we have 10,000 people enrolled in teacher education programs, amounting to 18% of the total student body. Furthermore, over 10,000 practicing teachers receive advanced training at our university every year, which contributes to establishing a functioning system of continuous pedagogical education.

We have implemented three different teacher education models. In our Yelabuga Institute, we preserved the traditional model of pedagogical training. This means that we have subject-oriented faculties (such as physics and mathematics, foreign languages, etc.), which prepare teachers to work in this or that subject area. The Yelabuga branch is fully integrated in the general teacher education system at the university, using all of its services, resources, and academic mobility. This is where I started my teaching and research career in the 1980s as a teacher of physics at what was then an autonomous pedagogical institute. That is why I am especially pleased to see how this institution has reshaped itself. Since 2011, we have made sizable investments in the Yelabuga Institute to improve the professional skills of employees, attract research talent, refurbish the labs, renovate and acquire new facilities and dormitories. As a result, its economics sustainability has grown, as well as its research output, entrance exam averages and popularity among enrollees. Yelabuga Institute has become internationally recognized, and now 40% of its students come from overseas. We are currently incorporating a secondary school into its structure. Our objective is not only to improve educational and instructional processes in that secondary school, but also to streamline development technologies for such schools, by which I mean those which show below average results and which, unfortunately, can be found in any city and in any country.

At our central campus in Kazan, we established a new distributed model of teacher education. Every specialized institute has become a focal point for teacher training in its own subject area. We think that future teachers can receive better professional education if they spend a bulk of their time with students of respective subject areas (such as chemistry, mathematics, and so on).

Then, the students hone their pedagogical and psychological knowledge at the Institute of Psychology and Education, which serves as the coordinating center for teacher training. Understanding the importance of both fundamental and methodological training, we pay special attention to techniques of subject teaching. These are learned, both at specialized institute and the Center for Practical Competences of the Institute of Psychology and Education, which is equipped with model classrooms and laboratories in a number of secondary school subjects. These model classrooms comprise the most advanced equipment currently used by the best Russian schools.

At the Institute of Psychology and Education, we have successfully tested another innovation – the Center for Pedagogical Master Studies, which unites the majority of postgraduate programs in teaching. Usually, these programs are not assigned to specific departments at universities. This helped us eliminate overlap and optimize our structure, as well as established unified management and quality control and increase the demand for programs. Furthermore, this approach enables us to be more adaptable to the changing conditions of the job market (Gafurov, Valeeva, Kalimullin, Sahieva, 2018).

Lately, we have been steadily shaping our digital infrastructure for education and research in teacher training. Kazan Federal University now has EduTech (Center for Digital Education Technology). Almost all institutes have their own digital planning rooms and video recording facilities. The University also established the Institute of Advanced Educational Technology tasked with determining the ideology of distance learning and planning online courses across the whole university. This infrastructure provides a backdrop for our groups working in digital transformation of education. Simultaneously, we attract Russian and overseas suppliers of software and hardware to assist in the process of teacher training. As a result of our productive policies in digitization, we experienced a relatively seamless shift to distance learning in March 2020 amid the coronavirus pandemic. Part of our programs were already taught online and offline, so students and educators had the necessary skills to move to distance learning. Notably, 90% of our

students gave positive feedback about distance education. The majority of classes use Microsoft Teams. We plan to continue our cooperation with this software powerhouse and to open the Microsoft Center of Excellence at our university.

For secondary schools, KFU is offering a multimedia database in physics and a course construction tool called "Educational Environment 21+", one that is widely used to create multimedia educational content. For the BINOM Publishing House, we completed a multimedia textbook in physics for 10th grade, which is freely available for the duration of the anti-pandemic measures. We are currently working on interactive physics textbooks for grades seven through eleven, an astronomy textbook (general and advanced courses), and a multimedia resource called Geography from Space.

Finally, the third model of teacher training is what we call an integrative model. This is only really feasible in a multidisciplinary university. The model enables sophomores or juniors of classical subject majors to shift to teacher education if they so choose. Additionally, within this model we implement various programs of professional retraining for those who received research-oriented instruction (in physics, chemistry, biology, etc.). This approach is in line with what President Vladimir Putin said in his Address to the Federal Assembly on 15th January 2020, namely, the need to provide opportunities for students to change their major before the start of junior year.

Another advantage of developing teacher education at a large university is the emergence of a unique type of school-university partnerships. In Kazan, the university already has two high-quality in-house secondary schools, whose employees are a part of the university faculty. Both of these lyceums are among the top one hundred secondary schools in Russia. They are consistently leading the region in the number of winners in contests at various levels. And their employees are real mentors for the pupils. Also, this year we are going to launch a kindergarten for children with autism spectrum disorders. This kindergarten will be heavily research-oriented. We plan to involve not only our teachers, psychologists, defectologists, but also physicians, physiologists, geneticists, and pharmacists. All our preschool and secondary education entities are, on one hand, wonderful practice platforms for our students, and on the other hand, bases for research activities. This contributes to the research focus of teacher education, something that has historically been lacking at specialized pedagogical universities. In that, we have a deep partnership with a leading research organization in Russia – the Russian Academy of Education. In 2016, the Academy established its research facility at our university, and it has been growing since then. In 2019 alone, the Volga Regional Center of the Russian Academy of Education saw the opening of three new laboratories – Digital Educational Solutions, Cognitive Research in Education, and Educational Management. Such a structure allows us to consolidate resources on the most important topics of research at the University.

We are in close cooperation with the Ministry of Education and Science of Tatarstan – the primary employer of our graduates in teacher training. Together with the Ministry, we founded the Coordination Council on Pedagogical Education in the Republic of Tatarstan.

The second group of favorable factors contributing to the development of this area at Kazan University is the orientation of our researchers towards wide international cooperation and best practices of leading international universities. To boost this activity, we established the Situation Analysis Center and a number of labs.

In 2015, we became one of the few Project 5-100 participants with a focus on pedagogical education. As a consequence, teacher training, as well as medical training, has become one of our development priorities. This helped us concentrate resources and increase our research potential year on year. In 2019, we saw a three-fold growth in research funding from national foundations and private clients. Many of our projects

are interdisciplinary in nature and unite pedagogy, psychology, medicine, and computer science. Our expert reputation helped us continue and increase research for large companies, such as Yandex, MTS, and others.

Kazan Federal University is a rare institution representing Russian teacher education to the global community. We are members of a number of international educational associations. During these past years, Kazan University has become the most visible, and sometimes the only, representative of Russia at major international conferences, spreading information about teacher education expertise in the country. Our high research output has received positive feedback from the international community. In weighted citations, total citations, H-indices we are significantly ahead of other Russian universities and are closing in on our reference institutions – Helsinki, Rochester, and some others. A growing trend of 2019 is our participation in monographs published by leading international publishing houses. For example, the Oxford Encyclopedia of Teacher Education now has a chapter on teacher education in Russia, co-written by our professors Aydar Kalimullin and Roza Valeeva (Valeeva & Kalimullin, 2019).

International recognition in Education subject rankings has increased the competitiveness of our teacher education programs. In 2019, we saw a significant growth of interest in teacher education from highly-ranked secondary school graduates. Moreover, KFU also became the national leader in enrolment to paid programs in teacher education in that same year.

Thus, despite all the difficulties, we have managed to create an effective model of teacher training at Kazan Federal University. Not only does it facilitate solutions to a number of problems facing teacher education, but also creates the mechanisms to foster young talent who then continue their studies at our university and other universities across the country. That is why we are keenly interested in further modernizing this sphere and hope that our experience will be in demand on a national scale. Large university complexes can make meaningful contributions to quantitative and qualitative improvements of teacher training. I must reiterate that this is very important in light of global, national and regional challenges facing contemporary school education in Russia.

References

Beauchamp, G., & Clarke, L. (2016). *Teacher education in times of change*. Bristol: Policy Press.

Ellis, V., & McNicholl, J. (2015). *Transforming teacher education: Reconfiguring the academic work*. London: Bloomsbury Academic Publishing Plc.

Elstad, E. (2010). University-based teacher education in the field of tension between the academic world and practical experience in school: a Norwegian case. *European Journal of Teacher Education*, *33*(4), 361-374.

Fancourt, N., Edwards, A., & Menter, I. (2015). Reimagining a school–university partnership: The development of the Oxford education deanery narrative. *Education Inquiry*, *6*(3), 353-373.

Gafurov, I. R. (2013). Teacher education in Kazan federal university. *Universum: Vestnik Gertsenovskogo universiteta - Universum: Bulletin of the Herzen University, 2*, 19-24.

Gafurov, I. R., Safiullin, M. R., & Elshin, L. A. (2017). Mechanisms and directions of higher education development in the context of innovational and technological development of national economy. *Alma mater, 11*, 5-10.

Gafurov, I. R., Valeeva, R. A., Kalimullin, A. M., & Sakhieva, R. G. (2018). Testing practice-oriented master's programme in "Education and Pedagogical Sciences" (Teacher of Basic General Education). *Psikhologicheskaya nauka i obrazovanie - Psychological Science and Education, 23*(5), 25-37. doi:10.17759/ pse.2018230102.

Kalimullin, A. M. (2014). Processes of reforming teacher training in modern Russia (Experience of the Kazan Federal University). *American Journal of Applied Sciences, 11*(8), 1365-1368. doi: 10.3844/ajassp.2014.1365.1368.

Menter, I., & Hulme, M. (2011). Teacher education reform in Scotland: National and global influences. *Journal of Education for Teaching*, *37*(4), 387-397.

Menter, I., Valeeva, R., & Kalimullin, A. (2017). A tale of two countries – forty years on: politics and teacher education in Russia and England. *European Journal of Teacher Education*, *40*(5), 616-629.

Valeeva, R. A., & Gafurov, I. R. (2017). Initial teacher education in Russia: connecting theory, practice and research. *European Journal of Teacher Education*, *40*(3), 342-360.

Valeeva, R., Kalimullin, A. (2019). Teacher Education in Russia. In *Oxford Research Encyclopedia of Education*. Ed. Jo Lampert. New York: Oxford University Press, doi: http://dx.doi.org/10.1093/acrefore/9780190264093.013.446 42-360.

Exploring Literature Reading Classes in Terms of Types of Feedback Provided by EFL Teachers: Does Teaching Experience Play a Determining Role?

Mahmoud Azizi[1], Martina Pavlikova[2], Alfiya R. Masalimova[3]

[1] *University of Mazandaran, Babolsar, Mazandaran, Iran*
Pasdaran St. Main Organization of UMZ
E-mail: mazizijam@umz.ac.ir
ORCID: https://orcid.org/0000-0002-6202-9154

[2] *Constantine the Philosopher University in Nitra, Nitra, Slovakia*
E-mail: mpavlikova@ukf.sk
ORCID: https://orcid.org/0000-0002-6738-3320

[3] *Kazan (Volga region) Federal University, Kazan, Russia*
E-mail: alfkazan@mail.ru
ORCID: https://orcid.org/0000-0003-3711-2527

Abstract
Reading comprehension is thought to be a very challenging skill for L2 (second language) learners, and definitely the role that feedback has in enhancing reading achievement is undeniable. To shed more light on the issue, this study aimed to investigate the types of feedback utilized by EFL teachers in L2 reading comprehension classes at the intermediate level. The study took a step forward and explored the role of years of teaching experience in the provision of feedback. The study also examined the frequency of different types of errors that EFL learners committed in reading comprehension classes. To this end, an observational and descriptive study was conducted. Six EFL teachers along with their L2 learners at the intermediate level participated in the study. Three of these teachers were novices and the other three were experienced. The data were drawn from transcripts of audio recording of the selected teachers' reading comprehension classes. Following the analysis, the corrective feedback types and the errors were coded using the coding categories identified in Lyster and Ranta's (1997) model. Two other corrective feedback types were added - translation and multiple feedback. The frequency count and percentage were used to analyze the data. The results indicated that recasts were the most frequently used feedback type in both groups of teachers. Moreover, both experienced and novice teachers preferred to use varied corrective feedback types at different distributions which may suggest that there is a significant difference between novice and experienced teachers' use of corrective feedback types. Regarding the error types, the analysis of the data showed that among four types of errors, the phonological errors were the most commonly errors committed by EFL learners in reading comprehension classes. The implications are discussed in the study.
Keywords: Corrective feedback, reading comprehension, experienced and novice teachers, oral errors

Анализ уроков литературного чтения как тип обратной связи в изучении английского языка как иностранного: Играет ли опыт преподавания определяющую роль?

Махмуд Азизи[1], Мартина Павликова[2], Альфия Р. Масалимова[3]

[1]Мазадаранский университет, Баболсар, Иран
E-mail: maziizjam@umz.ac.ir
ORCID: https://orcid.org/0000-0002-6202-9154

[2] Университет им. Константина Философа в Нитре, Нитра, Словакия
mpavlikova@ukf.sk
ORCID: https://orcid.org/0000-0002-6738-3320

[3] Казанский федеральный университет, Казань, Россия
E-mail: alfkazan@mail.ru
ORCID: https://orcid.org/0000-0003-3711-2527

Аннотация
Понимание прочитанного текста считается очень сложным навыком для всех, кто изучает иностранный язык. Роль обратной связи в повышении восприятия текста неоспорима. Для получения более четкого представления об этой проблеме настоящее исследование было направлено на изучение типов обратной связи, используемых учителями английского языка в работе с учениками, владеющими иностранным языком на среднем уровне. Исследована роль опыта преподавания с предоставлением обратной связи. Авторами проанализирована частотность ошибок различных типов. С этой целью проведено обсервационное и описательное исследование. В исследовании приняли участие шесть преподавателей и их ученики, владеющие английским на среднем уровне. Трое участников были молодыми учителями, остальные – опытными педагогами. Данные для анализа взяты из расшифровок аудиозаписей занятий, отобранных учителями. Типы корректирующей обратной связи и ошибки были закодированы с использованием категорий кодирования, представленных в модели Lyster и Ranta (1997). Были добавлены два других типа корректирующей обратной связи: перевод и множественная обратная связь. Для анализа данных использовались сведения о их частоте, выведено процентное соотношение. Результаты показали, что наиболее частым типом обратной связи в обеих группах учителей является техника исправления ошибок, хотя как опытные, так и молодые учителя предпочитали использовать различные типы корректирующей обратной связи. Анализ полученных данных показал, что среди четырех типов ошибок обучающиеся чаще всего совершали фонологические ошибки. В статье приводится обсуждение возможного влияния результатов исследования на процесс обучения.
Ключевые слова: корректирующая обратная связь, понимание прочитанного текста, опытные и молодые учителя, устные ошибки

Introduction

With regard to the role language plays in the construction of social, economic and cultural systems, reading comprehension has gained a growing attention. In the last few decades, considerable attention has been directed towards reading in English as a Foreign Language (EFL) context due to its relevance to the personal and professional development of students and professionals in several areas. Browder, Trela and Jiménez (2007) stress reading to be the most significant skill in the academic programs where English is taught, since it helps learners to expand the knowledge of the language and of the universe in general. This means that learners do not merely learn about language structures but they

also learn to reject and/or approve assumptions, concepts and interpretations made by others in a foreign language. In order for this to happen, according to Irwansyah, Nurgiyantoro and Sugirin (2019), teachers' practical consideration of students' needs and language proficiency are also critical factors in deciding the best materials for reading activities provided by the teacher. Khonamri and Roostaee (2014) asserted that no matter what type of activity accompanies reading, its effect is observable in students' reading development.

On the other hand, learning something new like a foreign language always means that errors are made. Corder (1974) stated that learner's errors in the process of language learning are crucial for teachers since they demonstrate the amount of information acquired by the learner, so that teachers can adjust their instruction based on students' needs. Similarly, Hendrickson (1978) argued that language errors are an inseparable part of the learning process, and that systematically analyzing the errors can assist researchers and teachers to understand the process of language acquisition better.

One way to achieve accuracy in the target language is through corrective feedback provided by teacher, directed at errors that the learners have made in their output. In other words, although in learning a foreign language, making errors is a natural part of mastering a new language, some researchers put emphasis on pertinent corrective feedback since correcting inaccurate language forms may help learners notice the structures that have not been mastered and help teachers to prevent fossilization.

In literature on second language (L2) acquisition, learners' errors have been widely discussed by most of the researchers in terms of negative evidence, repair, negative feedback, corrective feedback and as a focus on form (Ellis, Loewen & Erlam, 2006; Loewen, 2004; Lyster & Ranta, 1997; Sheen, 2004). In this respect, feedback which can be regarded as responses to students' behaviors, tasks, assignments, and outcomes, has been attracting more and more attention among teachers, theorists and researchers.

Corrective feedback occurs whenever "negative or positive evidence" is provided to learners in order to help them to restructure the correct and precise form of the erroneous utterance (Lyster & Ranta, 1997; Suzuki, 2004). Chaudron (1997) has defined corrective feedback as the teacher's reaction to the erroneous form which obviously leads learners to their utterance. Lightbown and Spada (1999) described corrective feedback as indicating to learners that their use of the target language is not correct. Moreover, corrective feedback is considered to enhance accuracy in language production (Lyster & Ranta, 1997).

Researchers such as Dekeyser (1993), Brooks, Crippen, & Schraw, (2002) and Pawlak (2013), asserted that corrective feedback plays an important role in L2 acquisition and that the provision of corrective feedback on learners' errors is one of the main hallmarks of foreign language teaching in the vast majority of instructional settings. What that means in practice is that once learners walk into the classroom they expect to be corrected on their inaccurate utterances and some teachers feel that reacting to learners' errors is one of their main responsibilities. How teachers correct second language learner's errors is a topic that attract enormous interest from researchers and teachers alike.

In spite of the fact that corrective feedback is a commonly used teaching tool in all types of EFL classroom it has long been the response of teachers in productive skills such as writing and speaking. A quick look at the research studies on corrective feedback, shows that it has focused mostly on written errors (Sheen, 2007; Ellis 2008; Bitchener & Knoch 2010), whereas the oral errors on which the researcher tended to focus usually seem to have had less concern. The main reason behind this is that the oral corrective feedback strategies seem to offer a more challenging task for researchers as well as teachers. As Pawlack (2013) pointed out, since there is no danger of conveying meaning for teachers,

they may quite indiscriminately apply red ink to students' paragraphs, compositions or essays, either only underlining the incorrect forms, using symbols to identify the nature of the errors, or immediately crossing them out and providing the correct version.

In Iran, a context where reading is the main means of learning English for EFL learners, few studies have directly investigated corrective feedback strategies provided by EFL teachers. Because foreign language learners do not have enough exposure outside the classroom and the input they receive is through reading comprehension, reading plays a critical role in language learning (Stranovská, Gadušová, & Ficzere, 2019). In the past decade, there has been sustained interest in promoting reading as a significant and viable means of language development for second and foreign language learners (Day & Bamford, 1998; Krashen, 2004). Moreover, reading as an effective skill has received a special attention in Iran. This can be verified by examining high school books and EFL course books which are generally developed by focusing mainly on readings. Despite this fact, the majority of Iranian EFL learners are not that competent in reading skills and they usually admit having different difficulties. This lack of investigation brings about the necessity of further investigations into the type(s) of corrective feedback which EFL teachers provide to their L2 learners during reading comprehension classes.

In addition to this, few studies consider the possible role of teaching experience in provision of corrective feedback. According to Gotbonton (2008, p. 21) studying both experienced and novice teachers together in a comparative study "allows one to compare them on very specific points and identify more clearly how they differ or how they are similar to each other". Studies in this field are rare, perhaps because investigation into teachers' experience is still relatively new, in contrast to investigation in, for example, teachers´ competences (Gadusova, Haskova, & Jakubovska, 2018; Gadusova, Haskova, & Predanocyova, 2019; Pushkarev & Pushkareva, 2019).

In order to address the gap in literature, this study seeks to determine the association between teachers' teaching experience and the type and frequency of different corrective feedback strategies they provide in reading comprehension classes. In other words, it attempts to investigate whether teachers of foreign language choose different types of corrective feedback to correct L2 learners' errors (phonological, grammatical, lexical and unsolicited use of L1) and which type of corrective feedback is most frequently practiced during teaching reading comprehension. The study also aims to investigate the most common error types, L2 learners commit in reading comprehension classes.

In this respect, the present study, intends to shed light on the field by examining two areas of research. First of all, it emphasizes the lack of studies directly investigating the most frequently used feedback types provided by EFL teachers while teaching reading comprehension. In the light of what is collected and studied, the objectives of this study are, to describe the types and the frequency of corrective feedback used by a group of Iranian teachers of English as a foreign language (EFL) in teaching reading comprehension and to identify the dominant type of corrective feedback used by these teachers. This line of research is motivated due to the outstanding place of reading comprehension in language syllabus at schools and English language institutes in Iran. Furthermore, this study attempted to compare the role of Iranian EFL teachers' years of teaching experience and choice of corrective feedback types at the intermediate levels. Almost all studies done in this field have been conducted in immersion and ESL contexts, and so it is crucial to investigate the significant differences of experienced and novice teachers' reaction to students' errors in EFL settings, like Iran, to find out any differences and similarities, if there are any. These two purposes establish the grounds for conducting this study, targeting English language teachers in the field.

Research questions:

This observational study attempted to answer the following research questions:

1. What are the most frequent types of corrective feedback employed by the Iranian EFL teachers in reading comprehension classes?

2. Is there any difference between EFL teachers with different years of experience in terms of the types of corrective feedback they provide in reading comprehension classes?

3. What are the most frequent types of errors Iranian English language learners commit in reading comprehension?

Methodology

Participants

In order to conduct the study, two groups of participants were needed: teachers currently involved with teaching English as a foreign language along with their current L2 learners. Shank (2002) indicates that selection of study participants depends on research topic, questions, availability, and other study characteristics. For the purpose of this study convenience sampling was used to select the participants. Convenience sampling as a non-probability sampling technique was used, focusing simply on conveniently available subjects (Dörnyei, 2007; Mackey & Gass, 2005). Therefore, those who were available were selected because it was difficult and time-consuming to select participants with specific characteristics. Six Iranian EFL (male & female) teachers who were coded as T1, T2, T3, T4, T5 and T6 with the age range of 24 - 45 participated in the present study. These teachers participated willingly and consented to be observed and tape recorded. In addition to the English teachers, the intermediate L2 learners with the age range of 14-25 years who were taught by these teachers participated in the study.

The participants' years of teaching experience in this study varied from less than three to more than 15 years. T1, T2, and T3 had less than 3 years of teaching experience or had just started to work as an EFL teacher were labeled as novice; T4, T5 and T6 with more than 10 years of teaching years of experience were deemed experienced.

The participating teachers had different educational backgrounds. The teachers' demographic information is provided in Tables 1 & 2.

Table 1. Demographic information of the Novice Teachers

Degree	EFL qualification	Teaching experience	Age	Gender	Code name
Literature	BA	1	24	Male	T1
Translation	MA	1.5	26	Male	T2
TEFL	BA	2	33	Male	T3

Table 2. Demographic information of the experienced teachers

Degree	EFL qualifications	Teaching experience	Age	Gender	Code name
TEFL	*MA*	*20*	*45*	*Male*	*T4*
TEFL	*MA*	*13*	*39*	*Male*	*T5*
Literature	*BA*	*10*	*36*	*Male*	*T6*

MA: Master of Arts
BA: Bachelor of Arts

Data collection instrument

According to Seedhouse (2004), between five and ten lessons are reasonable for analysis. The present study used a corpus of 18 sessions (nine sessions for experienced teachers and nine sessions for novice teachers), as an acceptable sample size so as to generalize and draw conclusions.

For the purpose of exploring EFL teachers' actual practice in using corrective feedback strategies in reading comprehension classes across intermediate levels, the data were drawn from two sources. The main method for data collection in the current study derived from classroom observation and audio-recordings. After determining the EFL teachers and their classes for the present study, the researcher obtained their consent and agreement. The observation and audio-recordings were used in order to observe the teacher's actual classroom practices of corrective feedback strategies. Neither the teachers nor their L2 learners were made aware of the focus of the study to explore the frequent corrective feedback types they provide to their learner's errors in reading comprehension sessions in order not to affect their tendency on error correction. They were just told that the data would be used for a study and they only knew they were being recorded and observed. The idea was that they acted as naturally as possible in order to gather authentic data.

Data collection procedure

As the focus of the current study was on reading comprehension, three sessions of reading comprehension classes of the selected teachers each of which lasted approximately 50 minutes or more were observed and audio recorded over the course of one semester. Since the researcher assumed that audio-recording might not be adequate to retrieve reliable data, observation was used as a complementary method for making data more accurate. An audio recorder (MP3 player) was placed close to the teacher in each class both to capture all the utterances by the teacher and to record teacher's voice more clearly.

All instances of the learners' errors and the teachers' use of different corrective feedback strategies in response to their erroneous oral productions in all reading sessions were recorded as carefully as possible. Having recorded the six English language classes for three sessions, they were observed in order to determine the corrective feedback strategies. These data were later analyzed qualitatively in order to obtain the different corrective feedback types used in the classroom, as well as quantitatively since the frequency of corrective feedback types had to be quantified according to Lyster and Ranta's (1997) model. Before the observation, a checklist was made to help the researcher stay focused on aspects that needed to be investigated. The checklist consisted of the different corrective feedback types (classified by Lyster and Ranta, 1997) that were expected to occur during the class, such as recast, metalinguistic feedback, paralinguistic signals, elicitation, repetition, clarification requests, and others that might occur but that were not included in the list.

Research Design

Based on the nature of the research questions, this study is qualitative in nature with supplementary quantitative methods to address the frequency of different corrective feedback types.

Research ethics

The EFL teachers in the present study participated on a voluntarily basis and each gave their individual consent. All participants were clearly informed that their participation and interactions were being audio recorded and analyzed for the research.

All participants understood the procedures in which they were engaged. They were all promised anonymity. Only anonymity can protect the participants and is thus an ethical demand for researchers" (Kvale 2009:56).

Results

Research question 1

The first research question asked in this study sought to identify the most frequent types of corrective feedback employed by Iranian EFL teachers to L2 learners during reading comprehension sessions at intermediate levels. In order to answer the question the researcher analyzed the transcribed data and computed the number of occurrences of each types of corrective feedback strategies. The total distribution of each type of corrective feedback strategies provided by all six EFL teachers were determined and the results were presented.

Table 3 illustrates the total distribution of corrective feedback types provided by all six teachers in reading comprehension sessions.

Table 3: Frequency and percentage of corrective feedback types provided by experienced and novice EFL teachers

Feedback types	Novice	experienced	total	percentage
Recasts	42	51	93	29.80%
Explicit correction	33	18	51	16.34%
Elicitation	10	36	46	14.74%
Clarification request	13	23	36	11.53%
Metalinguistic feedback	18	9	27	8.65 %
Multiple feedback	11	15	26	8.33%
Translation	15	7	22	7.05%
Repetition	6	5	11	3.52%
Total	148	164	312	100%

As Table 3 shows, EFL teachers used different corrective feedback strategies with varied frequencies to correct ill-formed utterances. A total of 312 corrective feedback strategies were identified in the 18 sessions of reading comprehension classes taught by six Iranian EFL teachers (3 novice, 3 experienced). Examining the percentage of provision of different corrective feedback types, it seems that across the six Iranian EFL teachers (novice and experienced), recast (29.80 %) was the most frequently provided corrective feedback strategy in reaction to EFL learners' errors in reading comprehension classes. The other most frequently feedback type used by the teachers was explicit correction with 16.34 % of the total number of teacher's use of corrective feedback. Elicitation (14.74 %) was the third most frequent type of corrective feedback. Repetition (3.52%) was the least favorite type. Figure 3 shows these results in graphical form.

Research question 2

Classroom observation analysis identified preferences for different types of oral corrective feedback for the teachers. It also examined the relationship between types of oral corrective feedback and teaching years of experience of EFL teachers. The question raised by this study was concerned with the existence of any differences in the EFL teachers' experience and their use of corrective feedback types in reading comprehension classes. As explained before, the teachers in this study were coded in terms of their years of teaching experience into two groups: experienced (n=3) and novice (n=3). According to Freeman, (2001) novice teachers are those having less than three years of experience and experienced teachers are those having five or more years of experience.
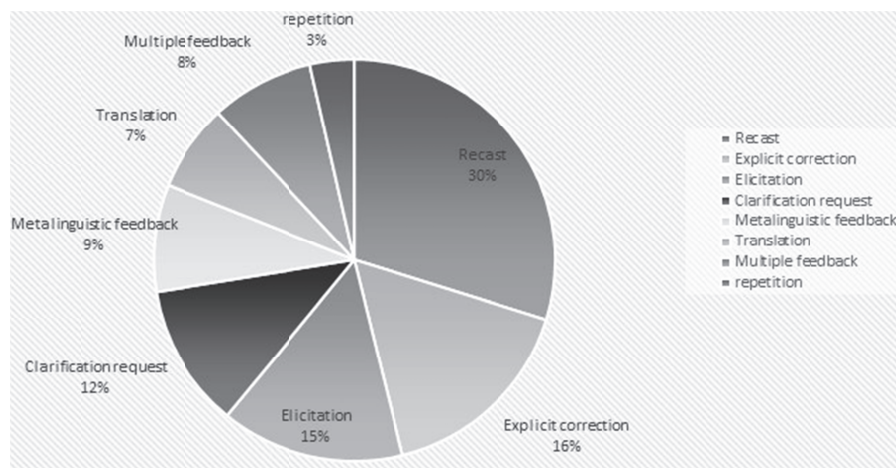
Figure 3: Corrective feedback distribution

Tables 4 and 5 provide the frequency and percentage of corrective feedback types that were employed per group. More specifically, it shows whether the novice and experienced teachers differed in providing corrective feedback to their L2 learners. It shows what kind of corrective feedback were used when L2 learner errors were pointed out.

Table 4: frequency of Corrective Feedback types employed by experienced EFL teachers (T4, T5, and T6)

Corrective feedback type	Number	percentage
Recasts	51	31.09%
Elicitation	36	21.95%
Clarification request	23	14.02%
Explicit correction	18	10.97%
Multiple feedback	15	9.14 %
Metalinguistic feedback	9	5.48 %
Translation	7	4.28%
Repetition	5	3.04%
Total	164	100%

As shown in Table 4, in total 164 corrective feedback strategies were identified in nine sessions of reading comprehension classes taught by experienced EFL teachers. The experienced teachers' most favorite type of corrective feedback was recast which accounted for 31.09%. The second most used feedback type was elicitation which accounted for 21.95%. Clarification request (14.02%) was another type of corrective feedback welcomed by experienced teachers in reading comprehension classes. The remaining 32.91% was related to the other types of corrective feedback as follows: Explicit correction (10.97%), multiple feedback (9.14%), and metalinguistic feedback (9.14%). The percentages of the use of translation (4.28) % and repetition (3.04) % were of minor significance in this data (5.12%). Obviously, the most frequently used type of corrective feedback utilized by experienced EFL teachers in reading comprehension classes at intermediate level was recast. Another prominent corrective feedback strategy was found to be elicitation. It is also noted that, experienced teachers were less eager to use translation and repetition in

reaction to their learner's ill formed utterances. Table 5 displays the percentages as well as frequencies of corrective feedback type used by novice teachers to cope with L2 learners' errors at intermediate level.

Table 5. Frequency of Corrective Feedback types employed by novice EFL teachers (T4, T5, and T6)

Corrective feedback types	Number	Percentage
Recasts	42	28.37 %
Explicit correction	33	22.29%
Metalinguistic feedback	18	12.16%
Translation	15	10.13%
Clarification request	13	8.78%
Multiple feedback	11	7.43%
Elicitation	10	6.75%
Repetition	6	4.05%
Total	148	100%

The table shows that 148 corrective feedback strategies were identified in the nine sessions of reading comprehension classes taught by novice teachers. The novice teacher's most favorite feedback type among all eight corrective feedback types was recast, accounting 28.37% of all teacher feedback. The next prominent corrective feedback type welcomed by novice teachers was explicit correction (22.29%). Their preference for explicit correction maybe due to their intention to use more straightforward treatment to correct L2 learner errors so as to avoid ambiguity. The third most used feedback by novice teachers was metalinguistic feedback, accounting for 12.16%. The distribution of other feedback types showed a decreasing frequency: translation (10.13%), clarification request (8.78%), multiple feedback (7.43%), elicitation (6.75%), and the least used type, repetition (4.05%).

It is worth mentioning here that the transcribed data of novice teachers showed that in EFL reading comprehension classrooms, apart from the eight types of CF, some new types of feedback, which were not included in Lyster and Ranta's taxonomy, were identified through observation. These new types of corrective feedback were called positive feedback. This refers to type of feedback that teachers give to the L2 learners when they answer correctly. According to Ferreira, Moore, and Mellish (2007), positive feedback can be divided into four categories: acknowledgement, acceptance, repetition and rephrasing. Two of these positive feedback types – repetition and acceptance - were used by novice teachers. Ellis (1997) defines repetition as a kind of positive feedback in which "the teacher repeats the student's correct answer. According to Sinclair & Coulthard (1992) acceptance is realized by a closed class of items like 'yes', 'good', and 'fine', all with neutral low fall intonation. Its function is to show the learners that the teacher has heard or seen and the provided reply by the learners was appropriate.

Extract 11

T: what does sentimental mean?
S: emotional
T: Emotional, YES … that's right (repetition, acceptance)

Comparison of novice and experience teachers

As it can be seen in Tables 4 and 5, there are some differences between the experienced and novice teachers concerning the frequency of the types of corrective feedback provided in reading comprehension classes. With regard to the overall frequency of corrective

feedback type, the frequency of corrective feedback types provided by experienced teachers is more than that for novices. In general, experienced teachers provided 164 instances of corrective feedback types while novice teachers provided 142. Figure 1 shows a breakdown of the number of corrective feedback types provided by each group of teachers.
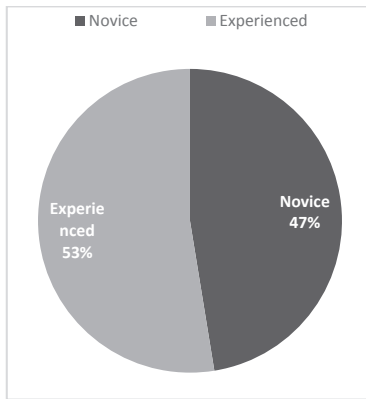
Figure 1. Corrective Feedback Types Distribution in Reference to Teachers Experiences

Figure 2 illustrates the number of corrective feedback strategies employed by each group of the teachers and shows a clear difference between the provisions of corrective feedback strategies by each respective group.
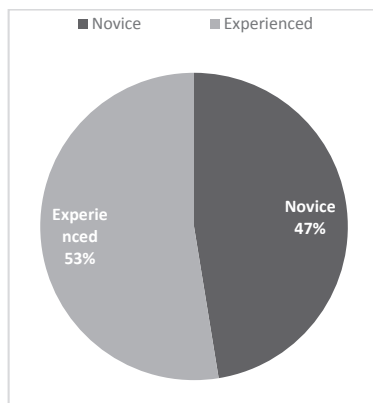
Figure 2: distribution of corrective feedback employed by both groups

As shown in Figure 1, EFL teachers use different corrective strategies with different frequencies. Differences were found among teachers' experience and their use of corrective feedback types. The types and frequencies of corrective feedback vary on the basis of the teachers' teaching experience (novice and experienced).

Regarding the overall frequency of corrective feedback types, the results of the analysis showed that both experienced and novice teachers teaching EFL learners in reading comprehension classes used recasts more than other types of feedback in reaction to L2 learner's errors. All of the teachers in two groups were less eager to use repetition (novice teachers: 4.05, experienced teachers: 3.04) in reaction to their L2 learners' ill-formed utterances.

Concerning other corrective feedback types, the results suggested that experienced and novice teachers display different frequency patterns of corrective feedback in reaction to L2 learners' errors. Explicit correction was another type of corrective feedback welcomed by novice teachers while experienced teachers, on the other hand, prefer to use elicitation as the second most frequent corrective feedback type. Moreover, experienced teachers did not apply any 'positive feedback' in their classes. This suggests that experienced teachers are different from novices in terms of type and frequency of corrective feedback types they use in their classes.

Research question 3

In order to answer the third research question, the frequency of different types of committed errors by L2 learners in reading comprehension classes were computed. As pointed out in the procedure section, an observation and audio recording were used to gather data for investigating the most frequent types of errors Iranian intermediate EFL learners commit in reading comprehension classes. From analysis of the data, four types of error including phonological, lexical, grammatical and unsolicited use of L1 were recognized.

Table 6 below describes the distribution of errors the L2 learners had in their reading comprehension classes. Data analysis yielded 317 error sequences containing at least one error, coded as grammatical, lexical or phonological and L1. Table 6 presents the raw frequency of different error types counts.

Table 6: Frequency of overall error types in reading comprehension classes at intermediate

Error types	Novice	experienced	total	percentage
Phonological	70	60	130	41%
Grammatical	50	32	92	29.2%
L1	20	15	35	11.04%
Lexical	40	20	60	18.92%
Total	154	168	317	100%

It should be noted that the classroom observations revealed a variety of error types in the L2 learners' reading comprehension classes. During the six classes observed and audio-taped, a total number of 317 erroneous utterances were produced by the L2 learners. Phonological errors occurring with almost 41% of the total errors produced by EFL learners got the highest rate of other error types followed by grammatical error (29.2%), then lexical error (18.92%) and unsolicited use of L1. This is shown graphically in Figure 3.
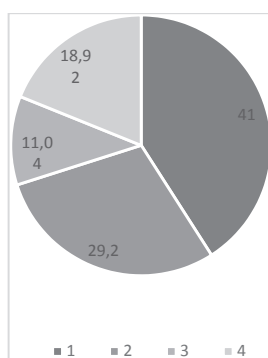
Figure 3: The percentage of each error type
1: Phonological; 2: Grammatical; 3: Lexical 4: L1

Among these four types of errors, phonological errors were the most frequently committed by L2 learners and unsolicited use of L1 was least frequently used (41% and 18.92% respectively).

Discussion of the results and conclusion

The findings demonstrated that two groups of EFL teachers with different years of experience tried to provide corrective feedback immediately for most of the erroneous utterances although several were ignored during the lesson. It is difficult to determine whether this was done intentionally or not. The results showed that six EFL teachers with different years of experience in the current study used eight different corrective feedback types as follows: Recast (29.80%), Explicit correction (17%), Elicitation (15%), Clarification request (11.5%), Metalinguistic feedback (8.65%). Multiple feedback and metalinguistic feedback were used to nearly equal extent (8%) and repetition which accounted for (3.52 %) was the least used. Almost all corrective feedback types were used. It was also noticed that the teachers did not manage to correct students all the time. As far as the percentage of corrective feedback types are concerned, the results revealed that 29% of the corrective feedback aimed to provide learners with correct form of the utterance. The findings suggested that recasts were the first most frequently provided corrective feedback among all other feedback types either in the entire data base or for each group in the observed reading classes with repetition as the least frequent feedback type (5%).The fact that teachers in this study used recasts a lot more than the other types of corrective feedback was predictable and confirmed the seminal study conducted by Lyster and Ranta (1997) who found that the teachers in their study provided corrective feedback using recasts over half of the time (55%).

Findings of the same kind of results seem not to be alone in SLA literature. Recasts were the most frequently used feedback type across the previous studies Lyster, Saito, & Sato, (2013); Lyster & Panova 2002; Panova & Lyster 2002; Tsang 2004; Sheen 2004), and the present study supported those results by showing a clear preference for the use of recasting of learner error. The table below displays the distribution of feedback types in their study.

Table 7: Distribution of Corrective Feedback for Lyster and Ranta (1997)

Corrective feedback type	Number and percentage
Recasts	375 (55%)
Clarification request	73(11%)
Elicitation	94(14%)
Repetition	36(5%)
Explicit correction	50 (7%)
Metalinguistic feedback Total	58 (8%)
Total	686(100%)

The findings of the current study were consistent with Lyster and Ranta's (1997) study in which recast was reported to be the most frequent type of corrective feedback (55%) and the least was repetition (5%).

The highest usage of recast by Iranian EFL teachers might be attributed to their desire to save time and at the same time encourage L2 learners to continue speaking without explicitly correcting their errors. Recast is the least risky interaction since it provides L2 learners with more input and does not ask anything of them. Indeed, EFL teachers use recast so often, so as not to harm interaction. In the case of recasts, regardless of whether learners are given the opportunity to repeat or not, they are not actively engaged. There

is also little evidence that recast is a helpful way of letting learners notice the gap between their use of incorrect forms and the teacher's correction.

Ahangari and Amirzadeh (2011) explained that a reason recasts were often the most frequently used correctional feedback type might be due to teachers' concern of interrupting the flow of communication in the classroom.

However, the preference of recast in this study seemed to be in contrast with Tabatabaei and Banitalebi (2011) who found explicit correction as the most frequently provided corrective feedback in reading comprehension classes. One possible reason for this contrast maybe because they did not consider the teachers' level of teaching experience in their study.

Consequently, the results demonstrated that explicit correction was the second most frequent used type of corrective feedback after recast which was in contrast with Lyster and Ranta (1997). A possible explanation for this contrast may be learners' level of proficiency. As Lyster and Ranta (1997) argued, learners' proficiency level is a critical factor that should be taken into consideration by teachers when they engage in corrective feedback. Sometimes the learners may not have the required knowledge to correct themselves.

The next reason might pertain to the nature of errors, as teachers are likely to vary their corrective feedback strategies based on the nature of different errors. The reason maybe lies in the values EFL teachers see in explicit correction. There are some benefits in using explicit correction. First, it is a clear identification of a learner-error that she/he used the linguistic forms incorrectly. L2 learners certainly notice the signal which indicates their answer may contain errors. Furthermore, they may pay more attention to the teacher's correction, which may help them to understand the correct form of a certain expression. In addition, explicit correction saves class time because the learner can figure out the problem immediately. It eliminates the need for several rounds of negotiation, which may ultimately leave the learner confused and not understanding what the teacher wants to convey implicitly.

Moreover, the results showed elicitation as the third most common corrective feedback type after explicit correction in contract to with Lyster and Ranta's finding (1997). The reason might lie in the fact that teachers want to allow opportunities for L2 learners to self-correct their errors at intermediate levels.

In Lyster and Ranta's (1997) study, the findings showed that repetition was the least frequent corrective feedback, so both studies reached similar conclusions. Moreover, this is in line with Tabatabaei and Banitalebi, whose study showed L2 teachers did not use repetition at all. According to Tabatabaei and Banitalebi (2012), the reason for the limited use of repetition might be because L2 teachers did not want to expose L2 learners to ill formed language.

In respect of the other corrective feedback types, the results of the current study indicate that, the order of the frequencies of other corrective feedback types are different from that of Lyster and Ranta. One of the possible explanations for the differences between the present study and the previous corrective feedback studies might be attributed to classroom setting. The major part of the research conducted in the area of oral corrective feedback is done in ESL or immersion settings. The interest in error treatment originated in these contexts and it is understandable that in content-based instruction the treatment of error is different and possibly more complex than in more language-based instruction. In Lyster and Ranta's (1997) study participants were in immersion classes, where students learned general subjects in the target language as well as the language itself. Compared with an ESL classroom setting where the main focus is on students' improvement in use of English, immersion classrooms focus on learning general knowledge as well as the

French language. When learning general knowledge, the class should be focusing on content, rather than the accurate or fluent use of French.

Aside from the comparison with Lyster and Ranta's study, the characteristics of the six EFL teachers in the present study might be worth considering in relation to the way they gave corrective feedback to their English classes. The second research question addressed how teachers' years of teaching experience affect their provision of corrective feedback has attracted attention by various researchers whose results can be considered congruent with those of the current study.

This question was concerned with the existence of any differences in the EFL teachers teaching years of experience and their use of corrective feedback types in reading comprehension classes at intermediate levels. As explained before, the teachers in this study were categorized into two groups in terms of their teaching years of experience: 3 experienced and 3 novices. As predicted, individual differences related to the EFL teacher's years of experience affected their use of corrective feedback strategies. The comparison of each group of teachers showed that some differences existed between the two. The frequency counts of data from these two groups of teachers showed that there are many more indications of types of corrective feedback used by experienced teachers than novice ones in reaction to their L2 learner's errors. The findings of the present study are consistent with Mackey, Polio, and McDonough (2004) study who found that experienced ESL teachers' techniques were more focus-on form type than inexperienced teachers. In a related study, Samad and Nursus (2015) also showed that teachers with more years of experience rely a lot more on corrective feedback compared to the novice teachers. The reason might be lie in the fact that novice teachers do not have enough knowledge or confidence to give corrective feedback therefor they use less corrective feedback in their classroom (Vítečková, Procházka, Gadušová, & Stranovská, 2016). Moreover, the data indicated that the ways of providing corrective feedback can vary greatly across teachers. It was quite evident that the ways of providing corrective feedback to L2 learners' errors differed considerably between the two groups of novice and experienced teachers.

The total results of the study showed some similarities with Lyster and Ranta's (1997) study which may testify the reliability and applicability of the error treatment sequence in the present study.

Between the two groups of teachers (novice and experienced), recast was the most frequently corrective feedback. However, the amount of recast provided by experienced teachers was slightly higher than that was provided by novice teachers.

In line with the above discussion another apparently important difference between the two groups in terms of supplying corrective feedback is the higher frequency of the use of elicitation in experienced teachers' classes compared to novice ones. The novice teachers did not hesitate to correct ill-formed utterances directly while the experienced teachers often gave the learners a chance to self-correct. In other words, novice teachers prefer to use explicit correction to correct their L2 learner's errors. The reason might be lie in the fact that experienced teachers want to allow opportunities for L2 learners to self-correct their errors and elicit responses from the L2 learners. This may reflect the novice teachers' teaching style, namely a teacher center approach through which they think explicit correction is more effective in awareness raising as related to the corrected feature in the learners. According to Ellis (1997) to help acquisition to occur, learners are required to notice the gaps, and receive the feedback. Therefore, the explicit correction used by novice teachers may have the reason to push the learners to notice the target feature, as well as to create a situation in which they can compare the noticed feature and consequently be able to incorporate it into their inter-language.

The results of this study showed that the types of corrective feedback used by experienced teachers in reading comprehension classes differ from those provided by novice teachers. It was observed that apart from eight corrective feedback types, novice teachers used positive feedback in many instances. There are some examples that EFL novice teachers repeated L2 learner's flawless utterances so frequently which was rare in experienced teacher's classes. This type of corrective feedback referred as positive feedback. The reason may be related to the fact that teachers intend to enhance L2 learners' exposure to the target language, as Krashen (2004) introduces comprehensible input to be the only necessary variable in SLA.

However, even though the experienced teachers used more corrective feedback strategies than the inexperienced teachers, it was not possible to explore the reason behind teachers' contrasting degree of feedback use as related to their level of experience. One possibility is that the teachers' contrasting level of education also contributed to the observed differences. It seems that EFL teachers with a TEFL degree used corrective feedback more frequently than those teachers with degrees in literature or translation. The reason maybe lies in the fact that in TEFL major teachers have more awareness of corrective feedback techniques.

The third research question addressed the distribution of different error types made by Iranian EFL learners in reading comprehension classes at intermediate level. Four different types of error were detected in the data. These were grammatical, phonological, lexical, and unsolicited use of L1. A total of 317 erroneous utterances were produced by L2 learners in the reading comprehension classes. The results showed that phonological errors formed the majority of the errors in the entire database (41%) and lexical errors were the next frequent categories with frequency of (29.2%). The other error types were at lower frequency.

One possible reason for the large number of phonological errors might be because, obviously, the focus was on reading skills and it must be taken into account that L2 learners in the reading comprehension lessons were required to read passages from their English books. When L2 learners were reading they did not commit grammatical or lexical errors: the only possible errors were of the phonological type.

It is also essential to state that different amount of errors was identified with different teachers. In other words, it was found that learner errors depended on the extent to which the teachers ask or encourage their learners to talk in English. For example, T3 as an experienced teacher asked questions in pre reading stage which required long sentences and therefore many errors were made.

The findings of the current study on the frequent L2 learner's error types were contradictory to Kennedy's (2010) findings. In Kennedy's study, grammatical errors were the most frequent errors by English learners while lexical errors and phonological errors did not occur as frequently. Contrarily, the Iranian L2 learners in this study frequently made phonological errors followed by lexical errors. These contradictory findings could be attributed to the fact that L2 pronunciation errors are often caused by the transfer of a well-established L1 sound system. In other words, the sound patterns or structures of Iranian L2 learners can affect the speech or production of their L2 language. These different findings could be attributed to the important role of first language in leading foreign language learners to overgeneralize the phonological system of their mother tongue to the second language (Stranovská, Hvozdíková, Munková, & Gadušová, 2016). This finding implies that language learners might make certain types of errors more than other types due to the influence of the native (L1) languages. Based on the findings, it seems that the notion of field experiment, training and awareness raising, which was suggested and investigated, by Khonamri and Ahmadi (2105), and in a different approach by Mahrik

et al. (2018), Tavilla et al. (2019), Kardis and Valčo (2018), Ambrozy et al. (2018), Valco and Sturak (2018) are also relevant and could be a helpful way to shed further light on the issue under investigation in this study - that is, the practice of corrective feedback.

As with every empirical study, this one is not without problems and weaknesses since the reality surpasses each descriptive concept and goes beyond methodological frames. It is therefore important to identify some of the emerging issues that might be of significance with regard to the perception of reality when conducting similar future research. The number of participants in this small-scale study and the amount of classroom interaction analyzed though limited, conveyed the core elements of researched phenomenon.

Acknowledgment:

References

Ahangari, S., & Amirzadeh, S. (2011). Exploring the teachers' use of spoken corrective feedback in teaching Iranian EFL learners at different levels of proficiency. *Procedia-Social and Behavioral Sciences*, *29*, 1859-1868. doi:10.1016/j.sbspro.2011.11.435

Ambrozy, M., Králik, R. & Poyner, J. (2018). The issue of periodization in Wittgenstein's philosophy of religion. *European Journal of Science and Theology*, 14(1), 115-124.

Bitchener, J., & Knoch, U. (2010). The contribution of written corrective feedback to language development: A ten-month investigation. *Applied Linguistics, 31*(2), 193-214. DOI: https://doi.org/10.1017/S0261444819000120

Brooks, D. W., Crippen K. J., & Schraw, G. P. (2002). *Performance: The hallmark of efficient instruction*. Retrieved June 18, 2010, from http://dwb4.unl.edu/dwb/Research/JCE-2002-0504.pdf

Browder, D. M., Trela, K., & Jimenez, B. (2007). Training teachers to follow a task analysis to engage middle school students with moderate and severe developmental disabilities in grade-appropriate literature. *Focus on Autism and Other Developmental Disabilities*, *22*(4), 206-219. http://dx.doi.org/10.1177/10883576070220040301.

Chaudron, C. (1977). A descriptive model of discourse in the corrective treatment of learners' errors. *Language Learning, 27*(1), 29-46. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-1770.1977.tb00290.x

Corder, S. P. (1974). Error Analysis. In J. P. B. Allen, & S. Pit Corder (Eds.), *Techniques in Applied Linguistics*. London: Oxford University Press. DOI: https://doi.org/10.1017/S0261444800002822

Day, R. R., & Bamford, J. (1998). *Extensive reading in the second language classroom*. Cambridge: Cambridge University Press. DOI: 10.1177/003368829802900211

Dekeyser, R. (1993). The effect of error correction on L2 grammar knowledge and oral proficiency. *Modern Language Journal, 77*, 501-514. DOI: 10.2307/329675

Dörnyei, Z. (2007). *Research Methods in Applied Linguistics: Quantitative Qualitative, and Mixed Methodologies*. Oxford: Oxford University Press. https://doi.org/10.1093/applin/amq023

Ellis, R. (1997). *The Study of second language acquisition*. Oxford: Oxford University Press. https://doi.org/10.1017/S0272263100014479

Ellis, R. (2008). *The study of Second Language Acquisition* (2nd ed.). Oxford: Oxford University Press.

Ellis, R., Loewen, S., & Erlam, R. (2006). Implicit and explicit corrective feedback and the acquisition of L2 grammar. *Studies in second language acquisition*, *28*(2), 339-368. https://doi.org/10.1017/S0272263106060141

Ferreira, A., Moore, J. D., & Mellish, C. (2007). A study of feedback strategies in foreign language classrooms and tutorials with implications for intelligent computer-assisted language learning systems. *International Journal of Artificial Intelligence in Education*, *17*(4), 389-422.

Gadušová, Z., Hašková, A., & Jakubovská, V. (2018). Stratified approach to teachers' competence assessment. In *INTED 2018: Proceedings from 12th International Technology, Education and*

Development Conference (pp. 2757-2766). Valencia: IATED Academy, 2018. DOI 10.21125/inted.2018.0518

Gadušová, Z., Hašková, A., & Predanocyová Ľ. (2019). Teachers' professional competences and their evaluation. *Education and Self Development, 14*(3), 17-24. DOI 10.26907/esd14.3.02.

Gotbonton, E. (2008). Looking beyond teachers' classroom behavior: Novice and experienced ESL teachers' pedagogical knowledge. *Language Teaching Research, 12*(2), 161-182. DOI: 10.1177/1362168807086286

Hendrickson, J. M. (1978). Error correction in foreign language teaching: Recent theory, research, and practice. *Modern Language Journal*, 62, 387-398. https://doi.org/10.1111/j.1540-4781.1978.tb02409.x

Irwansyah, D., Nurgiyantoro, B., Sugirin (2019). Literature-Based reading material for EFL students: a case of Indonesian Islamic University. *XLinguae*, Volume 13, Issue 3, ISSN 1337-8384, eISSN 2453-711X. DOI: 10.18355/XL.2019.11.03.03

Kardis, K., & Valčo, M. (2018) Future of religious faith the case of present-day Slovakia. *European Journal of Science and Theology, 14*(4), 95-107.

Kennedy, S. (2010). Corrective feedback for learners of varied proficiency levels: A teacher's choices. *TESL Canada Journal, 27*(2), 31-31.

Khonamri, F., & Ahmadi, F. (2015).The effect of metacognitive strategy training and raising EFL learners' metacognitive awareness on listening comprehesion. *Indonesian Journal of Applied Linguistics, 5*(1), 19-28. DOI: https://doi.org/10.17509/ijal.v5i1.827

Khonamri, F., & Roostaee, S. (2014). Does extensive reading combined with form-focused or meaning-focused activities affect lexical collocational knowledge of Iranian learners?. *Theory & Practice in Language Studies*, *4*(5), 1038-1044. doi:10.4304/tpls.4.5.1038-1044

Krashen, S. D. (2004). *The power of reading: Insights from the research* (2nd ed.). Portsmouth, NH: Heinemann.

Kvale, S. (2003). The psychoanalytic interview as inspiration for qualitative research. In P. M. Camic, J. E. Rhodes, & L. Yardley (Eds.), *Qualitative research in psychology* (pp. 275-297). https://journals.sagepub.com/doi/10.1177/1077800407308222

Lightbown, P. & Spada, N. (1999). *How languages are learned*. Oxford: Oxford University Press. DOI: 10.1111/j.1467-9922.2004.00251.x

Loewen, S. (2004). Uptake in incidental focus on form in meaning-focused ESL lessons. *Language learning*, *54*(1), 153-188.

Lyster, R., & Panova, I. (2002). Patterns of corrective feedback and uptake in an adult ESL classroom. *TESOL Quarterly, 36*(4), 573-595. https://doi.org/10.2307/3588241

Lyster, R., & Ranta, L. (1997). Corrective feedback and learner uptake: Negotiation form in communicative classrooms. *Studies in Second Language Acquisition, 19*(1), 37-66. DOI: https://doi.org/10.1017/S0272263197001034

Lyster, R., Saito, K., & Sato, M. (2013). Oral corrective feedback in second language classrooms. *Language Teaching, 46*(1), 1-40. http://doi:10.1017/S0261444812000365.

Mackey, A. & Gass, S. M. (2005). *Second language research: Methodology and design*. Mahwah, NJ: Lawrence Erlbaum Associates. https://doi.org/10.1177/0033688217707630

Mackey, A., Polio, C., & McDonough, K. (2004). The relationship between experience, education, and teachers' use of incidental focus-on-form techniques. *Language Teaching Research, 8*(3), 301-327. https://doi.org/10.1075/aals.16.12pol

Mahrik, T., Kralik, R., & Tavilla, I. 2018. Ethics in the light of subjectivity - Kierkegaard and Levinas. *Astra Salvensis, 6*, 488-500.

Panova, I. & Lyster, R. (2002). Patterns of corrective feedback and uptake in an adult ESL classroom. *TESOL Quarterly, 36*(4), 573-595. https://doi.org/10.2307/358824

Pawlak, M. (2013). *Error correction in the foreign language classroom: Reconsidering the issues*. Springer Science & Business Media.

Pushkarev, Y. V., & Pushkareva, E. A. (2019). Communication foundation for intellectual culture: Tendencies of contemporary development. *XLinguae, 12*(4), 212-218.

Samad, A. A., & Nursus, E. (2015). The influence of teaching experience, school location and academic background on teachers' beliefs in teaching grammar. *Asian Social Science, 11*(15), 257-266.

Seedhouse, P. (2004). *The interactional architecture of the language classroom: A conversation analysis perspective*. Malden, MA: Blackwell.

Sheen, Y. (2007). The effect of focused written corrective feedback and language aptitude on ESL learners' acquisition of articles. *TESOL Quarterly, 41*(2), 225-283. https://doi.org/10.1002/j.1545-7249.2007.tb00059.x

Sheen, Y. H. (2004). Corrective feedback and learner uptake in communicative classrooms across instructional settings. *Language Teaching Research, 8*(3), 263-300. https://doi.org/10.1191/1362168804lr146oa

Sinclair, J., & Coulthard, M. (1992). Toward an analysis of discourse. In M. Coulthard (Ed.), *Advances in spoken discourse analysis* (pp. 1-34). London: Routledge.

Stranovská, E., Gadušová, Z., & Ficzere, A. (2019). Factors influencing development of reading literacy in mother tongue and foreign language. In *ICERI 2019: Conference proceedings of 12th International Conference of Education, Research and Innovation* (pp.6901-6907). Valencia (Spain), IATED, 2019. ISBN 978-84-09-14755-7.

Stranovská, E., Hvozdíková, S., Munková, D., & Gadušová, Z. (2016). Foreign language education and dynamics of foreign language competence. *European Journal of Social and Behavioural Sciences, 17*(3), 2141-2153. DOI 10.15405/ejsbs.192.

Suzuki, M. (2004). Corrective feedback and learner uptake in adult ESL classrooms. *Teachers College Columbia University Working Papers in TESOL and Applied Linguistics, 4*(2), 56-77. DOI: 10.6007/IJARBSS/v7-i5/2976

Tabatabaei, O., & Banitalebi, A. (2012). Feedback strategies in foreign language reading classes. *Asian Culture and History, 3*(2), 59. DOI: 10.5539/ach.v3n2p59

Tavilla, I., Kralik, R., Webb, C., Jiang, X., & Manuel, A. J. (2019). The rise of fascism and the reformation of Hegel's dialectic into Italian neo-idealist philosophy. *XLinguae, 12*(1), 139-150.

Tsang, W. K. (2004). Feedback and uptake in teacher-student interaction: an analysis of 18 English lessons in Hong Kong secondary classrooms. *RELC Journal, 35*(2), 187-209. https://doi.org/10.1177/003368820403500207

Valco, M., & Sturak, P. (2018). The "relational self": Philosophical-religious reflections in anthropology and personalism. *XLinguae, 11*(1), 289-299.

Vítečková, M., Procházka, M., Gadušová, Z., & Stranovská, E. (2016). Teacher at the start of his career and his personal needs. In *ERIE 2016: Proceedings of the 13th International Conference Efficiency and Responsibility in Education* (pp. 624-633). Prague: Czech University of Life Sciences, 2016. ISBN 978-80-213-2646-0

Inclusive Education and Its Implementation: International Practices

Olga Bombardelli[1]

[1] *University of Trento, Trento, Italy*
Email: olga.bombardelli@unitn.it
ORCID: https://orcid.org/0000-0003-0617-5488

Abstract
Research problem. There is a big demand for high level competencies in an increasingly knowledge driven society. Ensuring that each individual has an equal opportunity for educational progress is a challenge worldwide; inclusive education is a question of equity and a premise for active contribution to society by all people, included the weakest. Inclusive schools work to ensure full participation and access to quality learning opportunities for all learners, respecting and valuing diversity, and fighting discrimination in and through education.
The aim of this paper is to study and select the best strategies for empowerment, talent development and raising achievement of all students, including the students with disabilities and special education needs. It explores the area of educational measures both for talented learners, and for upskilling staff to address a heterogeneous student population.
Research methods: The methodology implies the use of authoritative studies and of official documents from national, and the International Bodies, linking them to the author's personal experience in teaching and in project management, especially keeping in mind the inclusive tradition in Italy. The UN Convention on the Rights of Persons with Disabilities (art.24) stipulates that countries must take steps to ensure that persons with disabilities can access an inclusive primary and secondary education on an equal basis with others in the communities in which they live.
Conclusions and recommendations. We need to understand the importance of inclusivity, to widen the empirical research, to develop, and implement measures to capture the learners' potential, their academic, and personal development, improving teaching strategies, and guidance. Families and society also make a contribution. It is a challenging task, where teachers play a key role in innovative school systems. The results of the study can be used in policy making, curricula development, teaching programs, and improving the quality of education for all learners.
Keywords: inclusive education, talent development, quality teaching and learning, teacher training.

Инклюзивное образование и его реализация: международная практика

Ольга Бомбарделли [1]

[1] *Трентский университет, Тренто, Италия*
E-mail: olga.bombardelli@unitn.it
ORCID: https://orcid.org/0000-0003-0617-5488

Аннотация
В обществе, в значительной степени ориентированном на образование, уделяется особое внимание высокому уровню компетенций. Обеспечение равных возможностей для всех обучающихся является проблемой для всего мира. Инклюзивное образование – одна из попыток решить эту проблему. Оно нацелено на формирование общества, в котором активное участие будут принимать все люди, включая самых слабых. Инклюзивные школы, признавая

и уважая ценность разнообразия и борясь с дискриминацией в сфере образования, работают над обеспечением доступа к качественному обучению всех учащихся. Целью настоящей работы является изучение и выбор наилучших стратегий расширения прав и возможностей, развития способностей и повышения успеваемости всех студентов, включая учащихся с ограниченными возможностями и особыми потребностями. В работе рассмотрены образовательные меры как для обучения одарённых детей, так и для повышения квалификации учителей, работающих с разнородным составом учащихся. В методологическом обосновании работы использованы авторитетные исследования и официальные документы национальных и международных органов. Кроме того, привлекается личный опыт автора в преподавании и управлении проектами, а также инклюзивные традиции Италии. Конвенция ООН о правах инвалидов (статья 24) предусматривает, что страны должны принимать меры для обеспечения инвалидам наравне с другими доступа к инклюзивному начальному и среднему образованию в местах их проживания. Руководители в сфере образования должны понимать важность инклюзии, расширять эмпирические исследования, разрабатывать и реализовывать меры для выявления потенциала учащихся, их академического и личностного развития, улучшения стратегий обучения и управления. Семейные и общественные институты также должны участвовать в этой работе. Особая роль в решении этой сложной задачи в современных образовательных системах принадлежит учителю. Результаты исследования могут быть использованы в разработке образовательной политики, учебных планов и программ, в повышении качества образования на всех уровнях.

Ключевые слова: инклюзивное образование, развитие способностей, качественное преподавание и обучение, подготовка учителей

Introduction

There is a big demand for high level competencies in an increasingly knowledge driven society. Every child has the right to quality education and learning; however, people with disabilities are one of the most marginalized and excluded groups.

School inclusion has been considered in most countries around the world in the last 30 years, especially since the Salamanca Statement (UNESCO, 1994). In 2006, the *Convention on the Rights of Persons with Disabilities (CRPD)* was adopted by the U.N. General Assembly. Article 24 asserts the right of people with disabilities to education and states that part of this right includes that children with disabilities "can access an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live" (UN, 2006).

Inclusion is a question of equity and a premise for quality contribution to the society by all people, included the weakest. Equity is at the core of the Sustainable Development Goals (UN SDGs) 2030; it lies at the heart of the target 4.5 SDG on Education.

Although 160 countries are signatories to the CRPD, progress toward an inclusive education that promotes meaningful access to, and progress for, learners with special education needs (SEN) in the general education curriculum has proceeded slowly. Students with extensive support needs tend to lag significantly behind their peers academically (Ryndak, Jackson, & White, 2013). Such exclusion has long lasting impacts because education is the gateway to full participation in society, for employment, and engagement in their communities.

Teaching inclusively enables all students, whatever their circumstances, to enjoy the fullest possible learning experience; it is considered the most effective way to give children a fair chance to go to school, learn and develop the skills they need to thrive. Ensuring that each individual has an equal opportunity for educational progress remains a challenge worldwide.

Student population is more diverse than ever. The definition of "disability" varies depending on the circumstances and context of the evaluation. Despite the range of definitions, disability evaluation is based on the criteria of the bio-psychosocial model of the International Classification of Functioning, Disability and Health (ICF) adopted by

the World Health Organisation (WHO), or according to the Diagnostic and Statistical Manual (DSM).

Different students learn best in different ways and progress at different rates. Besides disabilities, there are special needs (specific learning disabilities like dyslexia) and disadvantages due to different reasons: migration status, poor economic or/and cultural background, belonging to minority groups as Roma children (UNICEF, 2011). The social-ecological perspective defines disability as a mismatch between personal competencies and environmental demands (Schalock et al., 2010; World Health Organization, 2007).

An estimated 93 million children worldwide live with disabilities (Save the Children, 2020). They face persistent barriers to education stemming from discrimination, stigma and the routine failure of decision makers to incorporate disability in school services. Nevertheless recently, according to UNICEF, there has also been a shift in the attitudes of teachers and school administrators towards enrolling children with disabilities in regular schools (UNICEF, 2017).

Purpose and objectives of the study

– To discuss the importance, the concept and the strategies of inclusion at school, from an international view, gathering relevant information from national and international sources (literature, work of international bodies) on inclusion, the principles that underpin inclusive education, the various definition of inclusion, looking for existing examples developed in the international scenario,

– To take one of the countries with long lasting experience: Italy, as a case study, to study and select good practices**,** developing proposals for successful inclusive education, for the empowerment and talent development of all students, especially at the secondary school level; it explores the area of educational measures both for talenting learners, and for upskilling staff to address heterogeneous student population, to raise the achievement of all learners.

Situation and literature review

Within the international view, there are ambiguous definitions and multiple interpretations of the term "inclusion" itself, as widely discussed in the literature (Göransson & Nilholm, 2014). On the other hand, each country implements education for disabled and disadvantaged children differently, according to many aspects related to its social and political context, as well as its school system structure and tradition.

There is a rich production of research and publications in the field of inclusive education, referring to students with Special Educational Needs (Amor et al., 2018; Van Mieghem et al., 2018), and to students without Special Educational Needs (Dell'Anna, Ianes, & Pellegrini, 2019). International and national Institutions, Universities, Research Centres, bodies like UNESCO (United Nations Educational, Scientific and Cultural Organization), UNICEF (United Nations International Children's Fund), Save the children. Uncountable centres and agencies as the EASIE (European Agency for Special Needs and Inclusive Education), the Centre for Studies on Inclusive Education (CSIE), NGOs like the European Association of Service Providers for Persons with Disabilities (EASPD), or the European Dyslexia Association (EDA), as well as national bodies are very active in awareness raising, research and support for inclusion. They promote information, coordination, host events and other forms of outreach geared towards policymakers and the general public, and in capacity-building by training teachers, administrators and communities.

The answer to inclusive education does not lie in building more special schools for children with disabilities. This would only serve to isolate them further and is unlikely to

be sustainable in the long-run. Instead, we should share resources that already exist in educational systems.

Inclusive education is when all students, regardless of any challenges they may have, are placed in age-appropriate general education classes that are in their own neighbourhood schools to receive high-quality instruction, interventions, and support that enables them to achieve success in the core curriculum (Alquraini & Gut, 2012).

Inclusion is a process that ensures full participation and access to quality learning opportunities for all learners, respecting and valuing diversity, and eliminating all forms of discrimination in and through education. Talent development for all should be part both of the school policy and of the Initial and continuing teacher training. The term inclusion represents a commitment to making preschools, schools, and other education settings, places in which everyone is valued and belongs, and diversity is seen as enriching. The European Agency for Special Needs and Inclusive Education studied the link between inclusive education and social inclusion, finding evidence to suggest that there is a link between inclusive education and social inclusion in the areas of education, employment and living in the community. At the same time, the review suggests that attending segregated settings minimizes the opportunities for social inclusion both in the short term and the long term (EASNIE, 2018). Bringing students of all backgrounds together in the same classrooms and in the same schools allows them to learn and grow side by side. It is not only equality, it means reducing barriers for all (CAWI, 2015). 'An inclusive setting refers to education where the child/learner with SEN follows education in mainstream classes alongside their mainstream peers for the largest part -80% or more- of the school week' (EASIE, 2018).

It is recognized that positive attitudes toward inclusion are also among the most important for creating an inclusive classroom that works, supported by reasonable accommodation and teaching strategies tailored to meet their individual needs (Hagiwara et al., 2019). Successful inclusive education happens primarily through accepting, understanding, and attending to student differences and diversity, which can include physical, cognitive, academic, social, and emotional elements. This is not to say that students never need to spend time out of regular education classes, because sometimes they do for a very particular purpose. But this should be the exception.

The driving principle is to make all students feel welcomed, appropriately challenged, and supported in their efforts. Individualized supports play a central role (Schalock, 2013) in the education context. Supports are defined as "resources and strategies that aim to promote the development, education, interests, and personal wellbeing of a person and that enhance individual functioning" (Schalock et al., 2010). Types of support are seemingly innumerable. Thompson et al. assert that there are three broad categories of supports relevant to general education contexts, including curricular adaptations, instructional supports, and participation supports (Thompson, Walker, Shogren, & Wehmeyer, 2018). It is an ongoing challenge for individual teachers, pupils, parents, principals and the system as a whole.

The Italian case study

A comprehensive account of the situation in Italy is given in a Eurydice report (EACEA, 2020), to which the following section shows basic similarities. Education at all levels is open to everyone - Italian citizens as well as foreign minors from both EU and non-EU countries, and from minority groups (Roma children etc.). The integration of learners with disabilities started in 1971, and in 1977 special classes were abolished. The offer of education for pupils with special educational needs is totally included in mainstream education; it is mandatory for the State as well as for local authorities and the

National health system, each within its own competences (EASNIE, 2016; Anastasiou et al., 2015).

Integration and support measures for special needs are addressed to pupils with disabilities as defined in the frame law no. 104/1992 on care, social inclusion and rights of persons with disabilities. Law no. 170/2010 recognised dyslexia, dysgraphia, dysorthography and dyscalculia as specific learning disabilities (Bombardelli, 2006).

In Italy, pupils with disabilities are defined as pupils with stable or progressive physic, psychic or sensory disabilities, causing learning and working difficulties that can produce social detriment and social exclusion. The most recent definition of the target group 'special education needs' extends the concept of disadvantage at school, not only to impairments. A new pedagogic-didactical category of SEN pupils with "specific developmental disorders" is defined in addition to disabled pupils and pupils with diagnosed specific learning disorders. This new category includes problems in language, nonverbal skills, movement coordination, attention deficits and hyperactivity disorder, socio-economic, linguistic and cultural disadvantage.

The State also guarantees the right to education to students who are unable to attend school because hospitalized, detained or at home for a long illness. Pupils with special educational needs deriving from proven socio-economic, linguistic, personal and cultural disadvantage (e.g., reported by social services) can temporarily follow personalized learning paths, through a personalized teaching plan, and can adopt compensative tools.

The local Medical committee of the National health system can provide a document that certifies the disability and the consequent right to benefit from the support measures foreseen by the legislation in force. Following the disability evaluation, a Functioning Profile is released according to the criteria of the bio-psychosocial model of the International Classification of Functioning, Disability and Health (ICF-WHO).

The support measures for pupils with disabilities are then selected on the basis of the Functioning Profile and the Individualized Education Plan, identifying also the professionals, the types of support measures and the necessary structural resources for school inclusion. School staff also include 'support teachers' who have received a specific initial training focused on support teaching activities for pupils with disabilities. Classes with disabled pupils have a maximum of 20 pupils, provided that the reduced class size is necessary to assure education to these pupils. Teachers, support teachers, the class council, in collaboration with parents, specific professionals (speech therapist etc.), jointly draw up and approve the Plan.

In every school there are measures to overcome architectural barriers, and a working group for inclusion is established, made up of teachers, support teachers, administrative staff, specialists of the local health authority, chaired by the school head. Schools can use compensatory educational tools and exempt pupils from some activities acting on decisions taken by the class council on the basis of the clinical documentation. Support measures for foreign minors focus on language learning with the presence of language and cultural mediators to help teachers and school staff communicating with pupils and their families.

Recurrent and final assessment of students with specific learning/developmental disorders is consistent with the pedagogic and didactic measures adopted. In particular, schools should adopt assessment measures that allow students with such disorders to demonstrate the level attained. For example, oral tests are preferable, in particular for assessing foreign languages and compensative didactic tools or exemption from specific activities are recommended, if suitable.

Assessment of pupils with certified disabilities focus on their Individualised Educational Plan. Pupils who do not sit the final exam receive a document attesting the

credits obtained and allowing their enrolment in regional vocational training courses. The upper secondary education leaving exam can be carried out with the help of special didactic tools. Pupils who followed a differentiated study plan and who have not obtained the final qualification, receive a document attesting the course of study, the subjects, the length of studies as well as competences acquired and the relevant credits obtained at the final exam.

Methodology

Authoritative studies and official documents of the national, and the international institutions, were used to explore the numerous ways in which different groups are not to be excluded from equal opportunities and achievements, in the daily routines of schools, and to link the scientific findings to the author's personal experience in teaching and in project management (Erasmus Plus project PREDIS, 2015-2018).

Results

The results of the study are the selection of the best educational strategies, which are measures in the school system, in the teaching curricula for differentiation (careful observation, motivation, non-standard evaluation, counselling, portfolio and personal development plan), paying attention to human relation, identity and self-esteem (Huysse-Gaytandjieva, Groot, Pavlova, & Joling, 2015; Booth, & Ainscow, 2018), caring for social contacts among learners (well organized group work, mutual support, solidarity), seeing students as persons, training of teachers, education of parents (educational styles, examples, media-management), to prevent under-achievement and early school leaving. Positive expectations and a supportive school environment can greatly improve the learning experience of children.

Inclusive teaching means not discriminating against students, directly or indirectly, creating an inclusive education climate in order to capture and strengthen the competences of the learners, their academic, and personal development (learning to learn, portfolio), improving teaching strategies (re-engineering educational programmes, assessment forms), and guidance. It is teaching in a way that respects the diversity of all students, and enables them to take part in learning and fulfil their potential, regardless of their backgrounds, learning styles or abilities, removing any barriers that prevent students from learning, using a variety of instructional formats (whole-group instruction, flexible cooperative grouping, paired learning, peer tutoring, and student-led demonstrations).

To ensure access to academic curricular content, teachers create accessible lessons, that include multiple ways of representing content to students and for students to represent learning back, such as modelling, images, objectives and manipulatives, graphic organizers, oral and written responses, and technology, caring for curricular adaptations (use of large print, headphones, calculators, draw a picture instead, or just to have extra time), instructional supports and participation, ensuring that all handouts, presentations and online course materials are accessible and meet the accessibility criteria (for example, using high-contrast text/background colours, legible fonts, and ensuring the text can be read correctly by screen-reading software).

Schools provide instruction in a wider range of learning modalities (visual, auditory, and kinaesthetic), which benefits their regular students as well, ensure access to appropriate learning materials and resources, including textbooks. Contents can be presented in interactive and practical ways (for example, using objects, images and video), not only having text-based materials. For example, children with vision impairments can use Braille texts, and sit at the front of classrooms; students with auditive impairments,

use hearing aids. Of course, support in the physical environment of schools is needed, overcoming movement barriers, making ramps for wheelchair users (accessible classrooms and toilets), etc.

Assessment and evaluation methods should help students to understand the standard of work they are expected to produce; participatory assessment forms facilitate self-evaluation and recovery plans, because they encourage learners to find their strengths and weaknesses and to look for improvement strategies.

There is a definite need for teachers to be supported in implementing an inclusive education. For there to be true long-term success necessitates formal training, starting from the pre-service curriculum, in general and special areas of competence necessary to be effective in inclusive classrooms (EASIE, 2012; EDA, 1997).

According to EASNIE (2012), the Profile of the inclusive teacher includes: valuing learner diversity, considering learner difference as a resource and an asset to education; supporting all learners, with high expectations for all learners' achievements. Promoting the academic, practical, social and emotional learning of all learners through effective teaching approaches in heterogeneous classes; working with others, collaborating in teamwork, with teachers, parents and families, other educational professionals; personal professional development, taking responsibility for the own lifelong learning. Teachers are reflective practitioners and initial teacher education provides a foundation for ongoing professional learning and development.

School systems are expected to plan, implement, monitor and evaluate their approaches to inclusion on a daily basis: governments must regularly collect and analyse data to ensure children are reached with effective services.

Inclusive systems require changes at all levels of society. Adopting a holistic model of inclusion means viewing it as a dynamic system that encompasses schools, and the wider community. Besides policy-makers and practitioners, parents and society have a big part to play; feelings and attitudes of parents of regular and impaired students influence the educational process. At the community level, stigma and discrimination must be tackled. Real inclusion is possible when communities and mass-media cooperate in this task, through acceptance, and inclusive behaviour.

Discussion

The potential of inclusive education has to be studied further, to widen the research basis. First, international agreement on definitions and on concept clarification is necessary to support comparability, the advancement of research, and synergy of educational measures. Secondly, detailed empirical studies have to be carried out in inclusive settings in such a complex field, especially to enquire about the impact of different support models on the main variables: quality learning by both regular and impaired students, the possible advantages of inclusion to counter early school leaving of all learners, the effectiveness of inclusive education in mainstream schools for students with severe and complex learning difficulties (Imray & Coley, 2017), socialization, the contribution of society, and of the world of work.

According to most authoritative experts, both students with and without disabilities learn more in inclusive settings (Alquraini & Gut, 2012). For students with disabilities, this includes academic gains in literacy, math, and social studies, better communication and social skills. There are even critical opinions. Inclusion works when it is quality inclusion, otherwise it can foster negative effects, such as marginalization of students with disabilities in mainstream schools (Nes, 2017; Nes, Demo, & Ianes, 2017), aiming at the implementation of research-based interventions and practices in inclusive schools.

Conclusion

Like all persons, children with disabilities and disadvantages have ambitions and dreams for their futures, they need quality education to develop their skills, realize their full potential, and make their contribution to the common development. In our information society high qualification is needed for all, keeping in mind both the human rights and the social costs of illiteracy. The ability to read and write, and to understand plays a vital role in the process of social progress and personal development.

To close the education gap for children in need, we must understand the importance of inclusivity, and we should implement measures to strengthen the competences of all learners, and their personal development, improving the organisation of the school systems, the teacher training, and the social commitment.

This issue is open to future directions in research and implications for the practice. For greater legitimacy based on empirical data, we need further efforts regarding different aspects of inclusive schools. Ongoing work can challenge and explore successful access to general education in inclusive settings preventing school failure in school policy worldwide. Respecting differences benefits all students because it values their individual strengths and contributions and makes the learning experience richer for everyone.

References

Alquraini, T., & Dianne Gut, D. (2012). Critical components of successful inclusion of students with severe disabilities: Literature review. *International Journal of Special Education, 27*(1), 42-59.

Amor, A. M., Hagiwara, M., Shogren, K. A., Thompson, J. R., Verdugo, M. Á., Burke, K. M., & Aguayo, V. (2019). International perspectives and trends in research on inclusive education: a systematic review. *International Journal of Inclusive Education*, *23*(12), 1277-1295.

Anastasiou, D., Kauffman, J. M., & Di Nuovo, S. (2015). Inclusive education in Italy: description and reflections on full inclusion. *European Journal of Special Needs Education*, *30*(4), 429-443.

Bombardelli, O. (2006). Possibilities to improve learning skills of pupils with learning difficulties. In *Reader Internationale Woche 2006* (pp. 91-108). Bremen: Universitaet Bremen.

Booth, T., & Ainscow, M. (2018*). Index for inclusion: Developing learning and participation in schools.* Centre for Studies on Inclusive Education (CSIE).

CAWI (2015). *Equity and Inclusion Lens Handbook*. Ottawa: City of Ottawa.

Dell'Anna, S., Ianes, D. & Pellegrini, M. (2018). *Effects of inclusive education on pupils and students without Special Educational Needs: A systematic Review.* Paper presented at ECER Conference 2018, Bolzano, Italy.

Diagnostic and Statistical Manual (DSM). Accessed August 6, 2020 at: https://www.psychiatry.org/psychiatrists/practice/dsm

EACEA (Education, Audiovisual and Culture Executive Agency) (2018/19). Italy Overview. Key features of the education system. Retrieved August 6, 2020, from https://eacea.ec.europa.eu/national-policies/eurydice/content/italy_en

EACEA (Education, Audiovisual and Culture Executive Agency) (2020). Special education needs provision within mainstream education. Accessed August 6, 2020 at: https://eacea.ec.europa.eu/national-policies/eurydice/content/special-education-needs-provision-within-mainstream-education-33_en

EASIE (European Agency Statistics on Inclusive Education) (2018). Methodology Report - Updated 2018. Accessed August 6, 2020 at: https://www.european-agency.org/sites/default/files/easie_methodology_report_updated_2018.pdf

EASNIE (European Agency for Special Needs and Inclusive Education) (2016). Preventing school failure country policy review and analysis Italy. Accessed August 6, 2020 at: https://www.european-agency.org/sites/default/files/agency-projects/CPRA/Phase1/CPRA%20Italy.pdf

EASNIE (European Agency for Special Needs and Inclusive Education) (2012). Teacher Education for Inclusion – Profile of Inclusive Teachers. Accessed August 6, 2020 at: https://www.european-agency.org/resources/publications/teacher-education-inclusion-profile-inclusive-teachers

EASNIE (European Agency for Special Needs and Inclusive Education) (2018). Evidence of the link between inclusive education and social inclusion: A review of the literature. Odense, Denmark. Accessed August 6, 2020 at: https://www.european-agency.org/resources/publications/evidence-literature-review

EASPD (European Association of Service Providers for Persons with Disabilities). Accessed August 6, 2020 at: https://www.easpd.eu/en/content/about-us

EDA (European Dyslexia Association) (1997). The guidance criteria for training teachers of dyslexic students. Accessed August 6, 2020 at: https://www.eda-info.eu/guidancecriteria.html

EDA (European Dyslexia Association). Accessed August 6, 2020 at: https://www.eda-info.eu/

Erasmus Plus project European Commission PREDIS (Preventing Early Drop out through Inclusive Strategies), 2015-2018. Accessed August 6, 2020 at: https://event.unitn.it/predis/en/

Fruth, J. D., & Woods, M. N. (2015). Academic performance of students without disabilities in the inclusive environment. *Education, 135*(3), 351-361.

Göransson, K., & Nilholm, C. (2014). Conceptual diversities and empirical shortcomings - a critical analysis of research on inclusive education. *European Journal of Special Needs Education, 29*(3), 265-280.

Hagiwara, M., Amor, A. M., Shogren, K. A., Thompson, J. R., Verdugo, Miguel A., Burke, Kathryn M., Uyanik, H., Aguayo, V. (2019). International trends in inclusive education intervention research: A literature review. *Education and Training in Autism and Developmental Disabilities, 54*(1), 3-17.

Huysse-Gaytandjieva A., Groot W., Pavlova M. & Joling C. (2015). Low self-esteem predicts future unemployment. *Journal of Applied Economics, 18*(2), 325-346.

Imray, P., & Colley, A. (2017). *Inclusion is dead. Long live inclusion.* Routledge: Abingdon.

International Classification of Functioning, Disability and Health (ICF) https://www.who.int/classifications/icf/en/

Nes, K. (2017). Inclusive education and exclusionary practices in Norwegian school. In F. Dovigo (Ed.), *Special educational needs and inclusive practices. Studies in inclusive education* (pp. 63-78). Rotterdam: Sense Publishers.

Nes, K., Demo, H., & Ianes, D. (2017). Inclusion at risk? Push and pull-out phenomena in inclusive school systems: The Italian and Norwegian experiences. *International Journal of Inclusive Education, 22*(2), 111-129.

Ryndak, D., Jackson, L., & White, J. (2013). Involvement and progress in the general education curriculum for students with extensive support needs: K-12 inclusive education research and implications for the future. *Inclusion, 1*(1), 28-49.

Save the Children's (2020). Resource Centre. Accessed August 6, 2020 at: https://resourcecentre.savethechildren.net/keyword/children-disabilities

Schalock, R. L. (2013). Introduction to the intellectual disability construct. In M. L. Wehmeyer (Ed.), *The story of intellectual disability: An evolution of meaning, understanding, and public perception* (pp. 1-18). Baltimore: Paul. H. Brookes.

Schalock, R. L., Borthwick-Duffy, S., Bradley, V., Buntix, W. H. E., Coulter, D. L., Craig, E. P. M., & Yeager, M. H. (2010). *Intellectual disability: Definition, classification, and systems of support* (11th ed.). Washington, DC: American Association on Intellectual and Developmental Disabilities.

Thompson, J. R., Walker, V. L., Shogren, K. A., & Wehmeyer, M. L. (2018). Expanding inclusive educational opportunities for students with significant cognitive disabilities through personalized supports. *Intellectual and Developmental Disabilities, 56*(6), 396-411.

UNESCO (1994). The Salamanca statement and framework for action on special needs education. Adopted by the World Conference on Special Needs Education: Access and Quality (Salamanca, Spain, June 7-10, 1994). Save the Children's (2020). Resource Centre. Accessed August 6, 2020 at: https://www.right-to-education.org/sites/right-to-education.org/files/resource-attachments/Salamanca_Statement_1994.pdf

UNESCO (2019). Global education monitoring report. Save the Children's (2020). Resource Centre. Accessed August 6, 2020 at: https://en.unesco.org/gem-report/

UNESCO Institute for Statistics (2018). Handbook on measuring equity in education. Save the Children's (2020). Resource Centre. Accessed August 6, 2020 at: http://uis.unesco.org/sites/default/files/documents/handbook-measuring-equity-education-2018-en.pdf

UNICEF (2011). The right of Roma children to education: Position paper. Geneva: UNICEF Regional Office for Central and Eastern Europe of Independent States (CEECIS).

UNICEF (2017). Country Office annual reporting, Countries implementing key measures of inclusive education. Save the Children's (2020). Resource Centre. Accessed August 6, 2020 at: https://blogs.unicef.org/blog/inclusive-education-children-with-disabilities/

United Nations (2006). The UN Convention on the rights of persons with disabilities. Save the Children's (2020). Resource Centre. Accessed August 6, 2020 at: https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html

United Nations (2015). Sustainable development goals (SDGs) 2030. Save the Children's (2020). Resource Centre. Accessed August 6, 2020 at: https://www.undp.org/content/undp/en/home/sustainable-development-goals.html

Van Mieghem, A., Verschueren, K., Petry, K., & Struyf, E. (2018). An analysis of research on inclusive education: a systematic search and meta review. *International Journal of Inclusive Education*, *24*(6), 675-689.

World Health Organization (2007). International classification of functioning, disability and health: Children and youth version. Geneva.

Coping with Negative Experiences of Gifted Children due to Dis-Synchrony

Nafisa T. Burganova[1], Irina F. Sibgatullina[2], Leisan M. Zakirova[3], Luybov Yu. Komarova[4]

[1] *Naberezhnye Chelny Institute, Kazan Federal University, Naberezhnye Chelny, Russia*
Email: yfabcf@mail.ru
ORCID: https://orcid.org/0000-0002-2746-8178

[2] *Yelabuga Institute, Kazan Federal University, Yelabuga, Russia*
Email: office@rbs-ifie.at
ORCID: https://orcid.org/0000-0001-5149-6139

[3] *Naberezhnye Chelny Institute, Kazan Federal University, Naberezhnye Chelny, Russia*
Email: drzak@mail.ru
ORCID: https://orcid.org/0000-0003-2918-4424

[4] *Naberezhnye Chelny Institute, Kazan Federal University, Naberezhnye Chelny, Russia*
Email: luba7575@mail.ru
ORCID: https://orcid.org/0000-0002-3759-7942

Abstract
Currently, psychological support for gifted primary school children requires specialists not only to have a high level of psychological and pedagogical, but also other professional competencies for the effective correction of negative experiences.
The purpose of the article is to develop methodological techniques and organization of professional activities of psychologists using modern technologies. The leading method for studying this problem is the modelling method, which allows us to consider this problem as a purposeful and organized process for improving professional and special competencies. The structure of the article includes the target, content, organizational procedural and effective components.
Optimization of the model of differentiated approach for overcoming negative experiences in gifted children of primary school age due to dis-synchrony using the method of interdisciplinary interaction, will not only overcome negative experiences, but also prevent possible negative emotions, as well as improving the professional skills of specialists working in this field.
Keywords: adverse experiences, primary school, dis-synchrony development, gifted children, teaching and learning activities.

Преодоление негативных переживаний у одаренных детей младшего школьного возраста в аспекте феномена диссинхронии

Нафиса Т. Бурганова[1], Ирина Ф. Сибгатуллина[2], Лейсан М. Закирова[3], Любовь Ю. Комарова[4]

[1] Набережночелнинский институт Казанского федерального университета, Набережные Челны, Россия
Email: yfabcf@mail.ru
ORCID: https://orcid.org/0000-0002-2746-8178

[2] Елабужский институт Казанского федерального университета, Елабуга, Россия
Email: office@rbs-ifie.at
ORCID: https://orcid.org/0000-0001-5149-6139

[3] Набережночелнинский институт Казанского федерального университета, Набережные Челны, Россия
Email: drzak@mail.ru
ORCID: https://orcid.org/0000-0003-2918-4424

[4] Набережночелнинский институт Казанского федерального университета, Набережные Челны, Россия
Email: luba7575@mail.ru
ORCID: https://orcid.org/0000-0002-3759-7942

Аннотация
На современном этапе психологическая поддержка одаренных младших школьников требует от специалистов высокого уровня сформированности не только психолого-педагогических, но и других профессиональных компетенций для эффективной коррекции негативных переживаний.
Цель статьи заключается в разработке (с применением современных технологий) методических приемов и организации профессиональной деятельности психологов. Ведущим в исследовании является метод моделирования, позволяющий рассмотреть данную проблему как целенаправленный и организованный процесс совершенствования профессиональных и специальных компетенций. Структура представленной работы включает в себя целевой, содержательный, организационно-процессуальный и результативный компоненты.
Использование дифференцированного подхода к одаренным детям младшего школьного возраста с феноменом диссинхронии в сочетании с методом междисциплинарного взаимодействия позволяет не только преодолевать их негативные переживания, но и предупреждать у них возможные отрицательные эмоции. Кроме того, такая модель повышает профессиональные навыки специалистов, работающих в данной области.
Ключевые слова: негативные переживания, особенности возникновения негативных переживаний у младших школьников, диссинхрония развития одаренных, учебная и внеучебная деятельность, проявления феномена диссинхронии у одаренных младших школьников

Introduction

Assimilation of the system of norms of relations to the world and to each other, is determined by the personality property of intelligence - in particular social intelligence. This allows a person to build different versions of their "picture of the world". The criteria for the level of the intellectual development of a person are related to how a person

perceives, understands and explains reality. This determines the features of intellectual mastery of the situation, and accordingly, behaviour in this situation. But this does not mean that intelligence is solely a mechanism for adapting to the environment. On the contrary, gifted people, as a rule, are maladaptive because, due to the specifics of the organization of their mental experience, they see what is happening in a different way, and their behaviour corresponds to deep, situational patterns, while coming into conflict with actual situational requirements (Burganova, 2011).

This research relates to the socialization and psycho-emotional support of gifted children of primary school age, as more and more attention is being paid to non-medicinal means. These psychological tools are successfully used in the correction and prevention of functional (social, communicative and psycho-social patterns of dis-synchrony. However, the use of these methods for social interaction is difficult and ineffective. They are ineffective because the paradigm of direct support of younger students does not take into account their emotional state. The phenomenon of dis-synchrony of the emotional state in gifted primary school children is manifested directly through negative experiences.

Psychological and internal dis-synchrony is the basis for the emergence of a tense and uncomfortable socio-psychological situation in the school. Thus, Sibgatullina (2020) notes that for these reasons, a gifted child's interest in learning dies. The child becomes distracted, plunges into his or her own development scenarios, shows aggression, or withdraws into him- herself.

In this paper, we report on studies of younger students with different predictors of high achievement (giftedness) in terms of the manifestation of negative experiences during academic and non-academic activities.

Purpose and objectives

To understand the pedagogical process, it was necessary to verify methodologically correctly all the main components, including an understanding of phenomenon nature of dis-synchrony and forms of educational motivation. An essential aspect of our scientific interests is the assessment of the mental development of the intellectually talented children, in terms of the presence of psychological obstacles that impede its manifestations and lead to dis-synchrony. The article explores the experience of the Institute of Psychology and Education of Kazan Federal University.

Literature review

The analysis of the literature showed that, in highlighting the possibility of overcoming negative experiences of talented children in a didactic system, researchers consider the process in a holistic context from the perspective of historicism. However, modern science approaches require constant adaptation to changing conditions (Biktagirova & Valeeva, 2015; Valeeva, R. A., & Valeeva, L. A., 2014).

In the 1990's, many scientists began actively developing specific technologies to overcome negative experiences of talented (Silverman & Kearney, 1989; Tomlinson, 1997). A number of studies note that the main trends characterizing the image of modern education is the organized process of improving the professional and special competencies of teachers in their work with talented children (Nazarova, 2001).

According to Nazarova (2001), integration is the most important means of educating children in the aspect of the phenomenon of dis-synchrony. It modifies the organizational structure of the general educational process and can be regarded as its systematizing factor as it performs the specific function of changing the learning technology (Nazarova, 2001, p. 28). Assessing the significance of this statement, it should be noted that the integration process brings its own innovations. To effectively solve the problems in training and

education of a talented primary school pupil, it is necessary to reflect these innovative technologies in the field of pedagogical practice.

The solution to this problem is in the postgraduate education of specialists. Dis-synchrony is a state of an intellectually talented child who has difficulty in contact with his environment (Zakirova, & Shulaeva, 2013). Usually, dis-synchrony reveals itself at the social and mental levels. The first level is expressed by the gap between the child and his environment – the speed of his/her intellectual development and the average (or low) rate of development of other children. Internal dis-synchrony is revealed in the inconsistency of the development of individual mental functions of the child him/herself, for example, a very fast pace of reading can be accompanied by psychomotor difficulties. Difficulties in writing or rapid intellectual development are related to a slow emotional development of the psyche (Sibgatullina, 2020).

As a rule, social and internal dis-synchrony is the basis for the emergence of a very tense and uncomfortable socio-psychological situation in school and class.

Thus, Sibgatulina (2020) notes that for these reasons, the talented child faces the lack of interest in learning, becomes absent-minded, immersed in their own developmental scenarios, shows aggression or withdraws. In general, the child remains defenceless, since teachers often do not accept such children. The child is compelled to build the whole system of psychological defences both from school, from parents and from the teacher.

It should be noted that our observations and studies have shown that there is no mandatory relationship and connection between marginal status and personality disorders of described talented children (Taber, 2007; Sibgatullina, Khamitova, Zakirova, & Komarova, 2019).

Methodology

The research employed analysis of normative documents and outcomes of activity using forecasting, systematization and generalization of facts and concepts, the study and generalization of experience, and diagnostic methods:

The experiment was conducted in the primary classes of secondary schools. A total of 248 respondents participated in the study at various stages. The sample consisted of 60 students of grades 1-3 in the schools of Naberezhnye Chelny.

The study was conducted in three stages. The first preparatory stage analysed the current state of the problem in psychological theory and practice using cross-sectional diagnostics, covering the traditional hierarchy of negative experiences in younger gifted students. At the second main stage, diagnostics of features of negative experiences in younger gifted students were applied during educational and out-of-school activities. At the third and final stage, systematization, understanding and generalization of the research results were carried out. The theoretical conclusions were clarified and the results of the study were processed and formalized.

Results

The work developed approaches for the practical activities of future specialists including:

- The target (goals, tasks),
- Methodological (approaches, principles),
- Content (features of negative experiences in gifted primary school children with different levels of cognitive abilities),
- Organizational and procedural (organizational and pedagogical conditions, scientific and methodological support) and
- Effective components (performance indicators).

• The implementation of diagnostics: gnosis, praxis, speech status, assessment of emotional state using the self-assessment test and the Spielberger-Khanin test, the method of assessing the emotional manifestations of schoolchildren by Stepanov (performed jointly with students).

• Additional components of assessing the mental state of primary school children: neurodynamic processes (Schulte's method), attitude to test performance (diligence, carelessness, passivity, indifference), the method of assessing the current psycho-emotional state of the child (determining the indicator of deviation from the auto-norm).

At the development and implementation of scientific and methodological support of practical bases stage, the pilot test was carried out for the implementation of the project for supporting children of primary school age with gifted children during academic and non-academic activities. This examined

• correspondence of texts of methods to the age characteristics of gifted primary school children;

• compliance of the diagnostic situation with the diagnostic goals.

Diagnostics were performed and 248 respondents were examined. Of these, the sample consisted of 60 students in grades 1-3 (control and experimental group: 30 people with gifts and 30 people with a high level of cognitive development). Negative experiences in the form of anxiety were shown in 98.2 % of respondents, both in the control and experimental group period of study and outside of study activities. As a result of the assessment of the overall emotional state, the following results were obtained:

• The state of General anxiety was 82% in the control group and 80% in the experimental group.

• The number of complaints about anxiety is 44% in the control group and 49% in the experimental group, respectively.

• The desire for home protection and solitude, which was also noted by almost all respondents, as well as vegetative regulation, was mainly due to sympathetic dominance. The main indicators are presented in Table 1.

Table 1. Indicators of psycho-emotional state at the beginning and end of the experiment (M±m)

Indicators	*The experimental group (n=18/ 9:9)*		*The control group (n=18/ 9:9)*	
	Before	*After*	*Before*	*After*
State of emotional tension (fear, anger, demonstrativeness, detachment)	53,9±3,4	53,8±4,2	53,9±3,6	54,4±4,1
A state of well-being	172,6±5,8	176,8±6,1	136,8±6,4	137,1±5,6
Mood	149,6±5,7	156,5±6,8*	173,9±6,2	184,3±7,1**
Adequate self-esteem	67,8±4,3	81,2±4,8*	68,2±4,7	90,4±5,1**

** - confidence of differences (p<0.01), * - confidence

There were no significant differences in the state of the psycho-emotional profile in the control and experimental groups at the beginning of the study.

At the formative stage of the experiment, scientific and methodological support of the project was developed and implemented. This included a scientific-theoretical (leading ideas and main provisions the use of modern technology in the practice of the psychologist), content (selection and structuring of the content of psychological support of children of primary school age with talent) and methodological levels (guidelines).

The following tasks were implemented during the project:

1. Creating conditions for providing psycho emotional psycho-emotional support for primary school children during academic and non-academic activities:

- formation of an initiative group of student volunteers who are able to participate in the work of the creative platform;
- organization of art therapy master classes of joint creativity of children of the experimental group and volunteers with subsequent presentation of works;
- diagnostics of the communicative component of the emotional background in children involved in the project, to record the dynamics of results.

2. Creating conditions for the implementation of the accumulated potential of gifted primary school children, through their involvement in the work of the creative platform through:

- support and development of intellectual and creative abilities of primary school children;
- conducting diagnostics;
- formation of positive attitudes in order to prevent negative experiences in younger students with predictors of high achievement.

3. Accumulation and dissemination of methodological material on the possibilities and prospects of conducting a modelling method that allows us to improve the psychological and pedagogical process of supporting younger gifted students during academic and non-academic activities. Optimization of the model of differentiated approach in overcoming negative experiences in gifted children of primary school age caused by dis-synchrony using the method of interdisciplinary interaction will allow practitioners not only to overcome negative experiences but also to prevent possible negative emotions, as well as improving the professional skills of specialists working in this field:

- organization of thematic events (exhibitions of works, monthly and final exhibitions of artistic works of participants of the creative platform) that help to attract public attention to the project;
- accumulation of methodological base for the issues of supporting younger gifted students through the use of art therapy techniques;
- establishing contacts with psychological offices in the cities of the Republic of Tatarstan in order to transfer the accumulated experience and gain new knowledge.

Experimental verification of the effectiveness of the proposed content of the psychologist's work

Our research revealed the positive impact of rehabilitation measures on the process of preventing negative experiences and psycho-emotional state in younger students with giftedness within the framework of dis-synchrony.

The number of selected test tasks did not exceed the time limits for working with younger students, who usually have limited personal time (especially during the period outside academic activities).

We identified additional components for assessing the emotional state of primary school children (state of emotional tension, fear, anger, demonstrativeness, detachment; state of well-being, mood, self-esteem). The student's criterion was used to evaluate intergroup studies (at the beginning and end of the study in the control and experimental groups), and the nonparametric Friedman's criterion was used to assess the neuropsychological status.

The integral sum of the emotional state score after the project according to the above criteria was statistically significant. For the reliability of this study, we used a research scheme with assessment of neuropsychological and speech history. The study, based on

the principles of an individually differentiated approach, allowed us to assess the nature of negative experiences in younger gifted students.

Table 2. Dynamics of emotional States during the project period, the pilot group during the training period (Talented junior high school students)

Indicator (points) M±m	Stages of observation			
	At the beginning of the study	3 weeks	5 weeks	3 months
Alarm	10,8 ±1,4	10,3±0,5 *	9,8±0,4 **	8,9±0,8***
Change of mood	16.1±1,5	13,8±0,4	10,1±0,7*	10,8±0,7**

Table 3. Dynamics of emotional States in experimental group during the period of non-academic activity (younger gifted students)

Indicator (points) M±m	Stages of observation			
	At the beginning of the study	3 weeks	5 weeks	3 months
Alarm	11,8 ±1,3	10,8±0,5 *	9,8±0,4 **	8,9±0,8***
Change of mood	13.1±1,4	12,8±0,4	10,2±0,7*	10,1±0,7**

Negative feelings of a sensual nature prevailed in the form of manifestations of anxiety and low self-esteem, and manifestations of capriciousness.

At the stages of catamnestic (the follow-up medical history of the subject) observation before the project, there was a statistically significant increase in the number of negative experiences in younger students.

Table 4. Dynamics of negative feelings in children with high intellectual potential during the period of the training activities control group

Indicator (points) M±m	Stages of observation			
	1 at the beginning of the study	3 weeks	5 weeks	3 months
Alarm	10,3 ±1,2	12,1±0,5	11,8±0,4	10,5±0,8*
Change of mood	12,1±1,3	11,8±0,4	10,9±0,7	9,8±0,7*

Dynamics of emotional manifestations - by the domain of anxiety (x 2 =3,386, n =3, p <0,05) and mood changes X22 =4, 376, n =3, p <0,001). When comparing the scores in the groups before the study and after the study, statistically significant differences were obtained in both the level of anxiety and mood change (p<0.05).

Table 5. With high intellectual potential in the period outside of academic activities, the control group

Indicator (points) M±m	Stages of observation			
	At the beginning of the study	3 weeks	5 weeks	3 months
Alarm	11,4 ±1,3	11,1±0,5	11,1±0,5	10,9±0,8*
Change of mood	12,8±1,4	12,3±0,4	11,6±0,7	9,9±0,7*

A subclinical alarm was detected, and the indicator is significant. In the comparative study of ballroom scores in the study of smart, gifted school children, there is an improvement in indicators of reducing the manifestation of negative emotions and a statistically significant sharp change in mood: the level of anxiety (r=0.36) and mood change (r=0.39). There was no correlation between the characteristics of giftedness and the manifestation of negative experiences (r= - 0.19).

Diagnostics and support during the project period were not limited to eliminating negative experiences and were aimed at creating optimal conditions for the psychological support of gifted children within the framework of the dis-synchrony predictor. At the same time, we believe that this problem is of particular importance in modern conditions. To date, there is no standardized and clinically tested compendium of social support for gifted children of primary school age.

As a result of the project implementation we:

• organized the final opening day of the works by gifted students in Naberezhnye Chelny, Institute of KFU created on the creative platform;

• contributed to the dissemination of information about opportunities to accompany children with disabilities;

• within the framework of the Republican events, we created conditions for exchanging views and developing progressive plans for the future in the work of psychological centres, offices and educational institutions covering up to 15 municipalities of the Republic of Tatarstan;

• created conditions for the development of intellectual and creative potential of children.

Discussions

The peculiarity of the project is that children were not given any emotional and volitional tasks aimed at transforming their own state in overcoming negative experiences. The student was only asked to participate in the project. At the same time, we believe that the modern concept of volunteer support has difficulties:

The need to clarify the methods and techniques of support for gifted younger students.

Creating a comprehensive and unified database of possible support techniques.

The creation of manuals, innovative support technologies for the purpose of prevention and regulation of negative experiences.

Thus, it is no less important to enrich the concept of dis-synchrony of mental development of gifted students and the study of motivation as a component of dis-synchrony in a sample of gifted students. This in turn confirms the possibility of describing the formula of the coefficient of dis-synchrony, which characterizes the degree of dispersion of indicators of mental development in the range of age norms (during the longitudinal study and beyond in accordance with the conditions of development).

Conclusion

The results of the research allow us to improve the clinical training of psychologists, and optimize the process of accompanying gifted children. The research established that the application of the project provides an effective means of overcoming the main components of negative experiences in gifted primary school children, as well as solving psychological, pedagogical and organizational and methodological problems, thereby ensuring efficiency. This can be useful in practical terms for specialists and psychologists in individual practice. Taking into account the results of this research, we can identify a number of scientific problems and promising areas that require further consideration. These include a more detailed expansion of some of the provisions set out above related to the formation and accumulation of psychological and pedagogical experience.

Acknowledgements

References

Biktagirova, G. F., & Valeeva, R. A. (2015). Formation of University Students' Readiness for Parenthood. *Review of European Studies, 7*(4), 93-97.

Burganova, N. T. (2011). *Modern pedagogical approaches in education (article). Education and science of the Zakamya region of Tatarstan.* Retrieved from http://nauctat.ru

Nazarova, L. P. (2001). Integration of children with disabilities in the secondary school. *Scientific Notes, 48*, 1-15.

Sibgatullina, I. F., Khamitova, L. M., Zakirova L. M., & Komarova, L. K. (2019, May). Study of academic motivation of gifted students in the context of the phenomenon of dis-synchrony. In *2019 International Conference on Pedagogy, Communication and Sociology (ICPCS 2019)*. Atlantis Press.

Sibgatullina, I. F. (2020). Informal education and benchmarking in the learning cities system. Visual Anthropology. City-University: Living Space and Visual Environment. In *Proceedings of the III International Scientific Conference*. Veliky Novgorod: Yaroslav-the-Wise Novgorod State University Press.

Silverman, L. K., & Kearney, K. (1989). Parents of the extraordinarily gifted. *Advanced development*, *1*(1), 41-56.

Taber, K. S. (2007). *Science education for gifted learners*. London: Routledge.

Tomlinson, C. A. (1997). The dos and don'ts of instruction: What it means to teach gifted learners well. *Instructional Leader*, *10*(3), 1-3.

Valeeva, R. A., & Valeeva, L. A. (2014). Rights of the child in the adult world in the context of the ideas of Janusz Korczak and John Dewey. *Education and self-development, 4*(42), 60-62.

Zakirova, L. M., & Shulaeva, M. V. (2013). *Psychological conditions of creative development of the personality: Monograph*. Nizhnekamsk: LLC printing house Guzel.

Improving Foreign Language Teaching for International Students

Endzhe A. Latypova[1]

[1] *Kazan (Volga region) Federal University, Kazan, Russia*
Email: ahm2003@mail.ru
ORCID: https://orcid.org/0000-0003-4668-3954

Abstract
The processes of internationalization and globalization are ubiquitous. The growing number of international students in universities prompts the necessity of research into the best ways of teaching and learning the language of a host country. Language is a connecting link of prime importance in building up an efficient and suitable educational environment for an international student in a foreign country. This qualitative study sought to identify the most effective practices of teaching the host language as second language in leading universities of two countries: Germany and Russia. We interviewed ten teachers in each university regarding the specifics of organizing courses to teach the host country language as a second language. Our analysis revealed the difficulties teachers usually face in their work with international students, as well as effective methods and models of teaching international students. We interpret these findings using a framework for English Medium Instruction proposed by Dafouz and Smit (2012).
Keywords: teaching host language, learning host language, internationalization, methods of organization, multicultural education, international students.

Совершенствование преподавания иностранного языка иностранным студентам

Эндже А. Латыпова[1]

[1] *Казанский (Приволжский) федеральный университет, Казань, Россия*
Email: ahm2003@mail.ru
ORCID: https://orcid.org/0000-0003-4668-3954

Аннотация
Процессы интернационализации и глобализации приводят в университетах к росту числа иностранных студентов. Язык для иностранного студента является условием первостепенной важности в создании комфортной образовательной среды. Это вызывает необходимость поиска наиболее эффективных методов преподавания и способов изучения студентами-иностранцами языка принимающей страны. Цель исследования – выявление наиболее эффективных методов преподавания языка пребывания как второго. Исследование проводилось в ведущих университетах двух стран: Германии и России. Было опрошено по 10 преподавателей в каждом университете на предмет специфики организации курсов преподавания языка принимающей страны как второго. Наш анализ выявил трудности, с которыми преподаватели сталкиваются при работе с иностранными студентами, а также эффективность методов и моделей обучения иностранных студентов. Мы интерпретируем эти выводы, используя структуру обучения английскому языку, предложенную Dafouz and Smit (2012).
Ключевые слова: системный подход к преподаванию**,** контентно-языковое интегрированное обучение, иностранные студенты

Introduction

The courses for learning local language provide fertile soil for deeper learning of the hosting country culture, and as a result, offer a safe space for intercultural communication in class. That is why the teachers' major initial purpose is cultural adaptation at large. The level of interconnected and combined knowledge of language and culture of the hosting country defines the quality of further education.

Presently, the internationalization of education is a distinctive trend in higher education. The process of internationalization influences political, economic, and ideological processes and culture (Maringe, 2010). The mobility of international students around the world is growing. Now the level of internationalization is one of the major indicators of a well-established, progressive and reputable university. In this article we describe internationalization as an educational process, while stressing the prime importance of good command of the hosting country's language in connecting the foreign student to the hosting country.

From the very beginning, poor command of language can be a major obstacle for international students' studies, and this is why it is very important to find some initial ways of creating a hospitable educational environment. In this paper we examine different ways suggested by teachers for implementing different kinds of cross-cultural communication models in the educational process with international students in academic classes. The research was conducted in the language preparatory departments of two German and Russian universities.

In general, students in Germany learn the German language during the full five years of their university studies. In Russia, particularly in the university where the research was carried out, students have only one year to learn the local language. The goal of our research study was to compare different systems of teaching the host country language as a second language in order to improve our practice.

According to Smit and Dafouz (2012), using another language as the medium of instruction can be analyzed through six basic components:

1. The role of English regarding another language. While Smit and Dafouz developed their framework in relationship to English as a Medium of Instruction (EMI), the framework is also relevant for analyzing the teaching of other languages as well.

2. Academic disciplines. Teaching academic disciplines in the language of the host country is the main activity at the university; disciplinary practices of teaching and learning are relevant.

3. (Language) Management. This dimension covers language policy in the sense of 'direct efforts to manipulate the language situation' (Spolsky, 2004). Language policy determines the choice: which language will be used in a multilingual environment.

4. Agents. Teachers and administration of the university are faced with the need to manipulate the language situation. This is manifested in the need to search for new information. Each foreign student is a 'peoples diplomat' and represents his motherland in a foreign country, and later becomes an intermediary between his state and country of his study.

5. Practice and Processes. This component is central in higher education and defines the ways of doing and thinking (Leung & Street, 2012). It is meant for discourses in the class for agents to develop disciplinary knowledge jointly. Practice and processes help thinking and self-realization of students, and ensure their level of mental health.

6. Internationalization and Globalization. This refers to measurement for internationalization and globalization that enables universities to respond to the challenges of the 21st century.

In our opinion, the framework developed by Smit and Dafouz (2012) helps to improve the teaching system and create conditions for the qualitative development of disciplines through a holistic approach.

Internationalization and preparatory language courses in higher education

Knight (2008) defines internationalization as 'the process of integrating an international intercultural or global dimension into the purpose, functions or delivery of higher education at the institutional and national levels' (p. 21). The knowledge of languages defines the scope of functional abilities. Language is a powerful tool of effective study. The academic disciplines cannot be learnt through poor language (Jenkins, 2014).

We focused on improving teaching a new language as a medium of instruction to international students. It is necessary clarify the role teachers in this process and how the teaching process is linked with whole system of education, using the six zones. The joint practice of studying a subject and a foreign language (Coyle, Hood, & Marsh, 2010; Dalton-Puffer, 2011) differs from the practice of teaching a foreign language on its own. In the practice of teaching foreign language, the focus is on achieving the level of knowledge of the target language. Dafouz and Smit (2012) offer educational practice in the form of classroom discourse. This is a platform for teaching and learning of teachers, where the teacher comes to the fore as a central agent in the implementation of educational approaches. Program documents in a foreign language can also act as a focus of study in the implementation of a program (Kehm & Teichler, 2013).

The practice of integrated language teaching has proven itself, and is being used as a research basis for applied linguistic interests in educational institutions that use a foreign or additional language to teach the content of curricula. Integrated language teaching means language integrated with subject content. It is important to take into account the cultural, linguistic context of student (Mauranen, 2012). What is the difference between the cultures of the host country and the student's homeland? Does the language, customs, traditions of the host country differ from the language, customs, traditions of the native country? Does the student find himself in similar or different conditions?

The practice of integrated language teaching is applied in regional and national contexts, as well as at all levels of education (Dafouz & Guerrini, 2009; Dalton-Puffer, Nikula & Smit, 2010; Ruiz de Zarobe, Sierra & Gallardo del Puerto, 2011).

By examining the same questions in two different cultural contexts (Russia and Germany), we tried to obtain the maximum information for the promotion of pedagogical activity of teachers in a multicultural context. Previous studies have shown the importance of the context of learning. Different results of training depend on voluntary participation in educational programs, and the existing beliefs of students (Dafouz, 2014).

Researchers have found a negative correlation between student performance and learning a second (foreign) language. In particular, this is due to a limited ability to ask questions in English. Reduction of the number of questions and answers narrows the interaction between the lecturer and the student (Airey & Linder, 2006).

At the lectures, students focus not on the lecture material, but on how trace out and translate incomprehensible words. After the lecture, additional time is needed for decoding of the content of the lecture. Before the start of the lecture, students have to read background material for understanding the lesson. According to the results of the study, the authors identified the following reasons that hinder the interaction of students and understanding the lecturer (Airey & Linder, 2006):
1. Understanding the subject matter correctly
2. Fear of revealing lack of understanding to the lecturer
3. Fear of speaking English

An important question for the administration of universities is this: Is it effective to arrange teaching in the host language for local students well in advance, before the students travel for studies? In our view, initial advance language preparation of students to travel to a new country, as well as the study of the educational material by students in the host language, makes work with foreign students easier and teaching more effective. There is a need to identify what makes learning a foreign language easier and what hinders the process.

Methodology

This qualitative study compares two universities of good ranking in Germany - Technique Dresden University, and in Russia - Kazan Federal University.

Statistically, 4900 international students studied in Technique Dresden University in 2017 (14.7% of the total number of students). Teachers work with international students only in German. German teachers note that the initial knowledge and understanding of language by students is rather good, but not good enough. Most students are from China but there are students from South America, Europe, India, China, Russia, Finland, the Baltic countries, France, Spain, Syria, India, Himalayas, Taiwan, Madagascar, Indonesia, Madagascar and Japan. There are no students from North America. By professional orientation, the first priority students choose is engineering sciences (29.0%); further choices include environmental ecology (26.8%); scientific directions (12.3%); humanities (12.3%); teacher training (10.5%); medicine (8.3%). German is studied during the entire period of university study. Language training in Germany is supported by the "European Union" foundation, and there is an opportunity for the best 25 students to get into the free-of-charge group.

4200 international students studied in Kazan Federal University in 2017 (11% of the total number of students). Among them there were 71% from Central Asia, 15% from East and South-East Asia, 6% from East and North Africa, 3% from Ecuador, 2% from Latin America, 3% were Europeans. As a first priority foreign students choose the Institute of Geology and Oil and Gas Technologies (27.7%); in second place, the Institute of fundamental Medicine and Biology (25.7%); the third was the Institute of Philology and Intercultural Communication (19.7%); and the fourth was the Institute of Economy and Finance (19.3%). Russian as a second language is studied only the first year, then the student studies it himself.

The data were collected by means of interviews undertaken directly in each university. We interviewed ten teachers in Kazan Federal University from the Preparatory Department (the department solves the problems of language preparation of international students, adaptation to educational process and with gradual preparation to the undergraduate program) and ten teachers in Technique Dresden University who teach German language as foreign for first year students. In contrast to Kazan Federal University, the Technique Dresden University does not have a Preparatory Department. Students in Germany study German simultaneously with disciplinary subjects for five years. Since many teachers of German know Russian and English well, the interview was conducted in both Russian and English. For Russian teachers, it was conducted in in Russian.

The interview included 8 research questions that helped to identify strong points of the teaching process. We wanted to know what works well and what does not work in teaching foreign students, what are the difficulties faced by students and teachers in the university education, and what could be useful and helpful for both teachers and students.

Findings

Qualitative analysis of the data obtained through interviews helped to identify similarities and differences in teaching of the host language as the second language in the Russian and German universities. In what follows, we report our findings to each interview question.

What does and does not work well for international students in your class.

Russian teachers noted that visual perception helps at the initial stage, so they prepared good teaching aids in advance. The manual works effectively when every student has in hand an exercise notebook in Russian. It can be in the form of a workbook with presentations, pictures, role-play situations for example in a pharmacy or in a store (what you need to buy). Parallel corresponding situational discussions of the cases are held in groups of 15-17 people.

The German teachers believe that having a high level of self-supporting motivation works well. Students choose on their own whether to take part in proposed events or not, and can select interesting courses for themselves. German teachers said there were no classroom problems with foreign students since they take part in all class assignments. Groups are divided into subgroups of 5, in which interactive work is arranged, followed by a summary discussion in a bigger general group. According to German colleagues at large, this system works well, although there are certain small problems associated with quiet, modest, inactive students.

In our research we discovered some immediate contradictions. One of them is holding tests and interviews in English while all regular educational structures function in German. Most of the information on tables, books, websites, colloquium, scientific research discussions, and events is in German. Communication with staff during internship by e-mail or directly is also done in German.

Difficulties encountered when working with international students and how the teacher copes with them.

Both the Russian and the German teachers had a lot to say about students' difficulties. In Russia teachers complain about large classes. That is a big problem in work for study groups that should not have more than 8 people. It is also difficult to teach students when they arrive at different periods of time. Some join the group later and have to catch up, and the total group has to repeat everything again and again. Further, Russian students complain that some students take longer than others to learn the material, because students with different levels of training are put together into one group and often have to wait everyone to complete the assignment.

There are cultural differences in everyday conduct patterns. For example, Colombian students are not always disciplined: they come late, they do not always listen attentively to teachers. Chinese students attend classes wearing casual sports outfits and in general disrespect the dress code. Students in dormitories have problems with their international roommates. There are everyday misunderstandings and problems of miscommunication. They wonder why psychologists do not help out in dormitories. These problems of everyday life interfere with the learning process. Psychological follow up is arranged. According to Smit and Dafouz (2012), it is necessary to shift the focus from the entire system onto teachers and their training. In our opinion, concentration on the teacher's actions really helps in practice, since it is difficult to work with the entire system at the same time.

In the Russian university, students sometimes complain that some classrooms are not sufficiently equipped with audio visual equipment for learning. Or students living in

distant dormitories are not happy that the road to school is long. At the Russian university, travel takes about one hour from the dorms where they live to the university because of traffic problems. Students prefer to live closer to the university just to save time.

Students are not happy spending a lot of time solving problems with visas and registration. These are issues directly related to the work of the Department of Foreign Affairs, which is a structural entity of the governance of Kazan Federal University dealing with development of foreign academic and educational relations. Sometimes students have to be at an examination at the same time as an appointment with the Department of Foreign Affairs to settle the extension of their study visa.

In Germany, the initial problem is that in the first semester students do not know much about the German education system and regulations. For example, that system is very different in China. And it is difficult to adapt quickly to accepted local academic rules. In Germany students have to act on their own. For example, the student needs to find by himself/herself the complicated schedule of classes in different buildings. The difficulty is that you need to know the requirements from the very beginning.

Special additional seminars and information events are organized by teachers, and guidance is personal. Teachers arrange special classes on how the university functions and the regulations. Students ask questions after classes face to face or by e-mail, such as: "I did not understand the task; I did not understand the task correctly, please, give me more information". Each group has its own platform. The "Opal" platform is very helpful; all important materials and information are placed there.

Although all students pass entrance examinations, still some students at first do not understand anything at all. Moreover, they have the psychological stress of being far away from their parents, or the stress of winter cold in case of those from warm climates. Students often catch cold because nobody takes close personal care of their health. Teachers say that this is the work of another separate department.

Plus, innumerable personal problems have to be solved on the spot, such as living facilities, legal problems, medical insurance, and travel logistics; all these have to be solved by students themselves. Teachers try to motivate them to self-support actions and focus on self-motivation, which is important.

Teachers' opinions about the difficulties that foreign students face in the process of learning.

In Russia, groups were reorganized into strong and weak based on the previous year. But that organization failed to eliminate immediately the problems of learning, for it was very difficult for weak groups to catch up with standard requirements of the program. Consequently, the experience was unsuccessful. There was success when groups were organized around areas of further professional specialization. During the year of this study, they decided to arrange groups on this basis, such as geology, physics, and chemistry.

In Germany the general independence of students is greater. There is no tight personal guidance. Attendance is free. That is why it is difficult for teachers to plan in advance how many students they will have; there could be 10 or 25. The teacher has one more plan, just in case only three students come. That creates difficulty in planning teaching. German teachers note that it is necessary to act efficiently in the classroom depending on the developing situation. Teachers use group work and the Opal system widely when working with a mix of international groups. For example, Chinese students are mixed with others especially looking for extra support from the German environment. Usually if students miss classes they are referred first to the Opal platform in order to catch up with learning materials and then are allowed to join the class.

Interviews with teachers in both Russia and Germany revealed difficulties in language misunderstanding when solving everyday life and organizational issues. The arising difficulties lead to dropout of foreign students from the educational process. The role of the teacher in the situation of language manipulations in subject teaching and in language teaching separately from the subject is to be studied in future studies.

How teachers solve the emerging difficulties when working with foreign students and who helps them in this.

In Russia, teachers solve their problems with assistance of other divisions, which help as much as possible. For example, the Department of Adaptation of Foreign Students in the Department of Foreign Affairs of the University helps with all everyday problems, especially during initial days of study and living. The university arranges regular courses of upgrading professional qualification of teachers working with international students.

In Germany, the upgrade of professional skills in language teaching is organized by the university. Teachers also have a special organization to support the European Union (official financial support for the language course) for a more successful learning, 'Academia Ausland.' According to German teachers specialized conferences are very helpful.

In our research we suppose communication system between students, teachers and administration helps to ensure a safe environment, and to resolve quickly domestic issues and visa issue.

Special preparation needed for foreign students.

In Russia, a training manual has been developed for teachers of foreign students. There is a well-structured study paper for regular retraining, and teachers attend advanced training and conferences. In Germany, teachers prefer to attend conferences, read articles, and have discussions with colleagues. German teachers consider that it is very effective to travel to other countries in order to feel themselves as foreigners, to become kind of 'foreign student' learning another culture and language.

Another form of special preparation is class design. The ideal model of class design differs in Russia and Germany. Russian teachers stress the importance of better equipped classrooms, especially interactive modern equipment. They believe that Russian as a second language should be offered during the whole period of studies in the university. That will empower students with ability to learn all special subjects better and be effective in solving their everyday life problems on their own, which should result in better adaptation. Currently, language is taught during the initial year and a half.

In Germany teachers require obligatory teaching of German for three years and further to learn deeply special professional subjects in order to increase professional and technical vocabulary. The gaps in knowledge are compensated by discussions in groups of students. Before that, a student should translate and audio-study professional text and discuss it with students.

If you could design or request preparation for working with international students, what would you ask for? What would be helpful to you?

Russian teachers stressed the importance of computer classes, spatial furniture and equipment for classrooms, teaching boards, air conditioners, shuttle buses, and extended time of training. Russian language classes are not enough for adaptation for further professional training.

German teachers focused on their obligations for the first three years to all students to learn German every week, including professional German and depending on the research

topic to accumulate professional vocabulary. If the student does not understand foreign words in the professional text which he works on in advance, after the lesson he can listen and discuss it with more advanced students and peers. There is strong recommendation that foreign students prepare in advance for upcoming classes.

Discussion

Comparative research by interviewing teachers about teaching in Russia and Germany revealed the importance of context and themes which are characteristic to teachers' approaches in different cultural contexts. Teichler (1996) adapted a questionnaire for an environment of cultural diversity. He found that research flows differently in different cultural contexts, and showed distinctive features and characteristics, and various connections to disciplines. The different roles were attributed to research in their activities.

The following difference in approaches to the practice of integrated language learning of the Russian and German universities was revealed. In Germany, this practice exists for all five years of study of foreign students. Subject training is done in German. In Russia, the integration of subject learning occurs at the second year of study, and not in all subjects. Despite the fact that the language in the study environment is Russian, some subjects are taught in English, not in Russian. In Germany language preparation is integrated into major subject of study itself. Students immediately get used to terminology and basic theoretical issues. The German system does not adapt itself to an individual student. All necessary information, textbooks, literature and recommended websites are in German. The accent is on professional development and professional vocabulary expansion. Teachers are more oriented to develop students' self-motivation. They also actively use a distance learning format. In Germany students solve the options and conditions for life during studies for themselves: either in a dormitory or private flat. In Russian teachers actively help international students to find best places for living. Though this paternal approach sometimes takes away self-decision making.

Comparative analysis revealed a certain collection of complexities met by teachers when working with foreign students. Correspondently, the practical methods of work at the initial stage of their education in the two universities were revealed. Highlights of our findings are:

1. The optimal efficiency of work is in small classrooms.

2. The teacher needs to have multi-level methods for working with different levels of student preparation.

3. It is important to arrange continuous training during the entire period of study.

4. The experience of German teachers shows that passing from self-support to independence is more efficient than the 'maternal style' of communication.

5. There is a necessity for preliminary preparation to give a quicker adaptation to the country, i.e. in removing unnecessary beliefs, overestimated expectations.

6. Of great importance is the availability of information in English (sites, timetables, methodological materials) that will help students in first stage to quickly enter into the educational process.

Summarizing the difficulties that exist in both universities, first of all multi-level classes are taken into account. Language mixed classes provide an opportunity for active involvement in the development of the language of the host country. The results of the research show that teachers have to work in a multi-level class, taking into account different cultural contexts. Distant electronic educational resources give extra students access to missed materials and enable students to return to misunderstood subjects.

Secondly, both in Russia and in Germany there are unstable sizes of study groups, which creates certain difficulties for teachers in preparing and conducting classes. And

third, in both countries, teachers have to work simultaneously with different number of students and level of training.

In this study, we found the framework by Smit and Dafouz (2012) to be very useful because it widens the scope of what one considers when planning the teaching of a host language to foreign students. We conducted a comparative analysis of the difficulties of Russian and German teachers when working with foreign students at the initial stage of their education in universities.

The first zone concerns English, and it was not relevant to our study.

The second zone of their framework focuses on teaching the host language within the academic disciplines. As a result of the study, we found a difference in language learning approaches: discipline-integrated language training in Germany and separate study of language and discipline in Russia.

The third zone of Smit and Dafouz's framework is language management. This is more difficult than the other five components in both Russia and in Germany.

In Russia and Germany, language policy initially involves learning in the language of the host country. This helps students to quickly penetrate the language environment and learn the subject in the language of the host. In Germany, the language policy builds up the process of learning through the subject area; in Russia, first the language is taught, and then the subject is learned in the language of the host.

The fourth zone is Agents, which is important in the implementation of educational practices. Educational practice takes place in the form of a classroom discourse and is a platform for both teaching and teacher training. The teacher comes to the fore in the form of a central agent. Program documents in a foreign language can also act as a focus of study during the implementation of a particular curriculum. In Germany, the development of the education system for international students focuses on teachers as agents. In Russia, the emphasis is shifted either on the psychologist or the administrators or to external structures such as visa departments for instance. There is no fixed position on this issue.

Conclusion

The framework developed by Smit and Dafouz (2012) has helped to frame our comparative analysis between the universities of two countries. Based on the six main zones we have managed to set up a maximum ideal model of teaching foreign language. The framework helps us to see the broad picture of helping foreign students learn the host country's language well enough to advance in the university and professional level learning in that language. The systemic care of language training at the university provides the necessary level of academic integrity, and improves studies in academic disciplines, and interaction with the administrative staff of the university, with departments, and with native local students. High-quality language training facilitates effective mastery of academic disciplines, enabling students to learn terminology. Quality language training helps students to manage the language situation independently in order to find optimal solutions to difficulties. Language training makes possible involvement in university social and academic life, and participation in conferences and cultural events. Active involvement in the processes of scientific thinking helps students to immerse into development of disciplinary knowledge.

Summarizing the conducted comparative research aimed at improving the teaching of a foreign language for students, we have eight recommendations for teachers:

1. Explain to students this is the second language of teaching.

2. Form groups of no more than 8 people. When the number of students goes up the group should be divided into subgroups.

3. Prepare auxiliary material in the form of visual slides and presentations, online platforms

4. Understand that unresolved every day domestic and organizational issues have a negative impact on the educational process.

5. Adhere to a single politics in choosing of language and material auxiliary to the lesson.

6. Teaching of second language through teaching of subject will help accelerate the preparation of a foreign student for bachelor's and master's programs.

7. Consider carefully the student's background, the cultural difference between the country of arrival and homeland.

8. It is important for the teacher to understand the mutual influence of the six zones in the learning process. Adhere to a systematic approach in teaching.

Limitation

This study has its limitations, since it based only in two universities. This, of course, is not enough to make exhaustive conclusions.

We would like to thank teachers from Kazan Federal University and Technique Dresden University for helping with interviews.

Disclosure statement

No potential conflict of interest was reported by the authors.

Acknowledgement

References

Airey, J., & Linder, C. (2006). Language and the experience of learning university physics in Sweden. *European Journal of Physics*, *27*(3), 553-560.

Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and language integrated learning*. New York, NY: Cambridge University Press.

Dafouz, E., & Guerrini, M. C. (Eds.) (2009). *CLIL across educational levels: Experiences from primary, secondary and tertiary contexts*. Madrid/London: Santillana Educación/Richmond Publishing.

Dafouz, E. (2014). Integrating content and language in European higher education: An overview of recurrent research concerns and pending issues. In A. Psaltou-Joycey, E. Agathopoulou & M. Mattheoudakis (Eds.), *Cross-Curricular Approaches to Language Education* (pp. 289-304). Cambridge: Cambridge Scholars.

Dalton-Puffer, C. (2011). Content-and-language integrated learning: From practice to principles?. *Annual Review of applied linguistics*, *31*, 182.

Dalton-Puffer, C., Nikula, T., & Smit, U. (2010). Language use and language learning in CLIL: Current findings and contentious issues. In C. Dalton-Puffer, T. Nikula & U. Smit (Eds.), Language use and language learning in CLIL classrooms (pp. 279-291). Amsterdam/Philadelphia: John Benjamins.

Jenkins, J. (2014). *English as a lingua franca in the international university. The politics of academic English language policy*. London: Routledge.

Kehm, B. M., & Teichler, U. (2013). *The academic profession in Europe: New tasks and new challenges*. International Comparative Perspective, Vol. 5.

Knight, J. (2008). *Higher education in turmoil: The changing world of internationalization*. Rotterdam: Sense.

Leung, C., & Street, B. V. (2012). *English: A changing medium for education*. Bristol: Multilingual Matters.

Mauranen, A. (2012). *Exploring ELF: Academic English shaped by non-native speakers*. Cambridge: Cambridge University Press.

Maringe, F. (2010). The meanings of globalization and internationalization in HE: A world survey. In *Globalisation and Internationalisation in Higher Education: Theoretical, Strategic and Management Perspectives* (pp. 17-34). London: Continuum.

Ruiz de Zarobe, Y., Sierra, J. M., & Gallardo del Puerto, F. (2011). *Content and foreign language integrated learning. Linguistic insights: studies in language and communication*. Bern: Lang. DOI: https://doi.org/10.3726/978-3-0351-0171-3

Smit, U., & Dafouz, E. (2012). Integrating content and language in higher education: An introduction to English-medium policies, conceptual issues and research practices across Europe. *Aila Review*, *25*(1), 1-12.

Spolsky, B. (2004). *Language Policy*. Cambridge: Cambridge University Press.

Teichler, U. (1996). The conditions of the academic profession: an international, comparative analysis of the academic profession in Western Europe, Japan and the USA. In P. A. M. Maassen & F. A. Vught van (Eds.), *Inside academia: new challenges of the academic profession* (pp. 15-65). Utrecht: De Tijdstroom.

How Students Perceive Educational Support Through Facebook

Miroslav Šebo[1], Alena Hašková[2]

[1] *Constantine the Philosopher University in Nitra, Nitra, Slovakia*
Email: msebo@ukf.sk
ORCID: https://orcid.org/0000-0002-6506-8714

[2] *Constantine the Philosopher University in Nitra, Nitra, Slovakia*
Email: aHaskova@ukf.sk
ORCID: https://orcid.org/0000-0001-8592-7451

Abstract
Since the beginning of the 21st century social media has expanded world-wide in all aspects of human lives. Mainly for the youth they have been a natural part of their "digital ecosystem". As the results of the surveys of social media use by teens, carried by the Pew Research Centre, showed, in 2014 in the USA 71 % of teens reported being Facebook users and no other platform was used by a clear majority of the interviewed. In 2018, three further online platforms, other than Facebook, have been reported by the significant majority of the teens. These were YouTube, Instagram and Snapchat. As to Facebook, "only" 51 % of the respondents stated to be Facebook users. Furthermore, smartphone ownership has become a ubiquitous element of teen life. Up to 95 % of teens have reported they have a smartphone or access to one, and 45 % of teens have proclaimed they are online on a near-constant basis. Even more important, they are becoming more and more used, in the time of the world-wide corona pandemic and the need for connection in social quarantine.
As for teachers and their opinions on social media, on the one hand they are aware of their usefulness as regards to sharing information or organizing school tasks. But on the other hand, they identify social media as a reason for the pupils and students` low attention during classes at school. But since the youth devote a lot of time to social media, there is no point of not using these means also in education, as shown by the current efforts to organize education processes during the corona pandemic.
At the Faculty of Education, Constantine the Philosopher University in Nitra, we have been aware of the significance of the social media in relation to different aspects of education and pedagogical communication. That is why for several years, attention has been paid to this new education phenomenon. The paper presents the authors experiences with the use of Facebook as a mean of support for education while the main focus is given to the results of a questionnaire survey which examined students` opinions and attitudes towards Facebook (before the pandemic situation), in comparison with Moodle, as a new phenomenon in university education.
Keywords: use of social media in education, Facebook, tertiary education, students` opinions on Facebook as a mean of education support, comparison of the use of Facebook and Moodle in education

Как студенты воспринимают образовательную поддержку через Facebook

Мирослав Шебо[1], Алена Гашкова[2]

[1] Университет им. Константина Философа в Нитре, Нитра, Словакия
Email: msebo@ukf.sk
ORCID: https://orcid.org/0000-0002-6506-8714

[2] Университет им. Константина Философа в Нитре, Нитра, Словакия
Email: aHaskova@ukf.sk
ORCID: https://orcid.org/0000-0001-8592-7451

Аннотация
С начала XXI века во всем мире отмечается рост проникновения социальных медиа во все аспекты жизни. Для молодежи они являются естественной частью их «цифровой экосистемы». По данным исследовательского центра Pew Research Centre, в 2014 году в США 71 % подростков были пользователями Facebook и большинство не пользовались другими платформами. В 2018 году значительное большинство опрошенных сообщили об использовании, помимо Facebook, еще трех онлайн-платформ: YouTube, Instagram и Snapchat. 51 % респондентов заявили, что они являются пользователями Facebook. Кроме того, смартфон стал широко распространенным атрибутом подростковой жизни. Около 95 % подростков сообщили, что у них есть смартфон или доступ к нему, а 45 % подростков заявили, что они почти постоянно находятся в сети. При этом во время всемирной пандемии коронавируса использование гаджетов растет в связи с необходимостью поддержания связи на карантине.
Учителя, с одной стороны, осознают эффективность социальных сетей в обмене информацией или организации обучения. С другой стороны, педагоги считают, что социальные медиа являются причиной низкого внимания учеников и студентов во время школьных занятий. Тем не менее, поскольку молодежь проводит много времени в социальных сетях, нет смысла не использовать эти средства и в образовании, как показывают нынешние усилия по организации образовательного процесса в дистанционном формате.
На педагогическом факультете университета им. Константина Философа в Нитре понимают значение социальных медиа в образовании и педагогической коммуникации и на протяжении уже нескольких лет уделяют этому особое внимание. В статье представлен опыт авторов по использованию Facebook в качестве средства поддержки образования. Выводы сделаны по результатам опроса, направленного на выявление мнений студентов о Facebook (до пандемии) как новом феномене университетского образования (в сравнении с Moodle).
Ключевые слова: использование социальных медиа в образовании, Facebook, высшее образование, мнение студентов о Facebook как средство поддержки образования, сравнительный анализ использования Facebook и Moodle в образовании

Introduction

Since the beginning of the 21st century social media has expanded world-wide in all aspects of human lives. Mainly for the youth they have been a natural part of their "digital ecosystem". The results of the surveys of social media use by teens undertaken by the Pew Research Centre, showed that in 2014 in the USA 71% of teens reported being Facebook users and that no other platform was used by a clear majority of respondents. In 2018, a further three online platforms, other than Facebook, were reported by the significant majority of the teens. In particular, these were YouTube, Instagram and Snapchat. As for Facebook, "only" 51% of the respondents stated they were Facebook users (Anderson & Jiang, 2018). Furthermore, smartphone ownership has become a nearly ubiquitous element of teen life. Up to 95% of teens reported they have a smartphone or access to

one, and 45% of teens have proclaimed they are online on a near-constant basis. This has nearly doubled from the 24% who reported this fact in the 2014-2015 survey. Another 44% say they go online multiple times per day. Even more important, they are becoming more and more used, in the time of the world-wide corona pandemic and the need for connection in social quarantine.

As for teachers and their opinions on social media, on the one hand they are aware of their usefulness as regards to sharing information or organizing school tasks (Tandale & Raman, 2016). But on the other hand they have identified social media to be a reason for the pupils and students` low attention during classes at school (Hodál, 2016). But since the youth devote a lot of time for social media, there is no point of not using these means in education, as shown by the current efforts to organize education processes during the corona pandemic.

Research problem

A lot of modern digital technology-based learning and teaching tools have been used in university education systems environment (Kostolanský et al., 2019). One of the most frequently used system is the LMS Moodle system. At Constantine the Philosopher University in Nitra, LMS Moodle is also often used in teaching practice, as this system has undoubtedly many advantages and is well configured for education. At the Department of Technology and Information Technologies of the Faculty of Education we have had many years of personal experience with it. But despite the indisputable advantages of LMS Moodle, we missed better feedback from students and a faster way to communicate with them.

Facebook is an environment that is very well known to students. Moreover, students do not perceive this environment as an educational one, but as a common one in which they move absolutely naturally. That is why we decided to use just this environment as a supporting tool for educational purposes to make the communication with students easier. Further reasons for this decision were the following ones:

– Facebook is more common software environment for students than LMS Moodle, it is less stressing and more motivating for them;

– most of the student population has created their accounts on Facebook;

– as most of the student population uses Facebook services, there is no need to organize any introduction training for students, as it is in case of LMS Moodle;

– neither a server nor any additional maintenance is necessary as it is in case of LMS Moodle (this means zero costs to operate and maintain this system).

Unlike LMS Moodle. the social network Facebook is not intended for education purposes and so cannot be used for complex e-learning education (Šebo, 2013; Manca & Ranieri, 2013; Dillingerová, 2007). Our intention was to use it as a supporting tool for blended learning because, despite the fact that it is not intended for education purposes, it has several functions which enable it to support maily tertiary education effectively. We rank these function as follows:

– creation of a Facebook page of the taught subject (the possibility to create and continually update the subject page which will be usable for several years (Rouse, 2010));

– creation of a Facebook group (In one Facebook group for one lesson/subject, the teacher uploads all necessary teaching and learning materials for students in form of texts, figures, videos, documents or links to other web pages Student can also be contributors (Hejl, 2012));

– sending messages and chat forums (predominantly for fast communication between the teacher and the students, but as well among the students. This means of

communication is very efficient as the students are almost constantly on-line, with this application in their mobiles, as is mentioned in the introduction);

– immediate sharing of different content (information, texts, audio records, video records, photos, etc.).

Concept and methodology

We had two possibilities how to use Facebook as a means of supporting education processes. One possibility was to create a web page on Facebook and hold information there for students. The main advantage of this possibility was uploading of all the important materials only once. Then all students would have access both to this web site as well as to the information uploaded there for a long time (in terms of years). On the other hand, one of the disadvantages was that the content would be accessible to anybody, what was not what we wanted. Another from the disadvantages was the impossibility of communicating only with selected students (e.g. with a group of students or with only one particular student). But the most significant disadvantage for us was the fact that students could not effectively submit different projects and completed assignments by means of this system. That was why we decided for the other alternative solution which was to support education processes by means of a Facebook group.

Once created, a Facebook group fulfils different tasks and assignments:

– projects and home works (given to the group by the teacher);

– files and documents (different files as documents, publications, textbooks, lecture presentations, seminar assignments processed by students, ae uploaded for the whole group both by the teacher as well as by the individual students);

– photos and videos;

– references to different web sites (to either interesting pages or pages with information relevant to the particular subject matter);

– events (the teacher creates in the group different events concerning excursions, dates of tests, exams, assignment deadlines, etc.);

– communication (for information transfer among the members of the group, i.e. for both types of the communication either teacher – student or student – student);

– inquiry (serves to monitor opinions of the group members).

At the beginning of the term closed Facebook groups were created for specific taught subjects. For several years we have been using this supporting tool and it only sometimes occurred that somebody did not have a Facebook account.

To have a feedback how students perceive this support of their education, whether or not they appreciate it, there was an inquiry on students` approaches to this form of education support. Research data were collected by means of a questionnaire which consisted of 21 items of both types (closed as well as open questions). The research sample consisted of 228 respondents. The processing the collected data we tried to find answers to two research questions. One research question was how the students perceive the educational support created through the social network Facebook. The second question was how they perceive this support tool in comparison with education carried out through LMS Moodle.

Research results and their discussion

Because of the limited scope hereinafter we do not deal with all 21 questionnaire items and there are presented only the main findings resulting from the inquiry, i.e. those which are the most relevant to these two research questions.

Figure 1 shows in a graphical form results of the responses to the question on which purposes the respondents use Facebook. As it is clear from the results, the dominating

answer is *communication* (97%). The next two most frequent purposes are significantly less (63% and 54%, respectively): getting *news* (pushed to them) and *education*. That is, half of the students use this social network for educational reasons. This finding has proved our assumption that Facebook should be a suitable support to enhance pedagogical communication between the teacher and student, and among the students themselves.

Apart from the purposes presented in Figure 1, respondents also identified several further purposes. These were to monitor/follow friends, to follow appointment dates, work, maintenance of Facebook fanpage, university groups, and business. However, numbers of those who declared these purposes were very small. None of these six purposes scored over 1%. What was very surprising for us was that such small percentage of respondents (<1%) mentioned, monitoring/following friends as a purpose for which they use Facebook.
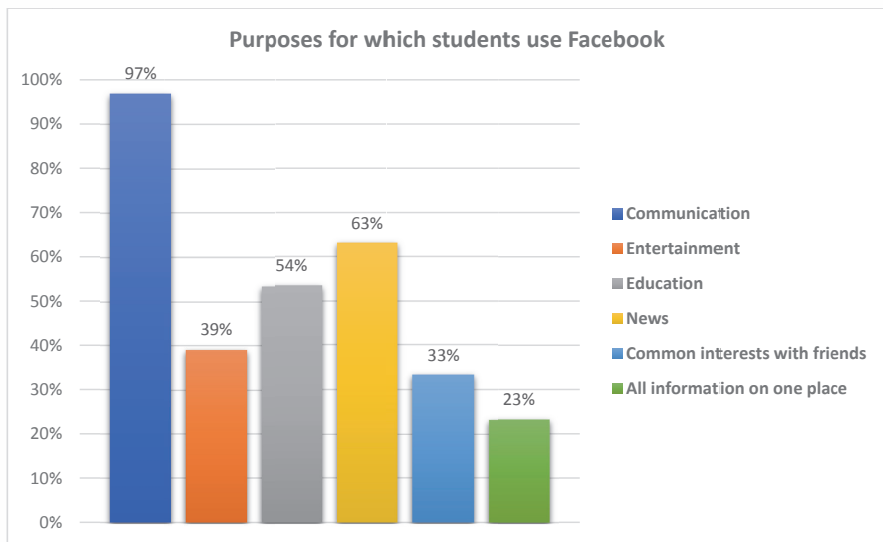
Figure 1. Results of the inquiry question for which purposes students use Facebook in general

Those respondents, who stated that they use Facebook also because of education reasons, were asked to specify the particular purposes. The results are presented in Figure 2.

As Figure 2 shows, the situation reflects that presented in Figure 1. Again, in this case the dominant reason with 93% of respondents, is *communication*, this time mutual communication of students. Communication with the teacher is the third most frequent reason of the use of Facebook (68%). The second purpose is for *homework elaboration submission* (76%). It is interesting that also in this case of the "educational purposes" of the use of Facebook, there is similar gap between the first-ranked purpose and the following two (97% - 63% - 54% vs. 93% - 76% - 68%). For respondents it was very common (56 %) to use Facebook to *upload information relevant to the taught subject*. They saw it a great advantage that they had all information they needed for the subject in one place – in the created Facebook group. If the subject finished with an exam, the students collected basic materials there for the exam (reported by 42% respondents). In general, Figure 2 clearly shows that the students lay stress on mutual communication, as well as on their communication with the teacher, and on gathering important information (materials) necessary to pass exams, or to complete the subject.

Figure 2. The education-related purposes for which students use
Facebook (as a percentage of those using it for education

Within personal questioning done during administration of the questionnaire, students very often expressed that they liked this kind of teaching support and many of them liked it so much that they created their own Facebook groups for some other subjects.
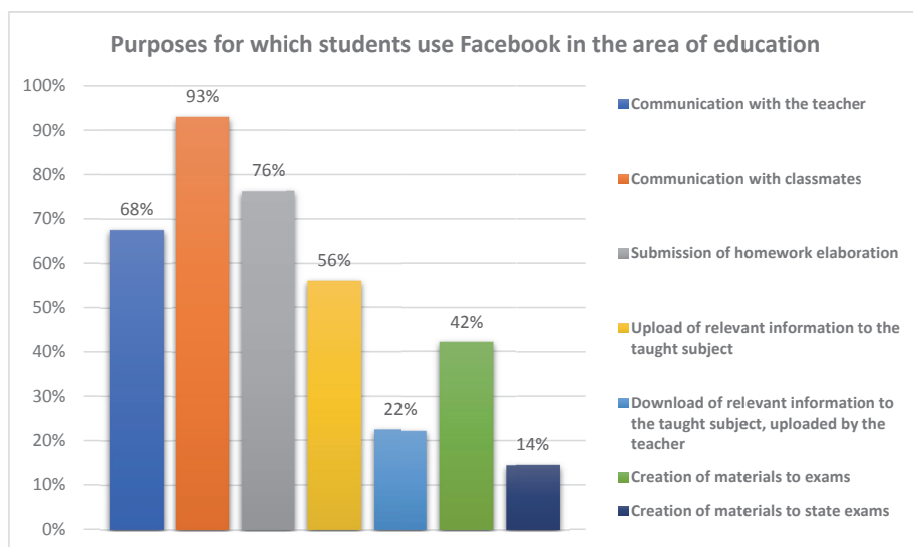
The results mentioned above prove a positive perception of Facebook as an education support by students. This conclusion answers our first research question. But there have been also some further, additional findings in favour of this statement.

In a further question, the respondents were asked whether it was difficult for them to become familiar with working with Facebook. This question was not focused on the fact whether they knew to use Facebook but whether or not it was difficult for them to learn the methodology of education with the support Facebook. According to the survey results, for 40% of the respondents it was very easy, 50% considered it to be easy, for 9% it was of an average difficulty and only for a negligible number of 1% of the respondents was it difficult. Nobody stated that it would be very difficult.

These numbers correspond to the results obtained for the question on how the respondents liked the education support offered by the Facebook mans. 14% of the respondents responded that they liked it even very much, a half (50%) liked it, a third (32%) considered it in a neutral way (neither liked it nor disliked) and only (negligible) 4% stated they did not like it. Strong dislike was not recorded.

More heterogeneous answers were recorded for the question on whether the respondents would use this kind of educational support (i.e. support offered by Facebook means) to support other subjects (other than taught by us). *Definitely yes* was stated by 30% of the respondents, *rather yes* by 22% of them, *may be yes or may be no* by 20%, *rather no* by 22% and *definitely no* by 6% of the respondents. Respondents answering positively were additionally asked to state which subjects they would propose to support in this way. The most frequent response to this item was that they would appreciate to have support for all subjects in this way (39% of the answers). While the answers support the positive perception of this education support by students in a direct way, this result proves it in an

indirect way. Due to a high heterogeneity (in terms of their study fields) of the students, this views were strengthened by a very large scope of the subjects which teaching they would like to have supported in this. Foreign languages and mother tongue (both above 10%) and subjects connected with the ICT issue (7%) scored highly.

With respect to further improvement of the created education support system the students were asked on the one hand to state the disadvantages of Facebook education support system, and on the other hand to propose what or how the system should be improved.

As to the disadvantages, 54% of the respondents had not been aware of any imperfections of the system based on Facebook. But they see a problem in that not every student has a Facebook account (stated by 10% of the respondents). Almost 10% of the respondents would welcome more teachers having their Facebook profiles. Another problem stated was the disturbing influence or impact of Facebook during the education processes. This was stated by the students but also perceived by teachers, too (and not only by the authors, but by teachers in general. See the note in the introduction on the social media as the reason of the students` low attention during classes at school). As Facebook is not intended for education purposes, some disturbing influences can have negative impacts on education processes. But this is considered to be a problem only by 8% of the respondents: not a markedly significant number in this context.

As to the students` proposals how to improve or what should be improved in the education support system that was created, 40% of the respondents would not change anything and 26% offered no views. But the disadvantages mentioned here were suggestions to increase the numbers of teachers on Facebook and at the same time to broaden mutual pedagogical communication with the teachers (12% and 11% respectively).

As the results of the inquiry on the education system created on the basis of Facebook show, students appreciate very much the aspect of mutual communication, mainly pedagogical communication with teachers (Teclehaimanot & Hickman, 2011). They wish that more teachers were in contact and communicated with them through such a system. In our opinion this results from the fact that communication through social nets is completely normal for students, and quite logically they appreciate this way of communication with teachers. But on the other hand, currently there are still not too many teachers, who would prefer this new communication mean over e-mail.

Our second research question was how the students perceive Facebook as an education support tool in comparison with education support carried out through LMS Moodle.

Not all the respondents participating in our inquiry on students` approaches to the education support system created by us on the Facebook platform had had previous experiences with education support based on the use of LMS Moodle. That was why the respondents of the inquiry were asked whether they had or had not such previous experiences and only those who had were asked to compare some selected aspects of the work with these two systems, i.e. the education support system based on Facebook and the education support system based on LMS Moodle. From the total number of 228 respondents to the inquiry 139 had no experiences with Moodle while only 89 had some. These 89 respondents were asked to express a level of their agreement or disagreement with following statements:

– Moodle is easier to use than Facebook.
– Facebook is more transparent than Moodle.
– To learn to work with Facebook was faster than with Moodle.
– There are more possibilities/ways to use Moodle than Facebook.
– to support education, Facebook is better.
– In most of the taught subjects Facebook as an education support would be sufficient.

To express the level of their agreement or disagreement, following scale was used:
– I totally agree
– I agree
– Neither agree nor disagree
– I disagree
– I totally disagree
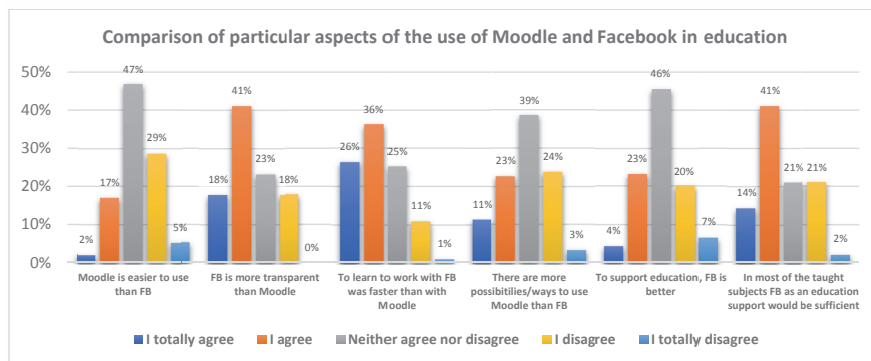Results of this part of the questionnaire survey are presented in Figure 3.

Figure 3. Comparison of particular aspects of the use of Moodle and Facebook in education

As Figure 3 shows, there is a significant group of respondents for which it does not matter whether they work with a system based on Facebook or Moodle (each statement evaluation *neither agree nor disagree*). But aside from this group and its neutral statements, the rest of the total measures of agreement (total sums of *I totally agree + I agree*) or disagreement (total sums of *I totally disagree + I disagree*) are in favour of Facebook.

Conclusion

Social networks have become one of the most important communication means. However, many teachers and teacher educators have remained uncertain about how to meaningfully integrate this technology into education or how to assess its impacts (Greenhow, 2011; Halverson, 2011). Paradoxically the horrible pandemic, which we are facing, also helps us to discover different possibilities and the real potential of these means. We all are forced to transform our pedagogical activities, and according to our previous (pre-pandemic) experiences Facebook is a tool which can be used as an addition to formal educational settings (Kolychalov & Pushkareva, 2018). A primary reason to adopt it is because it is familiar to almost everybody and also because it does not cost and requires minimal training.

Our experiences with the use of Facebook as a mean of support for education in higher education institutions prove that this tool mainly supports communication, but here it is important to stress that we mean pedagogical communication. At the beginning the intention was only to simplify communication of teachers with students to enhance the transfer of study sources to the target groups of students with no need to instruct students how to utilize the support systems we created. That was why we decided to use Facebook as a platform for the system. For all students Facebook is more or less a natural environment in which they are used to move and moreover in which they feel comfortable. Thus, they get accustomed to use the Facebook environment as a support tool to education very quickly. An added value was that the students also get accustomed to use Facebook

environment as a support tool with respect to their own education activities, either individual (personal) or group activities. Some might argue that our intention could also have been achieved by implementing another application into the developed system. As to this, the findings presented in connection to the second research question speak in favour of our choice of Facebook as a platform for the education support system.

References

Anderson, M., & Jiang, J. (2018). Teens, social media & technology 2018. *Pew Research Center*, *31*, 2018. Retrieved from https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/

Dillingerová, M. (2007). *Systémy pre e-learningové vzdelávanie.* Bratislava, FMFI UK. Retrieved from http://www.ddm.fmph.uniba.sk/files/EMATIK/Dillingerova.pdf

Greenhow, C. 2011. Online social networks and learning. *On the Horizon, 19*(1), 4-12.

Halverson, E. R. (2011). Do social networking technologies have a place in formal learning environments? *On the Horizon, 19*(1), 62-67.

Hejl, Z. (2012). *Otevřené, uzavřené a tajné skupiny na Facebooku. Jak zvolit tu správnou?* Retrieved from http://www.portiscio.net/otevrene-uzavrene-a-tajne-skupiny-na-facebooku-jak-zvolit-tu-spravnou

Hodál, P. (2016). *Sociálne siete ako podporný prostriedok vzdelávania technických predmetov* (Diploma thesis, Constantine the Philosopher University in Nitra). Nitra: PF UKF.

Kolychalov, M. I., & Pushkareva, E. A. (2018). Procesy globalizaciji i regionalizaciji v razvitiji sovremennovo obščestva: integracija issledovatelskich podchodov v socialno-gumanitarnom znaniji [Globalisation and regionalism in the development of modern society: integration of research approaches in the social and humanitarian knowledge]. *Vestnik Novosibirskovo gosudarstvennovo pedagogičeskovo universiteta, 8*(4), 94-108. DOI 10.15293/2226-3365.1804.06

Kostolanský, L., Šebo, M., & Tomková, V. (2019) The preparation of teachers in the field of multimedia education. *EduLearn19 Proceedings*, pp. 1477-1483. IATED Academy.

Manca, S. & Ranieri, M. (2013). Is it a tool suitable for learning? A critical review of the literature on Facebook as a technology-enhanced learning environment. *Journal of Computer Assisted Learning, 29*(6), 487-504.

Rouse, M. (2010). *Facebook page.* Retrieved from http://whatis.techtarget.com/definition/Facebook-page

Šebo, M. (2013). Súčasné trendy vo vzdelávaní [Current trends in education]. *Trendy ve vzdělávání: informační technologie a technické vzdělávání*, pp. 337-340. Olomouc (CZ), UP.

Tandale, M. G., & Raman, R. (2016). Social Media in Teaching and Learning – A Study. *International Journal of Education & Applied Sciences, Research, 3*(6), 31-42.

Teclehaimanot, B., & Hickman, T. (2011). Student-teacher interaction of Facebook: What students find appropriate. *TechTrends, 55*(3), 19-30.

Vidal, C. E., Martínez, J. G., Fortuño, M. L., & Cervera, M. G. (2011). University students' attitudes towards and expectations of the educational use of social networks. *RUSC, Universities and Knowledge Society Journal*, *8*(1), 186-199.

Digital Technologies in Teaching and Learning Foreign Languages: Pedagogical Strategies and Teachers' Professional Competence

Thierry Karsenti[1], Olga M. Kozarenko[2], Victoria A. Skakunova[3]

[1] University of Montreal, Montreal, Canada
Email: thierry.karsenti@umontreal.ca
ORCID: https://orcid.org/0000-0003-1733-4608

[2] Russian Peoples Friendship University, Moscow, Russia
Email: kozarenko_om@rudn.university
ORCID: https://orcid.org/0000-0002-5918-9288

[3] Lomonosov Moscow State University, Moscow, Russia
Email: victoria.skakunova@gmail.com
ORCID: https://orcid.org/0000-0002-2998-8070

Abstract

Research problem: Today's education system must adapt to the digital revolution and use it to best advantage. One of the most critical paths to pursue is to develop digital skills among student teachers. Many Russian researchers have focused on practices of digital technology integration in foreign language teaching, but, few among them have formulated systematic teaching strategies.

The aim of the study: To elaborate the pedagogical strategies for developing digital competence among students on the basis of the complex approach and scientific achievements in this field.

Research methods: The research is based on the statistics obtained during an online survey among university and school teachers, students. While conducting the interviews additional information appeared and teachers' opinions were specified. The participants included 100 university foreign language teachers as well as 120 students from Central Russia.

Results: The analysis revealed how the professors organized their digital learning spaces. Among others, the findings highlighted on which aspects they spent more Internet time, and the factors that limited digital use in class. The analysis of the students' responses revealed some problems in using digital tools while learning a foreign language. The results can be used in developing students' competences and in elaborating syllabus and teaching materials.

Conclusions and recommendations. On the basis of recent achievements and collected data, the complex of pedagogical strategies to form digital competence among students during the foreign language learning have been elaborated. With the appropriate pedagogical accompaniment, digital technologies allow the development of student teachers' digital competence to meet the demands of the modern society. Thus, it can increase the efficiency of foreign language teaching and will contribute to students' personal development.

Keywords: foreign language teaching, digital competences, pedagogical accompaniment, information technologies.

Цифровые технологии в преподавании и изучении иностранных языков: педагогические стратегии и профессиональная компетенция преподавателей

Т. Карсанти[1], Ольга М. Козаренко[2], Виктория А. Скакунова[3]

[1] *Монреальский университет, Монреаль, Канада*
Email: thierry.karsenti@umontreal.ca
ORCID: https://orcid.org/0000-0003-1733-4608

[2] *Российский университет дружбы народов, Москва, Россия*
Email: kozarenko_om@rudn.university
ORCID: https://orcid.org/0000-0002-5918-9288

[3] *Московский государственный университет имени М.В. Ломоносова, Москва, Россия*
Email: victoria.skakunova@gmail.com
ORCID: https://orcid.org/0000-0002-2998-8070

Аннотация
Проблема исследования. Современное образование должно адаптироваться к требованиям времени и использовать преимущества цифровой эволюции. Одним из важнейших направлений реализации этого принципа является последовательное развитие цифровых компетенций будущих учителей. Многие преподаватели-исследователи, работающие в вузах России, посвящают свои исследования конкретным практикам использования цифровых технологий в преподавании иностранных языков (ИЯ). Существенно меньше тех, кто занимается их систематизацией и обоснованием педагогических подходов их реализации.
Цель исследования заключается в разработке педагогических стратегий для формирования цифровых компетенций у обучающихся на основе комплексного подхода и с учетом научных результатов и достижений в этой области.
Методы исследования. Исследование опирается на статистические данные, полученные в результате онлайн опроса преподавателей педагогических вузов, учителей школ, учащихся. В ходе индивидуальных собеседований была получена дополнительная информация и конкретизированы мнения преподавателей. Было опрошено около 100 преподавателей и 120 студентов вузов Центральной России. **Анализ полученных результатов** позволил понять, как организовано цифровое пространство преподавателей ИЯ, каким аспектам они уделяют больше времени, работая в Интернете; выявлены причины, ограничивающие использование цифровых технологий на занятиях, личное мнение участников опроса об уровне их цифровых навыков и др. Анализ ответов учащихся обнаружил их отношение к использованию цифровых технологий в изучении ИЯ, способы их работы с цифровыми носителями на занятиях, алгоритмы поиска информации и т. д. **Результаты исследования.** С учётом полученных данных, а также на основе последних научных достижений для проведения занятий по иностранному языку был разработан комплекс педагогических стратегий, которые могут быть использованы для формирования цифровых компетенций учащихся и при составлении учебных программ и учебно-методических комплексов. **Обсуждение**. При условии грамотного педагогического сопровождения информационные технологии позволят сформировать цифровую компетенцию будущих учителей в соответствии с запросами современного общества, что повысит эффективность преподавания и изучения иностранных языков в цифровую эпоху и будет способствовать личностному росту учащихся.
Ключевые слова: преподавание иностранного языка, цифровые компетенции, педагогическое сопровождение, информационные технологии.

Introduction

The issue of research related to the integration of digital technologies in education is becoming more and more widespread among Russian researchers. This process reflects the ground-breaking changes that enhance massive usage of new technologies in the educational process. In our view, special place in this research should be attributed to the formation of digital competences among pre-service teachers since in most cases the future of social achievements depends on them.

The massive shift to distance education due to Covid-19 has demonstrated once again the weaknesses in the formation of digital competences among university and school teachers. The current situation is similar to an iceberg where people use only a small number of a wide range of accessible digital technologies and their opportunities.

That is why a special significance is attributed to research aimed at solving the concrete problems that occur while implementing digital technologies in the teaching process, and that are designed at revealing those difficulties that university and school teachers of foreign languages face in the digital environment. Thus, to understand the situation objectively this study examined the forms of teaching and learning activity while using digital technologies in foreign language teaching.

While conducting the research we noticed that certain technical difficulties that occur in the teachers' activity could hide even more important aspects related to the pedagogical accompaniment of digital technologies integration into the classroom. In this respect, the approach of using digital technologies is not always complex. As a result, the consequences of such situation can reflect on the entire process of digital competences formation among students - and student teachers in particular.

The teachers' workload does not always allow them to be able to follow all latest innovative achievements and their colleagues' advanced experience in this field.

All these aspects have determined the direction of the present research.

Purpose and objectives

The purpose of the study was to elaborate the pedagogical strategies for developing digital competences among students on the basis of the complex, integrated approach and scientific research and achievements in this field. To address this aim we identified the following research objectives. To:
• Collect factual data on the use of digital technologies in foreign language teaching at schools and universities;
• Study the opinions on this issue of all participants in the educational process (university teachers, school teachers and student teachers);
• Define main directions of the work on the development of digital competencies among students;
• Elaborate the list of digital competences for student teachers and pre-service teachers of foreign languages.

Literature review

At present, the studies conducted into teachers' digital competences are shifting their focus from just applying technologies in teaching process to the role of information and communication technologies (ICT), in contemporary society. This is oriented, in its turn, on the acquisition of new knowledge, skills, competences and attitudes towards the concept of life-long learning (Bennett, Maton, & Kervin, 2008; Janssen et al., 2013; Voogt, Erstad, Dede, & Mishra, 2013). The authors hold that digital competence allows teachers to provide students with the possibilities of expressing their capacities in terms

of studying a discipline with help of digital skills in the twentieth century. This situation has led to significant changes. Educational frameworks and models have been created (European Commission, 2007; Ferrari, 2012; Ferrari, 2013). For example, in the official document of educational reform in Norway (Ministry of Education and Research, 2006), digital competence was identified as the fifth important competence together with reading, counting, writing and oral skills. However, some researchers note that, despite a big interest to these notions and a range of studies, still there is a "gap between technical knowledge and knowledge on how to employ technology in a learning context" (Haugerud, 2011, p. 227). On the basis of the research conducted among Norwegian teachers and students, Krumsvik (2008, 2014) underlines the positive influence of the introduction of digital competence on the results of the educational process. Moreover, Kay (2006) concludes that an ICT-competent teacher has a positive impact on the process of subject study by students and thus, contributes to the development of critical attitude to the construction of the structure and approaches to the integration of digital technologies in the learning process. Similarly, some researchers emphasise the fact that the integration of digital technologies into the educational process in a reflective manner could greatly contribute to the efficiency of their usage in terms of teaching foreign (French) language.

Dwelling on the questions of competences, it should be noticed that this term is quite changeable and many researches propose different terms such as 'information literacy' (Zurkowski, 1974), 'computer literacy' (Tsai, 2002), 'media literacy' (Hobbs, 2011), 'multi-modal literacy' (Heydon, 2007), 'digital literacy' (Grusczynska, Merchant, & Pountney, 2013) and others. All of them associate this term with the effective integration of digital resources into teaching and learning processes. Falloon asserts that this situation happens due to 'evolving technological, cultural and societal landscapes' (Falloon, 2020).

Concerning the concept of general digital competence, Janssen emphasises that a 'sensible and healthy use of ICT requires particular knowledge and attitudes regarding legal and ethical aspects, privacy and security, as well as … balanced attitude towards technology…' (Janssen et al., 2013, p.480). In this way, a teacher's role is not only to introduce digital technologies to students but also to demonstrate the broader vision and its impact on the society.

Other scientists consider digital competence as a way of using digital technologies and understanding their influence on the digital world via optimal integration of technologies into education (NMC, 2017). According to Navarro et al. (2016) and Ananiadou and Claro (2009) digital competence is the integrated use of knowledge, skills and attitudes towards digitalization.

Likewise, Lakkala et al. (2011) consider this notion as the ability to use digital technology and software. The pedagogical digital technologies have influence on the relationship, knowledge, and didactic usage of teachers (From, 2017).

Specifically, according to Lázaro-Cantabrana et al. (2019) pedagogical digital competence is "a set of skills, abilities and attitudes that the teacher must develop to incorporate digital technologies into their practice and professional development". Rivera-Laylle et al. (2017) noticed the digital competence implies both technological knowledge and didactic usage. Therefore, the teacher's digital competence includes the responsibility in two dimensions: to improve the level of digital competence and contribute to the development of digital competence among their students (Instefjord and Munthe 2017). The European Commission (EC 2017) created a project called DigCompEdu where the digital competence is determined as the ability of a person to have safe, critical and creative approach in the use of ICT. The National Institute of Educational Technologies and Teacher Training (INTEF, 2017) created their dimensions based on the systems of dimensions, indicators and levels of the development of their skills in teachers' digital competence.

One of the most significant issues of digital competences formation is models. The most famous models in this way were created by UNESCO (2011), TPACK described by Mishra and Koehler (2006), ISTE (2017).

Lund et al. (2014) points out that, while implementing technologies in the educational process a teacher educator needs to show how to use it in their professional purposes but also how to be 'capable of using technology in productive ways,' calling it the 'transformative competence' (Lund et al., 2014, p.286).

A conceptual model describing competencies needed for teachers of today is the TPACK model (Mishra and Koehler, 2006) which includes three dimensions: technological knowledge, pedagogical knowledge and content knowledge. This model demonstrates the integration of the different types of knowledge. However, TPACK was criticized for not always being useful with various studies following the way it is being used (Willermark, 2018).

We note that Digital Competency Framework developed by Quebecois Ministry of Education and Higher Education (2019) promotes ethical citizenship and technological skills. This document describes different dimensions that encompass innovation and creativity, digital resources for learning, information literacy, collaboration, communication, content production, inclusion and diverse needs, personal and professional empowerment, problem solving, critical thinking.

As for the digital competence for language teachers, Sysoyev and Evstigneev (2015) define it as ICT competence of language teachers in a digital environment and put forward the idea that ICT competence comprises two essential components: knowledge about the ICT that could be used in the teaching foreign languages; and the skills and abilities to implement ICT in the educational process properly from the technological and didactic points of view.

Skakunova V.A. (2017) states that ICT competence as the integrative active quality of teachers' activity can be divided into several components: conceptual component (awareness, positive and critical attitude towards the implementation of ICT into the educational process); organizational and content component (which implies the ability to systematize the educational material and to project the educational electronic environment with the use of ICT); technological component (which presupposes the technological skills and knowledge) and the evaluation component (the ability to analyse the technological and didactic features of an ICT).

Methodology

Data was collected using a survey of university teacher educators of foreign languages dealing with teaching staff, school teachers of foreign languages and student teachers of foreign languages. The survey was conducted in the educational institutions of Central Russia. In total 220 people participated in the survey.

University teachers were also interviewed in order to clarify and better understand their perception of the problem. The data went through a comparative analysis and were statistically processed.

Results

The results showed that neither at universities nor at school were lesson conducted in which students study on the Internet during the whole lesson. There are individual responses that show students use the Internet in their study during the half of the lesson. A quarter of the pupils interrogated said that they use the Internet technologies for no more than 10 minutes. For students at universities, this time increases to 30 minutes.

The organization of the educational process in both schools and universities presupposes that two thirds of the students use digital technologies in their classroom work or homework. However, a third of students use the Internet only for work outside the class. Half of the material that is offered by half of the language teachers within the classroom is in digital format.

A quarter of students asked their teachers for advice on using digital technologies in language learning. But only a third of these felt the advice was helpful; half of them received a partial answer.

Over 60% of students consider the use of digital technologies makes the language learning more effective and a third of them stated that it gives them confidence in their study work. Nevertheless, half of the students could not provide concrete examples of the application onto language learning.

Three years ago, 80% of teachers (Kozarenko, 2019) answered that they used digital technologies in their work. The authors' survey found a significant increase in this percentage. However, only 25% of teachers considers that they have their own well-elaborated strategy of integrating digital technology effectively in the educational process.

Among the difficulties that hinder teachers from using digital technologies were:
• technical problems – 66% of the university teachers and 50% of school teachers;
• psychological problems that are connected with breaking traditional forms of the teaching process;
• a high level of teachers' workload (reported by 65%).
• A quarter of the teachers surveyed admit that they do not possess the sufficient information to implement innovative forms of work with the use of digital technologies.

When organizing students' work, nearly 7 out of 10 teachers at universities use tasks aimed at finding the information on the Internet and this was confirmed by the students' answers with 90% of students at universities answering the question 'Can you find the information on the Internet on your own?' positively. This percentage fell to 68% among school pupils.

Half of school teachers pay attention to security issues in the digital environment. According to the survey, 10% of university teachers emphasis this point among their students.

The reliability of information found on the Internet is mentioned by half of university teachers but only a quarter of school teachers mention this in the classroom.

Digital interaction between teacher and students is becoming more diverse every year and covers all existing forms of communication. However, school teachers seem to be more traditional in this way although more than 90% of them prefer email as a way of communication with their pupils (Karsenti et al., 2020). Today the tendency to use chat platforms as a way of communication is becoming highly popular among almost all teachers. Yet, 60% of university teachers and 25% of school teachers prioritize face-to-face communication with students.

In the authors' opinion, during the period of total shift to online education due to Covid-19, students have reconsidered their attitude towards traditional forms of delivering lessons and towards the value of face-to-face communication with their groupmates and a teacher. The survey indicates their desires to return to real classrooms are explained by technical issues (problems with connection and the access to the Internet). On the other hand, it is related to the necessity of real-world communication rather that in the virtual one: "I miss my groupmates in reality".

Approximately a quarter of university teachers and a fifth of school teachers prefer not to communicate with their students via social nets, explaining this situation by the

need to protect their privacy. However, half of those who use this form of communication in their work tend to use only a foreign language for educational purposes.

Turning to the use of digital technologies in writing, only one third of the teachers agreed that firstly, it is important to teach digital writing and the comprehensive use of all digital technologies. Only a few people saw advantages of digital writing. On the whole, Russian teachers' attitudes towards the use of digital competences is rather critical (Kozarenko, 2018).

The study found an insignificant amount of time in the use of digital technologies in the classroom and little demand from teachers for the implementation of digital technologies in foreign language teaching and learning, as a result of a low level of digital competences among university and school teachers, major technical difficulties and insufficient equipment in classrooms

Teachers pay special attention to the development of information competence, leading to the idea there is no complex approach in teachers' perception of the possibilities that digital technologies hold in terms of foreign language teaching and learning.

The high level of teachers' workload limits their possibilities of getting acquainted with the increasing amount of knowledge in the field of digitalization of education. This creates difficulties for elaborating recommendations for teachers in the context of using digital technologies in their routine work. This demonstrate to students the advantages of the usage of digital technologies in studying a discipline and in their professional activity as well. Nonetheless, specific tips and recommendations cannot replace the answers to general questions of implementation of digital technologies in education, their possibilities and limitations.

One more aspect of note is the elaboration of a complex approach to interpreting students' digital competences; an approach that could take into account the contemporary level of knowledge at this point.

Special attention is attributed to the elaboration of detailed recommendations on the pedagogical accompaniment of ICT integration in foreign language teaching and learning. In the context of the overload of work this could help to take advantage of latest achievements in using digital technologies in teaching.

Basing on these results, we have elaborated a pedagogical approach to form students' digital competences.

Discussions

Pedagogical strategies in the development of students' digital competences in foreign language learning

The formation of students' digital competences in foreign language teaching and learning presupposes the use of new technologies to communicate effectively in written and oral forms in a foreign language within a digital environment, including situations in their private, educational and professional life.

To make the process of competences formation more harmonic and effective, it is important to observe all the dimensions. This research used the Digital Competency Framework created by the Ministry of Education and Higher Education in Quebec (Canada) as a base to elaborate the concept of digital competences in teaching foreign language (Cadre de références de la compétence numérique, 2019).

While describing pedagogical strategies we firstly defined the student's digital competence and then specified main directions of the work to implement them.

1. While interacting in a foreign language on the Internet, students should be taught to be responsible digital citizens.

a) Respect other users' points of view observing ethical rules of communication.

- Be able to see differentiate between linguistic registers in digital communication.
- Be able to express oneself in a foreign language, respecting ethical norms and according to the type and style of the digital communication (professional, interpersonal types of communication).

b) Pay attention to the presentation of personal data in a foreign language on the Internet in order to avoid using them for commercial, publishing purposes etc. Learn how to present personal information in formal communication (for example, to be employed) and informal (for instance, for communication in social networks and also the comprehension of the limits and ways of protecting personal data).

c) Learn to respect copyright while working with documents in a foreign language.

- While learning foreign languages it is important to quote the sources in order to avoid unconscious plagiarism.
- Learn how to use linguistic ways to present others' ideas in written and oral forms.

d) Learn to pay attention to the reliability of information in a foreign language.

- Stay informed of the criteria of identification of the sites with reliable examples in a foreign language.
- Find recommended sites in foreign languages to check the authenticity of photos and videos.

2. Know how to learn a foreign language with the help of digital technologies

a) Learn to organize a digital working space to learn a foreign language (be able to maximise the use of smartphones educational platforms and for educational purposes; be aware of communities of students learning a foreign language in the same institution etc.).

b) To offer students some digital minimum from the beginning of the process of foreign language learning (Karsenti et al., 2020).

c) Over time the command of linguistic competences should evolve in terms of a wider range of digital instruments (video creation, the use of corpus, the creation of profiles in a foreign language, the animation of blogs in a foreign language, collective writing, the usage of virtual reality etc.) (Karsenti, 2018, a, b; Karsenti, 2019; Karsenti, 2020; Karsenti et al., 2019, a, b).

3. Make students write in a foreign language with the help of digital technologies.

a) Learn the particularities and advantages of digital writing (Karsenti, 2018, a, b; Karsenti, 2019; Karsenti, 2020; Karsenti et al., 2019, a, b).

d) Install some self-correction services and applications on devices (as recommended by a teacher) while studying a foreign language.

c) Learn to use self-correction applications for spelling and grammar to support digital writing (Bonpatron.com; Cordial.fr; Reverso.net).

d) Learn the particularities of different forms of digital writing (comments, posts, publishing articles, SMS etc.) and the mobile communication (using smartphones, and tablets).

e) Propose projects in collective writing.

4. Learn to translate with the help of digital support

a) Get recommendations for digital possibilities for translating texts, documents, pictures in a foreign language (electronic dictionaries, data bases, encyclopaedias, sites of professional translators, corpus etc.).

b) Pay attention to the applications for translation in their devices.

c) Learn the features of machine automatic translation.

d) Get acquainted, or work together with a teacher, on working with electronic translation algorithms.

5. Learn to organize the educational communication in a foreign language in the digital space

a) Choose digital ways of communication in a foreign language between a student and a teacher (tchat, email, messages, social networks etc.), with groupmates in the institution, and with native speakers in the electronic environment or inside digital communities according to the learners' interests.

b) Learn to regulate the timetable while communicating digitally in different time zone.

c) Try not to be afraid of communication in a foreign language on the Internet, find help or assistance (from a teacher) in order to feel self-confident.

d) Pay attention to the need to update their profile presented in a foreign language.

e) According to their preferences, create spaces for digital communication in a foreign language on the Net (creation of pages in a foreign language in social networks or creation of a site in a language they learn).

f) Take into account all the advantages of digital communication, remembering the values of face-to-face communication.

6. Develop information competence in foreign language learning

a) Learn how to find, select, evaluate, secure, present, and share information in a foreign language (Karsenti and Kozarenko, 2016).

b) Taking into consideration the increase of toxic information on the Internet, learn to determine the validity and reliability of digital sources

c) Develop critical attitude to work with digital documents in a foreign language.

7. Learn to cooperate in digital and media environment in a foreign language

a) Teachers need to motivate students to search/create and use the forms of cooperative work for studying a foreign language in the Internet space (e.g. Padlet for posting joint projects; the use of wikis to create joint publications, pictures etc., the creation of, and participation in, various joint educational, informational, entertainment Internet platforms; collective work with documents in clouds etc.).

b) Learn to use principles of cooperative creation/writing documents in a foreign language (parallel work in groups, individual writing of materials for collective project, group work in sections, distribution of responsibilities in group while working on some text etc.).

b) Elaborate and participate in joint projects.

d) Learn to use the Internet space to finding or delivering help in foreign language learning (e.g. for translating difficult phrases, finding online consultation and advice etc.)

8. Make students participate in the development of their collective intelligence in the world scope with the help of a foreign language

a) Develop confidence in oneself and in one's knowledge while communicating in a foreign language in the Internet space.

b) Develop motivation and their needs to share their knowledge and skills with the help of a foreign language with native speakers.

c) Provide help in searching optimal forms of participation in a collective task (e.g. being 'editors' in Wikipedia; posting their work in Tweeter, YouTube etc.).

9. Stimulate students' interest in selecting digital instruments and resources in a foreign language so as to develop competences in the subject or in a professional field.

a) Demonstrate to the students the instruments for selecting resources in a foreign language that could be useful for them in their future professions.

b) Motivate students to attend forums, sites of recruitment agencies, professional social nets in a foreign language to facilitate their integration into professional field.

10. Exploit the usage of virtual reality in learning foreign languages

Advise students of different applications that they can use in virtual reality (for example, Google Translate which can allow to see the translation of phrases during the communication with a native speaker).

11) Explore the usage of artificial intelligence in the formation of linguistic competences

1) Advise students various digital applications, programs or platforms in order to:

a) Learn foreign languages (e.g. Duolingo, Mon Coach Bescherelle – an application that adapts to the level of a user and helps to train spelling).

b) Correct written texts automatically.

c) Correct pronunciation.

d) Translate.

e) Use programs that can help to choose the most suitable educational course to study online (MOOC) according to the demands and needs of a learner.

f) Evaluate the content of a text in the long view basing on the designated principles (Wang, Chang, Li, 2008).

g) Detect the amount of plagiarism.

2) Learn to integrate functionality of different programs in order to improve the content (e.g. it is possible to vote for the most successful translation).

Conclusion

Due to the rapid and dynamic changes in modern technologies, the questions of using digital technologies in education (in particular, in foreign language teaching) require regular monitoring of the situation. The later should include obligatory tracking of those difficulties that occur while dealing with digital technologies in the educational process, constant updating and instruction of teachers about new achievements in this field, and cooperation to concentrate their joint efforts in order to gain the results.

The issues of the formation of digital competences of pre-service teachers require special attention. Because of the specific features of their professions they need to be aware of all innovative processes of education.

The efficiency of the educational process depends on how it is going to be organized with the use of digital technologies and what pedagogical principles and strategies are going to be used in order to help a student express their creative potential during the educational process.

Acknowledgements

References

Ananiadou, K. & Claro, M. (2009). 21st century skills and competences for new millennium learners in OECD countries. *OECD education working papers* (vol. 41, pp. 1–33). http://dx.doi.org/10.1787/218525261154.

Bennett, S., Maton, K., & Kervin, L. (2008). The 'digital natives' debate: A critical review of the evidence. *British Journal of Educational Technology, 39*(5), 775-786. doi:10.1111/j.1467-8535.2007.00793.x

Bonpatron.com (n.d.) Accessed August 16, 2020 at: https://bonpatron.com/fr/

Cadre de références de la compétence numérique, réalisé par le ministère de l'Éducation et de l'Enseignement supérieur du Québec (Canada). (2019). *Ministère de l'Éducation et de l'Enseignement supérieur.* http://www.education.gouv.qc.ca/fileadmin/site_web/documents/ministere/Cadre-reference-competence-num.pdf

Cordial.fr (n.d.) Le correcteur cordial. Accessed August 16, 2020 at: https://bonpatron.com/fr/

Duolingo (n.d.) Accessed August 16, 2020 at: https://www.duolingo.com/

EC (European Commission). (2017). Digital competence framework for educators (DigCompEdu). Accessed November 16, 2019: https://ec.europa.eu/jrc/en/digcompedu.

European Commission. (2007). Key competences for lifelong learning. European reference framework. Luxembourg: Office for Official Publications of the European Communities.

Falloon, G. (2020). From digital literacy to digital competence: the teacher digital competency (TDC) framework. *Educational Technology Research and Development.* https://doi.org/10.1007/s11423-020-09767-4

Ferrari, A. (2012). *Digital competence in practice: An analysis of frameworks JRC scientific and policy reports.* Seville: European Commission Joint Research Centre. Institute for Prospective Technological Studies.

Ferrari, A. (2013). DIGCOMP: A framework for developing and understanding digital competence in Europe. In Y. Punie & B. N. Breco (Eds.), *JRC Scientific and Policy Reports.* Seville: European Commission Joint Research Centre. Institute for Prospective Technological Studies.

From, J. (2017). Pedagogical digital competence-between values. Knowledge and skills. *Higher Education Studies, 7*(2), 43-50. https://doi.org/10.5539/hes.v7n2p43.

Gruszczynska, A., Merchant, G., & Pountney, R. (2013). Digital futures in teacher education: Exploring open approaches towards digital literacy. *The Electronic Journal of e-Learning, 11*(3), 193-206.

Haugerud, T. (2011). Student teachers learning to teach: The mastery and appropriation of digital technology. *Nordic Journal of Digital Literacy, 6*(4), 226-239.

Heydon, R. (2007). Making meaning together: Multi-modal literacy learning opportunities in an inter-generational art programme. *Journal of Curriculum Studies, 39*(1), 35-62.

Hobbs, R. (2011). The state of media literacy: A response to Potter. *Journal of Broadcasting & Electronic Media, 55*(3), 419-430. https://doi.org/10.1080/ 08838151.2011.597594

Instefjord, E. J., & Munthe, E. (2017). Educating digitally competent teachers: A study of integration of professional digital competence in teacher education. *Teaching and Teacher Education, 67*, 37-45. https://doi.org/10.1016/j.tate.2017.05.016.

INTEF. (2017). Marco Común de Competencia Digital Docente. Instituto Nacional de Tecnologías Educativas y de Formación del Profesorado. Accessed November 16, 2019: https://intef.es/Noticias/marco-comun-de-competencia-digital-docente-2017-intef/.

International Society for Technology in Education. (2017). ISTE standards for educators. From https://www.iste.org/standards/for-educators

Janssen, J., Stoyanov, S., Ferrari, A., Punie, Y., Pannekeet, K., & Sloep, P. (2013). Experts' views on digital competence: Commonalities and differences. *Computers and Education, 68*, 473-481.

Karsenti, T., & Kozarenko, O. M. (2016). New model of students' digital competences and its application in foreign language teaching/learning. In M.V. Melnichuk (Ed.), *Linguistic, methodological and psychological aspects of teaching a foreign language for professional purposes in higher education* (pp. 204-241).

Karsenti, T. (2018, a). *10 types d'outils technologiques novateurs pour l'école d'aujourd'hui (et de demain).* Montréal : CRIFPE. -1-1.

Karsenti, T. (2018, b). *26 impacts positifs et potentiels de l'arrivée de l'intelligence artificielle en éducation*. Montréal : CRIFPE.

Karsenti, T. (2019). *12 raisons d'apprendre à coder à l'école*. Éducation Canada, Mai.

Karsenti, T., Kerbrat, N., & Parent, S. (2019, a) *12 Applications de réalité virtuelle pour t ravailler les grandes périodes de l'histoire avec ses élèves*. Montréal. CRIFPE.

Karsenti, T., Parent, S., & Kerbrat, N. (2019, b). *12 outils de réalité virtuelle*. Montréal. CRIFPE.

Karsenti, T. (2020). *Écrire avec les technologies, ça s'apprend ! 25 impacts des technologies sur le processus d'écriture et le goût d'écrire*. Montréal. CRIFPE.

Karsenti, T., Kozarenko, O. M., & Skakunova V. (2020). Integration of ict into teaching french as a foreign language in terms of francophonie [S'inserer dans le monde francophone du numerique durant les cours de fle]. *XLinguae*. European Scientific Language Journal, 292-313.

Kay, R. H. (2006). Evaluating strategies used to incorporate technology into pre-service education: A review of the literature. *Journal of Research on Technology in Education and Information Technologies, 38*(4), 383-408.

Kozarenko, O. M. (2018). Le numérique en classe de fle: comment agir pour amener nos apprenants à réfléchir? *XLinguae*, 230-251.

Kozarenko, O. M. (2019). Usage des tic en cours de fle par les différentes catégories des enseignants. In *Functional Aspects of Intercultural Communication Translation and Interpreting Issues*, Vol. 6 (pp. 480-489). Moscow: Peoples' Friendship University of Russia (RUDN University). DOI: 10.22363/2686-8199-2019-6

Krumsvik, R. J. (2008). Situated learning and teachers' digital competence. *Education and Information Technologies, 13*(4), 279-290. doi: 10.1007/s10639-008-9069-5

Krumsvik, R. J. (2014). Teacher educators' digital competence. *Scandinavian Journal of Educational Research, 58*(3), 269-280.

Lakkala, M., Ilomäki, L., & Kantosalo, A. (2011). Which areas of digital competences are important for a teacher? In *Linked Portal* (pp. 1-8). Brussels: European Schoolnet (EUN).

Lázaro-Cantabrana, J., Usart-Rodríguez, M., & Gisbert-Cervera, M. (2019). Assessing teacher digital competence: The construction of an instrument for measuring the knowledge of pre-service teachers. *Journal of New Approaches in Educational Research (NAER Journal), 8*(1), 73-78. https://doi. org/10.7821/naer.2019.1.370

Lund, A., Furberg, A., Bakken, J., & Engelien, K. (2014). What does professional digital competence mean in teacher education? *Nordic Journal of Digital Literacy, 9*(4), 281-299.

Mishra, P., & Koehler, M. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record, 108*(6), 1017-1054.

Mon Coach Bescherelle (n.d.) *Orthographe et redaction. Editions Hatier*. Accessed August 16, 2020: https://moncoach.bescherelle.com

Navarro, S., Zervas, P., Gesa, R., & Sampson, D. (2016). Developing teachers' competences for designing inclusive learning experiences. *Educational Technology and Society, 19*(1), 17-27.

NMC-New Media Consortium. (2017). NMC horizon report: 2017 Higher Education Edition. Accessed August 16, 2020: https://www.nmc.org/publication/nmc-horizon-report-2017-higher-education-edition/.

Reverso.net (n.d.) Le correcteur en ligne. Accessed August 16, 2020: https://www.reverso.net/orthographe/correcteur-francais/

Rivera-Laylle, L. I., Fernández-Morales, K., Guzmán-Games, F. J., & Eduardo-Pulido, J. (2017). ICT acceptance by university professors: Knowledge, attitude, and practicality. *Revista Electrónica Edu-care, 21*(3), 99-116. https://doi.org/10.15359/ree.21-3.

Skakunova, V. A. (2017). On the question of information and communication competence of student teachers of a foreign language. *Higher Education Today, 5*, 16-18.

Sysoyev, P. V., & Evstigneev, M. N. (2015). Foreign language teachers' competency in using information and communication technologies. *Procedia -Social and Behavioral Sciences, 200*, 157-161.

Tsai, M. (2002). Do male and female students often perform better than female students when learning computers? A study of Taiwanese eight graders' computer education through strategic and cooperative learning. *Journal of Educational and Computing Research, 26*(1), 67-85.

United Nations Educational, Scientific and Cultural Organisation (UNESCO). (2011). ICT competency standards for teachers (version 2). https://unesdoc.unesco.org/ark:/48223/pf0000213475

Voogt, J., Erstad, O., Dede, C., & Mishra, P. (2013). Challenges to learning and schooling in the digital networked world of the 21st century. *Journal of Computer Assisted Learning, 29*(5), 403-413.

Wang, H., Chang, C., & Li, T. (2008). Assessing creative problem-solving with automated text grading. *Computer and Education, 51*(4), 1450-1466.

Willermark, S. (2018). Technological pedagogical and content knowledge: A review of empirical studies published from 2011 to 2016. *Journal of Educational Computing Research*, *56*(3), 315-343.

Zurkowski, P. (1974). *The information service environment: Relationships and priorities*. Washington D.C.: National Commission on Libraries and Information Science.

A Humanitarian Approach to the Digitization of Education

Alexey V. Lubkov[1], Oksana V. Gordienko[2], Anastasiya A. Sokolova[3]

[1] *Moscow Pedagogical State University, Moscow, Russia*
E-mail: av.lubkov@mpgu.su
ORCID: https://orcid.org/0000-0002-1395-4239

[2] *Moscow Pedagogical State University, Moscow, Russia*
E-mail: ov.gordienko@mpgu.su
ORCID: https://orcid.org/0000-0002-1450-3413

[3] *Moscow Pedagogical State University, Moscow, Russia*
E-mail: aa.sokolova@mpgu.su
ORCID: https://orcid.org/0000-0003-0504-1293

Abstract
Digitization is a global, all-encompassing process, affecting all spheres of human life and society. In this context education is not an exception, and the changes taking place in it are a natural result of the rapid development, wide dissemination and accessibility of information technology and networks. Understanding the methodological and philosophical foundations and principles of the process is a necessary phase of the transition to the digital education, the digital society and the digital economy. In the narrow sense digital education can be understood as a conversion of learning materials and the learning process itself from analog to digital format (i.e. electronic textbooks, electronic libraries, open online courses and webinars, video lectures, etc.), but this phenomenon can be considered in broader terms as the complex changes of infrastructural, managerial, behavioral, cultural nature. Recent events (quarantine almost all over the world because of the Covid-19 pandemic) have made it clear that the broad approach to digitization is necessary for the translation of all education systems across the world to an online format, since it refers not only to the form of presenting educational and control materials but first and foremost to the aspects of general behavior, psychological, cognitive and axiological issues. Studies have shown that in the process of transferring education from the classroom to a distance form, all participants of the educational process (students, teachers, education managers, parents) underwent a reassessment of views on education and its role in the life of a person and society. Furthermore, the contradictions, implicitly or weakly expressed prior to the forced and urgent transition to the distant form, were sharpened, and the problems related, for the most part, not to the technical aspects (although these problems also exist), but to the components of education such as communication, personal development, socialization and even physiology, became most urgent. All this requires more in-depth study, a comprehensive and systematic understanding of all the elements not only from the standpoint of functionality, but also axiological, epistemological, ontological and anthropological meanings.
It has become obvious that the focus should be placed not on the technical tools with which digital education is implemented, but on a humanitarian approach with its humanistic values, in the center of which is a person: teacher - pupil /student - director - parent. As participants of the educational process, they determine the goals, objectives and methods of activity, select the appropriate technical means and evaluate their training, educational and development potential; they are the *centrum omnium* that underlies education.
This article is devoted to the digital transformation of education in view of the humanitarian approach based on the study of culture, values and history of mankind as a whole and of the people in particular, supported by the pedagogical, psychological, sociological and communication theories that focus on the person, the individual.
Keywords: digital education, humanitarian technologies, digital risks.

Гуманитарный подход к цифровизации образования

Алексей В. Лубков[1], Оксана В. Гордиенко[2], Анастасия А. Соколова[3]

[1] Московский педагогический государственный университет, Москва, Россия
E-mail: av.lubkov@mpgu.su
ORCID: https://orcid.org/0000-0002-1395-4239

[2] Московский педагогический государственный университет, Москва, Россия
E-mail: ov.gordienko@mpgu.su
ORCID: https://orcid.org/0000-0002-1450-3413

[3] Московский педагогический государственный университет, Москва, Россия
E-mail: aa.sokolova@mpgu.su
ORCID: https://orcid.org/0000-0003-0504-1293

Аннотация
В настоящее время цифровизация носит глобальный характер, затрагивает все сферы жизни человека и общества. Трансформация образования в данном случае не исключение, а закономерное следствие развития, широкого распространения и общедоступности информационных технологий и сетей. Осмысление методологических и философских основ и принципов данного процесса – необходимый этап перехода к цифровому образованию, цифровому обществу и цифровой экономике.

Цифровое образование можно понимать в узком смысле как перевод учебных материалов и самого процесса обучения из аналогового формата в цифровой (это и электронные учебники, и электронные библиотеки, и массовые открытые онлайн-курсы, и вебинары, и видеолекции, и многое другое). Но это же явление можно рассматривать более широко – как комплексные изменения инфраструктурного, управленческого, поведенческого, культурного характера. И последние события (карантин практически по всему миру из-за пандемии в связи с Covid-19) наглядно доказали, что при переводе всех систем образования по всему миру в онлайн-формат требуется именно широкий подход к цифровизации, так как затрагиваются не столько формы представления учебного материала и контроля, сколько более общие поведенческие, психологические, когнитивные и аксиологические категории. Исследования показали, что в процессе перевода образования из аудиторного в дистанционный формат у всех участников образовательного процесса (учеников, учителей, управленцев системы образования, родителей) произошла переоценка взглядов на образование и его роль в жизни человека и общества, обострились противоречия, неявно или слабо выраженные до этого вынужденного и экстренного перехода в дистант, актуализировались проблемы, связанные по большей части не с техническими сторонами (хотя эти проблемы тоже есть), а с коммуникативными, развивающими, воспитывающими, социализирующими и даже физиологическими составляющими образования. Все это требует более глубокого исследования, комплексного и системного осмысления всех элементов с позиций не только функциональных, но и аксиологических, гносеологических, онтологических и антропологических смыслов.

Стало очевидным, что во главу угла должны быть поставлены не технические инструменты, с помощью которых реализуется цифровое образование, а гуманитарный подход с его гуманистическими ценностями, в центре которого находится человек: педагог – ученик (студент) – руководитель – родитель. Именно субъекты образовательного процесса определяют цели, задачи и способы деятельности, отбирают соответствующие этому технические средства и оценивают их обучающий, воспитательный и развивающий потенциал, именно они тот centrum omnium, который лежит в основе образования.

Настоящая статья посвящена проблеме цифровой трансформации образования с учетом гуманитарного подхода, основанного на изучении культуры, ценностей и истории человечества в целом и своего народа в частности, опирающегося на педагогические, психологические, социологические и коммуникативные теории, в центре которых находится человек.

Ключевые слова: цифровое образование, гуманитарные технологии, цифровые риски

Introduction

The relevance of the humanitarian approach to digitization of education

The starting point for the transition to the digital era has been the possibility to store, process and transmit data in a digital format. Since that time the amount of information began to grow dramatically, and now in a few years, mankind produces more information than for the entire period of its existence: this phenomenon is called *information blow-up*. As with other areas of human life, education cannot remain unchanged in this ever-faster information flow that changes not only our perception of the world, but also psycho-physiological, cognitive, communication and social behaviors of the younger generation. It (education) is no longer intended just to impart knowledge but should form the skills of processing the array of information as well as of orientation in the world information noise, fake, virtual personalities, etc.

The answer to all these and many other challenges of our time has been the global digitization, including the digitization of education. However, this process faces a number of objective contradictions: on the one hand, it is obvious that education must meet the challenges of our time, prepare the child for life in the new digital society, and on the other, the future in which today's students will live in 15, 20, 30 years' time is quite uncertain – what changes will occur in the scientific view of the world, in technological progress, and what knowledge and skills will be useful to them.

Another feature of the digital transformation of education at this stage is the absence of a uniform, even a rough model of the process and its final result, not to mention the fact that there is still no well-established and generally accepted definition of digital education and a clearly defined range of concepts associated with it or being integral part of it. One person talks about digital didactics, another explores digital pedagogy.

In addition, digital education is usually reduced to the learning process, and the issues of upbringing and socialization that affect the formation of a person's value system are out of sight, and the third component of pedagogy - personality development – appears to be deformed because some development processes become hyperactive (polysensor activity, multitasking, etc.) while others (memory, imagination, attention, speaking proficiencies, etc.) are inhibited.

In our opinion, it is the humanitarian approach that is needed to solve the above-mentioned problems, because it highlights the anthropocentric paradigm, where the central place is given to the upbringing of a person, the development of his/her basic mental functions, the formation of the worldview and values, as well as the cultural code of the nation and other spiritual bonds (Danilova, 2008).

Analysis of the literature on the humanitarian approach to the digitization of education

The process of digitization of education throughout the world has been uneven and phased. Initially, the prospects of converting the training process to electronic format and transferring many operations to technological training platforms were associated with the idea that teachers, having freed time from re-conducting the same lessons in the classroom and from the routine work of scoring each assignment, would cooperate more with each other using digital technologies, devote more time to "active learning" of schoolchildren and students; students would be able to obtain knowledge not only from their teachers working with them directly, but also from teachers of leading world universities; the training would be adapted to the individual needs of each student on the basis of a large array of data concerning personal interests, achievements and mistakes (Bowen, 2015; Uvarov et al., 2019). But gradually disillusionment has set in, a number of shortcomings were identified, and the ideas that some restrictions are needed to the digitization process such as introducing the so-called "digital Shabbat" (the period of total

refusal to use gadgets) and forming a digital minimalist philosophy (restrictions in using gadgets) (Newport, 2019) have arisen.

These changes in comprehension of digital education are quite logical – from the ideal image of the integral ecosystem of digital learning to the realities of the world around, risks and their consequences. However, this problem associated with the bipolarity of this phenomenon, which is a combination of both enormous educational opportunities and equally serious threats, has not yet been resolved. On the one hand, digital technologies make it possible to receive immediate feedback due to automatic data processing and save time, to interact with students in a different way (interactive tasks, the possibility of remote collaboration, etc.), to visualize training material (multimodality), to receive information quickly, to plan training at an individual pace, etc., which entails the introduction of digital skills in the list of civic skills in some countries at the level of official documents (Digitaalinen Suomi, 2019). On the other hand, analysis of the scientific literature has shown that the use of digital technologies for searching and processing information leads to tremendous changes in the perception and understanding of the world by children and teenagers (Palfrey & Gasser, 2008; Helsper & Enyon , 2011), new psychological dependencies associated with the virtual world are identified (Sieberg, 2011), other psychological problems appear that cannot be ignored by the modern education system (Zelenin, 2019), the transformation of the traditional values is going on at a frightening speed (Tapscott, 2009), the network communication format itself undergoes metamorphoses (Lanclos, 2016; Sullivan, 2016), social skills are being deformed (social autism), and physiological problems (physical inactivity, health deterioration, etc.) become more common.

Developing into a large-scale sociocultural phenomenon that affects all spheres of life today digital technologies largely determine the "cultural core" of the era, society, and sociocultural time markers. The national traditional views of life that have evolved over the centuries are now undergoing changes under the influence of virtual reality, transforming the picture of the world, including the linguistic.

In order to neutralize the possible negative effects of the digitalized world there must be comprehensive understanding of all elements of the system from the standpoint of not only functionality, but also axiological, epistemological, ontological and anthropological meanings (Gordienko, Sokolova, & Simonova, 2019).

Today it is clear that a complete rejection of digitization is impossible, but at the same time the absolute digitization of education is also a utopia. Thus, a model that combines all the possibilities of digital technology and traditional teaching seems to be the most productive. In this model a blended learning technology can be used, based on a combination of direct forms of interaction between the participants of educational process (traditional classroom lessons) and virtual interaction through learning environments (Andreeva, Rozdestvenskaya, & Yarmakhov, 2016; Daniluk & Faktorovich, 2019). According to a study conducted by American scientists in 2017 on the basis of six universities, this technology is recognized as the most promising (Bailey, Vaduganathan, Henry, Laverdiere, & Puglese, 2018). The use of the humanitarian approach as the core in the construction of a blended learning model will allow us to reduce the risks and threats that have already been objectively revealed and give reason for concern (Lubkov & Morozova, 2019).

Methodological grounds

The purpose of this paper is to identify and describe the possible risks for digitization of education in the case of a humanitarian approach based on anthropocentrism in

relation to the value component and where the meaningful content and principles of the digital transformation implementation, are not taken into account.

The methods of conceptualization of a humanitarian approach, analysis of the scientific literature on the problem, the method of independent assessments, monitoring, and the method of critical interpretation were used in the study.

Results

Where digital technology, is perceived and used without adequate analysis of the positive and negative aspects of technologisation, regardless of humanitarian approach, it becomes a real threat not only to education but to mankind as a whole. A risk analysis of technocratic approach to digitization shows that axiological sphere will be affected first of all, and this would have a negative impact on the epistemological (loss of value of knowledge), the ontological (the person ceases to perceive himself in space, time, movement, etc.) and other aspects important to humanity. These are some of the possible risks that may arise if the humanitarian approach to digital transformation is ignored.

Let us consider the risks in terms of key values such as freedom, responsibility, communication, cognition, development, equality and security, the deformation of which is possible because of digitization, and also show some ways to solve these problems.

Freedom as a fundamental value becomes ambivalent in the digital format: on the one hand, it is good, because there is an expansion of opportunities for communication, cognition and creativity, but on the other, permissiveness (quasi-freedom) carries with it a lot of internal and external risks. The notion of unlimited freedom in virtual reality (a possibility to invent a name, biography, appearance, destiny or complete anonymity) leads in real life to the fact that the scope and boundaries of freedom may be violated by an individual, and the responsibility for the actions becomes unclear. As a way out, the individual increases their virtual communications and eventually goes into escapism (withdrawal from reality to illusion world). In this connection there comes the problem of finding ways to neutralize these risks, instilling the sense of responsibility for the actions in young people and transforming destructive understanding of freedom – "freedom from ..." for a positive understanding – "freedom for ...".

Freedom in the network means the equality of all users: you are free within the boundaries that do not violate the boundaries of the freedom of another person. The hypertext basis of digital information allows every person to work and construct information in his/her own logic, however, one should be responsible for an information product. The problem of responsibility in digital society and digital education is also associated with destructive tendencies (cyber vandalism, trolling, cyber bullying, etc.) which are the result of the lack of restraining barriers in the network that impede the commission of immoral acts or actions, that are much easier to do in the virtual world than in the real life. The lack of a connection between freedom and responsibility can lead to anarchy, so digital communication must be built on the basis of moral and ethical values.

Digital technologies today are not only a tool for searching information, but also a condition for the very possibility of cognition, which is being transformed by existing super-saturated information field, where today's man has not only to learn and work, but also to live. On the one hand, digital civilization makes it possible to search for the necessary information in a flexible way, to expand it to the necessary level of information satisfaction, and on the other hand, there arises a hybridization and interference of information flows, mixing and shifting the necessary emphasis to an uncontrolled area. A quick look at different Internet pages does not create a holistic knowledge, it most often remains eclectic, mosaic. As a result, a distorted, illusive idea of owning it is born

(downloading, reproducing instead of creative reading and comprehension). A good image of this was suggested by Shlykova (2015, p. 87) who compared the Internet network to the library after the earthquake, which houses a lot of valuable and useful information, yet only a person who has a basic knowledge and values is able to avoid getting lost in this information chaos.

The Internet is recognized by the younger generation as the absolute source of information: "For generations, nurtured in the digital virtual space, the Internet with all of Wikipedia, blogs, social networks, news channels, etc. speaks the ultimate truth – they appeal to it, they cover their cultural nakedness by it, it is a shell of spiritual emptiness and worthlessness of communication" (Prokudin & Sokolov, 2013, p. 89). Cognition, earlier recognized as a cultural value, is losing its status, knowledge and scholars as the bearers of cultural meanings are no longer valued, since an opportunity to find information on any matter very quickly creates the illusion of a broad outlook, although connections between different information vectors in this case, as a rule, do not arise. Humanistic meanings of knowledge are lost, the idea of cognitive catharsis, when understanding happens and the discovery of a new that uplifts a person, vanishes. Due to discrepancies between the seeking and obtaining existing knowledge there may be a gap between the meanings, values of real and virtual knowledge. Science as a basic value institute, based on a search for answers to the universal questions, loses its value meanings for the younger generation too, because of the phantom idea of the only right and ready answer to any question. In this context leading researchers and acknowledged scientific authorities are perceived as remnants of the past.

Among digital risks are inaccurate information as a result of poor-quality scanning of sources, information hoaxes and misinformation (fake news), and information noise due to the abundance of advertising, and manipulation of the conscience, intimidation and coercion, and the lack of real socialization, as well as damage to health and the human psyche.

Thus, it must be taken into account that digital technology causes substantial socio-cultural transformations in the cognitive sphere. Introducing digital forms to education requires a number of measures to neutralize these risks - purposeful training to work with the information flow, strengthening value component knowledge and knowledge in general.

In the digitization of education, interpersonal and group communications carried out through electronic networks are recognized as equally important. Digital technologies generate new cultural codes and ways of interaction and therefore, values and communicative meanings are changing. On the one hand, new technologies allow us to create a multifunctional dialogue between network users, expand and complement it, to cooperate interactively through mobility, convergence (combining different services on the same base), interactivity, multimedia, multisensory and other technologies. But on the other hand, for the younger generation communication often turns into pseudo-communication. This leads to the loss of communication as a value associated with the expansion of the conceptual and semantic field, the displacement of meanings from enrichment and the transfer of knowledge and emotions to generating simulacra (signs beyond which there is no meaning), but which are nevertheless perceived and acted upon, creating an imaginary and false picture of reality among the recipients of communication. Such communication leads to a loss of responsibility for the words said, disorientation in the social system of values. "Free" communicative actions, the anonymity of the communicants, distant communication makes it possible not to take into account the moral and ethical features, and the virtual classroom becomes an object of mass information and communication influence and manipulation, with the active imposition

of new values. This often fails to satisfy the spiritual, moral and universal human needs for communication, and a person usually begins to experience frustration, to overcome which, he/she increases the number of recipients of virtual communication and the duration of communication sessions, but in the end often does not find meaningful life landmarks or comes to their moral distortion. Freedom and responsibility in the communicative sphere are associated with mastering the basic principles of communication, observance of ethical and communicative norms. All these phenomena ultimately influence the formation of the worldview.

Thus, the communication sphere's value also undergoes change, due to which the education system puts to the forefront training on culture of interaction in the networks, ethic norms compliance while placing reliable qualitative information, personal security verification.

Conclusions and recommendations

Having recently lost some of its relevance, the humanitarian approach is still one of the options for resolving the current prevailing contradictions between the declared objectives of the preparation of a harmoniously developed personality and a digital transformation, based on the cult of technology.

No doubt, today's children perceive the world and their place in this world differently, but the adjustment of the educational system to the short-term needs and requirements may lead to the situation when the development and education of the younger generation become the quasi-characteristics. After all, in the absence of formed values a child is not able to distinguish the good from the bad and the useful and harmful, good and harmonious from a hostile and destructive. Today his/her upbringing and development, socialization and the formation of a human personality occurs mainly in a virtual reality (social networks, computer games, popular messengers), where information and activities are not regulated by ethical, aesthetic and axiological norms. The child does not even understand the difference between the real live communication and activity on the virtual simulacra. He/she takes the Internet for the ultimate truth, searches there for answers to the most important and innermost questions for him/her, exposing himself/herself, without even knowing about it, to the risks and dangers of both spiritual and physical character, and spiritual risks are no less dangerous than physical. Only the implementation of a unified concept of education based on humanitarian approach with its main values of the human person, lively communication, freedom and responsibility, knowledge and security can protect the child from the negative impact of digital technologies. The same approaches should underlie the digital transformation of education.

The pedagogical community must come to the understanding that digital technology is not a panacea for all the problems of modern education, but only one of the instruments that helps to achieve higher educational goals. Universal human qualities and values (kindness, compassion, empathy, love, friendship, selflessness, etc.) remain unchanged as long as man exists, and education and development of these qualities is the main purpose of education. The displacement of the targets have already led to a deformation of the characteristics: the man as the center of the universe and at the same time as the preserver and the creator of a microcosm inside gives way to a "posthuman" essential qualities which are the denial of traditional values, the pursuit of unlimited consumption and personal success without any effort on his/her part.

Further ignoring the above trends, risks and threats in the construction of digital educational will lead to irreversible changes in the inner world of the man. Recently, philosophers, such as Keligov, Kutyrev, and Tchaikovsky, talk more and more often about

the transition of Homo sapiens to a different species, and let us hope it will not be e-homo, and the man created in the image and likeness of God, will not turn into a kind of robot.

References

Andreeva, N., Rozdestvenskaya, L., & Yarmakhov, B. (2016). *Step of school to blending learning*. Moscow: Rybakov Found. [in Russian]

Bailey, A., Vaduganathan, N., Henry, T., Laverdiere, R., & Pugliese, L. (2018). *Making digital learning work: Success strategies from six leading universities and community colleges*. Boston, MA: Boston Consulting Group.

Bowen, W. G. (2015). *Higher education in the digital age*. Princeton: Princeton University Press.

Danilova, M. (2008). *The humanitarian approach as a principle of organizing the development of specialists' professional culture in the educational process at university*. [PhD Dissertation, Saint Petersburg] [in Russian]

Daniluk, A., & Faktorovich, A. (2019). *Digital basic education*. Moscow: Avtorskaya masterskaya. [in Russian]

Digitaalinen Suomi – yhdenvertainen kaikille. Digi arkeen – neuvottelukunnan toimintakertomus. Valtiovarainministeriő (2019). *Helsinki, Julkisen hallinnon ICT*. Retrieved from: https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/161486/VM_2019_23_Digitaalinen_Suomi.pdf?sequence=1&isAllowed=y [in Finnish]

Gordienko, O., Sokolova, A., & Simonova, A. (2019). Axiological characteristics of digitalized education. *ARPHA Proceedings*, *1*, 969-975. doi:10.3897/ap.1.e0921

Helsper, E. J., & Enyon, R. (2011). Digital natives: where is the evidence? *British Educational Research Journal,* 1-18. Retrieved from: http://eprints.lse.ac.uk/27739/1/Digital_natives_(LSERO).pdf

Lanclos, D. (2016). *The death of the digital native: four provocations from Digifest speaker*. https://www.jisc.ac.uk/inform-feature/the-death-of-the-digital-native-23-feb-2016#

Lubkov, A., & Morozova, O. (2019). Pedagogical education in Russia: Current state, experience, outlook, problems. *ARPHA Proceedings, 1*, 423-429. doi:10.3897/ap.1.e0401.

Newport, C. (2019). *Digital minimalism: Choosing a focused life in a noisy world*. New York: Portfolio.

Palfrey, J., & Gasser, U. (2008). *Born digital: Understanding the first generation of digital natives*. New York: Basic Books.

Prokudin, D., & Sokolov, E. (2013). 'Digital culture' vs 'Analog culture'. *Vestnik Sainkt Petersburgskogo Universiteta - Vestnik of Saint Petersburg University, 4*, 83-91. [in Russian]

Shlykova, O. (2015). Sociocultural environment of the Internet: new values and communicative meanings. *Observatoriya kultury - Culture observatory, 4*, 86-98. [in Russian]

Sieberg, D. (2011). *The Digital diet: The 4-step plan to break your tech addiction and regain balance in your life*. New York: Three Rivers Press.

Sullivan, A. (2016, September). I used to be a human being. *New York Magazine.* Retrieved from: https://nymag.com/intelligencer/2016/09/andrew-sullivan-my-distraction-sickness-and-yours.html

Tapscott, D. (2009). *Grown up digital: How the net generation is changing the world*. Retrieved from: http://socium.ge/downloads/komunikaciisteoria/eng/Grown_Up_Digital_-_How_the_Net_Generation_Is_Changing_Your_World_(Don_Tapscott).pdf

Uvarov, A., Gable, E., & Dvoretskaya, I. (2019). *Difficulties and perspectives of digital transformation education*. Moscow: High Economic School. [in Russian]

Zelenin, A. (2019). Digitalization destroys school walls: The experience of school digitalization in Finland. *Russkii yazyk v shkole - Russian language at school, 80*(6), 16-22. doi: 10.30515/0131-6141-2019-80-6-16-22. [in Russian]

Comparative and Correlation Analysis of Experimental Work for Developing Organisational and Managerial Competences in University Teachers

Natalya V. Solovova[1], Natallia V. Sukhankina[2]

[1] Samara National Research University, Samara, Russia
Email: solovova.nata@mail.ru
ORCID: https://orcid.org/0000-0002-3280-3380

[2] Samara National Research University, Samara, Russia
Email: sukhankina@inbox.ru
ORCID: https://orcid.org/0000-0003-3816-3801

Abstract
This article reports on the development of a framework for university teachers' organizational and managerial competence. The work is based on the content analysis of scientific research in new generation educational program management, ways for expanding the functions of university teachers and transforming their activities with due regard to the modern reality of higher education institutions. This competence is an integrative teacher's personality trait that reflects four structural components: value and motivation-based component, cognitive component, design-based component and knowledge-based component. Expert surveys were conducted in 2017-2019 to provide empirical support for the structural components. The sample included over 280 respondents at Samara University. Means and methods for university teacher organizational and managerial competence formation were assessed within the scope of an advanced training program (ATP) named "Educational Program Management", implemented by the Professional Competence Development Centre of Samara University. The content of the ATP's sections was developed, and teaching methods contributing to the development of indicators of the relevant competence components were identified. Summative and formative assessments of the level of competence development used self-evaluation by a sample of 140 teachers, organizing the educational process at 35 departments of the University. A correlation analysis of summative and formative assessment data was carried out to establish ties between the components of organizational and managerial competence.
Keywords: higher education program, university teacher, organizational and managerial activity, organizational and managerial competence, competence approach.

Сравнительный и корреляционный анализ опытно-экспериментальной работы по формированию организационно-управленческой компетентности преподавателя вуза

Наталья В. Соловова[1], Наталья В. Суханкина[2]

[1] *Самарский национальный исследовательский университет имени академика С.П. Королева, Самара, Россия*
E-mail: solovova.nata@mail.ru
ORCID: https://orcid.org/0000-0002-3280-3380

[2] *Самарский национальный исследовательский университет имени академика С.П. Королева, Самара, Россия*
E-mail: sukhankina@inbox.ru
ORCID: https://orcid.org/0000-0003-3816-3801

Аннотация
Контент-анализ научных исследований в области управления образовательными программами нового поколения, выделение основных направлений расширения трудовых функций и трансформации видов деятельности преподавателя вуза в современных реалиях высшей школы послужили основанием для разработки авторской структуры организационно-управленческой компетентности преподавателя вуза. Данная компетентность представляет собой интегративную характеристику личности преподавателя, представленную в совокупности четырех компонентов – ценностно-мотивационного, когнитивного, проектировочного и экспертного. С целью эмпирического обоснования значимости показателей структурных компонентов организационно-управленческой компетентности преподавателя вуза в качестве руководителя образовательной программы были проведены экспертные опросы (2017–2019 гг.). Выборку составили более 280 респондентов. Апробация системы средств и методов формирования организационно-управленческой компетентности преподавателей вуза проводилась в рамках дополнительной профессиональной программы «Управление образовательными программами», реализуемой в Центре развития профессиональных компетенций Самарского университета. Целью формирующего и констатирующего экспериментов было выявление уровня сформированности компонентов организационно-управленческой компетентности преподавателей Самарского университета путем самооценки. Выборку составили 140 представителей профессорско-преподавательского состава, обеспечивающих образовательный процесс на 35 кафедрах университета. На следующем этапе был проведен корреляционный анализ данных формирующего и констатирующего экспериментов с целью установления связей между компонентами организационно-управленческой компетентности.
Ключевые слова: образовательная программа высшего образования, организационно-управленческая деятельность преподавателя вуза, организационно-управленческая компетентность преподавателя вуза, компетентностный подход.

Introduction

Current trends in higher education (increased openness of education systems, extension of external and internal integration processes, educational space digitisation, shift from mono- to inter- and transdisciplinary research, development of network interaction, etc.) affect the approaches to assessment of educational programs' competitiveness and cause transformational changes in a university teachers' job functions. Currently, such processes as personal growth (self-development) and self-evaluation of scientific research

work, introduction of novelties and innovations have been growing in significance. The focus of the human resource policy of a modern educational institution is on its competitiveness, achieved through improvement of professional competence of the staff, as well as through building a highly skilled and resilient workforce.

At this stage of development in higher education, innovative strategies used in educational program management acquire special urgency. It is through the prism of functioning of the higher education program that one can form an opinion on how efficiently the university attracts and spends resources, how management and infrastructure of an educational institution respond to the stakeholders' needs, and how effective the HR policy is. The main aspects influencing the competitiveness of a modern educational program that meets individual, regional and federal needs and the requirements of international standards are:

- brand and public image of the university;
- education program quality;
- academic staff qualification;
- management and learning technologies;
- economics of education program.

In today's dynamic environment, educational institutions have been rearranging or transforming their organizational structure, creating new types of employer-employee interactions, enhancing organizational, human and educational capital, enabling social initiatives, and building new working relationships.

Currently, educational institutions due to the standard nature of teaching, as representatives of the professional bureaucracy - at least those involved in innovation-based research - tend to adhocracy. A focus on convergent or deductive thinking while performing monotonous cyclical activities does not contribute to innovation. Therefore, when there is a need for conventional knowledge and skills, the professionals often work independently, but to generate new knowledge and skills they have to be united into multidisciplinary teams and work groups. Inequality in the external environment of an institution encourages it to adopt selective decentralization to differentiated work constellations, in other words, an administrative adhocracy structure.

Modern education management, according to researchers (Baranova, 2016; Chandra, 2015), implies a re-examination of the functions and activities of teachers, initiation of their organizational and managerial activities as educational program managers, who are competent in program design, implementation, quality assessment and competitiveness assurance. As a result, the traditional activities of a university teacher (teaching, research and procedure development, organization and planning) are complemented by the need to design business processes, such as quality assurance in educational program management, organizational and methodical activities to support students as educational program consumers, monitoring the performance of the educational program, and technical aspects of the marketing activities. Consequently, modernization of the management of the higher education programs underlines the need for scientific search for new means, techniques and methods, and the development of the teachers' organizational and managerial competence.

Purpose and objectives of the study

The conceptual phase of the research had the objective of justifying and developing the recommendations for research and practice aimed at upgrading the teachers' competences. The purpose of the summative and formative assessments was to identify the level of development of these competences in teachers at Samara University. Correlation analysis was then used to evaluate the relationship between the components

in the structure of teachers' organizational and managerial competence to prove the performance characteristic integrity.

Literature review

The findings of scientific research and practical experience accumulated to date create certain prerequisites for the development and testing of practical models for promoting university teachers' organizational and managerial competence. Many scholars have contributed to the understanding of such competences as an integral component of teachers' professional training (Zimina, 2004; Pedan, 2014; Sharipov, 2010; Blaskova et al., 2015; Batrakova, Bordovsky & Tryapicyn, 2013). These scientists believe that this integrated characteristic displays a complex of knowledge, skills and personal traits that a teacher needs so as to organize and manage learning, projects, research and other types of student activities. A modern university teacher should have a command of the "methods of analysis and diagnostic techniques of results from the learning activities, project activities, problem-solving activities, search activities, reproductive and productive activities" (Zhukovsky, 2012, p. 180).

The awareness of effective management problem-solving tools, professional knowledge and work-related leadership experience are important instruments for the head of an educational institution or a structural unit (Berlim, 2007; Bozina, 2013; Borovikova, 2010; Reznik, 2008).

The following scholars contributed to the comprehension of the competence-based approach, which serves as the methodological basis of our study: Burgoyne (1989), Prahalad and Hamel (1990), McClelland (1998), Woodruffe (1991), Spencer and Spencer (1993), Hartle (1995), and Beaumont (1996).

In view of growing demands for qualitative programs of higher education with a combination of key parameters that are significant and necessary for consumers, the management system is faced with the task of staffing for on-going reorganizations. Firstly, this applies to teachers, most of whom lack the organizational and managerial competence that ensures educational program management, active participation in its content, structure, concept development and further implementation.

It should be noted that there is no unique interpretation of the concept of a "university teacher's organizational and managerial competence" in the scientific literature. Additionally, extra development effort is needed for the methodical and implementation components of purposeful development, and further diagnosis of the teachers' competence when acting as an educational program manager. In our opinion, an effective means of solving these tasks should be specially organized training that contributes to formation of such skills as: content knowledge operation, activity design and modelling based on the integration of knowledge from the different spheres that are part of professional activity of a university teacher" (Kirsanov & Kondrat'ev, 2009, p.83).

Methodology

The authors used the content analysis of scientific research in new generation educational program management, ways for expansion of functions of university teachers and their activities transformation in the context of modern realities of higher education institutions as the basis for the development of the organizational and managerial competence framework. This competence is an integrative personality trait that reflects four structural components – a value and motivation-based component, cognitive component, design-based component and a knowledge-based component.

The expert surveys were conducted between 2017 and 2019 to provide empirical support for the structural components of these competences. Discussions and interviews with the heads of structural subdivisions of universities showed that a modern institution needs highly qualified specialists capable of self-assessment, ready for research, and aiming at professional and personal growth. The following challenges were expected to be met during the expert survey:

• empirically confirmation of the importance of organizational and managerial competence of the university teacher for effective management of educational programs;

• Identification of effective methods for developing these competences as part of the advanced training system offered at university.

The empirical justification for the importance of the organizational and managerial competence of teachers was based on the analysis of opinions of four groups of respondents (n=280):

• managers of educational programs of different higher education institutions in Samara ("external evaluation");

• teachers of Samara University ("internal evaluation");

• managers of educational programs of Samara University ("internal evaluation");

• heads of departments and faculties of Samara University ("internal evaluation").

The study ensured that the first sample of respondents (managers of educational programs of different higher education institutions in Samara) was representative, by including educational institutions offering training in various areas, and by experts having significant experience (n=42). The second sample included the teachers of Samara University (n=105). The third group of respondents (n=101) included the managers of educational programs of Samara University. The inclusion of the managers of educational programs developed for different levels and fields of study ensured that this sample was representative. The fourth group of respondents (n=32) included the heads of the department of Samara University. The total number of responses exceeds 100%, because following the survey methodology, respondents could mark several response options. The survey results are presented in Table 1.

As shown in Table 1, the respondents put a high value on the practical skills crucial for research. An analysis of the responses offered by the respondents of all groups allowed us to conclude that the indicators of the greatest importance were: awareness of the regulatory framework and innovative approaches to educational process organization; delegation of authority and acceptance of feedback; adoption and implementation of managerial decisions; activities aimed at conflict resolution during educational program development; diagnostics of competitiveness and effectiveness of educational programs.

These competencies refer to the main stages of the management cycle: planning, motivation, support, monitoring and assessment of the results achieved. The analysis of the survey results allowed us to analyse the distribution of all competencies in each area of activity of the managers of educational programs and define the subject matter and content of advanced training programs aimed at improving the level of organizational and managerial competence.

The findings of the research allow us firstly, to confirm the importance of indicators of structural components of teachers' organizational and managerial competence, and secondly, to prepare methodical support for developing organizational and managerial competence within the Samara University advanced training system.

Table 1. Findings of the expert survey conducted to assess the significance of indicators of organizational and managerial competence of teachers

Skills and Abilities of Educational Program Managers	Degree of Manifestation (%)			
	Group of Respondents *			
	1	2	3	4
Teamwork skills	52.0	51.2	48.2	45.6
Interest in managerial experience of other divisions of educational institution	22.5	27.8	24.2	21.5
Creative initiative promotion and innovation in educational program development	34.2	35.0	34.1	33.7
Adoption and implementation of managerial decisions	53.0	49.0	43.4	41.6
Awareness of regulatory framework and innovative approaches to educational process organization	46.7	55.0	50.2	51.2
Mediation for conflict resolution during educational program development	55.9	54.2	57.7	53.2
Methodical issues in educational program planning	37.2	32.0	35.3	29.5
Delegating authority to solve tactical and strategic tasks and receiving feedback	47.0	46.8	48.2	42.0
Document flow management	12.6	22.2	23.2	21.2
Educational program management evaluation	36.7	42.0	45.3	40.0
Diagnostics of educational program competitiveness and effectiveness	56.0	55.6	54.7	56.7
Monitoring success of educational programs	39.6	38.8	34.2	31.3

* Groups of respondents: 1 – managers of educational programs of different higher educational institutions of Samara; 2 - teachers of Samara University; 3 – managers of educational programs of Samara University; 4 – heads of departments and faculties of Samara University

A modern university teacher should be prepared to solve organizational and managerial problems in the design and implementation of competitive educational programs. The study of this problem involves many research objectives among which is the formation of university teachers' organizational and managerial competence (Table 2).

Table 2. Structure of university teachers' organizational and managerial competence

Component	No.	Criteria
Value and motivation-based component	1	Interest in creating innovative educational programs and products
	2	Need for teamwork
	3	Need for communication and integration with colleagues
	4	Interest in organizational and managerial activities
Cognitive component	5	Awareness of the regulatory framework of higher education
	6	Awareness of the fundamentals of managerial theories
	7	Awareness of the fundamentals of HR management and conflict resolution
	8	Awareness of the fundamentals of educational programs economics
	9	Awareness of the innovative methods and training techniques

Design-based component	10	Ability to design learning and teaching materials and educational programs support
	11	Ability to plan resource support of educational programs
	12	Ability to determine the budget of the educational program
	13	Ability to design the content and structure of the educational program (conduct marketing)
Knowledge-based component	14	Ability to monitor and evaluate the quality of educational programs
	15	Ability to evaluate the competitiveness of educational programs
	16	Ability to calculate the profitability of educational programs
	17	Ability to conduct an examination of the compliance of the educational program with the Federal State Educational Standard

The level of development of the components of a university teacher's readiness for effective management of educational programs can be assessed through training seminars, and interviews. It is extremely important, while teaching teachers the basic principles of development and implementation of educational programs, to shape such qualities as systematization, mobility, flexible thinking, and the ability to diagnose organizational and managerial problems. The formation of a range of skills and abilities that are part of the structure of organizational and managerial competence can be achieved through the use of active and interactive teaching methods. The development of system analysis skills, shaping of managerial decision-making skills, as well as training in effective intra-group and interpersonal interactions can be achieved through employment of business games, situation analysis, group discussions, and trainings.

The proposed structure of organizational and managerial competence of a university teacher developed with due regard to the analysis of innovative activities has been used as a content-related and methodological basis for the development of teacher advanced training programs aimed at solving the strategic priorities of the university, improvement of the efficiency of new generation educational program management, and involvement of all stakeholders in the implementation of educational programs.

Results

The means and methods for developing a university teacher's organizational and managerial competence were assessed through the advanced training program (ATP) "Educational Program Management", implemented by the Professional Competence Development Centre of Samara University. The purpose of the program was to prepare students for effective interaction during the design and implementation of competitive educational programs. Based on the proposed structure of organizational and managerial competence (the value and motivation-based component, cognitive component, design-based component and knowledge-based component), the content of the ATP's sections are the economics of education, educational program design, economics of educational programs, management of educational programs, educational program quality and competitiveness), and teaching methods contributing to the development of indicators of the relevant competence components. Relevant applications of active and interactive methods (training, organizational games, brainstorming, case study, group discussion, problem-based lecture, round table, debate, etc.) and teachers' personal experience were developed.

Summative and formative assessments, including self-assessment, were conducted to determine the level of development of the value and motivation-based component, cognitive component, design-based component and knowledge-based component of the competences. This sample included 140 teachers, organizing the educational process in 35 departments of the University.

The students were assessed before and after they successfully completed the advanced training program. When processing the survey findings, the mean index for self-assessment (J) was calculated (a number between -1 and +1 inclusive, where "-1" is the minimum value of the indicator, and "1" is the maximum value of the indicator). In order to confirm the effectiveness of the proposed system, and to find correlation between the four components of the competence structure, a correlation analysis of the findings of summative and formative assessments was carried out. The Pearson correlation coefficient was used as an indicator of the magnitude of the statistical relationship. The level of statistical significance at 0.05 was used to assess reliability of correlation between variables.

According to the findings of the summative assessment, the mean index for self-assessment of the value and motivation-based component is 0.31. It follows that the teachers underestimate the importance of organizational and managerial work for implementing competitive educational programs - the need for communication and integration with colleagues (J=0.37), and interest in organizational and managerial activities were low (J=0.26). In the findings of the formative assessment, the mean index value for self-assessment increased to 0.74. This demonstrates positive attitude of teachers to organizational and managerial activities, in particular to the creation of innovative educational programs and products (J=0.81) - the dominant indicator.

The educational technologies used in the implementation of advanced training programs enable the development of motivation for organizational and managerial activities, for management of a team of like-minded people to design education tools. Problem-based and debate-learning strategies contribute to the development of students' self-assessment, to their understanding of the importance of their professional activities with due regard to innovations, and the development of skills necessary for coordinating teamwork while implementing educational programs.

According to the findings of the summative assessment, the mean index value of the cognitive component of organizational and managerial competence of teachers (J=0.31) showed the students' knowledge deficiency in management theories (J=0.30) and economics of educational programs (J=0.26). This can be explained by the fact that the fundamentals of HR management policy, education management and conflict resolution theory, as a rule, are taught at the advanced training courses for managerial staff of educational institutions. In addition, many students lack experience in structural unit management.

The inclusion of such sub-units as "Financial Management in Higher Educational Institutions", "Academic Management of Educational Program", "Administration of Educational Program", "Estimation of the Economic Efficiency of the Educational Programs of the HEI's Structural Unit" helps to overcome the cognitive barrier manifested in the lack of knowledge of new aspects. At the same time, a high value of the indicator "awareness of higher education regulatory framework" (J=0.4) confirms the judicial competence of the teachers, which is important when working with an educational program as a social norm. According to the findings of the formative assessment, the mean index value of the cognition-based component has increased to 0.72, which demonstrates the developed information potential.

Barriers to a teacher's organizational and managerial activity are due to specifics of the activity and lack of maturity of the design-based component of organizational and

managerial competence, as evidenced by the mean index value (J=0.26), and in particular, low-level skills in educational program budgeting (J=0.2), resource planning (J=0.24), and design of HEIs educational program content and structure (J=0.26).

The findings of the formative assessment, showed that the mean index for the self-assessment of an adult increased (J=0.71), which means that teachers are involved in project activities, which contributes to the learning of the sub-units "Educational Program Project Planning", "Educational Program Design", "Educational Program Financial Responsibility Centre Establishment", "HEIs Financial Management", etc.

The summative assessment, showed that the indicator for "the ability to design teaching and learning materials and educational programs support" (J=0.32) has the highest value. This is easy to explain, since teachers first of all are qualified to teach a particular subject rather than to act as managers, and their standard activities do not include educational program design. In the formative assessment, the option (J=0.78) "to design the content and structure of the educational program" has the highest value, and the "ability to determine the budget of the educational program" showed the greatest increase (three times).

The summative assessment indicated that the expert-based component is insufficiently structured. This is confirmed by the mean index for self-assessment (J=0.24). Such options as "the ability to calculate the profitability of educational programs" (J=0.2), "the ability to monitor and evaluate the quality of educational programs" (J=0.23) have the lowest values.

From the summative assessment, the mean value of the index for self-assessment of the expert-based component increased significantly (J=0.64). This demonstrates the effectiveness of the training methods and techniques. And if, based on the results of the summative assessment, the ability to assess an educational program for compliance with the Federal State Educational Standard dominates in the structure of the expert-based component, then the ability to evaluate the competitiveness of educational programs dominates according to the data of the formative assessment (J=0.7).

From a comparison of the findings of summative and formative assessments, the dominant indicators of each component of the organizational and managerial competence of a teacher and directions for their improvements can be identified (Table 3).

Table 3. Dominant indicators in the structure of university teachers' organizational and managerial competence

Component	Mean index value		Dominant Indicators	
	SA	FA	SA	FA
Value and motivation-based component	0.31	0.74	Need for communication and integration with colleagues	Interest in creating innovative educational programs and products
Cognitive component	0.31	0.72	Awareness of the regulatory framework of higher education	Awareness of the fundamentals of the educational program economics
Design-based component	0.26	0.71	Ability to design teaching and learning materials and educational program support	Ability to design the content and structure of educational programs
Knowledge-based component	0.24	0.64	Ability to conduct an examination of the conformity of an educational program with the Federal State Educational Standard	Ability to assess the competitiveness of educational programs
Mean value	0.28	0.70		

In particular, the value and motivation-based component is characterized by a noticeable increase in interest in creating innovative educational programs and products. The cognitive component is marked by the awareness of the fundamentals of the educational program economics. The design-based component is exemplified by the change of the vector to the educational program budgeting. The dominant indicator of the expert-based component is the ability to assess the competitiveness of educational programs. The assumption of an increase in the indicators of the components of the organizational and managerial competence of university teachers through the process of implementing the "Educational Program Management" program was confirmed by the formative assessment for different categories of students.

A comparative analysis of summative and formative assessments' findings revealed differences in the dominant indicators. So, the formative assessment unlike the summative, showed the changes in the value and motivation-based component aimed at increasing interest in innovative educational programs and products creation, the cognitive component is marked by educational program economics, the design-based component is characterized by vector changed to the budgeting of educational programs, while the dominant indicator of the knowledge-based component is the ability to assess the competitiveness of educational programs.

Correlation analysis was used to evaluate the relationship between the components in the structure of organizational and managerial competence of a university teacher to demonstrate the performance characteristic integrity. The relationships between the components of organizational and managerial competence structure of the Pearson correlation coefficient, which lies between -1 and 1, were analysed using the summative and formative assessment matrices.

The findings of the correlation analysis of the summative assessment data, showed a link between value and motivation-based component and cognitive component expressed by "interest in creating innovative educational programs and products" (1), "need for teamwork" (2), "awareness of the regulatory framework of higher education" (5). At the same time, the self-development of a university teacher as a manager of an educational program is related to the "interest in organizational and managerial activities" (4) and "need for communication and integration with colleagues" (3). Thus, a university teacher strives for continuous learning of the management theories and fundamentals of the educational program economics.

At the same time, correlations between "ability to design learning and teaching materials and educational programs support" (10) and "ability to monitor and evaluate the quality of educational programs" (14) are quite weak. University teachers have the potential to design qualitative educational programs but do not strive to create a competitive educational product. We found no relationship between the cognitive and the design-based components.

No correlation between the design-based component and the knowledge-based components was identified. The "ability to design the content and structure of the educational program (conduct marketing)" (13) and the "ability to evaluate the competitiveness of educational programs" have a weak correlation. However, there is a weak link with the "ability to conduct an examination of the compliance of the educational program with the Federal State Educational Standard". The greatest number of correlation relationships refers to the following indicators: (5) "awareness of the regulatory framework of higher education" – 8 links; (12) "ability to determine the budget of the educational program" – 7 links and (13) "ability to design the content and structure of the educational program (marketing)" –5 links (Table 4).

Table 4. Relationship of components of organizational and managerial competence of a university teacher (based on correlation analysis)

Component	Summative Assessment	Formative Assessment
Value and motivation-based component	↕	↕
Cognitive component	↓	↓ ↕ ↕
Design-based component	↕	↓ ↕
Knowledge-based component	↓	↓ ↕

Within the formative assessment, the correlation coefficients between the value and motivation-based component and cognitive component have increased. The analysis of the formative assessment correlation matrix revealed additional relationships between the components as follows: cognitive and design-based (R=0.71); cognitive and knowledge-based (R=0.56) as shown in Table 5.

Table 5. Correlation Coefficient Values

Correlation Coefficient	Summative Assessment	Formative Assessment
$R_{(value\ and\ motivation\ -\ cognitive)}$	0.35	0.60
$R_{(value\ and\ motivation\ -\ design\ )}$	0.10	0.24
$R_{(value\ and\ motivation\ -\ knowledge)}$	- 0.14	0.15
$R_{(cognitive-design)}$	- 0.15	0.71
$R_{(cognitive-knowledge)}$	- 0.12	0.56
$R_{(design-knowledge)}$	0.27	0.65

Thus, having undergone advanced training, the university teachers developed the necessary skills in the design and expertise of the educational programs, but these managerial and organizational competencies have not gained professional value. The formative assessment proved the hypothesis concerning the growth of the organizational and managerial competence of the university teachers after attending the advanced training courses in "Educational Program Management".

The effectiveness of the implemented system of developing organizational and managerial competence of the university teachers was confirmed by the increase in scores indicating the maturity of the components.

Conclusion

This study:

• analysed the prerequisites and conditions for the development of the organizational and managerial competence of university teachers through implementing a strategy aimed at increasing the competitiveness of higher education programs;

• provided empirical evidence of the relevance of the main components of the organizational and managerial competence of the university teachers based on the expert survey of four groups of respondents;

• developed practical and scientific recommendations aimed at improving the level of organizational and managerial competence of university teachers (as an advanced training program);

• developed and tested learning and teaching materials designed for educational process during the implementation of the advanced training program, as well as for various training courses and seminars held by the structural units of the university.

The validity of the research findings was confirmed by the practical implementation of the results in the educational process of Samara University. However, there are a number of controversial issues and potential risks associated with the implementation of the methodology for building teachers' organizational and managerial competence. In particular, the management of higher education programs needs to be optimized.

Management decisions should address the staffing for ongoing reorganization, utilisation of such mechanisms as staff selection and training in educational program management. The formation of new structural units for the management of educational programs, such as educational program departments and training offices, is a vital issue. Thus, under the changing conditions of the educational environment, educational institutions are being restructured, developing new educational programs for competitive training of specialists to meet new requests of the educational process stakeholders.

References

Baranova, N. V. (2016). *Training university professors to manage educational programs of higher education* [PhD Dissertation abstract, Moscow].

Batrakova, I. S., Bordovsky, V. A., & Tryapicyn, A. V. (2013). Professional competence of a teacher of higher education. *Bulletin of the Volgograd State University. Pedagogical sciences, 2*, 28-35.

Beaumont, G. (1996). *Review of 100 NVQs and SVQs.* London: Department for Education and Employment.

Berlim, L. I. (2007). Managerial competence of the education manager. *Izvestia: Herzen University Journal of Humanities & Sciences, 22*(53), 276-281.

Blaskova, M., Blasko, R., Matuska, E., & Rosak-Szyrocka, J. (2015). Development of key competences of university teachers and managers. *Procedia-Social and Behavioral Sciences*, *182*, 187-196.

Bozina, N. A. (2013). Theoretical foundations of the development of professional competence of heads of educational institutions. *Innovative Projects and Programs in Education, 6*, 67-70.

Burgoyne, J. (1989). Creating the managerial portfolio: Building on competency approaches management development. *Management Education and Development, 20*(1), 56-61.

Chandra, M. Yu. (2015). Quality management of the design and implementation of educational programs at the university: Conception. *Discussion, 10*(62), 161-166.

Kirsanov, A. A., & Kondrat'ev, V. V. (2009). Methodological foundations of the modern system of continuing education of teachers. *Higher Education in Russia, 2*, 83-86.

McClelland, D. (1998). Identifying competencies with behavioural-event interviews. *Psychological Science, 9*(5), 331-339.

Pedan, T. N. (2014). On the content and structure of managerial competence of a teacher at a medical university. *Omsk Scientific Bulletin, 2*, 154-156.

Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review, 68*(3), 79-91.

Sharipov, F. V. (2010). Professional competence of a university teacher. *Higher Education Today, 1*, 72-77.

Spencer, L., & Spencer, S. (1993). *Competence at work: A model for superior performance.* New York: Wiley.

Woodruffe, C. (1991). Competent by any other name. *Personnel Management*, *23*(9), 30-33.

Zhukovsky, V. P., & Skvorcova, L. A. (2012). Theoretical approaches to the problem of development among teachers of organizational and managerial competence. *Bulletin of the Saratov State Technical University, 1*(63), 178-181.

Zimina, E. Yu. (2004). *The development of managerial competence of the future teacher of a vocational school* [PhD Dissertation abstract, Ekaterinburg].

Learners' Success and Self-esteem in Foreign language Reading Comprehension

Eva Stranovska[1], Zdenka Gadusova[2]

[1] *Constantine the Philosopher University in Nitra, Nitra, Slovakia*
Email: estranovsk@ukf.sk
ORCID: https://orcid.org/0000-0002-6766-0850

[2] *Constantine the Philosopher University in Nitra, Nitra, Slovakia*
Email: zgadusova@ukf.sk
ORCID: https://orcid.org/0000-0002-8954-659X

Abstract
Demands for a high-level development of foreign language reading comprehension skills and competences are now escalating and processing of foreign language text information is a matter of course. Pupils and teachers are faced with the need to work with textual information in more complicated ways, in which self-esteem plays an important role. This paper analyses learners' success of reading comprehension in foreign language and real self-esteem in acquiring those skills. Self-esteem helps to promote language self-confidence, the learner's level of aspiration, and adjustment to perception of foreign language structure. As long as the learner does not really perceive themselves (real "self"), it is difficult to talk about understanding lexical meanings and their real perception of grammatical structures in the text. The research goal was to find differences in self-esteem and success in foreign language reading comprehension skills with respect to categories of comprehension (specifically: I always understand everything; I have a lot of problems with text understanding; specifically: I experience difficulties with understanding unknown words; problem with understanding long sentences; difficulty with understanding the unfamiliar topic of the text; pictures help me in understanding; guiding questions help me in understanding). The research question was whether the self-image of learners in relation to the skill of foreign language reading comprehension is realistic given their real success in this skill. The research was carried out in the Slovak Republic on a sample of 327 respondents and found differences in subjective perception of understanding and success in reading comprehension skills. The research showed a low real self-image of learners especially in categories of global character in respect to the average understanding of foreign language texts.
Keywords: foreign language, reading comprehension, self-esteem, testing, success in reading comprehension, variables.

Успех и самооценка учащихся при чтении на иностранном языке

Ева Страновска[1], Зденка Гадусова[2]

[1] *Университет им. Константина Философа в Нитре, Нитра, Словакия*
E-mail: estranovsk@ukf.sk
ORCID: https://orcid.org/0000-0002-6766-0850

[2] *Университет им. Константина Философа в Нитре, Нитра, Словакия*
Email: zgadusova@ukf.sk
ORCID: https://orcid.org/0000-0002-8954-659X

Аннотация

В настоящее время возрастают требования к высокому уровню развития навыков и компетенций чтения на иностранном языке, и обработка иноязычной текстовой информации является обычной практикой. В работе с текстовой информацией учащиеся и учителя используют всё более сложные формы, в которых важную роль играет самооценка. В данной статье анализируется реальная успешность понимания учащимися прочитанного текста на иностранном языке и их самооценка при формировании этих навыков. Самооценка способствует развитию у обучающегося языковой уверенности, его адаптации к восприятию структуры иностранного языка. Пока обучающийся не начнет воспринимать себя реально (реальное «Я»), трудно говорить о его понимании лексических значений и верном восприятии им грамматических структур в тексте. Цель исследования – поиск расхождений между реальным уровнем развития навыков понимания иноязычного текста (по категориям: я всегда все понимаю; у меня много проблем с пониманием текста; я испытываю трудности с пониманием незнакомых слов; у меня есть проблемы с пониманием длинных предложений; у меня есть трудности с пониманием незнакомой темы; картинки помогают мне в понимании; наводящие вопросы помогают мне в понимании) и их самооценкой. Исследование ставило перед собой задачу определить, является ли самооценка учащихся по отношению к навыку понимания прочитанного текста объективной, с учетом реальных успехов в формировании этого навыка. Исследование было проведено в Словакии с привлечением 327 респондентов. Были выявлены различия между субъективным восприятием понимания и действительными успехами в развитии навыков понимания прочитанного текста. Анализ показал низкую реальную самооценку обучающихся, особенно в категориях глобального характера, по отношению к среднему уровню понимания иноязычных текстов.

Ключевые слова: иностранный язык, понимание прочитанного текста, самооценка, тестирование, успех в развитии навыков понимания текста, переменные

Introduction

Success in reading comprehension is closely related to the overall success of the student in the educational process, because comprehension supports the expansion of cognitive knowledge, deepening the emotional or social perception of the world around them. Understanding serves not only as the basis for the perception of the world, but also as a tool for learning the curriculum and developing the student's personality. In a broader context, there are some parallel to understanding of different forms of communication in the field of technology (Hašková, Manduľáková & Van Merode, 2017). Above all, it is about the development of self-esteem, self-reflection of the social environment through texts, that provide the student with the opportunity to think and reason, create values and relationships, knowledge and views about the world. Earlier researchers (Clarke, Truelove, Hulme, & Snowling, 2014; Horton, Beattie, & Bingle, 2015) have found that individuals with a poor comprehension profile are less successful at engaging in

reading processes. They believe that the reasons for poor reading comprehension lie in metacognitive processes, or in the processes of developing self-esteem and self-reflection that contribute to understanding. Self-esteem reflects what we know about our own knowledge and includes the ability to think about our understanding of the text (Clarke, Truelove, Hulme & Snowling, 2014; Khonamri & Ahmadi, 2015). The ability of real self-esteem and self-reflection shows the readiness of the individual for a successful reading comprehension. Foreign language reading comprehension has a specific position, as it is directly dependent not only on the level of foreign language proficiency of the learner, but also on cognitive, social and intrapersonal variables. Newer approaches focus on student success and failure, because success is a source of high self-esteem and failure of low self-esteem (Kirchner, 2004).

Recent research (Riemer, 2019; Dörnyei, 2014; Khonamri & Roostaee 2014) examines self-perception in a foreign language learning situation and considers self-image as a predictor for developing foreign language comprehension. In this regard, we believe that there is a correlation between real self-image, or self-esteem in reading comprehension and success in reading comprehension. The research goal is to determine the differences in the self-esteem of reading comprehension and success in reading comprehension skills in a foreign language with respect to specific categories of comprehension: I always understand everything; I have a lot of problems with understanding the text; specifically: a problem with understanding unfamiliar words; problem with understanding long sentences; problem with understanding an unfamiliar text topic; pictures help in understanding; subsidiary questions help with comprehension.

Self-esteem and reading comprehension

Self-esteem in terms of a realistic estimate of the level of comprehension of the read text supports performance in setting the aspiration level as well as mental setting for the perception of the foreign language structure. Until the learner really perceives themselves (the real self), it is difficult to talk about the estimation of lexical meanings and the real perception of grammatical structures in the text. Texts can evoke new ways of thinking (Clarke, Truelove, Hulme, & Snowling, 2014). Learners notice characteristic stylistic reversals, similarities or differences in relation to their mother tongue and characteristic grammatical formulations in a foreign language (Stranovská, Hvozdíková, & Munková, 2019). In this regard, self-esteem is a strongly affective variable. Subordinate to it are mental states, processes and characteristics, which include the entire content of the individual's psyche, their experience and behaviour. The cognitive and emotional components are involved in self-esteem. The emotional components those that the individual retains to themselves, for example, a sense of self-confidence and self-assurance. At the cognitive level, there is a constant discrepancy between the ideal and the real self (what the individual would like to achieve, and what they expect to achieve in conflict with what they usually achieve). This acts as one of the most important motivating factors of personality. Ruisel (2000) considers self- esteem to be a regulator of cognitive performance and decision-making processes that significantly influence human behaviour. Brown (2008) identified three levels of self-esteem. The first, universal or global self-esteem is a constant quality of an individual; the individual person creates one value. The second, situational or specific self-esteem, is the individual's assessment of their abilities in a particular situation, such as learning. The last level points to the role of self-esteem in specific activities and situations. Research shows that individuals with a high level of self-esteem achieve success in education, adopt higher quality of learning strategies, and exhibit creativity and language self-confidence.

McIntyre & Charos (1998) point to two components of the construct of language self-confidence in a foreign language:

1. Assessment of foreign language skills: represents the cognitive component of the construct, the individual's judgment of the level of the target language knowledge. This is a specific self-esteem, which has an assessing and evaluating characteristic. Evaluation contributes to the promotion of performance, aspiration level and helps create a sense of duty. The individual learns to assess the level of language skills acquired according to the standards and criteria they take from a parent, teacher, classmates or the wider social environment.

2. Linguistic anxiety: is an affective component of the construct, a feeling of discomfort which is perceived in foreign language situations. Linguistic anxiety can be understood as a "specific type of anxiety" (Horwitz, 1986). Some individuals have greater predispositions and tendencies to anxiety (not just language) than others. Language anxiety is more dependent on a particular situation, and can be experienced by individuals who do not feel anxiety in other situations. Language anxiety was initially associated mainly with speaking in a foreign language, but over the years, linguists have begun to address language anxiety associated with all language skills: speaking, writing, reading and listening.

From the point of view of personal development, language self-confidence is associated with the perception of self-efficacy, i.e. with perceiving success in learning a foreign language or in understanding a foreign language text. Success depends on the perception of one's own success or failure, which according to Kirchner (2004) depends on whether an individual seeks the reason for their success or failure in themselves or in someone else, or whether the individual considers these reasons stable or modifiable, or whether the individual takes personal responsibility for these changes or delegates it to another person. A student who sees the reasons for their success primarily in the internal factors related to their person will be more willing to approach the educational process independently. Recent research has focused on self-perception in the classroom environment (Riemer, 2019), and on the experience of education and real self-perception in the educational environment (Dörnyei, 2014). It can be said that research is moving from the personality level to a multidimensional level. These theories try to grasp the complexity of the student's motivational structure in connection with their self-image, or perceiving themselves in a foreign language learning situation. Dörnyei (2014) assumes the existence of possible selves that play an important role in developing comprehension of a foreign language text, because the possible selves are vivid ideas about the level of understanding the student would like to be in the future, what level of foreign language text comprehension he would like to achieve. According to Dörnyei (2014), the ideal role is played by the ideal selves and the desirable, out of self. The ideal self includes the student's stated goals, and the desired self reflects the individual's ideas about the expectations and responsibilities he should achieve. Dörnyei's model drew attention to the purposefulness of learning and encourages teachers to support students in their creation of systematic, long-term and positive self-presentations in connection with working with reading comprehension in a foreign language, or working with a general understanding of a foreign language (for more, see Stranovská, Ficzere, Hvozdíková & Hockicková, 2019; Khonamri, Azizi, & Kralik, 2020). Although Dörnyei applied the theory to learning a foreign language, it can also be applied to learning other subjects. Within reading comprehension, it is essential that students become active participants in reading, thoughtful and receptive readers, reading for joy and self-realization, to try to arrive at a more complex reflection on the text they read.

Methodology

Research design and methodological background

The research used a mix of qualitative and quantitative research methods. Quantitative methods were used to determine the success of reading comprehension and qualitative methods were used to determine self-esteem of comprehension. The research was divided into two parts, qualitative and quantitative. The qualitative part tests the students' performance in English texts comprehension (the average success of students and the success of average students), and subjective self-esteem of English texts comprehension as well as self-esteem of comprehension problems. The quantitative part explored the differences between real success in reading comprehension performance and the subjective self-esteem of students' understanding (global and detailed categories of comprehension). The quantitative part identified success in understanding with respect to (1) problems with understanding (words, sentences, text, understanding), (2) help with understanding (pictures, questions), and (3) positive self-esteem of understanding. The success in reading comprehension of foreign language texts was operationalized as reading comprehension (extensive and intensive reading, information and literary types of texts). The self-esteem of understanding (text comprehension) was operationalized in the following categories:

A. Reading is easy for me. I always understand everything.

B. I have difficulties with understanding if there are difficult or unfamiliar words in the text.

C. I have troubles with understanding if there are long sentences in the text.

D. I have a problem with understanding if I don't know what the text is about (the topic of the text is unfamiliar to me).

E. Pictures to the text help me to understand the text.

Subsidiary questions help me understand the text.

F. I have a lot of problems with reading the text, I can't do it

G. We established two hypotheses:

H1   There is a difference between students' success in reading comprehension in English and subjective self- esteem of reading comprehension in global categories.

H2   There is a difference between students' success in reading comprehension in English in detailed categories.

Research Sample

The research was carried out at upper-secondary grammar and vocational schools throughout Slovakia on a sample of 327 students. They were full-time students in the 3rd year of upper-secondary vocational schools (hotel academies, business academies, school of commerce, polytechnic school, veterinary school, and electro-technical school) and grammar schools who are obliged to study English as the first foreign language. Their level of proficiency according to CEFR is B1. The students had learned English on average for 10 years.

Instruments

The reading comprehension test for English was developed by a team of experts (Gadušová, Hvozdíková, Klimková, Hricková, Ďurková) within the project APVV-17-0071 *Support of Reading Literacy in Mother Tongue and Foreign Language*. It was partially inspired by some items from previous national testing (Butašová & Lalinská, 2014). Its creation was based on Slovak language policy documents, the State Educational Program and the Common European Framework of Reference (CEFR). The quantitative didactic

test measured performance in reading comprehension at language proficiency level B1. The test contains four texts - two of them ranging up to 250 words and the other two up to 320 words which is the appropriate text extent for B1 students. There are 21 items in total (5 items per a text with the exception of the task number three where there are six items designed for the information transfer task. The topics addressed are related to studies - giving instructions how to do things, environmental issues and treating animals. Different testing techniques are used for each of the four tasks to satisfy different preferences of students when writing a test.

The sociological questionnaire was prepared by a team of experts (Štrbová, Selická, Šarvajcová) within the project APVV-17-0071 *Support of Reading Literacy in Mother Tongue and Foreign Language*. The questionnaire is aimed at eliciting data about the subjective self-esteem of reading comprehension, preferred reading genres, reading motives and characteristics of the family background which can influence students' reading habits (family educational and professional status, emotional-communicative environment, cultural capital). For the purposes of this research, the factor of the subjective self-esteem of reading comprehension, reading problems and kinds of help in the process of reading comprehension (pictures, helpful questions, and others) were used. The questionnaire consists of 28 items, which were closed on a 4-point Lickert scale, with choices (reading genres, motifs) and open items identifying the education and status of parents.

Data Collection Procedure

The research was carried out at over ten upper-secondary schools in the Slovak Republic in 2019 and 2020. Data were collected using the Reading Comprehension Test and Sociological Questionnaire. The test and questionnaire were designed by the research team and subsequently its reliability was piloted and tested. Pilot testing led to proofreading and editing of the test and questionnaire. Prior to carrying out the research the data from testing the students were evaluated using descriptive statistics and classical test theory. Reliability of different tools or the degree of reliability, and the accuracy of the measurement tool for a certain population was verified by the Kuder-Richardson coefficient and the Cronbach alpha. A descriptive analysis of reading comprehension success was used to determine the statistical indicators of the data. The analysis focused on basic statistical indicators: percentage average, minimum and maximum value, standard deviation, interval estimate of success, interval estimate of success of the average student. To determine comprehension self-esteem a percentage expression of averages was used.

To test the hypotheses, to determine differences between success and self-esteem in reading comprehension, the Mann-Whitney U test was used to compare the medians of two independent samples. The test answers the question as to whether the difference between the medians (more precisely, the order averages) of the two groups is statistically significant or only random (Rimarčík, 2007). The data were recorded and processed by the SPSS statistical program.

Results

The data collected from research methods aimed at determining the success of reading comprehension in English at the B1 proficiency level were evaluated using descriptive statistics and classical test theory. The basic psychometric parameters are listed in Table 1.

Table 1: Descriptive statistics of reading comprehension success - English language

	English language
Number of students tested	**327**
Basic test parameters	%
Maximum success	96,15
Minimal success	0,00
Average	**55,53**
Standard deviation	22,66
Interval estimation of success - lower limit	11,11
Interval estimation of success - upper limit	99,95
Standard error of average success	1,41
Interval estimation of average student success x±	16,42
Reliability (Cronbach alpha)	**0,86**
Reliability (Kuder - Richardson coefficient)	0,86

According to SCIO 2013, based on the value of the reliability coefficient Cα, the following conclusions can be drawn when comparing participants:

if Cα <0.6, the test results cannot be taken into consideration - high degree of coincidence influence on the measured results,

if 0.60 <Cα <0.85, the test results can only be used as one of the bases for individual decision-making,

if 0.85 <Cα <0.95, then the test results can be used for reliable individual decision-making based on the test,

if 0.95 <Cα, then the results are minimally affected by coincidence - excellent reliable results.

The average success of secondary vocational school students in reading comprehension in English at the B1 proficiency level according to the CEFR, was in the average band, or in the range of 5% above the average, with a maximum success rate of 96.15%, a minimum success rate of 0% and an interval estimate of the success rate of the average student of 16.42%. There is a high degree of variation between students in comprehension performance, which is shown by the high standard deviation, as well as the lower and upper limit of the estimate of student success (Table 1). For this reason, we also focused on determining the success of students in absolute numbers (Graph 1) and testing the reliability of the test at the level of Cronbach alpha. We identified the test reliability in the range of 0.85<Cα<0.95, indicating that the test results can be used for reliable individual testing.

The distribution of the gross students' success score, i.e. the range of success rates of individual students is illustrated in figure 1 which is a graphical representation of student success expressed in the form of a histogram showing the distribution of students' gross scores in absolute numbers.

The students' test scores in the range from 0 to 25 points (for English) in the relevant histogram is shown on the horizontal axis (student success). The number of students who achieved the relevant score value is expressed in the vertical axis. The shows clearly that the highest number of points achieved by students was 17 and the success of students according to the distribution of the gross score is in the above-average range.
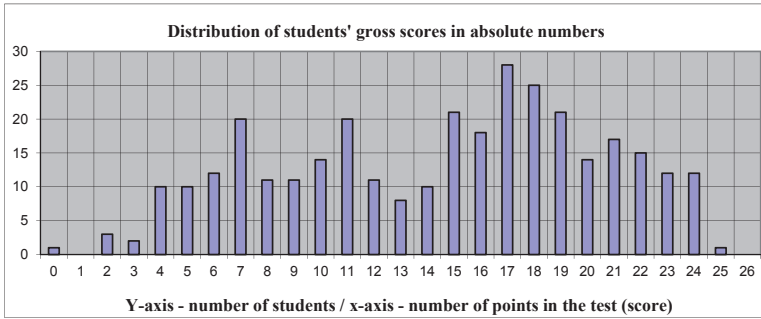
Distribution of students' gross scores in absolute numbers

Y-axis - number of students / x-axis - number of points in the test (score)

*Figure 1. Graphical representation of students' success in the
English language test of reading comprehension*

The data obtained from the sociological questionnaire (self-esteem of understanding) were processed qualitatively way (percentage expression). We focused on determining the self-esteem of understanding, or real perception of success in reading comprehension (Graph 2) in global and specific categories of comprehension (categories A-G).

The findings point to a high self-esteem of reading comprehension, especially in the global categories A (*Reading is easy for me, I always understand everything* - expressing consent) and in category G (*I have a lot of problems with reading a text, I can't do it -* expressing disagreement). Most students self-assess as understanding the text being read. In specific categories, the high self-esteem was identified in category B (*I have difficulties with understanding if there are difficult or unfamiliar words in the text*), C (*I have troubles with understanding if there are long sentences in the text*) and F (*Subsidiary questions help me understand the text*). This means that students have no problem understanding long sentences, unfamiliar words and do not need subsidiary questions to understand the text. In the average range of self-esteem, there are the categories D (*I have a problem with understanding if I don't know what the text is about - the topic of the text is unfamiliar to me*) and E (*Pictures in the text help me to understand the text*). Some students have a problem with understanding an unfamiliar text topic and pictures partially help them understand it.
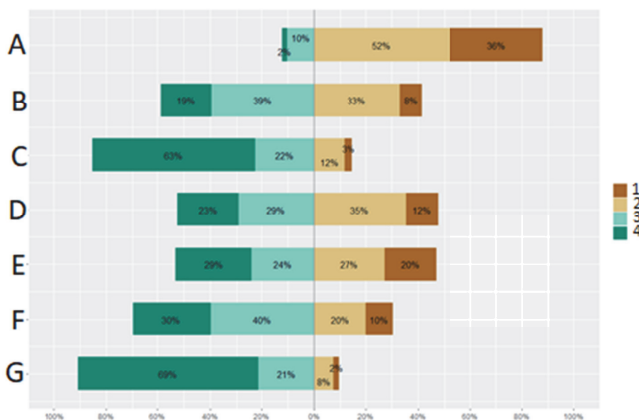
Graph 2. Self-esteem of reading comprehension

Legend:

A - Reading is easy for me, I always understand everything

B - I have trouble with understanding if there are difficult or unfamiliar words in the text

C - I have trouble with understanding if there are long sentences in the text

D - I have trouble with understanding if I don't know what the text is about (the topic of the text is unfamiliar to me)

E - The pictures to the text help me understand the text

F - Subsidiary questions help me understand the text

G - I have a lot of troubles with understanding the text while reading, reading is difficult for me

1 - I agree, 2 - I rather agree, 3 - I rather disagree, 4 - I disagree

To test the research hypotheses the Mann-Whitney U test was used. The results of testing the success differences in reading comprehension of English texts and the variable of the subjective self-esteem of understanding the text for reading in global categories A, G and detailed categories B, C, D, E, and F are shown in Table 2.

Table 2: Mann-Whitney U test - Differences in success in understanding and self-esteem of understanding in categories A - G

	A	B	C	D	E	F	G
Mann-Whitney U	5329,000	6999,500	5643,000	6949,500	7223,500	6161,500	5975,000
Wilcoxon W	29200,000	30870,500	7854,000	9160,500	9501,500	8306,500	8253,000
Z	-3,709	-,534	-3,194	-,436	-,081	-1,641	-2,721
Sig. (2-tailed)	,000***	,593	,001**	,663	,935	,101	,007**

Statistical significance at the level p = .05 (*), p = .01 (**), p = .001 (***)
Variable: reading comprehension in English (test)
Categories of reading comprehension self-assessment are as in figure 1:

The Mann-Whitney U test confirmed a statistically significant difference in comprehension of a foreign language text and self-esteem of comprehension in global categories of comprehension, category A (p = .000 ***) and category G (p = .007 **). Among the detailed categories of self-esteem of comprehension, there was a statistically significant difference in category C (*I have a problem with comprehension if there are long sentences in the text*), p = .001 **.

Discussion and conclusions

The aim of the study was to contribute to the research in the field of reading comprehension in respect to the success and self-esteem, or real and ideal self-image of the student in the process of understanding a foreign language (English) text. We were interested in the difference between real performance in understanding and subjective evaluation of understanding, or how an upper-secondary school student perceives their performance and whether they can estimate it. We consider real self-esteem to be an essential indicator because it stimulates self-regulation in the process of acquiring reading comprehension skills. We also consider the ideal self to a certain extent to be a positive indicator in directing motivation and efforts for future acquisition, while in connection with the variable success in reading comprehension it appears rather as a negative indicator.

The study examined differences in self-esteem and success in understanding a foreign language text with respect to categories of comprehension, seven global categories related to comprehension and detailed categories that are divided into subcategories (unknown words, long sentences, and others) and areas that help students to understand texts.

First, the success in understanding the reading of English texts at the B1 proficiency level was descriptively analysed. Students' success was in the average range, or within 5% above the average. Students' self-esteem proved to be high, especially in terms of global understanding.

Hypothesis H1, stating that there is a difference between students' success in reading comprehension in English and subjective self-esteem of reading comprehension in global categories has been confirmed. Students self-assessed that reading was easy for them; they always understood everything and did not have any problems with comprehension of the text, which was not proven in their success in reading comprehension. It turns out that the students of secondary vocational schools in the research sample show low real self-image in the evaluation of global comprehension with respect to their average comprehension of foreign language texts. The finding may mean that students tend to overestimate their reading skills, simplify the picture of their performance and skills, or show a high ideal self. In this regard, we agree with Dörnyei (2014, 2019) that ideal self-esteem is closely related to "visions". In an idealized image of themselves, students not only want to look personally pleasant, but also professionally successful. It should be noted that self-concept can be associated with either an ideal self or an ideal identification with a foreign language, while the ideal self is associated with effort and the ideal identity with low performance.

These findings correspond with the findings of Juhásová (2016), which pointed out the importance of ideal self and learning experience in the process of learning a foreign language. These have an impact on foreign language learning in the later stages of learning.

Hypothesis H2, stating that there is a difference between students' success in reading comprehension in English in detailed categories was not confirmed, or was confirmed in just one category - I have a problem with comprehension if there are long sentences in the text. This means that students ideally assessed themselves in this category, but was not supported in their success. Students assessed themselves as having no problems with understanding long sentences, but the comprehension results showed that they had difficulties with understanding long sentences. In other categories, such as problems with unknown and difficult words, unfamiliar text topic, the need for text accompanying pictures and subsidiary questions were assessed realistically, without differences in success and self-esteem. This may mean that students who have a real self-esteem system in reading comprehension attach importance to stimulating events in relation to the information stored in their memory.

The research has shown that a realistic self-esteem of success in reading comprehension can be related to the overall experience of students from acquiring reading comprehension skills and thus contribute to their foreign language development.

Acknowledgements

References

Brown, R. A. (2008). Censure avoidance and self-esteem in Japan. *The Journal of Social Psychology*, *148*(6), 653-666.

Butašová, A., & Lalinská, M. (2014). *Tvorba a hodnotenie testov pre meranie úrovne B1 a B2 podľa Spoločného európskeho referenčného rámca pre jazyky* [Development and evaluation of tests to measure level B1 and B2 according to the Common European Framework of Reference for Languages]. Bratislava: Štátny pedagogický ústav.

Clarke, P. J., Truelove, E., Hulme, Ch., & Snowling, M. J. (2014). *Developing reading comprehension*. Wiley Blackwell.

Dörnyei, Z. (2014). Motivation in Second Language Learning. In M. Celce-Murcia, D. M. Brinton, M. A. Snow (Eds.), *Teaching English as Second or Foreign Language*, (pp. 518-531). Boston, MA: National Learning.

Dörnyei, Z. (2019). Psychology and language learning: The past, the present and the future. *Journal for the Psychology of Language Learning, 1*(1), 27-41.

Hašková, A., Manduľáková, S. & Van Merode, D. (2017). Problematic Aspects of Technology Education in Slovakia. *Communications: scientific letters of the University of Žilina, 19*(1), 75-80.

Horton, S., Beattie, L., & Bingle, B. (2015). *Lessons in teaching reading comprehension in primary schools*. SAGE.

Horwitz, E. (1986). Foreign language classroom anxiety. *The Modern Language Journal, 70*(2), 125-132.

Juhásová, J. (2016). Sprachbewusstsein und ihr Einsatz von Jugendlichen, die Deutsch als Tertiärsprache in der Slowakei lernen [Language awareness and its commitment by young people learning German as a tertiary language in Slovakia]. *Zeitschrift für Interkulturellen Fremdsprachenunterricht*, *21* (2). Retrieved from

Khonamri, F., & Ahmadi, F. (2015). The effect of metacognitive strategy training and raising EFL learners' metacognitive knowledge on listening performance. *Indonesian Journal of Applied Linguistics, 5*(1), 18-27.

Khonamri, F., & Roostaee, S. (2014). Does extensive reading combined with form-focused or meaning-focused activities affect lexical collocational knowledge of Iranian learners? *Theory and Practice in Language Studies, 4*(5), 1038-1044.

Khonamri, F., Azizi, M., & Kralik, R. (2020). Using interactive e-based flipped learning to enhance EFL literature students' critical reading. *Science for Education Today, 10*(1), 25-42.

Kirchner, K. (2004). Motivation beim Fremdsprachenerwerb. Eine qualitative Pilotsudie zur Motivation schwedischer Deutschlerner [Motivation in foreign language acquisition. A qualitative pilot study to motivate Swedish learners of German]. *Zeitschrift für Interkulturellen Fremdsprachenunterricht, 9*(2), 24-37.

McIntyre, P. D., & Charos, C. (1998). Personality, attitudes, and affect as predictors of second language communications. *Journal of Language and Social Psychology, 15*(1), 3-26.

Riemer, C. (2019). Stärkung der Motivation zum Deutschlernen [Strengthening the motivation to learn German]. In U. Ammon, G. Schmidt (Eds), *Förderung der deutschen Sprache weltweit. Vorschläge, Ansätze und Konzepte*. Berlin, Boston: de Gruyter.

Rimarčík, M. (2007). *Štatistika pre prax.* [Statistics for practice]. Košice: STATSOFT.

Ruisel, I. (2000). *Kapitoly z psychológie osobnosti* [Chapters from personality psychology]. Bratislava: VEDA.

Stranovská, E., Ficzere, A., Hvozdíková, S., & Hockicková, B. (2019). Learning experience as a factor of Motivation in lower-secondary school in foreign language learning. *Problems of Education in the 21st Century, 77*(3), 437-448.

Stranovská, E., Hvozdíková, S., & Munková, D. (2019). *Selected factors and successfulness in the process of foreign language learning*. Hamburg: Verlag Dr. Kovač.

The Place of Research and Creative Skills in the Training of Future Teachers

Vyara Todorova Gyurova[1]

[1] *Sofia University "St Kliment Ohridski", Sofia, Bulgaria*
Email: viaragyurova@abv.bg
ORCID: https://orcid.org/0000-0002-6477-6268

Abstract
Among the priorities of the 21st-century education and school, and therefore, of teachers as well, is developing students' creative skills, teaching them to take advantage of diverse information and educational resources, to find quickly new and reliable information, which they need in order to manage their learning tasks and life problems. This "navigation" through information is one of the important research skills are needed by the young citizens of the technologized, dynamic world and must be purposefully formed and developed. This means that teachers themselves have to acquire and develop these skills, and the place where this should be accomplished is the university.
 The aim of this article is to present the experience of the Faculty of Pedagogy at the Sofia University "St. Kliment Ohridski" in developing students' research skills through assignments for self-dependent work. The paper provides an analysis of the students' opinions included in three studies: of the University Center for Quality Management, of a research team within an intra-university project, and a survey conducted by the author.
The conclusion is that, according to the students, basic university training is sufficient to develop their research and creative skills through various forms of individual and group work, in line with the skills necessary for 21st-century teachers.
Keywords: 21st-century teacher, teacher training, research skills, creative skills.

Развитие научно-исследовательских и творческих способностей в подготовке будущих педагогов

Вяра Тодорова Гюрова[1]

[1] *Софийский университет им. святого Климента Охридского, София, Болгария*
E-mail: viaragyurova@abv.bg
ORCID: https://orcid.org/0000-0002-6477-6268

Аннотация
Одним из приоритетов школы XXI века, а следовательно, и учителей является развитие творческих способностей учащихся, обучение школьников использованию разнообразных информационных и образовательных ресурсов, быстрому поиску новой и достоверной информации, которая необходима для решения учебных задач и жизненных проблем. Эта «навигация» в информации является одним из важных исследовательских навыков, которые нужны юным гражданам технологизированного и предельно динамичного мира. Эти навыки необходимо специально формировать и развивать. Это означает, что преподаватели сами должны уверенно овладеть такими умениями, причем уже в университете.
Цель данной статьи – представить опыт педагогического факультета Софийского университета им. святого Климента Охридского по формированию исследовательских навыков у студентов посредством заданий для самостоятельной работы. В статье анализируются результаты исследований университетского Центра менеджмента качества и исследова-

тельской группы в рамках внутриуниверситетского проекта, а также опроса, проведённого автором статьи.

По мнению студентов, университетская подготовка в достаточной степени развивает их исследовательские и творческие способности через различные формы индивидуальной и групповой работы, что соответствует необходимым навыкам преподавателя XXI века.

Ключевые слова: учитель XXI века, подготовка учителя, исследовательские навыки, творческие способности

Introduction

Today's education and school reflect, as a mirror, the problems, the values, and the challenges of the 21st century. They also define the context in which the teacher performs his/her professional roles: as a manager of the educational process (the one who plans, organizes, conducts, and controls the processes of students' education and training) and as a manager of the class (the role of a class instructor), as a diagnostician of students' needs and results, as an educator and a developer (of various literacies and skills), as a facilitator of learning, as a navigator and a mediator (with regard to information which is useful for students), etc. The context in which the teacher performs these roles is determined by several basic components:

• The ever-changing social environment at different levels (global, regional, national) and the impact of these changes on the specifics and nature of education and school.

• The changes in education, mainly driven by the scientific and technological progress, by the development of information and communication technologies.

• The national and local traditions, values, lifestyle, and culture, which are an important part of the knowledge of the 21st-century student – a citizen of the world, whose roots, however, are in his/her homeland and native memory.

Each of these roles involves the performance of certain activities. For the success in these the teacher needs specific competencies (expert, managerial, leadership, diagnostic, research, information, digital, etc.). All these constitute the basis on which the teacher can form in his/her students those literacies and skills defined by a number of reformers and researchers as "key competences" for life and activity in the 21st century, including:

• learning and innovation skills – an important place among them is held by the group of the "Four Cs" – creativity, critical thinking, collaboration (ability to work in cooperation), communication;

• skills related to searching and using information, different media, and technologies – these are, essentially, research skills;

• life and career skills – for coping with problems, adapting to change, teamwork (including in research projects), etc.

The ever-evolving new information and communication technologies daily expand the palette of knowledge (and information) sources and the opportunities to access them. Students do not need special permission and guidance to surf the Internet and to decide on their own which information is "true" and "important" and which is not, what to learn and what not. Thus, the modern educational process acquires the characteristics of an andragogical process (the process of training adult learners (of legal age) who are active participants in their own learning, able to make choices and make self-directed decisions, and to be partners of the teacher in a learner-centered process of training (Gyurova, 2011, 4.2)). And if learning is a process of thinking, discovering, questioning, critical reasoning, and reaching creative answers (Nottingham Andragogy Group, 1983, pp. 36-37), then students – like adult learners – can be creators (authors and makers) of their own knowledge, thinking, and feelings. The modern teacher has to accept the fact that he/she is just one of the sources of knowledge, though still a very important source. The new professional tasks required nowadays, also include the preparation of one's students

to navigate successfully in the sea of information, to put them in the role of researchers of educational resources and creators – thinking, seeking, and discovering creative solutions and answers to questions provoked by their encounter with different truths, views, and authors, through various sources of information, including electronic (virtual) ones. And this means that teachers themselves must be researchers and creators, must be able to seek, discover, select, and analyze information for educational purposes, and must be able to create educational resources by themselves, including electronic ones. This research and creative competence must be a part of the competences which the university forms and develops in future teachers.

Methodological grounds

The research question is whether the modern pedagogical training of Bulgarian students forms their skills for research work and creativity. We consider that this group of skills includes the skills to seek, select, analyze, and interpret information from various sources (printed, electronic, including different websites), from experience gained in group work and communication in learning and virtual environment. These are part of the skills needed to perform individual and group (or teamwork) creative tasks – to conduct an empirical research for the purposes of coursework and diploma theses, to develop and carry out scientific projects, to write essays and papers, to study cases, etc.

The aim is to examine the extent to which research and creative skills are among the important skills (competences) which university education forms in the students of Pedagogy and Non-formal Education at the Sofia University "St. Kl. Ohridski" (Sofia, Bulgaria). The study involved an analysis of the curricula and syllabi of students enrolled in these two specialties. The article recounts the conclusions of an empirical study (based on a content-analysis and a survey) conducted in 2015-2016 by a research team within an intra-university project on "Students' self-study skills" (Bozhilova et al., 2016). The author also discusses data from an independent survey carried out among Bachelor students, year I-IV (157 students of Pedagogy and 63 students of Non-formal Education) on the quality of their training during the first semester of the 2018-2019 academic year, conducted by the University Centre for Quality Management (2019). This information is further substantiated by the opinions of 31 students from the same specialties, gathered during two focus groups conducted by the author in January, 2019.

And since the Sofia University "St. Kl. Ohridski" is the oldest and leading university in Bulgaria, earning the right to be a model of pedagogical education in the country, it can be said that the conclusions of the present study can be considered to a significant extent valid for the training of students of pedagogy in other Bulgarian higher schools.

Results

The overview of the curricula and syllabi shows that, besides gaining knowledge, students of education manage to acquire a variety of skills (including research skills): for planning and organizing educational activities with children and adults, for working on projects, for teamwork, for writing scientific papers, for analyzing case studies, for presenting, for arguing and defending positions, etc. The main instrument in this process of skills development is individual work, carried out through different methods.

The content analysis of the curricula conducted by a research team led by Bozhilova in 2015-2016 shows that students from the Faculty of Pedagogy are assigned 19 varieties of creative tasks, performed individually or in working groups/teams related to the following categories: writing tasks (preparing a report, most often with a presentation of the results), tasks involving searching resources and selecting information (often involving use of libraries), and tasks for presenting and defending a thesis/an idea by participating in a

discussion (Bozhilova et al., 2016, p. 4). Most often, these are tasks which involve work according to a preset model, with detailed instructions from the teacher, followed by tasks for presentation, description and analysis of phenomena or processes. Next, there come the tasks for discovering regularities and causal relations, for ranking, summarizing, and comparing. The least frequent are the entirely individual creative tasks where students themselves formulate the research problem, plan the execution, choose the means, and accomplish the task (*ibid*, p. 46).

In almost all disciplines, students develop individual projects, make presentations, solve cases, participate in discussions and debates, etc. In particular, students of pedagogy are most frequently assigned the following tasks for individual work: using a library, writing reports and making presentations, preparing to participate in discussions, followed by portfolio development, project development, writing essays and academic papers.

Similar tasks are assigned to the students of non-formal education. Here, in second place, "field-work" is also required – involving attendance, on-site monitoring (for example, educational companies or centres) and practical activities (*ibid*, pp. 33-34, 37-37).

As a whole, the students of the Faculty of Education (from all the specialties) are most often assigned the task of developing a portfolio in the discipline, followed by developing a study project, preparing and delivering a presentation (including multimedia) (*ibid*, pp. 50-51).

More and more teachers are introducing elements of distance (virtual) training in their courses – uploading lectures and materials to educational platforms, guiding students to use electronic resources, conducting "virtual" discussions, using electronic tests for on-going evaluation. These contribute to developing important skills enable students to work in a virtual learning environment.

The report from the University Centre for Quality Management (2019) reflecting students' opinions and ratings of the quality of their training during the first semester of the 2018-2019 academic year shows that they approve of the use of training methods which require from them creativity and research work and rate them as follows (where 6.00 is the highest rating):

Table 1: Average students' ratings of the usefulness of creative training methods

Methods of training and assessment	Students of Pedagogy (%)	Students of Non-formal education (%)
Case solving	5.06	5.47
Individual projects	5.33	5.34
Presentations	5.23	5.18
Discussions and debates	5.33	5.08
Game (simulation) methods	5.29	5.00
Group work	5.24	4.73
Elements of e-learning	4.74	4.50

The data are presented according to the results reported in University Centre for Quality Management (2019) Table 13 (for the pedagogy specialty, p. 23) and Table 24 (for the Non-formal education specialty, p. 60)

According to the same report, the students of Pedagogy consider as "absolutely useful in training" the methods of "discussions and debates" and "individual projects",

followed by "game methods" and "presentations" (Paper ..., 2019, p. 73). Students of non-formal education place first in terms of usefulness the method of "case solving", followed by "individual projects" and "presentations".

According to the curricula and syllabi, individual assignments and coursework are part of the forms for assessing learning achievements. Students prefer them as a means of assessment. (Table 2).

Table 2. Average students' ratings of the used creative methods of assessment

Methods of assessment	Students of Pedagogy (%)	Students of Non-formal education (%)
Individual work	5,09	5,03
Coursework	4,98	4,82

The data are presented according to the results reported in University Centre for Quality Management (2019) in Table 15 (for the Pedagogy specialty, p.23) and Table 26 (for the Non-formal education specialty, p.63)

Individual work is ranked first of the students' preferences. The final oral examination is placed second by the students of Pedagogy, and the test as a form of assessment is placed fourth (*ibid*, p.25). The students of Non-formal education place coursework second (after individual work), followed by the test, and the final oral examination is in the last (sixth) place (*ibid*, p.63). These preferences indicate that students have good skills in writing different creative texts.

Students of Pedagogy consider individual work to be the method that most adequately assesses their knowledge acquired during the training process (*ibid*, p. 73).

Besides individual work (in addition to the studied undergraduate courses of "Fundamentals of pedagogical research" and "Empirical studies in non-formal education"), direct participation of students in research projects, together with lecturers, also leads to the development of their research skills. The new rules of research funding give priority to projects involving students and/or PhD students. The accreditation of the different specialties also takes into account students' research work. This is the reason for the increasing participation of students in research projects over recent years. According to the report from the survey of students' opinions, more than one third of the students of pedagogy and nearly two thirds of the students of non-formal education were included in research work – some of them in more than one form (*ibid*, 2019, pp. 27 and 66).

Table 3: Participation of students in research work

Forms of research work	Students of Pedagogy (%)	Students of Non-formal education %)
Research projects of the Sofia University	18,5	12,5
Research projects of other institutions	3,7	10,0
Scientific conferences (seminars)	18,5	52,5
Publications in the specialty field	2,5	7,5
No previous involvement	66,7	22,5
Total	109,9	105,0

The data are presented according to the results reported in (*ibid*, 2019) in Table 17 (for the Pedagogy specialty) and Table 26 (for the Non-formal education specialty)

Table 3 shows that the students participated mainly in scientific forums (conferences and seminars) and in intra-university research projects. Undoubtedly, the inclusion of students in research teams is also based on the assessment of their present skills and qualities. The report shows that almost all excellent students (from the respondents) participated in research projects. Students with lower grades have been involved mainly in scientific forums.

Students' research and creative skills evolve over the years of study. As already mentioned, students gain experience from performing individual and group creative tasks (projects) and from being involved in research work together with lecturers. All this contributes to developing in future specialists in pedagogy and non-formal education those skills which are part of the key competencies of the 21st-century teacher. Also, these graduates are preparing for pedagogical work with children. Therefore, it is important to consider how they evaluate the benefits of research and creativity; to what extent individual work helps them develop such skills, what helps them, and what prevents them from successfully performing research and/or creative tasks, and what other skills from this group should be developed in order to manage even better.

In order to verify students' opinions on these issues, two focus groups were held (on 24 and 30 January 2019):

- the first– involving 25 students of Pedagogy, 2nd year, full-time;
- the second– involving 6 students of Non-formal education, 5th year, part-time.

The difference in the number of students was determined by the difference in the number of students in the courses. During the focus groups, the following questions were discussed:

1. Why are students' research skills important?

2. What conditions should be present so that students can successfully accomplish a research or creative task?

3. What are the problems faced by students in performing such tasks, and what hampers them?

4. What research skills and qualities should students develop to better cope with performing research and creative tasks?

The responses show that students from both focus groups estimate realistically the presence or absence of their own research skills, mainly on the basis of their experience in university. There are also some differences regarding the ratings, which are undoubtedly related to the larger experience of the 5th-year students of non-formal education.

The discussions in the two groups on the first question *(Why are students' research skills important?)* showed that students generally have a positive attitude towards this group of skills and the need to develop and improve them. The students of pedagogy consider them useful in the following regards:

– *They find them necessary and important transferable skills in connection with their studies at the university* – in particular, these skills help students to master the material better, to deepen and strengthen the knowledge in a particular field, obtained from the lectures and the seminars on the subjects. Research work motivates them to learn new things and develops their desire to seek and find the necessary information faster; the presence of such skills helps them to achieve better effectiveness of their empirical or theoretical research and, consequently, of the results thereof. These skills bring them closer to the studied sciences, and students feel "useful and significant to the scientific sphere" to which their specialty belongs;

– *They associate them with future benefits for their work (as specialists in other fields as well)*, requiring the search for and use of information – in particular, they believe that these skills help them: to access information and knowledge that one day can be utilized

in practice; to deal with projects and tasks of a different nature – "these skills can be "transferred" to a number of other tasks";

– *They evaluate them as an important part of their personal development* – for "training" one's brain, memory, thinking, and analyzing "the learning reality"; for developing and stimulating the skills for reasoning, analyzing and synthesizing information; for the formation of useful skills for self-control, self-education, self-evaluation, teamwork, and of qualities such as independence, creativity, discipline and initiative.

The students of non-formal education also highlight the benefit of research skills as *transferable skills for their university training*: for analyzing "the learning reality"; for fulfilling the learning tasks; for evaluating information with regard to its "potential" in terms of educational work, and in particular, for achieving effectiveness of their empirical or theoretical research (creative task) and, accordingly, effectiveness of the final result. Next, the students in this specialty place second the benefit of research skills in relation to improving brain activity, memory, and thinking.

The answers to the second question *(What conditions should be present so that students can successfully accomplish a research or creative task?)* are presented in Table 4. The opinions are ranked according to the priority attributed by the students to each condition.

Table 4: Conditions for conducting an effective (productive) student research
(for performing a creative task)

Students of Pedagogy (%)	Students of Non-formal education (%)
• *Good material base,* including enough literature and reliable sources, and enough time for the research or the creative task • *Good preliminary preparation* – setting clear objectives for the research (the creative task), which implies good awareness of what and how should be done, and what results are expected to be achieved; good planning and structuring of the task; developing an adequate set of instruments; good preliminary organization for the task execution (providing the necessary resources, time and materials, well-prepared instruments for the realization of the empirical research or the creative task); ensuring a cooperative target group / respondents • *Consistency of actions* – following the plan, providing a critical analysis of the information and the results; final editing of the text.	• *Competence on the subject matter* of the learning task, including existing achievements of different authors in the sphere of the research (on the topic of the creative task). • *Presence of students' skills for conducting a research*: for setting goals; for developing and following a plan (an algorithm); for providing information; for using adequate instruments; for making a critical analysis of the results from the research (the creative task); for final editing of the analytical text. *Skills for work with information: collecting and using information;* for managing the process of searching for information; for taking notes from various sources; for analyzing, interpreting, and evaluating information; for presenting the results (in oral and written form).

Some of the students from both focus-groups noted that if the subject is not predetermined by the lecturer, the result depends first on the choice of a significant problem, and only then the necessary information should be collected and processed. This is also important for the motivation to work on a research (or creative) task, which is often determined by the availability of the *necessary* research skills in students, in particular:

- for managing the process of searching for, collecting, and using information
- for taking notes from different sources
- for analyzing, interpreting, and evaluating information;
- for presenting information in the required format**.**

The students of Pedagogy comment on specific obstacles (difficulties) in performing research and creative tasks:

1. *Problems with information* – from the lack and scarcity of reliable literary sources, to the risk of encountering sources with false content, containing old/incorrect data or misleading information.

2. *Problems with respondents when conducting an empirical research* – from the difficulty of finding respondents to the willingness and attitudes of the people whose participation is crucial for the realization of the research (the creative task) to cooperate with the students, including filling out the questionnaires correctly and in time.

3. *Problems with the students' competence perform the research or the creative task (lack of research and other skills)* – how to conduct the empirical study (or fulfill the creative task) and how to process the data obtained; how to choose criteria and analyze results accordingly; how to adhere to the main theme of the research (the creative task); how to solve cases related to problems from a field which is unfamiliar to the student ("lack of critical thinking"); how to interpret more complex texts (of materials that are "hard to comprehend"); how to organize time, etc.

4. *Discrepancy between theory and* practice – between facts and authors' theses and search results.

5. *Problems with communication between students in team tasks (projects) or tasks for group work* – a lack of motivation in the team of students to carry out the research (to fulfill the creative task) or a lack of motivation in some individual members; misunderstanding or tension between the members of the group/team.

6. Problems related to incorrect information from the teacher assigning the task – giving students incomplete, inaccurate, or unclear information about the task and the way it should be performed; exhibiting subjectivity when assessing the results; setting short deadlines for the execution.

Similar problems and difficulties are also identified by students of non-formal education. However, they are more critical with regard to their own skills, especially to their skills for: interpreting more complex and difficult texts; solving cases from a field with which they are unfamiliar (problems with skills for critical thinking and defending one's own theses through the research). Students note that sometimes their personal observations differ from the theses of the authors of theories. They are definitely hampered by the lack of research skills (for collecting, evaluating, and using information; for evaluating the results), by the uncertainties about the task (mostly about the purpose and the variables), and also by incomplete feedback, etc.

In this spirit are also the comments of the students with regard to *what would facilitate them* in their research work. Students of pedagogy highlight the following "facilitations":

- precise and clear guidelines for work (for better understanding of the task);
- advance specification of good and "secure" (i.e., available) sources of information in the libraries;
- development and improvement of their research skills;
- sufficient time to complete the task;
- a better motivated team;
- good ("accurate") conditions for work: responsive respondents, documents granting access to the institutions studied and to representatives of the target group of the study who have the characteristics needed for the purposes of the research, including social and cultural characteristics;
- opportunity to request and to receive help – first of all, by the teacher, but also by other specialists or experts – "authorities" in the specific area of the research (the creative task);

• availability of technical means – to search for information on the Internet and to present the results.

The students of non-formal education consider that key to success in their research work are the following "facilitations":

• the opportunity to receive help and support from a recognized authority (specialist) and from the teacher; to be aided in overcoming difficulties and finding alternatives;

• the opportunity to develop and improve their research skills – including searching, collecting, and using information is relevant to the task;

• availability of the necessary information, conditions, and appropriate respondents to conduct the research;

• the creative nature of the task.

In this context, students from both focus groups also share opinions on *what research skills and qualities they need to develop* in order to better cope with the performance of research and creative tasks:

• organizational and technological skills – related to specifying the task and the technology of its execution, including planning and time management;

• specific research skills – related to discovering, collecting, and selecting, analyzing, reading, and processing information; developing the set of instruments for the research; skills for conducting the research;

• presentation skills – for presenting the results;

• intellectual skills – for critical and analytical thinking, for analyzing and summarizing, for using reference resources;

• mathematical and technical skills – for processing statistical data;

• social skills – for communicating with others; for cooperative (team) work; for dealing with tension and stress – for achieving greater self-control, for solving problems and overcoming difficulties in performing the research or the creative task.

The students of pedagogy point out that necessary qualities for research and creative work include: purposefulness; patience; initiative; fairness (lack of prejudices and stereotypes); objectivity; flexibility; self-control. Students of non-formal education emphasize the development of critical and analytical thinking as well as qualities such as objectivity and flexibility.

These views coincide with the skills and qualities mentioned by the students surveyed in the other two studies, the results of which are reported in the paper of the University Centre for Quality Management (*ibid*, 2019) and in the book by Bozhilova (2016) which gives the results from the study.

Discussion and inferences

Despite the critical attitude towards their own skills for performing research and creative tasks, students in the Faculty of Pedagogy recognize the benefit of these tasks and skills for their successful training and personal development. The opinions students express lead to the conclusion that there is a need for *special efforts on the part of teachers who assign research and creative tasks,* in terms of ensuring the conditions for the successful fulfillment of these tasks. In particular, teachers have to:

– provide more detailed (if possible, written) information on the task and a list of reliable and accessible sources of information;

– provide preliminary training for students how to perform the research or the creative task (including work on developing specific skills);

– set realistic deadlines for the task, taking into account the fact that students might have other commitments (and tasks) during the same period;

– improve students' information literacy;

– develop and improve their communicative and social skills through more group work during the sessions and assigning teamwork as an out-of-class activity, while clearly distinguishing the responsibilities of each team member for the overall result;

– introduce students to approaches and strategies for negotiating and persuading others so that they can ensure the respondents needed for their research;

– provide the opportunity for further informing and counseling students during their work on the research (or creative) task.

Conclusion

The study has shown that, without specifically laying down in the curricula and syllabi of the offered undergraduate specialties the goal of "forming skills for the 21st century", the Faculty of Pedagogy at the Sofia University "St. Kliment Ohridski" in practice manages to develop in students the skills from the group of "the 4 Cs" through self-dependent work (realized through research and creative tasks). Students involved in the studies indicate that self-dependent tasks require creativity and an innovative approach as well as purposeful development of learning skills. They take into consideration their weaknesses sufficiently with regard to some of these skills, and they claim willingness to develop them. This is an important step on the path of students' own self-development and self-improvement. The university could help them by offering specialized courses on learning skills, which could include research and creative skills.

References

Bozhilova, V., Yanakieva S., Radenkova, Ts., & Marinova, M. (2016). *Students' self-study skills*. Sofia: Avangard Prima.

Gyurova, V. (2011). *Andragogy in 6 questions*. Gabrovo: Express.

Gyurova, V., & Bozhilova, V. (2016). *Study skills' development*. Sofia: Sofia University St. Kliment Ohridski University Press.

Nottingham Andragogy Group (1983). *Toward a developmental theory of andragogy*. Nottingham, University of Nottingham.

University Centre for Quality Management (2019). *Data analyses of the students' opinions and assessments about the quality of education in the professional area 1.2. Pedagogy, Bachelor degree*. Sofia University "St. Kliment Ohridski". Laboratory of Analysis and Research.

Transformation of Relationships Between Primary School Stakeholders in the Context of Digitization

Natalia A. Zaichenko[1], Liudmila I. Zaichenko[2], Irina N. Kondrateva[3], Dmitry D. Rubashkin[4]

[1] *National Research University – Higher School of Economics, St. Petersburg, Russia*
Email: zanat@hse.ru
ORCID: https://orcid.org/0000-0002-3663-7631

[2] *Tallinn University, Tallinn, Estonia*
Email: lucia.sheren@gmail.com
ORCID: https://orcid.org/0000-0001-5555-0657

[3] *Mart Studio Ltd, St. Petersburg, Russia*
Email: kin@mart.spb.ru
ORCID: https://orcid.org/0000-0002-7021-3971

[4] *Technologies & Innovations for Modern Education (TIME), St. Petersburg, Russia*
Email: ddr.cv.lab@gmail.com
ORCID: https://orcid.org/0000-0003-1515-0979

Abstract
The need for research into the transformation of relationships between primary school stakeholders is caused by the acceleration of social and technological processes in which all agents are involved. Digital platforms functioning in unified information systems become cross-functional where they support managerial and pedagogical innovative solutions. The authors regard digitization as a new space for the poly-subjective relationships within information system development. In the transition to digitization it is important to examine the pedagogical aspects and assess the potential advantages but also consider risks. This study considers one of the significant manifestations of digitization as the transformation of the relationship between the teacher and the learner when the learning process is augmented by some active digital practices.
Empirical data was obtained during a large-scale pedagogical experiment within the framework of "Learn to Learn" project focused on primary school learners. The sample included over 2,500 students from 46 schools of different regions of Russia. The experiment started in 2018. The project was based on a digital platform which facilitates the diverse roles of different education process stakeholders. The platform records learners' step by step actions for further examination. These 'digital footprints' are available to the adults – teachers and parents, who accompany the learning process.
The data is presented through the lens of the theory of liminality and Vygotsky's concept of 'zones of development' and is accompanied by a comparison with contemporary international research in the field. The paper also considers the concepts of relationship transformation between the teacher and the learner while using digital technologies and analyses of the database. Drawing on the empirical data the research demonstrates the role of digital platforms to compensate for deficiencies in child's skills and personal growth moving them into the 'zone of proximal development'.
Keywords: digitization, education relationship, primary level of education (primary school), transformation, liminality, digital footprint, learner, teacher, parent, training, zone of proximal development, agency.

Трансформация образовательных отношений в начальной школе в контексте цифровизации

Наталья А. Заиченко[1], Людмила И. Заиченко[2], Ирина Н. Кондратьева[3], Дмитрий Д. Рубашкин[4]

[1] Санкт-Петербургский филиал НИУ «Высшая школа экономики», Санкт-Петербург, Россия
Email: zanat@hse.ru
ORCID: https://orcid.org/0000-0002-3663-7631

[2] Таллиннский университет, Таллин, Эстония
Email: lucia.sheren@gmail.com
ORCID: https://orcid.org/0000-0001-5555-0657

[3] Директор ООО «Студия «Март», со-руководитель проекта «Учим учиться»,
Санкт-Петербург, Россия
Email: kin@mart.spb.ru
ORCID: https://orcid.org/0000-0002-7021-3971

[4] Директор Инновационного центра «Технологии современного образования», со-руководитель проекта «Учим учиться», Санкт-Петербург, Россия
Email: ddr.cv.lab@gmail.com
ORCID: https://orcid.org/0000-0003-1515-0979

Аннотация
Актуальность темы изменения отношений между субъектами образовательного процесса на стадии цифровизации обусловлена ускорением социальных и технологических процессов, в которые вовлечены различные стейкхолдеры. «Цифра» становится универсальной платформой, на которой в единой информационной системе поддерживаются управленческие и педагогические инновационные решения. Цифровизация рассматривается нами как качественно новая ступень полисубъектных отношений в условиях информатизации.
На стадии перехода к «цифре» в первую очередь следует обратить внимание на педагогические аспекты, оценить потенциальные приобретения и риски.
Настоящая статья посвящена одному из значимых проявлений цифровизации – изменению отношений в связке «учитель-ученик» при включении в учебный процесс начальной школы активных компьютерных практик.
Тема раскрывается в статье на основе данных, собранных в рамках проекта «Учим учиться». Педагогический эксперимент начат в 2018 г., на настоящий момент в него включились свыше 2500 обучающихся из 46 школ разных регионов РФ. Технологической основой проекта является цифровая платформа, на которой поддержаны роли субъектов образовательных отношений. На платформе фиксируются учебные действия, после чего «цифровой след» каждого ребенка становится доступным взрослым: учителям и родителям, которые осуществляют педагогическое сопровождение тренинга.
Цель исследования – выявить и экспериментально проверить изменения в образовательных отношениях субъектов в условиях цифровизации в начальной школе.
Данные измерений рассматриваются в статье в контексте теории лиминальности, концепции «зон развития» Л. С. Выготского и в сравнении с исследованиями, проведенными в разных странах. Представлены трансформации модели отношений между учеником и учителем при использовании компьютерных технологий, а также аналитика больших данных. На основе собранной статистики показано, как компьютерный тренинг влияет на компенсацию дефицита умений и личностный рост ребенка, обеспечивая его продвижение в зону ближайшего развития.

Introduction: Concept of digitization and the education relationship problem.

Rationale

Digitization of space for living comfortably as a field of research has become increasingly topical since the 1990s (Negroponte, 1996). The Russian digital model has been taking shape since 2002 with the advent of "Digital Russia" federal program (Ministry of Digital Development, Communications and Mass Media of the Russian Federation, 2014), which was later extended in the programs "Information Society" (2011-2020) and "Digital Economy of Russian Federation" (2019). Sustained attention by government to digitization is evidenced by the plethora of rules and standards: by 2020 approximately thirty regulatory documents of different kinds had been adopted (including instructions, conceptions and presidential decrees) in the field of digitization development.

Key events in the digitization of education in Russia have been aligned with the federal projects: "Digitization of education" (2005-2007), the National project "Education" (2006-2018), and the National priority project "Education" (2019-2024).

This paper draws on the methodology and initial findings of the research supported by the Russian Fund of Fundamental Studies (2020-2022). The aim of this multidisciplinary project to analyze problems of education relations management in the age of digital transformation.

Digitization concept and its theoretical treatment

The focus of the study is the digitization of education and the problem and phenomena of transforming relationships in the process of transition from a traditional to a digital landscape. Specifically, it looked at these problems in primary education. It also should be noted that the definition of "education digitization" is not clearly articulated within the expert community; this is examined separately in further discussions.

Expert debate in the field reveals two essentially divergent perspectives: on one hand there is the technocratic view of digitization (Abramova & Franina, 2019; Uvarov, 2019), while on the other there is a humanistic expert approach (Corporate University of Sberbank, 2018). While the technocrats tend to accentuate intercommunication of human with machine, the humanists prefer to imbue digitization phenomena with behavioral force. Their view of digitization significance is interrelated with the positive culture of digital behavior development among the education relations stakeholders.

These two perspectives can be accepted as mutually reinforcing, because making digital systems and artificial intelligence algorithms a part of education process impacts directly on the redistribution of roles between various agents of the process, and hence effects their relationship.

Brief review of the contemporary international research in the field of education digitization

Contemporary international research in the field of digitization in primary education reflects various facets of the problem and represents a wide variety of data acquisition methods.

Most commonly the focus is on the interplay unfolding in the digital space between 'the learner at the start,' 'the digital device as an educational tool in the middle,' and 'the learner at the finish.' Some researchers emphasize teacher engagement in the process of interaction although the particular role of a teacher is not accentuated or specified.

Examining the most broad and common directions of the contemporary international research in the field of interrelation between digital environment and child development several topics can be distinguished:

1. The role of digital games (particularly iPad apps and tablet games) in early literacy skills development;

2. Digital games in school in the context of transversal skills development;

3. Digital technology as a tool of pedagogical practice for both subject learning and metacognitive skills development;

4. Digital technology in science learning and scientific skills acquisition including STEM subjects;

5. Digital technologies as an efficient tool for formative assessment and feedback in class.

This paper draws on the publications about topics (3) and (5) as they appear to be the most relevant to both the theoretical and experimental frameworks used in the study. The results from international research in Australia (Neumann, 2018; Kervin, 2016), Belgium (Vanbecelaere, Berghe, Cornillie, Sasanguie, Reynvoet, & Depaepe, 2020); Finland (Kahila, Valtonen, Tedre, Mäkitalo, & Saarikoski, 2019), Hong Kong (So, Chen, & Wan, 2019), and the Netherlands (Janke, Luyten, & Visscher, 2017) should be mentioned in this context. The most significant international research practices are discussed below, before we present the Russian pedagogical experiments.

Kahila et al. (2019) highlight the children's own perception of their transversal skills development in the process of digital tools use. Children-respondents' answers revealed the most positive influence of digital games on their skills acquisition. The children assessed the skills they acquired subjectively and the study authors then relate this factor to its weak points. The respondents mentioned they acquired improved reading skills, self-regulation skills, self-control skills, and perseverance. In the final discussion the authors conclude that the major competence acquired by the sample during the process of playing digital games was 'learning to learn' which is also referred to as a self-regulation skill or (in the context of the Federal State Education Standards – FSES) as a personal competence.

The Hong Kong study by So, Chen and Wan (2019) concentrated on multimedia e-learning and self-regulated learning. Digital technologies made multimedia learning materials approachable which is an undeniable advantage of digitization. The study authors draw on previous research data pointing to the ambiguity of results in using e-learning materials in primary education. Meanwhile their research elicited positive outcomes: students enjoyed animations and the forum as a feedback tool. They also mentioned the ability to share tasks on-line as an advantage of the multimedia interface. The participants commented on the importance of feedback both from their peers and teachers. Students also enjoyed graphic data as well as the simulation experiments embedded in the lesson. However, the authors concluded that multimedia technologies in self-regulated learning may be inefficient if the learners (1) cannot understand the rules and function of the e-platforms (and do not follow the instruction given in the system), (2) cannot exercise self-discipline and (3) are challenged to learn the material without teacher scaffolding.

Another aspect of the digital influence on education was presented from the Netherlands by Janke, Luyten and Visscher (2017) who explored the effects of a digital assessment tool on mathematics achievement. A randomized experiment (with 79 schools and students of 8-9 years of age) was used to examine the effects of a digital formative assessment tool on mathematics achievement and motivation in grade 3 primary education. The authors reported that digital formative assessment and feedback tool may be quite useful for the learner (Haelermans & Ghysels, 2015; Sung et al., 2016) as

it provides instantaneous feedback immediately after the exercise (Bokhove & Drijvers, 2012a, b; Pilli & Aksu, 2013; Van der Kleij, Feskens, & Eggen, 2015; Wang, 2014) while the teacher is given an opportunity to evaluate the progress of each individual as well as the class and to compare the results with the progress in other schools and national benchmarks (Koedinger, McLaughlin, & Heffernan, 2010; Pape et al., 2012).

The research was centered on formative assessment practice when using the Snappet tool for assessment and feedback. The Snappet environment provides immediate feedback to learners, immediate feedback to the teacher, and adaptive assignments. The experiment examined how intensive use of Snappet contributed to further advancement in learning mathematics and increased student motivation, and whether the learning outcomes differ among the cohorts using Snappet between the students with high and low performance. Formative assessment is defined by the authors as all the activities undertaken by teachers and by students which provide information to be used as feedback to modify the teaching and learning strategies in which they are engaged. Efficient formative assessment should help both students and teachers answer the questions, Where do I go next? How do I go? and What is next? (Locke & Latham, 2002; Hattie & Timperley, 2007).

The main findings of this survey highlight both high efficiency and practicality of applying such tool for a cohort of high achieving students, where the intensity of the tool use directly correlates with both advanced achievements and higher motivation. Among other conclusions there is an assertion about the relevance of feedback which can be regarded efficient only where it does not compare the learner achievements with the results and grades of others but rather compares it with the learning goals (Kluger & DeNisi, 1996; Shute, 2008; Hattie & Timperley, 2007).

Russian project "Learn to Learn"

An ambitious pedagogical experiment, the project "Learn to learn," started in the 2018/19 academic year sponsored by the Presidential Grants Fund. The project was aimed at testing the hypothesis about the possibility of improving learning outcomes in primary school (and later, in high school) through active digital practice – computer assisted informational training.

In the process of individual work primary scholars use an educational on-line service provided through a digital platform similar to the Snappet tool, particularly in terms of feedback possibilities for students, teachers and parents. Training assignments are meta-disciplinary in nature and are aimed at building the basis of functional literacy. This means the ability to work efficiently with various multimedia formats of digitized learning information, including texts, images, tables, maps, graphs and diagrams.

Over the two academic years 2018/20 the project has enrolled over 46 schools from St. Petersburg, Leningrad Region, Karelia Republic and other regions of Russia with over 2,500 participants. The results of their participation in the project have been archived, both for operational analysis and big data analysis. This makes the project an effective environment for analyzing real learning practices in primary education and also for testing research hypotheses.

Research Method

Methodological considerations

The phenomena of digital transformation pose both research and practical questions:
– from the research perspective, there is a problem of incomplete consensus on a definition of "education digitization" as well as a problem of seeking either objective measuring instruments or a relevant descriptive theory of education relationship transformation in a digital reality;

– from the practice perspective, the digitization process has already acquired an irreversible position and therefore we lack any particular model which would create proper conditions for the new forms of relationship and role-based attitudes among the main stakeholders – the learners and the teachers – within the traditional education environment.

For this purpose, we articulate three approaches to the problem comprehension: (1) theoretical, (2) practical and (3) experimental.

The theoretical lens is directed at the identification and justification of both the transformation relationship phenomena and its development logic. The practical framework consists of contemporary international research results in the field of digital education in primary schools. The experimental part of the study is based upon empirical data from the Russian schools' digital practices. This part serves to test several hypotheses on what and how, may and should, change in education relations at primary school level.

Theoretical Framework of the Research

The theoretical framework is based on interdisciplinary approach with philosophic-anthropological, sociological and psychologic-pedagogical angles.

In this paper we will elaborate three theoretical grounds: liminality theory by Gennep and Turner (Gennep, 1960; Turner, 1974; Tulchinsky, 2003), 'the zone of proximal development' theory by Vygotsky (1956), and 'activity theory' by Leontiev (1977). The first theory allows us to analyze the role of a teacher and its transformation in the context of the change in 'educational rituals.' The second, contributes to an explanation of new subject-to-subject relations in the digital education environment where some of functions are delegated to computers. Through the activity approach we traced the sequence of events as 'demand-motive-activity' where the motive and the activity are external and objectively observable instances monitored by the digital footprint.

The logic for selecting these theoretical considerations is as follows. The phenomena of relationship transformation in the digitization process is considered through the prism of liminality theory or through the prism of relationship transition from a traditional state to the new one where the loss of previous statuses and roles among the agents is distinct (Gennep, 1960; Turner 1974). The authors of liminality theory included three phases in the rite of passage: (1) separation – as deprivation by individual of previous status indicators, (2) transition – a new transitional state, and (3) incorporation – construction of a new relationship system.

Similarly, we can distinguish three phases in education relationship transformation when transferring to digital practices:

1. The traditional education relationships "learner – teacher"; "teacher – parent" undergo changes and become actual in the virtual space;

2. Powers and responsibilities are redistributed; new norms of cooperation and feedback appear;

3. Relevant procedures of new interaction and cooperation models, as well as new relationship opportunities are constructed.

When analyzing transformations which occur in the relationships between children and adults it is reasonable to apply the Vygotsky's "zone of proximal development" concept (Vygotsky, 1956).

The authors divided the observation process into two levels. Firstly, the level of 'actual development' in learning process with assignments which children are able to handle independently and secondly, the level of 'zone of proximal development' in learning activity, as an area of future development of a child which is scaffolded by adults. The importance in distinguishing the 'zone of proximal development' in this context is

because this 'zone' is quite personal and has specific bounds for every child, which can be traced through the digital footprint and depend on the parents' and teachers' readiness to assist in child evolution.

Examples of digital transformation of the relationship model between learner and teacher

We take a closer look at what may change through the use of active digital practices when the learners perform training activities on the digital platform. In a traditional learning process the relationship would be formed as in "model A" (figure 1). A teacher is guiding the learning process and the learner gives a response to these actions. The teacher provides the learning material as a direct relation, a student performing assigned tests provides feedback. The essential weakness of this model is that the learner (who should be the main actor) is assigned a passive role. The relationship between the teacher and the learner needs reconstruction to make it cooperative and trustworthy.
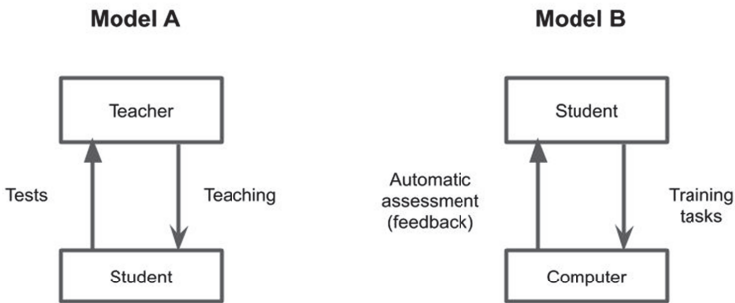
Figure 1. Control circuit of learning activities

Model A – without computer use; Model B – in a digital environment

How does digitization change the whole process? If a teacher delegates the test assessment function to the computer program which will analyze the answers, discover mistakes and report the result to a learner, the student is given a chance to make an individual correction to their work and present the corrected version for re-examination. To evaluate objectively any learning activity is a task which cannot be entrusted to the artificial intelligence at the present time. Nevertheless, Model B (figure 1) is the first step towards relationship transformation where the roles are reassigned in a different manner. In this model the learner is given agency and the feedback function is performed by the computer.

Even at this stage we can see how digitization has resulted in change in relationships. The opportunity for changing the passive learning acquisition of data into active training is evident, and the psychological pattern in personal relationship has changed. The role of inspector opposing the learner is now given to a computer instead of a teacher, and if digital practice can partially substitute this control function detaching it from the teacher, it will turn the relationship paradigm between teachers and learners towards cooperation and partnership.

This is how the Model C emerges (figure 2) in which the role of teacher is to lead. It is similar to Model A but the interaction with a learner is premised on quite different grounds. Despite the teacher's prevailing role, the learner is given agency and his activities are controlled through feedback where computer completes this communication circle.
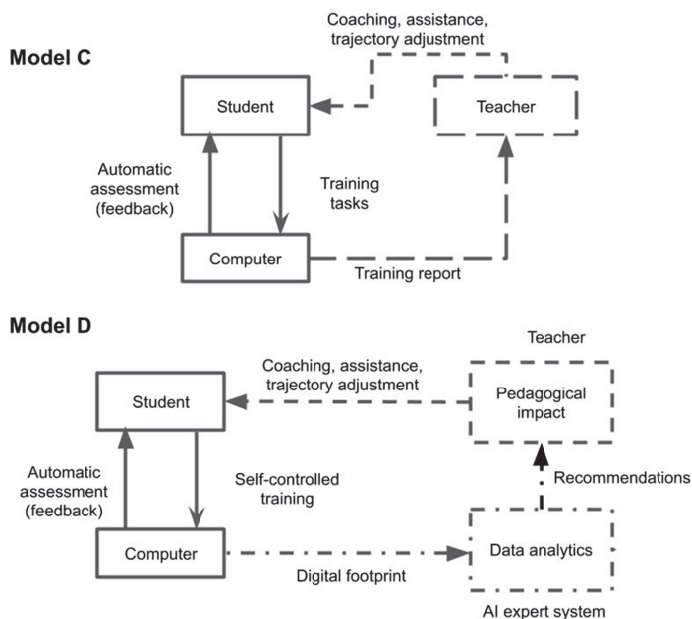
Figure 2. The teacher's mission in digital models

Model C – real time mode;
Model D – using big data

Managing the learning process is still the teacher's responsibility but her role alters to one of scaffolding where she becomes a coach. The educational ritual has changed in favor of a more meaningful relationship between the teacher a child. In this scenario a child scaffolded by an adult becomes the key actor in the learning process in which the computer provides him with the feedback necessary for objective self-assessment, and the teacher assumes a role of supervisor. The role of the computer becomes increasingly more important. It monitors and stores all training activities for further analysis, composing a learner digital footprint. A teacher can check the history of task performance, elicit gaps in preparation, specify the competences deficits which result in failures, and together with the learner, find a solution for improvement.

The digital platform is regularly monitoring educational outcomes. The teacher has real time access to the digital footprint which allows her to adjust the learning process promptly. We can see Model D in figure 2 as a synergy of two circuits where digital technologies are not limited by an assessment function. Primarily, the computer assists in training process by providing real time feedback. Secondly, the further development of the education relationship is based on the digital footprint tracing and gathering big data which makes it possible to create a computer expert system which would undertake analytical work and be able to offer personalized learning tracks for each individual learner.

Artificial intelligence exempts teachers from their responsibility to analyze the digital footprint and takes into account various other factors which influence further decisions. Remarkably, the expert system is not a substitute for a teacher, rather, its role is consultative where the final decision and interaction with a learner remain with the teacher.

The digital footprint can ideally be accessed, not only by a teacher but may become accessible to other adult participants in the education process – the teaching staff in the school, parents and if needed, a psychologist. As stakeholders they also may use data

about the learner's training activities and make contributions to the formative assessment process as well as the overall quality and usefulness of the learning journey.

Experiment: learning activities on the digital platform. Experience of "Learn to Learn" project.

Work in the zone of actual development

We now consider how the theoretical concepts mentioned above can be used in primary school digital practices. The empirical base for this section is taken from the Russian project "Learn to Learn" which will be presented and compared with various educational experiments from international practice.

The learners who took part in the experiment (9-10 years of age) were offered meta-disciplinary training with tasks corresponding with school curriculum, as distinguished from many international practices when children were offered meta-disciplinary games and play tasks. This emphasizes the importance of implicit motivation of children who are not supported by the playful nature of the tasks (for instance, in the Finnish experiment).

The immediate aim of the training was developing functional literacy basics as a foundation for further effective learning processes. This learning practice concept is taken from the definition given by Leontiev (2001) where he remarks that "functional literacy is an ability of human to use naturally skills and competences of reading and writing for acquiring information from the text, hence for understanding the text, the ability to make precis and transformation as well as transmission of knowledge in real life communication" (Leontiev, 2001, pp. 5-8). This definition seems work in meeting practical needs.

The training project "Learn to Learn" is aimed at development of learning and information skills but not to inspect the units of study. The learning goal is formulated in such a way that it puts a learner into the 'zone of actual development.' It provides children with the opportunity to do tasks individually at their own pace. At this stage individual progress can be reached with the learner's personal efforts where his or her capabilities of self-assessment and self-control are sufficient for success. The training stimulates re-execution of tasks for consolidating skills and abilities. Many participants return to the task after they have achieved on their own initiative so as to improve the result of the first attempt. This ability to initiate decisions on task repetition seems to be a crucial manifestation of a learner's agency and personal growth in the process of individual learning through the digital platform.

Looking at this process through the scope of liminal theory we notice that within the relationship model "teacher – learner" it is the teacher who grows out of her status as controlling the learning process, although the new model of relationship based on mentorship idea is still deficient.

In this case, the individual training process is limited by the 'zone of actual development' which is definitely not sufficient for the relationship reconstruction and transformation into the whole new level.

Learning activities in the zone of proximal development

The "Learn to Learn" platform offers a teacher the possibility to see in real time, not only the results of the tasks performed, but also a detailed report about the training activities of each individual learner. The functions provide the teacher with all the information necessary to correct students' behavior, assist with advice and mediate stress. The same functions are available to the parents regarding their own child. And if the tasks assigned are not limited by class time and can be done at home then pedagogical support becomes a shared responsibility of both school and family. This promotes uncertainty in

the division of power and responsibility for the outcomes – another characteristic of a transitional – liminal – state.

It is equally important to design the developmental trajectory for a child which not only compensates for deficits but also advances them to a higher competence level. In this relationship model this developmental trajectory design is handled by the artificial intelligence while teachers and parents only assist and motivate the child. This distribution of roles resonates with interests of all the subjects of education relationships involved in child development.

Experiments on refining the expert system of the "Learn to Learn" project to offer various trajectories for further training depending on the observation data, started in the 2018/19 academic year. All the participants were offered diagnostic module assignments to evaluate their entry level. Following the results, each learner's indicators were compared with general population median value (n=1,300). Each indicator had three bands: deficit zone (below the norm), norm, stable proficiency zone (above the norm). Based on the diagnostic results at the end of 2018 each participant was classified into one of the groups: "compensation" (35%), "training" (45%), "development" (20%). This breakdown also corresponds, to and was confirmed by, the results of 2019/20 academic year. Table 1 presents the overall results of all participants who took part in diagnostics by the end of March 2020).

Table 1. Participants breakdown based on the diagnostics results

Participants total	C – "compensation"		T – "training"		D – "development"	
	n	%	N	%	n	%
2,054	760	37	882	43	412	20

The expert system's role involved manipulating the data of individual indicators and setting out recommendations for further inclusion of participants in any of the groups with the final decision still remaining with the teacher. A breakdown of the main indicators for the general population is presented in figure 3.
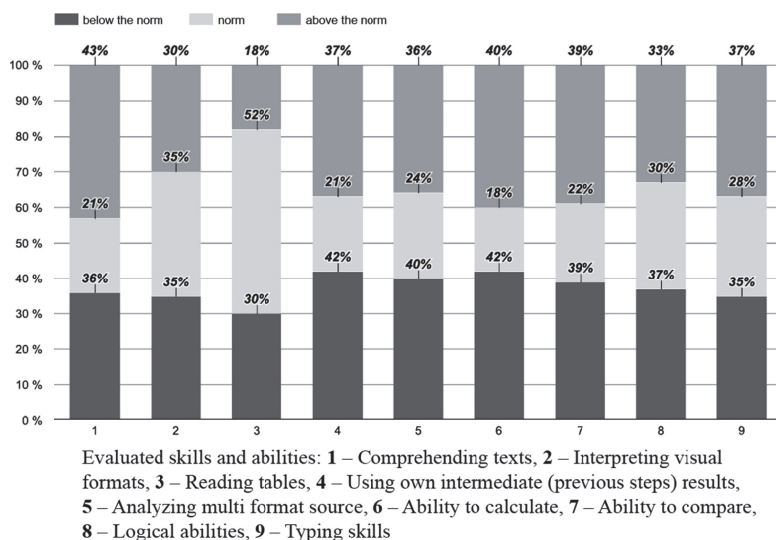

Evaluated skills and abilities: **1** – Comprehending texts, **2** – Interpreting visual formats, **3** – Reading tables, **4** – Using own intermediate (previous steps) results, **5** – Analyzing multi format source, **6** – Ability to calculate, **7** – Ability to compare, **8** – Logical abilities, **9** – Typing skills

Figure 3. Diagnostic results of functional literacy main indicators (%)

The "Compensation" group included learners with the major share of deficits. The "Development" group was recommended by the expert system for the cohort of children whose results did not reveal any deficits and where their major indicators were above the norm. The others were assigned to the medium training trajectory for mastering their present skills.

Detailed statistical data for 2018/19 academic year is available at the website http://www.learntolearn.ru. The data analysis for the 2019/20 academic year will be completed in June 2020.

Based on its analysis of the individual indicators the expert system provided guidance on further individual assignments for each learner corresponding to their competence level. Meanwhile since it was the teacher who made a final decision on the distribution of learners among the groups the system provided her with a diagnostic assessment checklist including tables and diagrams of the diagnostic module results. Figure 4 presents example of the diagnostic results visualization for an individual participant against the general population data. Dots on the bars signify the learner's individual indicators.

Evaluated skills and abilities: **1** – Comprehending texts, **2** – Interpreting visual formats, **3** – Reading tables, **4** – Using own intermediate (previous steps) results, **5** – Analyzing multi format source, **6** – Ability to calculate, **7** – Ability to compare, **8** – Logical abilities, **9** – Typing skills
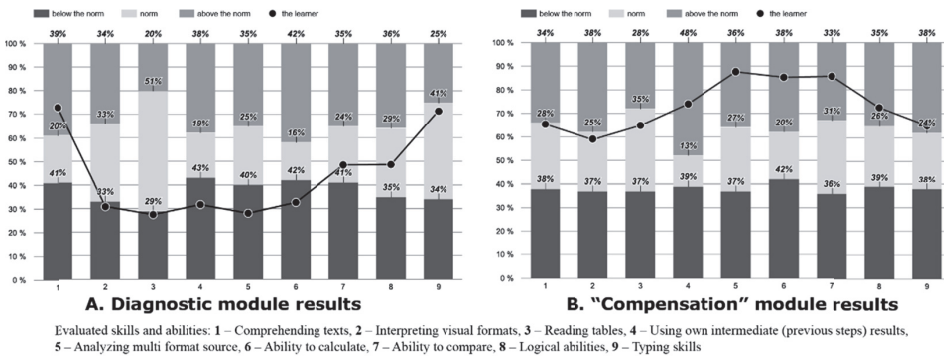
Figure 4. Individual indicators values

Further training in groups was assessed based on the individual progress of each participant comparing with his or her diagnostic results rather than on the median performance of the general population. Figure 4B presents results of the same participant after going through the training module in the "Compensation" group which included assignments of the same difficulty level as the diagnostic module. It demonstrates improvement in the majority of indicators.

A comparative analysis of training sessions in all groups taking modules of different levels revealed a surprising result. There was a higher improvement in individual work beyond the 'zone of actual development' reached by the participants originally referred to the "Compensation" group. The top-tier among them successfully passed the "compensation" level and advanced to more complex modules, demonstrating their ability to be efficient even at the highest "Development" level.

Figure 5 shows the percentage of participants who demonstrated progress based on their training results compared with the diagnostic module results.

However, some learners who had been successful at the start and exercised tasks of advanced "Development" level, also manifested immaturity in personal traits, and unpreparedness to overcome difficulties as well as a low level of motivation to advance and perform higher.

According to teachers, feedback played a large part in the project "Learn to Learn." The expert system recommendations and guidance based on analysis of big data gathered

through the digital platform, provides an opportunity to evaluate not only the present level of learners' skills, but also the potential for growth. This is a good reason for designing personalized learning trajectories.
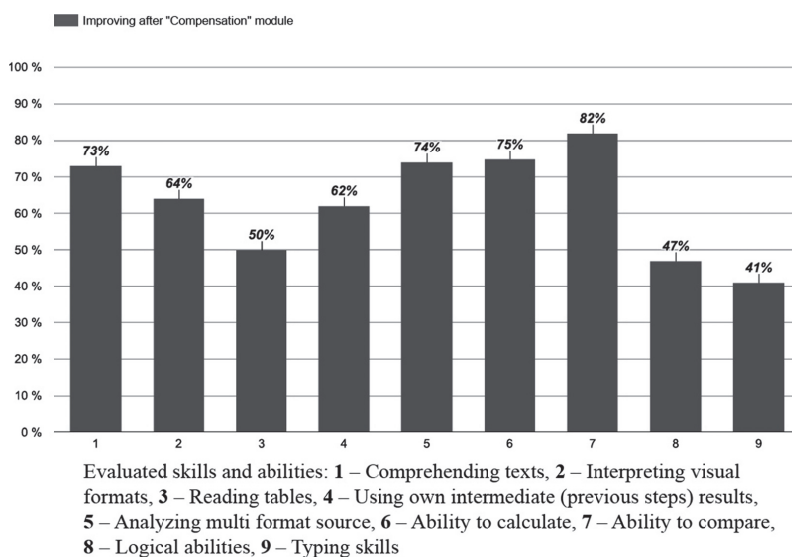

Evaluated skills and abilities: **1** – Comprehending texts, **2** – Interpreting visual formats, **3** – Reading tables, **4** – Using own intermediate (previous steps) results, **5** – Analyzing multi format source, **6** – Ability to calculate, **7** – Ability to compare, **8** – Logical abilities, **9** – Typing skills

Figure 5. Percentages of participants who demonstrated progress in training

Discussion and Conclusions

The interim results of the experimental work on the "Learn to Learn" with an empirical sample of children 9-10 years of age suggest some solutions about education relationship transformation in the context of digitization.

1. Active training practices supporting individual work on digital platforms change the role-based functions of both the learners and the adult participants in the process.

2. The performance capabilities of the digital platforms may assist primary level of education learners in both the zones of actual and proximal development, depending on the chosen model of interaction.

3. Young learner's individual activity while participating in the training may be invested in the realization of their present intellectual potential. The main effect of training lies in eliciting the skills and competences deficits with their further remediation.

4. Young learner's further development is impossible without adults scaffolding, hence a relationship model which would comprise formative assessment of both the individual learner and the whole group is deemed necessary.

5. Big data technologies and artificial intelligence capacities provide opportunities to design personalized learning trajectories based on measurements of the learners' learning and psychological traits.

6. Experiments with Russian school children shows that most learners possess intrinsic motivation for regular practice of not only playing but also learning tasks, as well as for making their own decisions about repeating learning tasks and activities to advance to a higher competence level.

7. In contrast to the survey results conducted in the Netherlands (Janke, Luyten & Visscher, 2017) the results of the "Learn to Learn" project provided evidence that the

highest individual progress may be attained by the least prepared learners as they acquire self-confidence during training. Overcoming this deficits-compensatory stage gives them the motivation to proceed successfully to the activities of the 'zone of proximal development,' outperforming their peers who were initially considered to be more competent and skillful.

8. The preliminary experiment results emphasize the meaningfulness of children's individual work at the digital platform in the 'zone of actual development' where a child may develop agency and the computer may facilitate this process by taking on the role of a self-assessment tool.

During the experiment the relationship model "teacher – learner – parent – expert" went through three assumed transformational stages (of the five possible): (1) teacher agency – learner objectivity (2) teacher agency – learner agency by the virtue of computer (3) teacher agency – learner agency – computer as a mediator – parent objectivity (4) education relationship poly-subjectiveness – relationship expertise (5) education relationship poly-subjectiveness.

By the end of March 2020, Stages (4) and (5) had not yet been reached, and the authors are planning to continue their research and explore further the phenomena of poly-subjectiveness in the context of digital transformation of education.

Acknowledgements

References

Abramova, M., & Franina, M. (2019). Cifrovizatsiya obrazovaniya v usloviyah cifrovogo neravenstva. [Education digitization in the context of digital inequality]. *Professionalnoye obrazovaniye v sovremennom mire* [Professional education in contemporary world], 9(4). [in Russian]

Bokhove, C., & Drijvers, P. (2012a). Effects of a digital intervention on the development of algebraic expertise. *Computers & Education, 58*(1), 197-208. http:// dx.doi.org/10.1016/j.compedu.2011.08.010.

Bokhove, C., & Drijvers, P. (2012b). Effects of feedback in an online algebra intervention. *Technology, Knowledge and Learning, 17*(12), 43-59. http://dx.doi. org/10.1007/s10758-012-9191-8.

Corporate University of Sberbank (2018). *Obucheniye cifrovim navikam: globalniye vysovi i peredoviye practiki. Analiticheskiy otchet* [Digital competences teaching: global challenges and advances practices. Analytical Report] [in Russian]

Gennep, A. V. (1960). *The rites of passage.* (Trans. By Monika B. Vizedom & Gabrielle L. Caffe) London: Routledge and Kegan Paul.

Haelermans, C., & Ghysels, J. (2015). The effect of an individualized online practice tool on math performance: evidence from a randomized field experiment. Retrieved from the TIER website http://www.tierweb.nl/tier/assets/files/UM/Workingpapers/TIERWP15e01.pdf.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research, 77*(1), 81-112. http://dx.doi.org/10.3102/003465430298487.

Janke, J., Luyten, H., & Visscher, A. (2017). The Effects of A Digital Formative Assessment Tool on Mathematics Achievement and Student Motivation: Results of a Randomized Experiment https://doi.org/10.1016/j.compedu.2016.12.001

Kahila, J., Valtonen, T., Tedre, M., Mäkitalo, K., & Saarikoski, O. (2019). Children's experiences on learning the 21st-Century skills with digital games. *Games and Culture, 15*(6), 685-706. https://doi.org/10.1177/1555412019845592

Kervin, L (2016). Powerful and Playful Literacy Learning with Digital Technologies. *Australian Journal of Language and Literacy, 39*(1), 64-73.

Kluger, A. N., & DeNisi, A. (1996). The effects of feedback interventions on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin, 119*(2), 254-284. http://dx.doi.org/10.1037/0033-2909.119.2.254.

Koedinger, K. R., McLaughlin, E. A., & Heffernan, N. T. (2010). A quasi-experimental evaluation of an on-line formative assessment and tutoring system. *Journal of Educational Computing Research, 43*(4), 489-510. http://dx.doi.org/10.2190/EC.43.4.d.

Leontiev, A. (1977). *Deyatelnost. Soznaniye. Lichnost* [Activity. Consciousness. Personality]. Moscow: Politizdat publ. [in Russian]

Leontiev, A. (2001, March 26-28). *Ot psyhologii chteniya k psihologii obucheniya chteniyu* [From psychology of reading to psychology of learning how to read]. 5th International Research and Practice Conference. Usacheva, I. (Ed). Moscow: Institut Psyhologii RAN publ. [in Russian]

Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist, 57*(9), 705-717. http://dx.doi.org/10.1037//0003-066X.57.9.705.

Ministry of Digital Development, Communications and Mass Media of the Russian Federation. (2014). *Russia on-line*. Retrieved from: https://digital.gov.ru/ru/activity/programs/6/ [in Russian]

Negroponte, N. (1996). *Being digital*. New York: Knopf. Retrieved from: http://inance.ru/2017/09/cifrovaya-ekonomika

Neumann, M. M. (2018). Using tablets and apps to enhance emergent literacy skills in young children. *Early Childhood Research Quarterly*, *42*, 239-246. https://doi.org/10.1016/j.ecresq.2017.10.006

Pape, S. J., Irving, K. E., Owens, D. T., Boscardin, C. K., Sanalan, V. A., Abrahamson, A. L., & Silver, D. (2012). Classroom connectivity in algebra I classrooms: Results of a randomized control trial. *Effective Education, 4*(2), 169-189. http://dx.doi.org/10.1080/19415532.2013.841059.

Pilli, O., & Aksu, M. (2013). The effects of computer-assisted instruction on the achievement, attitudes and retention of fourth grade mathematics students in North Cyprus. *Computers & Education, 62*, 62-71. http://dx.doi.org/10.1016/j.compedu.2012.10.010.

Shute, V. J. (2008). Focus on formative feedback. *Review of Educational Research, 78*(1), 153-189. http://dx.doi.org/10.3102/0034654307313795.

So, W. W. M., Chen, Y., & Wan, Z. H. (2019). Multimedia e-learning and self-regulated science learning: a study of primary school learners' experiences and perceptions. *Journal of Science Education and Technology*, *28*(5), 508-522. https://doi.org/10.1007/s10956-019-09782-y.

Sung, Y. T., Chang, K. E., & Liu, T. C. (2016). The effects of integrating mobile devices with teaching and learning on students' learning performance: A meta- analysis and research synthesis. *Computers & Education, 94*, 252-275. http://dx.doi.org/10.1016/j.compedu.2015.11.008.

Tulchinsky, G. (2003). *Proektivniy philosophskiy slovar: noviye terminy i ponyatiya* [Projective philosophic dictionary: new terms and notions] (G. Tulchinsky, & M. Epshtein, Eds.). Moscow: Aleteya publ. [in Russian].

Turner, V. (1974). Liminal to Liminoid, in Play, Flow, and Ritual: An Essay in Comparative Symbology. *Rice University Studies, 60*(3). Retrieved from: https://hdl.handle.net/1911/63159

Uvarov, A. (2019, September 26-27). *Problemy i perpestivy cifrovoy transformacii в Rossii i Kitaye* [Problems and perspectives of digital transformation in Russia and China]. Second Russian-Chinese conference on transformation and artificial intelligence. Moscow: National research university publ. [in Russian]

Van der Kleij, F. M., Feskens, R. C. W., & Eggen, T. J. H. M. (2015). Effects of feedback in a computer-based learning environment on students' learning outcomes: A meta-analysis. *Review of Educational Research, 85*(4), 475-511. http://dx.doi.org/10.3102/0034654314564881.

Vanbecelaere, S., Van den Berghe, K., Cornillie, F., Sasanguie, D., Reynvoet, B., & Depaepe, F. (2020). The effects of two digital educational games on cognitive and non-cognitive math and reading outcomes. *Computers & Education*, *143*, 103680. https://doi.org/10.1016/j.compedu.2019.103680.

Vygotsky, L. (1956). Problema obucheniya i umstvennogo razvitiya v shkolnom vozraste [Problem of learning and mental growth in school age] In L. Vygotsky, *Izbranniye psyhologicheskiye issledovaniya* [The selected psychological research]. Moscow: Izdatelstvo academii nauk RSFSR publ. [in Russian].

Wang, T. H. (2011a). Developing Web-based assessment strategies for facilitating junior high school students to perform self-regulated learning in an e-learning environment. *Computers in Education, 57*(2), 1801-1812.

Wang, T. H. (2011b). Implementation of Web-based dynamic assessment in facilitating junior high school students to learn mathematics. *Computers & Education, 56*(4), 1062-1071. http://dx.doi.org/10.1016/j.compedu.2010.09.014.

Wang, T. H. (2014). Developing an assessment-centered e-Learning system for improving student learning effectiveness. *Computers & Education, 73*, 189-203. http://dx.doi.org/10.1016/j.compedu.2013.12.002.

Постсоветская идентичность в педагогическом образовании: прошлое, настоящее, будущее

Айдар М. Калимуллин[1], Мария П. Жигалова[2], Алима Х. Ибрашева[3],
Лариса И. Кобылянская[4], Евгений А. Лодатко[5], Елдос Б. Нурланов[6]

[1] *Казанский федеральный университет, Казань, Россия*
E-mail: kalimullin@yandex.ru
ORCID: https://orcid.org/0000-0001-7788-7728

[2] *Брестский государственный технический университет, Брест, Беларусь*
E-mail: zhygalova@mail.ru
ORCID: https://orcid.org/0000-0002-9406-8369

[3] *Высшая школа образования Назарбаев Университета, Нур-Султан, Казахстан*
E-mail: alima.ibrasheva@nu.edu.kz
ORCID: https://orcid.org/0000-0002-1656-0809

[4] *Славянский университет в Республике Молдова, Кишинев, Молдова*
E-mail: larisakobylyanskaya@rambler.ru
ORCID: https://orcid.org/0000-0001-8276-0836

[5] *Черкасский национальный университет имени Богдана Хмельницкого, Черкассы, Украина*
E-mail: lodatko@gmail.com
ORCID: https://orcid.org/0000-0002-4951-3259

[6] *Высшая школа образования Назарбаев Университета, Нур-Султан, Казахстан*
E-mail: yeldos.nurlanov@nu.edu.kz
ORCID: https://orcid.org/0000-0002-7523-4368

Аннотация
Формирование эффективных стратегий, моделей и содержания подготовки учителей настоятельно требует исследования исторических предпосылок современных реформ на глобальном и национальном уровнях. Наиболее перспективны в этом отношении историко-антропологические исследования в образовании, позволяющие, опираясь на междисциплинарные и кросс-культурные подходы широкого круга наук, более глубоко осмыслить социокультурные процессы.

В статье представлен опыт развития педагогического образования в постсоветских странах (Россия, Беларусь, Казахстан, Молдова, Украина) с момента его возникновения в дореволюционной России до настоящего времени.

Цель исследования заключается в анализе процесса подготовки учителей от его зарождения до конца XX века и последующей трансформации национальных систем в течение трех последних десятилетий.

Специфика исследования проявляется в том, что до начала 90-х годов XX века эти страны представляли единое образовательное пространство, которое характеризовалось общими подходами и содержанием педагогического образования, а затем трансформировалось под влиянием политических факторов.

Сопоставление конвергентных тенденций и национальных особенностей систем педагогического образования на постсоветском пространстве позволяет дать всестороннюю оценку

современной образовательной политике в области подготовки учителей как с педагогических позиций, так и в контексте перспектив геополитического, экономического и культурного сотрудничества стран Содружества независимых государств.

Ключевые слова: педагогическое образование, история педагогики, постсоветские страны, идентичность, подготовка учителей.

Post-Soviet Identity and Teacher Education:
Past, Present, Future

Aydar M. Kalimullin[1], Maria P. Zhigalova[2], Alima Kh. Ibrasheva[3],
Larisa I. Kobylyanskaya[4], Yevgeny (Evgen) A. Lodatko[5], Yeldos B. Nurlanov[6]

[1] *Kazan Federal University, Kazan, Russia*
E-mail: kalimullin@yandex.ru
ORCID: https://orcid.org/0000-0001-7788-7728

[2] *Brest State Technical University, Brest, Belarus*
E-mail: zhygalova@mail.ru
ORCID: https://orcid.org/0000-0002-9406-8369

[3] *Graduate School of Education, Nazarbayev University, Nur-Sultan, Kazakhstan*
E-mail: alima.ibrasheva@nu.edu.kz
ORCID: https://orcid.org/0000-0002-1656-0809

[4] *Slavonic University, Kishinev, Moldova*
E-mail: larisakobylyanskaya@rambler.ru
ORCID: https://orcid.org/0000-0001-8276-0836

[5] *Bohdan Khmelnytsky National University at Cherkasy, Cherkasy, Ukraine*
E-mail: lodatko@gmail.com
ORCID: https://orcid.org/0000-0002-4951-3259

[6] *Graduate School of Education, Nazarbayev University, Nur-Sultan, Kazakhstan*
E-mail: yeldos.nurlanov@nu.edu.kz
ORCID: https://orcid.org/0000-0002-7523-4368

Abstract
Research into the historical background of ongoing global and national reforms is essential for the development of effective strategies, models and content of teacher education. Historical and anthropological research in education offers a good perspective on the matter as it draws from interdisciplinary and cross-cultural scientific approaches, thus helping to fully comprehend socio-cultural processes.
The article explores the development of teacher education in the Post-Soviet countries (Russia, Belarus, Kazakhstan, Moldova, Ukraine) from its beginning in pre-revolutionary Russia up to the present day. The purpose of the research is to analyze the evolution of initial teacher education up to the end of the 20th century and its further transformation during the past thirty years. Until the early 1990s, the teacher education system represented a common education area that shared the same content and approaches to pedagogical education. After that, compromised by political factors, the system was transformed.

The juxtaposition of convergent trends and national features of teacher education systems in the Post-Soviet countries provides an opportunity to thoroughly assess current teacher education policies through the lens of pedagogical, geopolitical, economic and cultural partnership of the CIS countries.

Keywords: teacher education, history of pedagogy, Post-Soviet countries, identity, teacher training.

Введение

Вызовы современного образования, актуальные практически для каждой страны мира, требуют формирования эффективной системы подготовки и поддержки учителей в целях обеспечения качественного и справедливого образования детей (Menter, Valeeva & Kalimullin, 2017; Tatto and Menter, 2019; Teacher Education in a Time of Change, 2016). Особенно остро этот вопрос стоит на постсоветском пространстве, страны-участники которого еще 30 лет назад представляли единый политический и экономический механизм, гарантировавший достаточно широкие возможности для получения образования населением страны.

Сегодня, в глобальном понимании, существование СССР (1922-1991 гг.), первоначальным ядром которого стала дореволюционная Российская империя, можно рассматривать как уникальный исторический эксперимент по созданию самого большого в эволюции человечества государства, объединившего огромную территорию и более 100 разных национальностей. Многие из них являлись представителями весьма далеких друг от друга культур, религий, рас, образа жизни, политических и экономических укладов. Соединение их в единую общность строилось на многих основаниях, в числе которых одна из ведущих ролей отводилась унификации образования.

Сегодняшние и формирующиеся приоритеты развития образовательных систем в постсоветских странах весьма далеки от социально-политических реалий предшествующего периода, зачастую критикуемых в рамках национальных подходов. Разрушение советского образовательного ландшафта привело к попыткам образовательных реформ, требующим критического и объективного анализа. Безусловно, речь не идет об идеализации социалистической модели, но мы должны реалистично оценивать её достижения и просчеты, особенно в контексте тех изменений, которые бывшие республики СССР пережили, уже будучи в статусе независимых государств.

Независимо от современной политической принадлежности, страны СНГ и Прибалтики в той или иной степени подвержены постсоветской идентичности в образовании, несмотря на то что некоторые из них активно пытались избавиться от нее за три прошедших десятилетия. Это обязывает политиков и администраторов при реформировании образования принимать во внимание фактор влияния образовательных традиций на региональное сообщество, переосмысливать социокультурную значимость содержания и ценностных ориентиров советского образования, учитывать роль русского языка, выступающего в качестве одного из государственных языков или языка межнационального общения. Постсоветская идентичность отчетливо прослеживается и на уровне педагогического образования в рассматриваемых странах – в области, где сегодня тесно переплелись рудименты социалистических традиций, современные международные тренды и национальная специфика, связанная с локальными попытками трансформации этой сферы.

В этой статье мы обосновываем *два основных научных подхода* к исследованию истории педагогического образования, которые определяют перспективы реформирования подготовки учителей на постсоветском пространстве.

1. Необходимость объективной оценки советской образовательной политики и практики, которые по ряду причин рассматривались в последние годы в наци-

ональных историографиях в основном с негативных позиций. Невозможно отрицать, что мы имели общую историю, которая во многом и определяет сегодняшнее состояние образовательной сферы. Поэтому важно, чтобы педагоги, ученые и политики разных стран осознавали историческую близость в реализации текущей политики и практики педагогического образования.

2. Рассмотрение современного состояния подготовки учителей на постсоветском пространстве как результата сложной трансформации, происходившей с 1990-х годов, объясняющего различия в системах педагогического образования, и отхода от советской модели. Такой подход позволяет сравнить содержание и успешность реформ в этих странах, учесть их позитивный и негативный опыт в целях формирования дальнейшей стратегии развития. Кроме того, принимая во внимание географическую близость, политические интересы, экономические связи, культурное взаимодействие, миграционные потоки и другие факторы, нельзя отрицать влияние реформ в образовании на возможные интеграционные процессы в странах СНГ.

Это обстоятельство определяет **актуальность и научную значимость** изучения данной проблемы в целях создания обобщающих историко-педагогических исследований, позволяющих определить истоки и перспективы развития современных реформ в области педагогического образования на постсоветском пространстве.

Эта научная проблема была рассмотрена и на VI Международном форуме по педагогическому образованию (IFTE 2020) (http://ifte.kpfu.ru/ru/glavnaya/) в рамках работы специальной исследовательской группы «Стратегии трансформации педагогического образования, блок I», где был представлен опыт реформирования педагогического образования в восьми бывших союзных республиках Советского Союза – России, Молдове, Украине, Беларуси, Казахстане, Армении, Таджикистане, Кыргызстане. Следующим этапом стало более глубокое сравнительное исследование в рамках пяти стран (России, Молдавии, Украины, Беларуси, Казахстана), результаты которого представлены в данной статье.

Проблема исследования: оценка результатов формирования национальных систем педагогического образования вследствие трансформации базовой советской модели с 1991 года по настоящее время.

Цель исследования: проанализировать влияние социалистических традиций, глобальных тенденций и реформ на национальном уровне со времени распада СССР на современное состояние подготовки учителей в России, Молдове, Украине, Беларуси, Казахстане.

Методы исследования: историко-логический и критико-теоретический анализ широкого круга источников – правительственных документов, официальных проектов реформирования системы образования в целом и педагогического в частности; документов международных и европейских организаций по педагогическому образованию; материалов педагогической и общественно-политической печати. В исследовании использовались также методы: контент-анализа, сравнительно-сопоставительного анализа, обобщения, научной интерпретации и синтеза конкретных фактических материалов, индуктивный и дедуктивный методы в их единстве.

Анализ литературы

Исторические принципы преемственности, целостности, объективности в отношении исследуемых процессов и явлений нашли отражение в обобщающих трудах Е.Н. Медынского (Medynsky, 1929), Е.Г. Осовского (Osovski, 1959), Г.Б. Корнетова (Kornetov, 1994), А.Н. Джуринского (Dzhurinsky, 1999), А.И. Пискунова (Piskunov, 2001), М.В. Богуславского (Boguslavsky, 2007) и др. Большинство работ,

созданных в советское время, закономерно строится на марксистко-ленинской методологии, проявлением которой является идеализация образовательной политики периода социализма. С ними диссонируют современные оценки подготовки учителей конца XX века, нередко концентрирующиеся, к сожалению, только на проблемах и недостатках советского прошлого.

Несмотря на появление в последние годы работ, посвящённых реформе подготовки учителей в ряде стран на постсоветском пространстве (Р.А. Валеевой, И.Р. Гафурова, А.К. Калимуллина, К. Тастанбековой, Ж.О. Жилбаева, Н.А. Венцевой, И.А. Степанца, В.В. Пашкевича) (Valeeva & Gafurov, 2017; Valeeva & Kalimullin, 2019; Tastanbekova, 2018; Zhilbaev, 2015; Ventseva, 2013; Stepanets, 2014; Pashkevich, 2008), всесторонние сравнительные исследования все еще отсутствуют. Следует выделить лишь коллективное исследование «25 Years of Transformations of Higher Education Systems in Post-Soviet Countries» посвященное общим процессам в высшем образования во всех бывших советских республиках, в том числе косвенно затрагивающее и подготовку учителей (Huisman, Smolentseva, & Froumin, 2018). Несомненный интерес в этом отношении представляет отчет Европейской комиссии по исследованию педагогического образования для начального и среднего звена в шести странах: Армении, Азербайджане, Беларуси, Грузии, Молдове и Украине (Duda & Clifford-Amos, 2011).

Результаты

Страны, входившие в состав Союза Советских Социалистических Республик, имели различную и весьма противоречивую историю интеграции не только в этом государственном объединении, но и в предшествующей структуре дореволюционной России. Вместе с тем, все они имели общую точку отсчета их современной государственности – 26 декабря 1991 года, когда произошел распад СССР. Это позволяет выделить три основных периода в развитии систем подготовки учителей в рассматриваемых странах, имеющие как типичные черты, так и свои особенности.

1. Строительство российской государственности в дореволюционный период, как правило, было связано с военными действиями русской армии, экспансией и продвижением российского влияния на новые территории. Несмотря на богатую и переплетающуюся предшествующую историю, воссоединение России с Украиной произошло в середине XVII века. Основные белорусские земли вошли в состав империи в конце XVIII века. Бессарабия (Молдавия) была присоединена в начале XIX века. Казахские земли окончательно интегрировались в состав России в середине XIX века. К концу XIX века Российская империя являлась крупным многонациональным государством, лишь 70 % населения которого говорило на славянских языках и представляло православное христианство. Примерно 8,9 % исповедовало католичество, а 8,7 % являлись мусульманами (Mironov, 2015).

В связи с этим национальная политика традиционно представляла собой один из приоритетов деятельности российского правительства, стремившегося максимально интегрировать многочисленные народы в единое государственное сообщество. В числе разнообразных методов этой интеграции, наряду с политическими, экономическими, военными, религиозными механизмами, ключевую роль играло стремление к формированию единого образовательного пространства, выступавшего гарантом долгосрочной стратегии по отношению к присоединяемым народам. Постепенный рост просвещения среди населения, его стремление к знаниям привели к зарождению массовой начальной школы, потребовавшей огромного количества учителей, начиная с рубежа XVIII-XIX веков. Это способствовало активизации образовательных реформ сначала в центре страны, а затем и на окраинах.

Вместе с тем, следует признать более высокий уровень начального образования на центральных и западных территориях России, объяснявшийся, главным образом, уровнем их промышленного развития, частично их пограничьем с Европой и религиозными факторами (Saprykin, 2009).

В середине XVIII века, в связи с открытием в 1755 году Московского университета, было положено начало университетской подготовке учителей. В 1779 году при университете стала действовать учительская семинария с трехлетним сроком обучения. Эта дата явилась отправной точкой в 240-летней истории российского профессионального педагогического образования. В 1783 году было создано Петербургское главное народное училище, которое готовило учителей для малых училищ. В 1786 году из него была выделена Учительская семинария, задачей которой стала подготовка учителей для всех остальных главных народных училищ страны (Eskin, 1952). Дальнейшая история России, вплоть до советского периода, изобиловала образовательными реформами, стимулировавшими дальнейшее развитие системы подготовки учителей. Нововведения, выразившиеся в появлении новых типов учебных заведений, дифференциации их принадлежности (государственные, общественные, частные), совершенствовании программ обучения, затронули практически все губернии страны.

Светские учебные заведения постепенно вытесняли подготовку учителей в рамках традиционного духовного (религиозного) образования, частично сохранявшуюся до начала XX века. Исторически её осуществляли учебные заведения Святейшего Правительствующего Синода – Киево-Могилянская и Славяно-греко-латинская академии, Троицкая, Новгородская и Александро-Невская духовные семинарии. Для западных частей Украины, Белоруссии, Молдавии заметной являлась деятельность католических учебных заведений (Krachun, 1969; Stepanets, 2014; Pashkevich, Baranova, & Kolbasko, 2008). Аналогичная ситуация была характерна и для мусульманских народов России, основными образовательными единицами для которых были религиозные мектебы (начальные школы) и медресе (средние и высшие). Как правило, учителями в них были сами священнослужители (муллы), прошедшие курс обучения в медресе внутри страны или в крупнейших религиозных центрах Средней Азии и Ближнего Востока (Khanbikov, 1975).

В течение XIX века в России формируется достаточно разветвленная система подготовки учителей в светских учебных заведениях. Её развитие в основном соответствовало общемировым тенденциям того периода. Это прежде всего повышение значения массового и доступного общего образования, усиление светских тенденций, ориентированность на решение задач экономического и социального развития страны (Eskin, 1952; Koroleva, 1979; Nefedova, 2013; Panachin, 1979; Pletneva, 1997). Вместе с тем, развитие образования в различных частях империи имело свои особенности, связанные с географической отдаленностью, религиозным, национальным и социальным составом населения и, наконец, с продолжительностью и глубиной интеграции в состав единого государства.

Особенно сильный толчок количественному и качественному расширению образовательного пространства придали буржуазные реформы 60-70-х годов XIX века и затем все более ускорявшееся капиталистическое развитие страны в пореформенный период. Например, становление системы подготовки учителей на территории Украины произошло в основном в 60–70-е гг. XIX века. В первую очередь это отвечало потребностям начальных школ, в развитие которых значительный вклад вносился земствами (Lodatko & Tatarinov, 2013). На базе двусоставных училищ в городах Коростышев (1865 г.), Херсон (1871 г.), Акерман (1872 г.), Переяслав (1878) были созданы трехлетние учительские семинарии (Stepanets,

2014, p. 159). На западноукраинских землях учителей для народных школ готовили Львовская, Мукачевская, Ужгородская учительские семинарии.

Школьные реформы 60-х годов XIX века оказали также положительное влияние на подготовку учительских кадров для начальной школы Белоруссии. На территории современной Республики Беларусь в XIX веке действовали первые учительские семинарии: Молодечненская (1864), Свислочская (1878), Полоцкая (1872), Несвижская (1875).

Система высшего педагогического образования, ориентированная на подготовку учителей для гимназий и реальных училищ, в России была представлена университетами. Несмотря на то что педагогические институты при них были закрыты, возможность подготовки к учительской профессии предлагалась на двухгодичных педагогических курсах при университетах. Такие курсы были открыты в Петербургском, Московском, Казанском, Киевском и Харьковском университетах (Eskin, 1952).

Во второй половине XIX века на территории Российской империи стали появляться учительские институты, которые готовили учителей для уездных, городских и высших начальных училищ. К концу XIX в. учительские институты были открыты в 10 городах: Москве, Тамбове, Казани, Томске, Белгороде, Вильно, Глухове, Феодосии, Тифлисе, Петербурге (Koroleva, 1979; Nefedova, 2013).

Отправной точкой зарождения профессионального педагогического образования в Казахстане стал 1883 год, когда в г. Орске Оренбургской области была открыта первая казахская учительская школа (Sembaev, 1958). В июле 1903 г. была открыта Семипалатинская учительская семинария в составе одного подготовительного и одного первого класса, которая считается колыбелью педагогического образования в стране. Несмотря на название, которое больше служило обозначению национального характера контингента, эта семинария обучала в духе «православия и самодержавия» (Zhanaeva, Mukanov, & Bolenbaeva, 2018).

После первой русской революции 1905-1907 годов, когда в стране были значительно расширены демократические права и свободы населения, учительские институты стали открытыми учебными заведениями, принимавшими лиц мужского пола всех званий и состояний. В начале XX века наметилась тенденция к открытию учительских институтов в крупных губернских городах страны. К 1917 году их число увеличилось до 20. Вследствие этого численность обучающихся в них также заметно возросла (Nefedova, 2013). Только в Украине в период с 1908 по 1916 г. функционировали 22 учительские семинарии и 7 учительских институтов (Dneprov et al., 1991, p. 319). Кроме того, Харьковский, Киевский, Новороссийский университеты готовили учителей классических языков, истории, физики, математики (Stepanets, 2014, p. 159).

Таким образом, в начале XX века в России существовала достаточно разветвленная, но не полностью взаимосвязанная система педагогического образования. Действовал широкий спектр учебных заведений различного типа и уровня: учительские семинарии; церковные и второклассные учительские школы; различного рода педагогические курсы и классы в женских заведениях для подготовки учителей начальных школ, учительские институты для подготовки учителей высших начальных училищ, отдельные педагогические институты, высшие педагогические курсы для подготовки учителей средних учебных заведений и др. Однако содержание учебных программ и качество обучения заметно различались в зависимости от их принадлежности к определённым ведомствам: Министерству народного образования (просвещения), земствам, православной церкви.

Географический фактор стал причиной неравномерного распределения педагогических учебных заведений России. Высокая плотность населения в центральной и западной части страны обусловливала достаточное число учебных заведений по подготовке учителей в ряде губерний. Прослеживается зависимость уровня педагогического образования от индустриального развития того или иного региона, так как промышленность требовала большего числа образованных людей в сравнении с аграрным сектором (Knyazev, 1989; Tereshchenko, 2016). По мере продвижения на восток количество учебных заведений сокращалось, особенно в сфере высшего образования. В некоторых губерниях они вообще отсутствовали. Окраины в основном получали учителей из центральных регионов страны, что было типично для Бессарабии, Средней Азии, Дальнего Востока и частично Сибири. Ситуация усугублялась отсутствием долгосрочной государственной стратегии по подготовке учителей, что приводило к непоследовательности и даже противоречивости преобразований, закрытию отдельных типов учебных заведений, недостаточной их поддержке со стороны правительства. В результате дефицит учителей во второй половине XIX – начале XX века неуклонно нарастал.

2. Масштабные попытки решения многих образовательных проблем были сделаны в советское время, что демонстрирует яркий пример влияния политического режима на изменение целей, содержания и форм подготовки учителей. Начальный этап создания СССР, стартовавший практически с первых лет советской власти, во многом строился на национальной традиции государственности, которой было свойственно многовековое собирательство территорий в составе Российской империи. Дезинтеграционные тенденции послереволюционных событий 1917 года, сопровождавшиеся отделением или попытками к этому некоторых внутренних и окраинных регионов, были достаточно быстро преодолены, что привело к созданию 30 декабря 1922 года Союза Советских Социалистических Республик. Первоначально включив только четыре федеративные республики, Союз постепенно разрастался, административно-территориально менялся, приобретал новые территории, особенно в период Второй мировой войны (1939-1945 гг.). В своих максимальных размерах СССР сложился к 1945 году, просуществовав как Союз 15 республик до 26 декабря 1991 года.

Огромная единая страна характеризовалась максимальной централизацией и унификацией всех сфер жизни, включая образование. Несмотря на наличие социокультурной специфики, национальных особенностей и традиций, во всех 15 республиках была сформирована советская система образования, имевшая как очевидные недостатки в виде чрезмерной идеологизированности, так и неоспоримые преимущества – бесплатность, доступность, фундаментальность. Это позволило создать достаточно эффективную образовательную систему на территории всей страны. Одним из её ключевых звеньев стало унифицированное педагогическое образование (Vasilyev, 1966; Lyman, 2019). Причем в ряде республик социалистические принципы были наложены на уже существовавшую систему, а в других они способствовали возникновению массового светского педагогического образования, особенно в регионах, отличавшихся в предвоенный период сравнительно высокой степенью неграмотности населения (Средняя Азия, Кавказ) (Sembaev, 1958). Важной и своевременной была кадровая и материальная помощь западным территориям, пострадавшим в ходе Второй мировой войны, оказанная областями центральной и восточной частей СССР (Ventseva, 2013).

В послевоенные десятилетия удалось сгладить принципиальные различия в уровне образования населения различных республик и сформировать единое образовательное пространство Советского Союза, позволявшее создать максималь-

но близкое содержание обучения, высокий уровень мобильности учащихся и студентов при освоении образовательных программ. Одной из основ этой системы являлась унифицированная и разветвленная система подготовки учителей, имевшая идентичную структуру и строившаяся на общих подходах и единых программах, независимо от местоположения учебного заведения. К концу советской эпохи педагогические учебные заведения были достаточно многочисленны и представлены не только во всех столичных и областных центрах, но и в ряде сравнительно небольших городов, выполняя важные просветительские функции для близлежащих территорий (Shcherbakov, 1968; Slastenin, 1976; Yashchuk, 2013). Вместе с тем, педагогическое образование в это время было сосредоточено на предметной подготовке будущих учителей, а инновационные практики разрабатывались и спускались государственными научно-методическими организациями (Postovoy, 1971).

3. Распад СССР в 1991 году привел к появлению на постсоветском пространстве 15 независимых государств, которые за истекшие три десятилетия продемонстрировали различные подходы и темпы реформирования образовательной сферы. К настоящему времени это определило формирование достаточно разнообразной палитры национальных образовательных систем. Особенно интересны в этом отношении изменения в организационных и содержательных подходах к подготовке учителей, определявших в конечном счёте успешность всех других образовательных реформ (Bolotov, 2001).

С начала 1990-х годов в постсоветских государствах начинается процесс формирования собственных моделей подготовки учителей, разворачивавшийся первоначально в условиях жесткого экономического кризиса и вследствие этого характеризовавшийся достаточно робкими попытками реформ. Во многих странах были приняты собственные законодательные акты в области образования, как важное свидетельство независимости вновь образованных государств. Первым был принят Закон Украины «Об образовании» (1991), предусматривавший «независимость государственной системы образования от политических партий, других общественных и религиозных организаций» (On education, 1991). За ним последовал Закон «Об образовании в Республике Беларусь». В 1992 году принимаются Законы Российской Федерации и Казахстана «Об образовании», в 1995 году Закон Республики Молдова «Об образовании».

В то же время для большинства стран педагогическое образование стало наиболее консервативной сферой образовательной политики, следствием чего явились достаточно поверхностные изменения в содержании подготовки учителей. Эта тенденция оказалась характерной для всех постсоветских стран, стремившихся забыть коммунистическое прошлое. Например, и после обретения Украиной независимости подготовка педагогических кадров продолжала осуществляться в тех рамках, которые достались в наследство от СССР.

Тем не менее, под влиянием общей трансформации образовательных систем реформаторские процессы начинают затрагивать и эту сферу. Первоначально они касались деполитизации подготовки учителей, повлекшей исключение дисциплин, содержание которых было так или иначе связано с пропагандой марксистско-ленинских и коммунистических идей. Из учебных планов педагогических специальностей были изъяты курсы «История КПСС», «Политэкономия капитализма/социализма», «Научный коммунизм», «Атеизм» и другие одиозные дисциплины, которые не имели никакого отношения ни к одной из наук, а лишь обслуживали партийно-коммунистические установки. Было пересмотрено содержание педагогических и психологических дисциплин, содержащих прежде марксистско-ленинские методологические установки.

Последующие два десятилетия стали временем перманентных нововведений в области подготовки учителей в России, Беларуси, Казахстане, Молдове, Украине (Duda & Clifford-Amos, 2011; Bolotov, 2014; Margolis, 2014). Их сопоставление показывает определенную тождественность, отличавшуюся иногда хронологической асинхронностью, определяемой приоритетами государственной образовательной политики. Среди них можно выделить несколько наиболее важных тенденций.

Во-первых, начало разгосударствления образовательных систем в целом и педагогического образования в частности. Возможно, определенное влияние на это оказали международные организации, имевшие различную степень влияния на страны. В результате децентрализации высших учебных заведений наряду с государственными появляются негосударственные (частные) университеты. В частности, с конца 1980-х годов они появляются в Украине (Pokataeva, 2013), а с середины 1990-х годов начинают активно распространяться и в России. В некоторых странах этот процесс продвинулся еще дальше. Например, в Казахстане с 2000 года была инициирована первая волна приватизации государственных вузов. Этот процесс называют «горизонтальной диверсификацией вузовского сектора» (Ahn, Dixon, & Chekmareva, 2018). До нынешнего времени Казахстан – единственная постсоветская страна, где частный сектор преобладает в структуре высшего образования (Ahn et. al., 2018). Особенностью Молдовы стало привлечение международных университетов к процессу подготовки учителей.

Во-вторых, происходит присоединение рассматриваемых стран к Болонскому процессу. Типичным стало поэтапное выполнение условий присоединения к Болонской декларации. Так, принятый в 1991 г. Закон Украины «Об образовании» (On education, 1991) и Постановление Кабинета Министров о ступенчатом образовании (Regulation on educational and qualification levels, 1998) с последующими законодательными дополнениями предусматривали переход сначала на четырех-, а затем на двухступенчатый вариант образования через присуждение выпускникам вузов «первой научной степени – бакалавра соответствующей специальности» и «второй научной степени – магистра соответствующей специальности» (статья 37). Положения этой статьи стали ориентирами для дальнейших нормативных шагов по их имплементации в практику подготовки будущих учителей. Официальное присоединение Украины к Болонскому процессу произошло в 2005 году.

В 2004 году в Казахстане внедрена кредитная технология обучения в вузах в связи с грядущим вступлением страны в Болонский процесс, произошел переход на трехуровневую систему образования. Пятилетние программы специалитета были преобразованы в четырехлетние программы бакалавриата. Это обусловило сокращение объема психолого-педагогических дисциплин и продолжительности педагогической практики, что, несомненно, оказало влияние на качество подготовки педагогических кадров (Tastanbekova, 2018). Однако окончательное решение о присоединении Казахстана к Болонской декларации произошло в 2010 году.

В России переход на многоуровневую систему высшего образования также проявился как попытка окончательного отхода от утвердившегося в стране общего принципа подготовки кадров по узким специальностям в рамках пятилетнего срока обучения. Несмотря на то что официально Россия присоединилась к Болонскому процессу в 2003 году, непосредственно этот процесс стартовал в начале 1990-х годов. После принятия Федерального Закона «Об образовании» в 1992 году в национальной системе образования была регламентирована возможность реализации многоуровневой подготовки (Artamonova, 2011).

Пример наиболее кардинального отхода от советского прошлого показала Молдова, что было связано со стратегической ориентацией государственной политики

в области высшего образования и стремлением быстрой интеграции в европейское пространство. Первоначально в качестве примера была взята образовательная модель Румынии. Присоединение к Болонскому процессу в 2005 году повлекло за собой формирование достаточно самобытной многоуровневой системы, отличающейся от других. Это прослеживается уже при определении уровней высшего образования, которые прописаны так: I цикл – лицензиатура; II цикл – магистратура; III цикл – докторантура. Существуют различия и в объеме зачетных единиц в сравнении с другими странами (Duda & Clifford-Amos, 2011).

Беларусь подала первую заявку на вступление в Болонский процесс в 2012 году, но она была отклонена. Вторая попытка была повторена в 2015 году и страна стала участницей Единого пространства высшего образования (ЕПВО). Однако полная интеграция в европейскую образовательную систему была продлена до 2018 года с условием более глубокого реформирования системы образования (Zhigalova, 2017).

Принципы Болонской декларации оказали серьезное влияние на трансформацию педагогического образования на постсоветском пространстве, что проявилось в отказе от системы специалитета, во введении многоуровневой подготовки, внедрении европейской системы перезачета кредитных единиц и др. Но эти меры не решили задачи полного включения постсоветских стран в единую европейскую зону высшего образования и повлекли за собой ряд проблем, дифференцированных по странам. Речь идет о создании реальной системы студенческой и преподавательской мобильности, абсолютного признания дипломов и равноправного трудоустройства, массовых совместных программ обучения и др. (Duda & Clifford-Amos, 2011).

В-третьих, в ряде стран реформы педагогического образования 1990-х годов ознаменовались интеграцией педагогических институтов с другими вузами и созданием на этой основе региональных многопрофильных университетов. Этот период охарактеризован снижением государственных расходов на образование, что обусловило сокращение преподавателей из-за низкой зарплаты и ухудшение материально-технического оснащения вузов (Valeeva & Gafurov, 2017; Tastanbekova, 2018; Valeeva & Kalimullin, 2019). Слабым звеном образовательных систем стали именно педагогические вузы, в наибольшей степени зависящие от государства, которое не смогло в достаточной мере поддержать их в годы экономических трудностей. В силу своей специфики педагогические учебные заведения оказались почти не способны к коммерциализации своей деятельности. По этой причине типичным решением для некоторых стран (Казахстан, Россия) стало присоединение педагогических институтов и университетов к другим высшим учебным заведениям.

Следствием этого стала сформированная в последние двадцать лет диверсифицированная система подготовки учителей. Их обучение в настоящее время ведется в высших учебных заведениях различного типа, различающихся по специализации (педагогические, классические, технические и другие университеты) и формам собственности (государственные, муниципальные, частные). Например, в Казахстане насчитывается 85 вузов, ведущих подготовку педагогических кадров (Vlast, 2019). Это значит, что эти высшие учебные заведения получили лицензии на осуществление образовательной деятельности по педагогическим специальностям. В их числе 5 профильных педагогических вузов (Казахский национальный педагогический университет имени Абая, Казахский национальный женский педагогический университет, Павлодарский и Южно-Казахстанский педагогические университеты, Аркалыкский педагогический институт), а также государственные и частные многопрофильные университеты.

В России в конце 1990-х годов подготовку учителей вели более 170 высших учебных заведений, в том числе 90 педагогических университетов и институтов. Современная система подготовки насчитывает более 250 высших учебных заведений различного типа и принадлежности, из которых лишь 33 являются государственными педагогическими университетами и институтами (Valeeva & Kalimullin, 2019).

Ориентировочно в Украине действует 20–25 педагогических колледжей, не являющихся структурными подразделениями университетов. Учителей для общеобразовательной школы, специальных учебных заведений, воспитателей дошкольных заведений готовят также около 30 университетов. По отдельным педагогическим специальностям подготовка может вестись и неспециализированными педагогическими учебными заведениями. Это могут быть классические и отраслевые университеты или колледжи, имеющие лицензии на подготовку специалистов по некоторым педагогическим специальностям.

Сегодня в Беларуси функционирует 12 университетов, где можно получить педагогическую специальность, но специализированный педагогический университет в Беларуси один – Белорусский государственный педагогический университет имени Максима Танка (БГПУ). В Молдове функционирует 18 государственных и 11 частных высших учебных заведений, некоторые из которых предлагают программы подготовки учителей[1]. Среди них лишь один является специализированным – Государственный педагогический университет имени Иона Крянгэ.

В целом трансформация педагогического образования на постсоветском пространстве сопровождалась серьезными политическими, экономическими и социальными реформами периода, переходного от социалистического к капиталистическому устройству общества. Зачастую они завершались ошибками и неудачами, которые полностью поменяли статус образования, учителей, учебных заведений. Тем не менее, происходил активный поиск новых моделей подготовки учителей, сопровождавшийся различной экспериментальной работой. Нововведения проявились в законодательной базе, научной основе, организации, экономике, содержании педагогического образования.

Дискуссионные вопросы

Многовековое взаимодействие и взаимовлияние постсоветских стран, ставшее особенно тесным в период СССР, оказало значительное влияние на просвещение, культуру, религию, быт, психологию их народов. Поэтому можно предположить, что постсоветская идентичность будет оказывать влияние на многие процессы, которые происходят и будут разворачиваться на обширной территории от Восточной Европы до Дальнего Востока и от русского Севера до Средней Азии. Проекция понятия «постсоветская идентичность» на педагогическое образование, на наш взгляд, предполагает, с одной стороны, сохранение отдельных принципов и содержания образовательной сферы предшествующего периода на современном этапе, а с другой – схожесть некоторых реформаторских тенденций последних трех десятилетий независимого развития. Перспективы развития образования при необходимости консервации или трансформации дают возможность сформулировать ряд дискуссионных вопросов.

1. Целесообразность сохранения определенной доли доступного (бесплатного) педагогического образования, государственного контроля, регламентации образовательных программ, многоступенчатого характера подготовки учителей (СПО-

---

[1]   Home – Vlaams Ministerie van Onderwijs en Vorming

ВПО). В качестве новаций-антагонизмов последнего времени отметим появление таких совершенно новых явлений, как диверсификация, вариативность, коммерциализация, зависимость от международных факторов.

2. Непредсказуемость замены прежней коммунистической заидеологизированности образования на национальную политизированность, зависящую от приоритетов внутренней и внешней политики. Здесь прежде всего важна объективная оценка присоединения к Болонскому процессу, повлекшего слом многих традиционных устоев. Сейчас уже очевидно, что часть принципов Болонской декларации в проекции на педагогическое образование осталась в большой степени декларативной и нереализованной в должной мере. Барьеры для интеграции постсоветских стран в единое европейское пространство по-прежнему остаются серьезной проблемой для большинства студентов и преподавателей, что было только усилено пандемией COVID-19. Более того, существуют трудности в признании кредитных единиц и дипломов об образовании и внутри Содружества независимых государств, что решается только на уровне локальных межправительственных отношений. Несмотря на близкую структуру учебных планов подготовки учителей, предполагающих до 240 кредитных единиц (ECTS) для бакалавров и до 120 кредитных единиц для магистров, имеются заметные различия в их содержательном наполнении, соотношении базовой и вариативной части, теоретической и практической подготовки и др. Всё более активной становится в ряде стран критика сложившейся многоуровневой системы высшего образования.

3. Перспективы дальнейшей трансформации советской модели на постсоветском пространстве. Система, сложившаяся к концу 1980-х годов, стала результатом более чем 200-летней эволюции светского педагогического образования в России и СССР. Она выполнила свои основные задачи, обеспечив высокий уровень всеобщего среднего образования для всего населения страны и создав единое образовательное поле. Важным достижением стала почти абсолютная обеспеченность школ страны учителями, имевшими сравнительно стабильный экономический и социальный статус в сравнении с другими профессиональными группами в Советском Союзе. Не случайно эта образовательная сфера столь долго была в стороне от значительных изменений, сохраняя некоторые традиции до настоящего времени. Вместе с новациями и реформами педагогическое образование практически во всех странах лишилось серьезной государственной поддержки, что повлекло за собой не столько финансовые и материально-технические, сколько кадровые проблемы и привело к снижению популярности учительской профессии и появлению острой нехватки учителей (за исключением Беларуси). Либерализация жизни в ряде стран стала причиной ослабления государственного контроля и, в конечном счете, снизила уровень регламентации образовательных программ подготовки педагогов. В итоге, например в Украине, высшие учебные заведения получили широкие права в разработке собственных образовательных программ и учебных планов, что резко дифференцировало их содержание (по одной и той же педагогической специальности) в разных университетах. Это фактически исключило возможность конкретизации и унификации компетентностных результатов, как и реализации академической мобильности даже в рамках одной страны.

4. Неопределенность статуса и перспектив русского языка, выступавшего ранее в качестве основного инструмента межнационального общения в СССР. В Беларуси русский язык официально признан государственным: на нём ведётся обучение в школах, колледжах и университетах, оформляются все деловые бумаги. В Казахстане русский язык официально употребляется наравне с казахским, в Молдове и в Украине он является вторым по распространённости, не имея при этом официально-

го статуса (Gabdulkhakov et al., 2018). Мы не идеализируем национальную политику в Советском Союзе, ясно понимая её положительные и отрицательные стороны. Но нельзя отрицать наличие достаточно больших групп населения в постсоветских странах, считающих русский язык родным. Это актуализирует вопрос о подготовке в рассматриваемых странах учителей, готовых преподавать на русском языке. В целом на постсоветском пространстве мы наблюдаем в течение последних трех десятилетий отрицательную динамику распространения русского языка, а это влечет за собой снижение уровня его использования в учебных заведениях страны, что для педагогического образования является одним из индикаторов отдаления независимых постсоветских стран от их общего прошлого. В геополитическом плане это представляет потенциальные риски для существующей модели политического, экономического, культурного и образовательного сотрудничества в рамках Содружества независимых государств.

Заключение

Анализ трансформации педагогического образования на постсоветском пространстве на материалах пяти стран показал, что Россия, Беларусь, Казахстан, Молдова и Украина в течение 1991-2020 годов сохранили в большей степени близкие модели, а в меньшей степени содержание подготовки учителей. Во всех странах сложилась достаточно диверсифицированная современная система педагогического образования, включающая высшие учебные заведения нескольких типов. Общей тенденцией стало сокращение численности специализированных педагогических высших учебных заведений, доминировавших в советский период. В равной степени рассматриваемые страны испытали влияние международных тенденций, связанных с интеграцией в единое европейское пространство в рамках Болонского процесса, значение и результаты которого нуждаются в специальном сопоставительном исследовании.

На уровне государственной политики в рассматриваемых странах сформировалось понимание важности реформирования подготовки учителей в качестве ключевого механизма повышения эффективности образовательной системы в целом. Однако темпы, последовательность и результаты продвижения в этом направлении на постсоветском пространстве существенно разнятся из-за политической нестабильности и экономических проблем. Недостаточная интеграция и сотрудничество в области педагогического образования существенно затрудняют обмен передовым опытом, лучшими образовательными практиками.

Специфика национальных педагогических концепций, образовательных программ, ориентированных на идеологию независимых государств, различия в содержании предметных дисциплин, особенно в гуманитарной сфере, увеличивают разрыв между странами, что определяет необходимость поиска инструментов профессиональной мобильности студентов и выпускников педагогических университетов и институтов в рамках Содружества независимых государств.

Можно предположить, что сфера подготовки учителей станет в ближайшие годы ареной серьезных институциональных преобразований и приоритетом в государственной политике ряда постсоветских стран, так как внутренние политические противоречия, рост оппозиционных настроений среди молодежи, попытки иностранного вмешательства, террористические и информационные угрозы вновь повысят статус образования как важнейшего социального института. Это потребует формирования результативных систем подготовки учителей, традиционно выступавших в этих странах ключевыми проводниками государственной политики в образовании и воспитании новых поколений.

Acknowledgements

Список литературы

Артамонова, Э.И. Особенности организации многоуровневого педагогического образования и его функционирования в рамках Болонского процесса // Педагогическое образование и наука. – 2011. – № 8. – С. 8-15.

Богуславский, М.В. История педагогики и современность. – М.: ИТИП РАО, 1987. – 217 с.

Болотов, В.А. Теория и практика реформирования педагогического образования в России в условиях социальных перемен. Дисс. …д-ра пед.н. – СПб, 2001.

Болотов, В.А. К вопросам о реформе педагогического образования // Психологическая наука и образование. – 2014. – №19 (3). – С. 32-40.

Васильев, К.И. Очерки по истории высшего педагогического образования в РСФСР. (1918-1932 гг.). – Воронеж: Центр.-Чернозем. кн. изд-во, 1966. – 294 с.

Венцева, Н.А. Особенности реформирования высшего педагогического образования Украины в 1930-1940 гг. // Педагогические науки: теория, история, инновационные технологии, 2013. – № 6 (32). – С. 21-30.

Власть (2019, 25 ноября). В Казахстане значительно сократят количество вузов, готовящих педагогов. https://vlast.kz/novosti/36165-v-kazahstane-znacitelno-sokratat-kolicestvo-vuzov-gotovasih-pedagogov.html.

Габдулхаков, В.Ф., Жигалова, М.П., Кобылянская, Л.И., Ходынюк, Ю.Э., Семёнова, М.Г. Формирование культурного кода в сознании учителей Восточной Европы // Непрерывное педагогическое образование. – 2018. – № 2(8). – С. 9-14.

Джуринский, А.Н. История образования и педагогической мысли древнего и средневекового мира. – М.: Издательство «Совершенство», 1999. – 224 с.

Днепров, Е.Д., Егорова, С.Ф., Паначина, Ф.Г., Тибеева, Б.К. (Ред.). Очерки истории школы и педагогической мысли народов СССР. Конец XIX - начало XX века. – М.: Педагогика, 1991. – 445 с.

Жанаева, Ш.А., Муканов, Т.К., Буленбаева, А.К. (Ред.). Учебное заведение Алаш. Том 2. – Издательство «Педагогический колледж имени М.О. Ауэзова», 2018. URL: https://pkollsemey.kz/wp-content/uploads/2019/12/Alashty-bilim-ordasy.-II-tom.pdf

Жигалова, М.П. Подготовка педагогических кадров в Республике Беларусь: социокультурный и методический аспекты // Непрерывное педагогическое образование: проблемы и поиски. – 2017. – № 3 (5). – С. 19-31.

Князев, Е.А. Становление и развитие высшего педагогического образования в России, 1905-1917 гг. Дисс. ... канд. пед.н. – М., 1989. – 219 с.

Корнетов, Г.Б. Цивилизационный подход к изучению всемирного историко-педагогического процесса. – М.: ИТПИМИО, 1994. – 265 с.

Королева, Г.И. Подготовка учителя в Казанском университете в дореволюционный период: 1804-1917 гг. Дисс. ... канд.пед.н. – Казань: КГУ, 1979. – 230 с.

Крачун, Т.А. Очерки по истории развития школы и педагогической мысли в Молдавии. – Кишинев: Лумина, 1969. – 322 с.

Лиман, I. Особливості розвитку вищої педагогічної освіти в УСРР (1920–1935 рр.). // Ігор Лиман. Персональний сайт історика України. URL: https://www.i-lyman.name/BerdjanskPedKursy/History/1.html.

Лодатко, Є.О., Татаринов, С.Й. Діяльність земських установ з розвитку народної освіти Бахмутського повіту наприкінці XIX – початку XX ст. // Наукова скарбниця освіти Донеччини: науково-методичний журнал. 2013. – № 4(17). – С. 6-12.

Марголис, А.А. Проблемы и перспективы развития педагогического образования в Российской Федерации // Психологическая наука и образование. – 2014. – 19(3). – С. 41-57.

Медынский, Е.Н. История педагогики в связи с развитием общества. – М.: Работник просвещения, 1929. – 418 с.

Миронов, Б.Н. Российская империя: от традиции к модерну. В 3-х томах. – СПб.: «Дмитрий Буланин», 2015. – 896+912+992 с.

Нефедова, М.В. Становление и развитие педагогического образования в Казанском Императорском университете: 1804 - 1917 гг. Дисс. …канд.пед.н. – Казань: КФУ, 2013. – 189 с.

Про освіту: Закон Української радянської соціалістичної республіки від 23 травня 1991 року № 1060-XII. // Верховна рада України. Законодавство України. URL: https://zakon.rada.gov.ua/laws/show/1060-12/ed19910604#Text.

Про затвердження Положення про освітньо-кваліфікаційні рівні (ступеневу освіту) // Постанова Кабінету міністрів України від 20 січня 1998 р. N 65. URL: https://zakon.rada.gov.ua/laws/show/65-98-%D0%BF#Text.

Осовский Е.Г. Высшее женское образование в дореволюционной России. Дисс. … канд. пед.н. – М., 1959.

Паначин, Ф.Г. Педагогическое образование в России: Ист.-пед. очерки. – М.: Педагогика, 1979. – 215 с.

Пашкевич, В.В., Баранова, А.С., Колбаско, И.И. История образования и педагогической мысли Беларуси. Под общ. ред. В.В. Пашкевича. – Мозырь: Содействие, 2008. – 56 с.

Пискунов, А.И. История педагогики и образования. – М.: ТЦ «Сфера», 2001. – 512 с.

Плетнева, И.Ф. Становление и развитие высшего педагогического образования в России XIX века. Дисс. … д-ра пед.н. – М., 1997. – 303 с.

Покатаева, Т.А. (2013). Ф.И. Поддубный – первый организатор негосударственного образования в Украине. *Вестник государственного и муниципального управления, 4*, 34-41. URL: https://orel.dev.ranepa.ru/upload/iblock/1e9/2013_4_vestnik_gmu.pdf.

Постовой, Е.С. Народное образование Молдавской ССР на новом этапе. – Кишинев: Лумина, 1971. – 151 с.

Сапрыкин, Д.Л. Образовательный потенциал Российской Империи. – М.: ИИЕТ. РАН, 2009. – 176 с.

Сембаев, А.И. Очерки по истории казахской советской школы. Алма-Ата: Казучпедгиз, 1958. – 327 с.

Сластенин, В.А. Формирование личности учителя советской школы в процессе профессиональной подготовки. – М.: Просвещение, 1976. – 160 с.

Степанець, І.О. Передумови становлення системи вищої педагогічної освіти України // Наукові записки кафедри педагогіки [Харків]. – 2014. – №. 36. – С. 152-160.

Терещенко, С.А. Особливості становлення педагогічної освіти в Україні (1917-1933 рр.) // Вісник Черкаського університету. Серія «Педагогічні науки». – 2016. – Вып. 18. – С. 130-136.

Ханбиков, Я.И. История педагогики татарского народа. – Казань: КГПИ, 1975. – 162 с.

Щербаков, А.И. Формирование личности учителя советской школы в системе высшего педагогического образования. Автореферат дис. … д-ра пед. н. – Ленинград: Ленингр. гос. пед. ин-т им. А. И. Герцена, 1968. – 35 с.

Эскин, М.И. Подготовка учителей средней школы в дореволюционной России (XVIII начало XX века). Дисс. …д-ра пед.н. – М., 1952.

Ящук, І.П. Особливості виховання вчительських кадрів у 1960 -80-х роках // Наука і освіта. – 2013. – №3. – С. 204-208.

Ahn E.S., Dixon J., Chekmareva L. Looking at Kazakhstan's higher education landscape: From transition to transformation between 1920 and 2015 //25 Years of Transformations of Higher Education Systems in post-Soviet Countries. – Palgrave Macmillan, Cham, 2018. – C. 199-228.

Duda A., Clifford-Amos T. Study on teacher education for primary and secondary education in six countries of the Eastern Partnership: Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine //Brussels: European Commission, Directorate-General for Education and Culture. – 2011.

Huisman J., Smolentseva A., Froumin I. (Eds.) 25 Years of Transformations of Higher Education Systems in Post-Soviet Countries: Reform and Continuity. – Palgrave Macmillan, 2018. – C. 482.

Menter I., Valeeva R., Kalimullin A. A tale of two countries–forty years on: politics and teacher education in Russia and England //European Journal of Teacher Education. – 2017. – T. 40. – №. 5. – C. 616-629.

Tastanbekova K. Teacher education programs in Kazakhstan: Trends and issues //Bulletin of Institute of Education, University of Tsukuba. – 2018. – Т. 42. – №. 2. – С. 87-97. https://core.ac.uk/reader/158327214

Tatto, M.T., Menter, I. (Eds.) (2019). Knowledge, Policy and Practice in Teacher Education: a Cross-National Study. London: Bloomsbury Academic.

Teacher Education in a Time of Change (2016). Bristol: Policy Press (The Teacher Education Group).

Valeeva R.A., Gafurov I.R. Initial teacher education in Russia: connecting theory, practice and research //European Journal of Teacher Education. – 2017. – Т. 40. – №. 3. – С. 342-360. doi:10.1080/02619768.2017.1326480

Valeeva R., Kalimullin A. Teacher Education in Russia //Oxford Research Encyclopedia of Education. – 2019. doi: http://dx.doi.org/10.1093/acrefore/9780190264093.013.446

References

Ahn, E. S., Dixon, J., & Chekmareva, L. (2018). Looking at Kazakhstan's higher education landscape: From transition to transformation between 1920 and 2015. In J. Huisman, A. Smolentseva & I. Froumin (Eds.), *25 Years of Transformations of Higher Education Systems in Post-Soviet Countries* (pp. 199-228). Cham: Springer International Publishing.

Artamonova, E. I. (2011). Peculiarities of organization of multilevel teacher education and its functioning in the framework of the Bologna process. *Pedagogicheskoye obrazovanie i nauka – Pedagogical Education and Science, 8*, 8-15.

Boguslavsky, M. V. (1987). *The history of pedagogy and the present*. Moscow: ITIP RAO.

Bolotov, V. A. (2014). The issues of the teacher education reform. *Psikhologicheskaya nauka i obrazovaniye - Psychological Science and Education, 19*(3), 32-40.

Bolotov, V. A. (2001). *Theory and practice of the teacher education reform in Russia in terms of social change* [Doctoral dissertation, St. Petersburg].

Dneprov, E. D., Egorova, S. F., Panachina, F. G., Tibeeva, B. K. (Eds.) (1991). *Essays on the history of the school and pedagogical thought of the peoples of the USSR. The end of XIX – early XX century*. Moscow: Pedagogika.

Duda, A., & Clifford-Amos, T. (2011). *Study on teacher education for primary and secondary education in six countries of the Eastern Partnership: Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine*. Final report. Brussels: European Commission, Directorate-General for Education and Culture.

Dzhurinsky, A. N. (1999). *History of education and pedagogical thought of the ancient and medieval world*. Moscow: Publishing house "Sovershenstvo".

Eskin, M. I. (1952). *Secondary school teachers' training in pre-revolutionary Russia (XVIII beginning of XX century)* [Doctoral dissertation, Moscow].

Gabdulkhakov, V. F., Zhigalova, M. P., Kobylyanskaya, L. I., Khodynyuk, Yu. E., Semyonova, M. G. (2018). Formation of the cultural code in teachers' minds in Eastern Europe. *Nepreryvnoye pedagogicheskoye obrazovaniye: problemy i poiski - Continuous pedagogical education: problems and searches, 2*(8), 9-14.

Huisman, J., Smolentseva, A., Froumin I. (Eds.) (2018). *25 years of transformations of higher education systems in post-soviet countries. Reform and Continuity*. Palgrave Macmillan.

Khanbikov, Ya. I. (1975). *The history of the pedagogy of the Tatar people*. Kazan: KGPI.

Knyazev, E. A. (1989). *Formation and development of the higher teacher education in Russia (1905-1917)* [Doctoral dissertation, Moscow].

Kornetov, G. B. (1994). *A civilizational approach to the study of the world historical and pedagogical process*. Moscow: ITPIMIO.

Koroleva, G. I. (1979). *Preparation of the teacher at the Kazan University in the pre-revolutionary period (1804-1917)* [Doctoral dissertation, Kazan].

Krachun, T. A. (1969). *Essays on the history of school development and pedagogical thought in Moldova*. Chisinau: Lumina.

Lodatko, Ye., Tatarinov, S. (2013). Activities of zemstvo institutions for the development of public education in Bakhmut district in the late XIX – early XX century. *Scientific treasury of education of Donetsk region, 4*, 6-12.

Lyman, I. (2019). Peculiarities of the development of higher pedagogical education in the USSR (1920-1935). Igor Lyman. Personal site of the historian of Ukraine. Retrieved from https://www.i-lyman.name/BerdjanskPedKursy/History/1.html.

Margolis, A. A. (2014). Problems and prospects of the development of pedagogical education in the Russian Federation. *Psikhologicheskaya nauka i obrazovanie – Psychological science and education 19*(3), 41-57.

Medynsky, E. N. (1929). *History of pedagogy in connection with the development of society*. Moscow: Rabotnik prosveshcheniya.

Menter, I., Valeeva, R. A., & Kalimullin, A. M. (2017). A tale of two countries - forty years on: politics and teacher education in Russia and England. *European Journal of Teacher Education, 40*(5), 616-629.

Mironov, B. N. (2015). *Russian Empire: from tradition to modernity. In 3 volumes*. St. Petersburg: "Dmitry Bulanin".

Nefedova, M. V. (2013). *Formation and development of pedagogical education at the Kazan Imperial University: 1804-1917* [Doctoral dissertation. Kazan: KFU].

On education: Law of the Ukrainian Soviet Socialist Republic of May 23, 1991 № 1060-XII. Verkhovna Rada of Ukraine. Legislation of Ukraine. Retrieved from https://zakon.rada.gov.ua/laws/show/1060-12/ed19910604#Text.

On approval of the Regulation on educational and qualification levels (stepwise education): Resolution of the Cabinet of Ministers of January 20, 1998 N 65. Retrieved from https://zakon.rada.gov.ua/laws/show/65-98-%D0%BF#Text.

Osovski, E. G. (1959). Higher education for women in pre-revolutionary Russia [Doctoral dissertation, Moscow].

Panachin, F. G. (1979). *Teacher education in Russia. Historical and pedagogical essays*. Moscow: Pedagogika.

Pashkevich, V. V., Baranova, A. S., Kolbasko, I. I. (2008). *History of education and pedagogical thought in Belarus* (V.V. Pashkevich, Ed.). Mozyr: Sodeystviye.

Piskunov, A. I. (2001). *History of pedagogy and education*. Moscow: TC "Sfera".

Pletneva, I. F. (1997). Formation and development of higher teacher education in Russia in the XIX century [Doctoral dissertation, Moscow: MPGU].

Pokataeva, T. A. (2013). F.I. Poddubnuj – first organizer of private education in Ukraine. *Journal of Public and Municipal Administration, 4*, 34-41. Retrieved from https://orel.dev.ranepa.ru/upload/iblock/1e9/2013_4_vestnik_gmu.pdf.

Postovoy, E. S. (1971). *Public education of the Moldavian SSR at a new stage*. Chisinau: Lumina.

Saprykin, D. L. (2009). *The educational potential of the Russian Empire*. Moscow: IYET. RAS.

Sembaev, A. I. (1958). *Essays on the history of the Kazakh Soviet school*. Alma-Ata: Kazuchpedgiz.

Shcherbakov, A. I. (1968). *Formation of the Soviet school teachers in higher teacher education* [Doctoral dissertation, Leningrad].

Slastenin, V. A. (1976). *Formation of the Soviet school teachers in the process of vocational training*. Moscow: Prosveshcheniye.

Stepanets, I. (2014). Prerequisites for the formation of the system of higher pedagogical education in Ukraine. *Scientific notes of pedagogy department [Kharkiv], 36*, 152-160.

Tastanbekova, K. (2018). Teacher education reforms in Kazakhstan: Trends and issues. *Bulletin of Institute of Education, University of Tsukuba, 48*(2), 87-97. https://core.ac.uk/reader/158327214

Tatto, M. T., & Menter, I. (Eds.) (2019). *Knowledge, policy and practice in teacher education: A cross-national study*. London: Bloomsbury Academic.

Teacher Education in a Time of Change (2016). Bristol: Policy Press (The Teacher Education Group).

Tereshchenko, S. (2016). Features of the formation of pedagogical education in Ukraine (1917–1933*). Bulletin of Cherkasy University. Pedagogical Sciences Series, 18*, 130-136.

Valeeva, R., & Gafurov, I. (2017). Initial teacher education in Russia: connecting practice, theory and research. *European Journal of Teacher Education, 40*(3), 342-360. doi:10.1080/02619768.2017.1326480

Valeeva, R., & Kalimullin, A. (2019). Teacher Education in Russia. In Jo Lampert (Ed.), *Oxford Research Encyclopedia of Education*. New York: Oxford University Press. doi: http://dx.doi.org/10.1093/acrefore/9780190264093.013.446

Vasilyev, K. I. (1966). *Essays on the History of Higher Teacher Education in the RSFSR (1918-1932)*. Voronezh: Centralnoye chernozemnoye knizhnoye izdatelstvo.

Ventseva, N. (2013). Peculiarities of reforming higher pedagogical education in Ukraine in 1930-1940. *Pedagogical sciences: theory, history, innovative technologies, 6*(32), 21-30.

Vlast (2019, November 25). In Kazakhstan, the number of universities preparing teachers will be significantly reduced. https://vlast.kz/novosti/36165-v-kazahstane-znacitelno-sokratat-kolicestvo-vuzov-gotovasih-pedagogov.html

Yashchuk, I. (2013). Peculiarities of teacher education in the 1960s and 1980s. *Science and Education, 3*, 204-208.

Zhanaeva, A. J., Mukanov, T. M., & Bolenbaeva, A. K. (Eds.) (2018). Alash educational institution. Volume 2. Auezov Pedagogical College Publishing, 2018. https://pkollsemey.kz/wp-content/uploads/2019/12/Alashty-bilim-ordasy.-II-tom.pdf

Zhigalova, M. P. (2017). Training of pedagogical personnel in the Republic of Belarus: socio-cultural and methodological aspects. *Nepreryvnoye pedagogicheskoye obrazovaniye: problemy i poiski - Continuous pedagogical education: problems and searches, 3*(5), 19-31.

Технология помощи студентам в самопознании своих личностных качеств

Владимир Г. Маралов[1], Вячеслав А. Ситаров[2], Ирина И. Корягина[3],
Лариса В. Романюк[4]

[1] Череповецкий государственный университет, г. Череповец, Россия
E-mail: vgmaralov@yandex.ru
ORCID: https://orcid.org/0000-0002-9627-2304

[2] Московский гуманитарный университет, г. Москва, Россия
E-mail: sitarov@mail.ru
ORCID: https://orcid.org/0000-0002-8426-7487

[3] Ивановская государственная медицинская академия Министерства здравоохранения Российской Федерации, г. Иваново, Россия
E-mail: koryaginairina@mail.ru
ORCID: https://orcid.org/0000-0002-7821-681

[4] Московский гуманитарный университет, г. Москва, Россия
E-mail: lora1408@mail.ru
ORCID: https://orcid.org/0000-0003-2764-8205

Аннотация
Авторы описывают технологию помощи студентам в самопознании их личностных качеств, которая апробирована в течение нескольких лет. В апробации приняло участие более 800 человек. В качестве теоретического концепта используется принцип выведения внутреннего во внешнее, в основу которого положен прием, который получил название «Работа с субличностями». Предлагаемая технология включает в себя: 1) выделение личностью в себе сильных и слабых сторон, отображение их в виде четырех концентрических окружностей на листе бумаги; 2) изображение качеств субличностей в виде «домиков»; 3) конструирование собственной личности с помощью модифицированного приема «Работа с творческим мусором»; 4) использование элементов психодрамы. На примере одного испытуемого поэтапно показаны возможности практического применения технологии. Обосновывается эффективность метода. В итоге показано, что предлагаемая технология позволяет человеку осознавать смысл и назначение того или иного свойства собственной личности, создает предпосылки для самопринятия, гармонизации представлений о себе, выработки стратегий самосовершенствования. Делается вывод о возможности использования технологии психологами в ходе оказания ими помощи тем людям, которые стремятся познать себя и свои личностные качества. Метод может найти применение в деятельности психологических служб разного профиля.
Ключевые слова: личностные качества, субличности, самопознание, технология самопознания личностных качеств

Technology to Strengthen Students' Self-awareness of Their Personal Qualities

Vladimir G. Maralov[1], Vyacheslav A. Sitarov[2], Irina I. Koryagina[3], Larissa V. Romanyuk[4]

[1] Cherepovets State University, Cherepovets, Russia
E-mail: vgmaralov@yandex.ru
ORCID: https://orcid.org/0000-0002-9627-2304

[2] Moscow University for the Humanities, Moscow, Russia
E-mail: sitarov@mail.ru
ORCID: https://orcid.org/0000-0002-8426-7487

[3] Ivanovo State Medical Academy of the Ministry of Health of the Russian Federation, Ivanovo, Russia
E-mail: koryaginairina@mail.ru
ORCID: https://orcid.org/0000-0002-7821-681

[4] Moscow University for the Humanities, Moscow, Russia
E-mail: lora1408@mail.ru
ORCID: https://orcid.org/0000-0003-2764-8205

Abstract
There is a need to develop specific techniques to help individuals in self-actualization. The article suggests an instrument that has been tested over years and validated with over 800 people. The theoretical basis is the method of making inner knowledge explicit, using a construct called subpersonality. The technology suggested the individual follows four steps: (1) s/he analyzes his/her strengths and weaknesses, drawing them on a plane of four concentric circles on paper; (2) s/he draws the qualities – subpersonalities as 'little houses'; (3) models his/her personality with the help of a modified technique "Work with creative garbage"; and (4) uses elements of psychodrama (role-divided psychotherapy). The paper presents a case study of one participant, so as to show the practical application of this technology, and to validate its effectiveness. In the concluding section, we demonstrate how this technology helps a person to interpret one of his/her personal qualities, and creates conditions for self-acceptance, integrity of self-image, and ways of self-actualization. We confirm that the technology described can help psychologists to assist their patients in self-cognition and in learning about their personal qualities. This can help psychology experts in various fields.
Keywords: personal qualities, subpersonalities, technology of self-actualization, self-awareness.

Введение

Самопознание является важнейшим условием существования, развития и саморазвития человека как личности. Хорошее знание себя, своих сильных и слабых сторон дает человеку возможность адекватно оценивать свои отношения с различными сторонами объективной действительности, с другими людьми, в конечном итоге – выстраивать траекторию собственного развития. Являясь, наряду с самооцениванием, важнейшим структурным компонентом самосознания (Чеснокова, 1977), самопознание позволяет осуществлять акты саморегулирования, решать сложные жизненные задачи, обретать внутреннюю гармонию и психологическое здоровье. Познание себя проходит ряд этапов: от обнаружения и фиксации в себе определенных личностных качеств и особенностей до их оценки, анализа, приня-

тия или непринятия. Ученые выделяют три группы проблем, связанных с самопознанием (Vazire, Carlson, 2010). Во-первых, насколько точно человек способен познавать себя. Во-вторых, насколько представления о себе совпадают с представлениями о личности других людей. В-третьих, насколько люди способны предсказывать то, как их видят другие.

Практика показывает, что многие люди испытывают определенные трудности как в самопознании, так и в постановке целей саморазвития, в выборе средств их достижения. Наш опыт работы со студентами – будущими специалистами сферы психолого-педагогического сопровождения – показал, что многим из них сложно выделить в себе и осознать наиболее важные черты личности, понять смысл и назначение, осуществить акты самопринятия и в последующем – акты саморазвития. Это обусловлено разнообразными причинами мотивационного (отсутствие потребностей) и операционального (несформированность соответствующих умений) плана. В связи с этим актуальной становится проблема разработки таких психологических технологий, которые облегчали бы человеку процессы познания себя. Тем более это важно для будущих педагогов, психологов, то есть для специалистов социономической сферы. Хорошее знание себя и своих возможностей есть непременное условие не только собственного развития, но и понимания других людей, умения оказывать им помощь.

В современной психологии существует значительное число специальных технологий помощи людям в познании себя. В широком плане можно выделить две группы технологий: структурированные и неструктурированные. К первой группе относятся личностные тесты и методики, направленные на выявление различных сторон «Я-концепции» личности. Вторая группа не является жестко структурированной. Психолог, используя такие технологии, ориентирован на конкретного клиента, нуждающегося в помощи в процессе самопознания. В силу этого, опираясь на определенные теоретические представления, он так выстраивает взаимодействие, чтобы в максимальной мере актуализировать ресурсы клиента, необходимые для достижения целей самопознания. Сюда относятся многие психотерапевтические методики (Хорни, 1993; Роджерс, 1994). В рамках группового процесса, например в тренингах личностного роста, также широко используются специфические технологии, ориентированные на самопознание. Например, в групповой работе широко используется модель под названием «Окно Джогари» (Рудестам, 1990; Osmanoğlu, 2019).

В настоящей статье мы представляем вариант технологии, которая разрабатывалась и апробировалась авторами в течение длительного времени в ходе проведения психологических практикумов с руководителями образовательных организаций, педагогами и психологами, а также в учебном процессе со студентами. В общей сложности в апробации этой технологии приняло участие более 800 человек.

Методы исследования

Цель технологии: создание условий для самопознания человеком его внутреннего мира, сильных и слабых сторон его личности с целью самопринятия и гармонизации представлений о себе.

Теоретические положения:

– свой внутренний мир, свои личностные качества легче познать, если представить их в символической форме и вывести вовне, например в пространство листа бумаги или в психодраматического действия. Это позволит «зримо» оперировать символами, за которыми стоят образы субъективной реальности, а именно собственные личностные свойства;

– в качестве психологического конструкта использовался прием, который получил название «Работа с субличностями» (Ассаджоли, 1994);

– в роли индикатора удовлетворенности или неудовлетворенности собой, тем или иным личностным качеством выступают положительные или отрицательные эмоции, которые сигнализируют человеку о том, насколько достигнуты цели деятельности и насколько успешно взаимодействие с другими людьми;

– качества, выделяемые личностью в себе, должны проходить проверку на «истинность», то есть человеку необходимо примерами из жизни доказать, что свойство, обнаруженное им в себе, действительно существует и вызывает положительные или отрицательные переживания.

Форма работы групповая; оптимальный размер группы от 10 до 20 человек.

Время проведения – 6-8 часов.

Порядок и методика проведения. На первом этапе всем членам группы предлагается выполнить ряд заданий с использованием графических символов выведения своего внутреннего мира (своих субличностей) в пространство листа бумаги. На втором этапе руководитель группы проводит работу по осознанию и анализу слабых и сильных сторон личности одного из членов группы – того, кто добровольно вызвался выступить в роли испытуемого. На третьем этапе осуществляется работа в небольших подгруппах по 3-4 человека. Члены подгруппы по очереди помогают разобраться в себе каждому из участников. Наиболее сложные случаи выносятся затем на общее обсуждение в группе. На четвертом этапе работа проводится с помощью приемов психодрамы: один испытуемый должен принять в себе качества, вызывающие у него отрицательные эмоциональные переживания, и гармонизировать представления о себе, а остальные участники группы играют роли субличностей протагониста или выступают в роли активных «зрителей».

В качестве исходного использовался широко известный в практической психологии прием, основанный на выделении человеком своих сильных и слабых сторон личности. При этом подчеркивалось, что никакое из качеств не является положительным или отрицательным. Есть сильные стороны, которые помогают в жизни, и слабые, которые, наоборот, мешают, препятствуют достижению целей. Например, один человек считает свою доброту сильным качеством, а другой – слабым (слишком добрый). После чего предлагается отобрать из этих качеств 5 наиболее сильных свойств, и 5 – наиболее слабых. При этом нужно подчеркнуть самое сильное качество, то есть то, которое вызывает положительную эмоциональную реакцию, и самое слабое качество, вызывающее отрицательные эмоциональные переживания.

После того как испытуемые определились со списком сильных и слабых сторон личности, их просят нарисовать на листе бумаги четыре концентрические окружности (внутренняя окружность принимается за первую, внешняя – за четвертую). Даётся следующая инструкция: «Разместите свои качества (нужно обязательно написать их словами, а не обозначить номер, под которым они у испытуемого идут в списке) в этих окружностях там, где «пожелает рука». Писать можно как угодно: и в окружностях, и пересекая их, и по вертикали, и по горизонтали, и вне окружностей». Строгой интерпретации здесь не существует. Предлагается лишь общая схема анализа, которая позволяет испытуемому сформулировать некоторые «гипотезы» относительно того, что в себе принимается или не принимается, наметить первые контуры для осознания взаимодействия собственных личностных качеств (субличностей). Опыт применения данной технологии на значительном контингенте людей показывает, что принимаемое в себе чаще попадает в центральные два круга. Те качества, которые недооцениваются или не принимаются, попадают в нижнюю

часть (третий и четвертый круги). Свойства, которым придается слишком большое значение или которые переоцениваются, попадают в верхнюю часть (верхняя часть третьего и четвертого круга). В левую часть третьего и четвертого кругов попадают качества, связанные с эмоциональными переживаниями, а в правую – с образом действий. Особое внимание следует обратить на качество личности, которое было оценено как слабое, вызывающее отрицательные эмоциональные переживания. Чаще оно попадает в нижнюю часть, хотя и не всегда. Далее испытуемому предлагается решить самому, какое качество вызывает у него отрицательные переживания, сравнить, совпадает ли это с первоначальной версией «слабого свойства», вызывающего негативную оценку.

После того как осуществлен первый этап анализа, испытуемым предлагается на листе бумаги нарисовать домики, в которых «живут» эти качества личности (субличности). Это могут быть и многоэтажные дома, и шалаши, вигвамы, избы, и т.п. Располагаться они могут и хаотично, и упорядоченно – в виде улиц. Можно нарисовать целый город, поселок. Обязательно нужно нарисовать домик, где живет «Я». В каждый домик вписывается то или иное качество. Не возбраняется, если испытуемый первую половину дома отдает одному свойству личности, вторую – другому. После этого испытуемому дается задание: «Проведите жирную стрелку от качества, которое вы в первую очередь пригласили бы в домик, где живет «Я», и проведите пунктирную стрелку от того качества, которые вы не хотели бы пригласить в домик «Я». Здесь также не может быть однозначной интерпретации. Тем не менее, было замечено, что размещение «Я» в центре свидетельствует о стремлении личности управлять собой, гармонизировать свой внутренний мир. Расположение домика «Я» вверху позволяет предположить, что личность придает слишком большое значение своему «Я», стремится самоутвердиться. Если же домик «Я» располагается внизу, то это может свидетельствовать о слабости «Я», подчиненности его ситуациям, когда та или иная субличность может доминировать. Важно проанализировать, как располагаются домики-качества, совпадают ли «приглашенные» или «неприглашенные» свойства с первоначально выделенными сильными или слабыми эмоционально окрашенными сторонами личности.

Следующая часть технологии была заимствована нами из арт-терапии, где широко используется прием «Работа с творческим мусором». Студенты должны были, используя любой подручный материала (картинки, открытки, скрепки, авторучки и др.), соотнести то или иное качество личности с тем или иным предметом и составить список соответствия. После чего список убирался. Затем предлагалось из «творческого мусора» составить любую композицию. При этом никакой установки на то, должна ли быть эта композиция приятной или неприятной, не давалось. После выполнения задания испытуемым предлагалось на листе бумаги зарисовать эту композицию, обозначив предметы кружками или другими геометрическими фигурами, и вписать в них те качества личности, которые они символизируют. В итоге получался некий целостный проективный «портрет» личности, где отдельные качества распологались определенным образом. В процессе анализа важно проследить, как группируются качества, какие из них занимают центральную позицию, какие отнесены на периферию, нет ли сочетания несовместимых друг с другом качеств и т.п. Символический «портрет» сопоставлялся с результатами, полученными в ходе выполнения предыдущих заданий, и давал возможность более глубоко познать себя, уточнить детали взаимодействия субличностей, их роль и значение в структуре личности.

Завершающая часть технологии базируется на психодраматических методиках. Используемый нами прием получил условное название «На приеме у короля (ко-

ролевы)». Работа носит групповой характер. Один из участников (протагонист) играет самого себя, свое «Я» (король), другие члены изображают его субличности, то есть сильные и слабые стороны личности (приближенные). Кто какую субличность будет играть, указывает протагонист. Его задача состоит в том, чтобы «рассадить» свои субличности по местам, как бы это было в тронном зале. Чаще всего протагонист свои сильные стороны рассаживает ближе к себе, а слабые – подальше от себя.

Суть игры заключается в том, что студенты, играющие роли того или иного качества личности протагониста, должны были доказать свое право занять более привилегированное место, то есть у трона короля (королевы), а те, кто должен был уступить эти места, – право остаться или даже занять более достойное место. Протагонист внимательно слушает приводимые доводы, в диалог не вступает, но после этого может принять любое решение: оставить всё как есть или произвести перестановку. Особая роль принадлежит «Совести», которую также играет один из членов группы. «Совесть» располагается позади «трона» и подсказывает протагонисту, как сделать пересадку.

Необходимо констатировать, что само по себе пересаживание субличностей чаще всего ничего не дает. Как только кого-то пересадили ближе к «трону», другие начинают возражать. Цель состоит в том, чтобы протагонист догадался рассадить всех вокруг себя и пространственно соподчинил субличности. Например, лень можно подчинить (посадить ниже) активности, застенчивость – общительности и т.д. Если испытуемый не догадывается, как нужно поступать и что делать, ему подсказывает «Совесть», которой, в свою очередь, пути решения «нашептывает» руководитель группы.   В итоге осуществляется перестройка структуры личности и новая личность принимается протагонистом.

В конце занятия «Я», находясь в центре круга, признается в любви ко всем без исключения своим подданным-субличностям, отмечая только позитивные их возможности, а все субличности признаются в любви своему «Я», что сопровождается глубоким эмоциональным переживанием целостности и гармоничности собственной личности, характеризующим акты самопринятия и перестройки отношения к себе в положительную сторону.

Результаты

Рассмотрим возможности использования указанной технологии на примере одной испытуемой, студентки Насти М. (возраст 20 лет). Настя в качестве сильных сторон своей личности выделяет заботливость, ответственность, пунктуальность, способность к эмпатии, хозяйственность. Наиболее сильным своим качеством считает ответственность. К слабым сторонам личности она отнесла тревожность, вспыльчивость, лень, злость, трусость. Она отметила, что наибольшее беспокойство у нее вызывает собственная лень. В пространстве листа на концентрических окружностях Настя следующим образом расположила свои качества (см. рис. 1).

Как видим (рис. 1), два центральных круга занимают такие качества, как ответственность, заботливость и лень. В третий круг попадают хозяйственность, тревожность, эмпатия и трусость. И в последний – злость, пунктуальность и вспыльчивость. Согласно приведенной ранее схеме анализа, в два центральных круга чаще всего попадают наиболее значимые и принимаемые в себе свойства личности. В нашем случае сюда попали ответственность и заботливость. Возникает вопрос относительно лени. Может ли Настя интуитивно принимать свою лень, указывая одновременно, что она доставляет ей беспокойство? Из беседы с испытуемой выясняется, что под ленью она понимает в большей мере прокрастинацию, то есть откладывание дел на потом, что вступает в противоречие с ее ответственностью. В нижнем

четвертом круге она размещает пунктуальность и вспыльчивость. Это позволяет выдвинуть гипотезу, что непринимаемым в себе является не столько лень, сколько вспыльчивость. Почему сюда попадает еще и пунктуальность, остается пока непонятным. Качеств, которым бы испытуемая придавала преувеличенное значение, у Насти не обнаружено. Из последующей беседы выясняется, что, действительно, ее беспокоит порой проявляющаяся вспыльчивость, и она самостоятельно делает предположение, что вспыльчивость у нее выполняет защитную реакцию, позволяя ей на время преодолевать тревожность. В конечном итоге Настя приходит к выводу, что в большей степени ее беспокоит тревожность. Именно с ней определенным образом связана и лень, и вспыльчивость, и пунктуальность.

Рис. 1. Расположение качеств личности Насти М.
на четырех концентрических окружностях

Рассмотрим, как она расположила свои качества в рисунке домиков (рис. 2).
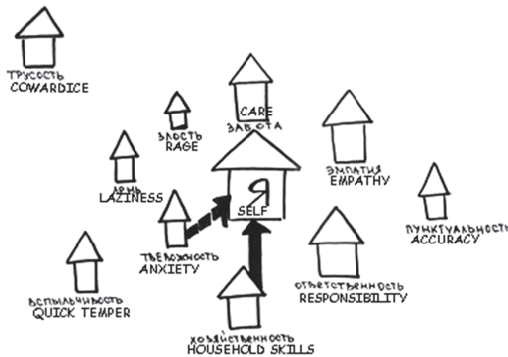
Рис. 2. Расположение качеств личности Насти М. в виде домиков

Из рисунка 2 видно, как Настя М. структурно представила свою личность. Домик, обозначающий «Я», находится в центре листа, что может свидетельствовать о стремлении гармонизировать собственную личность, управлять собою. Основу «Я» составляет хозяйственность, именно данное качество Настя в первую очередь пригласила бы в гости в домик, обозначающийся как «Я». Вверху над домиком «Я» сразу же расположился домик, в котором живет заботливость. Такое структуриро-

вание центральной части личности становится понятным после разговора с Настей. Дело в том, что она уже несколько месяцев живет в гражданском браке с молодым человеком. Отсюда ее стремление проявить себя в качестве хозяйки, у которой дома все в порядке, и свою эмпатию (любовь), заботливость о молодом человеке. Обращает на себя внимание и тот факт, что Настя с правой стороны расположила все свои положительные качества: ответственность, пунктуальность и эмпатию. А левую часть составили тревожность, вспыльчивость, лень, злость и трусость. Причем свою тревожность, она ни при каких обстоятельствах не пригласила бы к себе в гости. Обращает на себя внимание и тот факт, что здесь уже пунктуальность располагается ближе к ответственности. Проведенный анализ рисунка совместно с Настей позволил отвергнуть гипотезу о том, что свойством личности, наиболее отрицательно переживаемым, является лень, и утвердить гипотезу о тревожности как отрицательно переживаемом качестве личности. Из беседы с Настей выяснилось, что она не испытывает тревоги в общении с близкими людьми. Небольшая тревога проявляется при первых контактах с людьми малознакомыми. Чаще всего она испытывает тревогу, когда ей нужно что-то сделать, в частности, в учебе. Это дало возможность выдвинуть следующую гипотезу о том, что ее тревожность каким-то образом связана с ее ответственностью. В результате было установлено, что Настя свою ответственность связывает со сроками, отсюда и проявление такого качества, как пунктуальность. Она заранее приходит на занятия, старается все сделать качественно и в срок. Ей свойственно одной из первых сдавать экзамен, так как ожидание для нее невыносимо. Становится понятен и тот факт, что она укоряет себя за лень, когда откладывает важные дела на потом. В то же время выясняется, что она никогда не откладывает их до последнего предела.

Однако из первого и второго рисунков и бесед с Настей пока остается невыясненным вопрос о природе злости, трусости и вспыльчивости. Прояснить это позволил третий рисунок Насти (рис. 3).
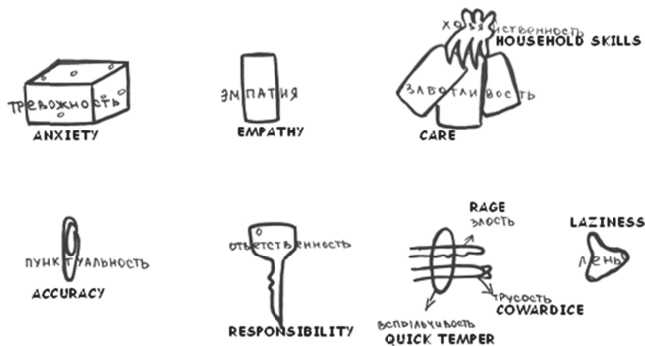
Рис. 3. Структура качеств Насти М., выявленная
с помощью приема «Работа с творческим мусором»

На рисунке 3 мы можем наблюдать определенные закономерности в расположении предметов, символизирующих качества личности Насти М. В центре находится ответственность, верхнюю часть занимает эмпатия. Заботливость и хозяйственность составили особый комплекс личности и расположились в правой верхней части. Пунктуальность расположилась рядом с ответственностью, а тревожность вверху в левой части напротив эмпатии. Особый комплекс составили злость, трусость и вспыльчивость, которые помещены в правой нижней части рисунка напротив ответственности. Чуть дальше, отдельно заняла свою позицию лень.

В последующей работе с Настей нами было задано ей всего несколько вопросов, которые дали ей возможность выстроить логическую цепочку существования и назначения в ней всех ее наиболее значимых качеств личности. Первый вопрос звучал следующим образом: «Не кажется ли тебе, что твоя тревожность напрямую связана с твоей ответственностью и пунктуальностью?» Второй вопрос: «Будешь ли ты такая же ответственная, если лишишься тревожности?» Третий: «В каких ситуациях проявляется твоя злость и вспыльчивость?»

Вот ее рассуждения. «Да, я поняла, что для меня очень важно в жизни все выполнять качественно и в срок. Тревога возникает у меня тогда, когда я откладываю важные дела (ленюсь) или опасаюсь, что меня неадекватно оценят. Это дает мне силы собраться и наилучшим образом выполнить дела, особенно касающиеся моей учебы. Если у меня не будет тревожности, то я потеряю свою ответственность. Другим проявлением моей тревожности является трусость. Я боюсь, что не справлюсь на высоком уровне с поставленной задачей и потеряю расположение других людей, к которым я сама способна относиться с симпатией и заботой. Моя вспыльчивость и злость проявляются тогда, когда во время выполнения важных дел меня что-то или кто-то отвлекает, не дает завершить начатое. Я срываюсь, за что потом себя корю. Вспыльчивость проявляется и в ситуациях, когда я не хочу показать другим, что я испугалась. Теперь я понимаю, что вспыльчивость и злость – это своеобразные проявления моей тревожности и трусости, они выполняют защитные функции. Лень, которая первоначально вызывала у меня отрицательную реакцию, позволяет мне вовремя собраться и выполнить все намеченное в обозначенные сроки. Она также связана с моей тревожностью, а значит, и с моей повышенной ответственностью. Я поняла, насколько важны для меня все мои свойства личности, что все они взаимосвязаны и не могут существовать вне зависимости друг от друга. Все это Я».

Далее ей был задан итоговый вопрос: к каким выводам она пришла? Вот ее ответ. «Я поняла, что тревожность является неотъемлемой частью моей ответственности, она формирует мою готовность к принятию любых исходов. Я начинаю меньше тревожиться, когда не откладываю дела в «долгий ящик». Свою вспыльчивость я могу ограничить кругом близких людей, которые меня любят и понимают, и не проявлять ее по отношению к людям, не входящих в этот круг. Эти качества и сами уже будут в меньшей степени проявляться, так как я знаю, что это всего-навсего защитный механизм, компенсирующий мою ранимость и тревожность».

И на последнем этапе работы Насте было предложено сыграть в психодраматическом действии свое собственное «Я» (королеву), а сокурсникам, изображающим ее субличности, – приближенных королевы. Как и следовало ожидать, ближе к себе она посадила студентов, играющих сильные стороны ее личности, а подальше от себя – слабые. Последние места заняли тревожность и лень. Далее в течение сорока минут субличности вели спор друг с другом за места, располагающиеся ближе к «трону» королевы. Настя внимательно их слушала, осуществляла перестановки, но, когда ее спрашивали, удовлетворена ли она такой структурой своей личности, она отвечала отрицательно. После того как было испробовано несколько вариантов, студент, играющий «Совесть» Насти, подсказал ей мысль о том, что качества личности можно соподчинить, тогда все они окажутся, с одной стороны, ближе к «Я», а с другой – сильные смогут управлять слабыми. После этого Настя в течение 10 минут легко справилась с задачей.

В итоге получилась следующая картина. В своей структуре личности она выделила два блока. В первом блоке ведущую роль стала играть эмпатия, которая соподчинила себе, с одной стороны, заботливость и хозяйственность, а с другой – злость и вспыльчивость. Как она пояснила, проявлять свою вспыльчивость она будет

только на фоне эмпатии и любви к другим людям, которые об этом знают, поэтому не будут обижаться на нее. Во втором блоке центральные места заняли ответственность и пунктуальность, которые соподчинили тревогу, лень и трусость. Настя так пояснила этот факт: «Моя ответственность связана не только с пунктуальностью, но и с упорством, которое не дает тревоге, лени и трусости одержать надо мной победу». После всего этого Настя призналась в любви всем своим сильным и слабым качествам. А студенты, играющие субличности Насти, в свою очередь признались в любви к своей королеве, то есть к её «Я».

В заключение приведем еще несколько высказываний студентов, которые прошли через описанную технологию.

«Я поняла, что все качества личности важны для меня. Я считала, что слабым моим качеством является обидчивость. Сейчас я осознаю, что обидчивость является проявлением моей чувствительности, позволяет мне привлекать к себе внимание, выполняет защитную функцию, дает возможность глубже понимать других людей и отстаивать свою позицию» (Екатерина Л., 20 лет).

«Лень позволяет мне экономить силы, сохранять психологическое здоровье, не нервничать по поводу неоконченных дел, спокойно относиться к жизни» (Никита Н., 21 год).

«Моим слабым качеством является незлопамятность. Это свойство дает мне возможность поддерживать хорошие отношения с другими людьми, проявляя подобным образом верность» (Алина 21 год).

«Моим качеством, вызывающим отрицательные переживания, является повышенная эмоциональность. Сейчас я поняла, что ее лучше заменить на чувствительность, которая позволит мне быть открытой по отношению к людям» (Карина Ж., 20 лет).

Обсуждение результатов

Приступая к обсуждению полученных результатов, можно констатировать, что в рамках различных направлений психологии проблеме внутреннего мира человека, исследованиям процессов самопознания уделяется серьезное внимание. В отечественной психологии внутренний мир человека рассматривается как субъективная реальность (Слободчиков, 1986), как многомерное пространственно-временное образование (Березина, 2001), как потребностно-эмоционально-информационная субстанция (Шадриков, 2004), которая обладает определенными качественными характеристиками (Климонтова, 2013) и существует по своим особым законам (Шадриков, 2004). В зарубежной психологии основной акцент делается на «Я-концепции» человека как системе представлений о себе и установок на себя (Бернс, 1986). Она складывается в результате актуализации механизмов самопознания человеком своих личностных качеств и характеристик, в результате обобщения опыта взаимодействия с социумом. Исследования показали, что развитие Я-концепции, процесс самопознания тесно связаны с жизненными устремлениями и целями личности. В частности, выявлено, что студенты с разрозненной структурой Я-концепции испытывают трудности в самопознании по сравнению со студентами с интегрированной Я-концепцией (Showers, 2015). Это утверждение справедливо и относительно жизненных целей и целей обучения. Студенты колледжа, имеющие достаточно четкое и ясное представление о себе, как правило, имеют более сформированное представление и о своих жизненных целях, и о своих намерениях (Shin et al., 2016). Доказано также, что локус контроля и ориентация на цель обучения оказывают положительное прямое и интерактивное влияние на академическую Я-концепцию (Albert, Dahling, 2016).

В психологии выявлены факторы, способствующие активизации самопознания. Установлено, что к важнейшим из них относится осознанность своего жизненного опыта, которая дает возможность преодолеть информационные и мотивационные барьеры самопознания (Carlson, 2013), а также ориентация на обратную связь, получаемую индивидом от других людей (Bollich et al., 2011). Особо подчеркивается роль рефлексивной практики в активизации самопознания. Проведенное на контингенте студентов – будущих учителей (Raza et al., 2017) – исследование показало, что рефлексивное обсуждение собственного опыта с использованием техники портфолио существенно расширяет представление студентов о себе и о своих профессионально-значимых качествах личности. К аналогичному выводу приходят и другие авторы, которые указывают на неоспоримое преимущество рефлексивного обучения как средства развития способности к профессиональному самопознанию (Pallisera, 2013).

Разработанная и апробированная нами технология в полной мере подтвердила возможность использования рефлексивного обсуждения личностных качеств и опыта студентов в процессе организации их самопознания. Ее преимущество и отличие от других технологий состоит в том, что эти качества представляются в образно-символической форме, что осуществляется анализ их взаимосвязей, подкрепляемый конкретными примерами из жизни. Используемые нами приемы взаимно дополняют друг друга, что позволяет испытуемым повысить уровень объективности представлений о себе. Студенты подводятся к осознанию смысла существования тех или иных личностных свойств, необходимости гармонизации представлений о себе. В результате создаются предпосылки для актов самопринятия и определения направлений дальнейшего развития себя.

Заключение

Итак, в настоящей статье мы привели вариант технологии помощи студентам в познании их внутреннего мира и личностных качеств. Это вариант работы, направленной на актуализацию самопознания и гармонизацию личности, принятие тех ее элементов, которые вызывают отрицательные эмоциональные переживания. Она основана на принципе выведения свойств внутреннего мира вовне, в данном случае – личностных качеств в пространство листа бумаги или в пространство психодраматического действия.

Практика применения технологии показала, что она способна решать ряд важных задач. Во-первых, она дает возможность выделять в собственной личности слабые и сильные стороны. Во-вторых, позволяет осознавать смысл и назначение того или иного свойства для собственной личности, анализировать взаимодействие субличностей, оценивать вклад каждой из них в проявление индивидуальности. В-третьих, создаются предпосылки для принятия тех сторон личности, которые ранее не принимались. В-четвертых, описанная технология дает возможность наметить пути и стратегии самосовершенствования. В результате личность по-другому начинает относиться к себе, понимать роль и назначение каждого личностного свойства в структуре индивидуальности.

На основании всего сказанного можно сделать вывод, что описанная технология может быть использована в качестве инструментария психолога в работе по оказанию помощи людям (в данном случае студентам) в процессе самопознания их личностных качеств. Она может найти применение в деятельности психологических служб, в том числе в образовательных организациях.

Список литературы

Ассаджоли, Р. Психосинтез: теория и практика. – М.: REFL-book, 1994. – 314 с.

Березина, Т. Н. Многомерная психика: Внутренний мир личности. – М.: ПЕРСЭ, 2001. – 510 с.

Бернс, Р. Развитие Я-концепции и воспитание. – М.: Прогресс, 1986. – 422 с.

Климонтова, Т. А. Метасистемный подход как основа изучения внутреннего мира человека // Теория и практика общественного развития. – 2013. – № 10. – С. 158-159.

Роджерс, К. Взгляд на психотерапию. Становление человека. – М.: Прогресс, 1994. – 478 с.

Рудестам, К. Групповая психотерапия. Психокоррекционные группы: теория и практика. – М.: Прогресс, 1990. – 368 с.

Слободчиков, В. И. Психологические проблемы становления внутреннего мира человека // Вопросы психологии. – 1986. – № 6. – С. 14-22.

Хорни, К. Невротическая личность нашего времени. Самоанализ. – М.: Прогресс, 1993. – 220 с.

Чеснокова, И. И. Проблема самосознания в психологии. – М.: Наука, 1977. – 144 с.

Шадриков, В. Д. О предмете психологии (мир внутренней жизни человека) // Психология. Журнал Высшей школы экономики. – 2004. – № 1. – С. 5-19.

Albert, M. A., Dahling, J. J. Learning goal orientation and locus of control interact to predict academic self-concept and academic performance in college students // Personality and Individual Differences. – 2016. – Т. 97. – С. 245-248.

Bollich, K. L., Johannet, P. M., Vazire, S. In search of our true selves: Feedback as a path to self-knowledge // Frontiers in psychology. – 2011. – Т. 2. – С. 312. https://doi.org/10.3389/fpsyg.2011.00312

Carlson, E. N. Overcoming the barriers to self-knowledge: Mindfulness as a path to seeing yourself as you really are // Perspectives on Psychological Science. – 2013. – Т. 8. – №. 2. – С. 173-186. https://doi.org/10.1177/1745691612462584

Osmanoğlu, D. E. Expansion of the Open Area (Johari Window) and Group Work Directed to Enhancing the Level of Subjective Well-being // Journal of Education and Training Studies. – 2019. – Т. 7. – №. 5. – С. 76-85.

Pallisera, M. et al. Personal and professional development (or use of self) in social educator training. An experience based on reflective learning // Social Work Education. – 2013. – Т. 32. – №. 5. – С. 576-589. https://doi.org/10.1080/02615479.2012.701278

Raza, A., Batool, S., Ajmal, F., Hussain, Dr. I. Reflective practices: a journey of self-discovery // International Journal of Innovation in Teaching and Learning. – 2017. – Т. 3. – № 2. – С. 1-17.

Shin, J. Y., Steger, M. F., Henry, K. L. Self-concept clarity's role in meaning in life among American college students: A latent growth approach // Self and Identity. – 2016. – Т. 15. – №. 2. – С. 206-223. DOI: 10.1080/15298868.2015.1111844

Showers, C. J., Ditzfeld, C. P., Zeigler-Hill, V. Self-concept structure and the quality of self-knowledge // Journal of personality. – 2015. – Т. 83. – №. 5. – С. 535-551. DOI: 10.1111/jopy.12130.

Vazire, S., Carlson, E. N. Self-knowledge of personality: Do people know themselves? // Social and personality psychology compass. – 2010. – Т. 4. – №. 8. – С. 605-620. doi:10.1111/j.1751-9004.2010.00280.x

References

Albert, M. A., & Dahling, J. J. (2016). Learning goal orientation and locus of control interact to predict academic self-concept and academic performance in college students. *Personality and Individual Differences*, *97*, 245-248.

Assagioli, R. (1994). *Psychosynthesis: Theory and practice*. Moscow: REFL-book.

Berezina, T. N. (2001). *Multidimensional psyche: The inner world of a personality*. Moscow: PER SE.

Bollich, K. L., Johannet, P. M., & Vazire, S. (2011). In search of our true selves: Feedback as a path to self-knowledge. *Frontiers in psychology*, *2*, 312. https://doi.org/10.3389/fpsyg.2011.00312

Burns, R. (1986). *Self-concept development and education*. Moscow: Progress.

Carlson, E. N. (2013). Overcoming the barriers to self-knowledge: Mindfulness as a path to seeing yourself as you really are. *Perspectives on Psychological Science*, *8*(2), 173-186. https://doi.org/10.1177/1745691612462584

Chesnokova, I. I. (1977). *Problem of self-actualization in psychology*. Moscow: Nauka.

Horney, K. (1993). *The neurotic personality of our time. Self-analysis*. Moscow: Progress.

Klimontova, T. A. (2013). Metasystem approach as a basis for study of human inner world. *Teoriya i praktika obshchestvennogo razvitiya - Theory and Practice of Social Development, 10*, 158-159.

Osmanoğlu, D. E. (2019). Expansion of the open area (Johari Window) and group work directed to enhancing the level of subjective well-being. *Journal of Education and Training Studies, 7*(5), 76-85. DOI: 10.11114/jets.v7i5.4128

Pallisera, M., Fullana, J., Palaudarias, J. M., & Badosa, M. (2013). Personal and professional development (or use of self) in social educator training. An experience based on reflective learning. *Social Work Education*, *32*(5), 576-589. DOI: 10.1080/02615479.2012.701278

Raza, A., Batool, S., Ajmal, F., Hussain, Dr. I. (2017). Reflective practices: a journey of self-discovery. *International Journal of Innovation in Teaching and Learning*, 3(2), 1-17.

Rogers, K. (1994). *A therapists view of psychotherapy: On becoming a person*. Moscow: Progress.

Rudestam, K. (1990). *Group psychotherapy*. Moscow: Progress.

Shadrikov, V. D. (2004). On the subject of psychology (man's inner life). *Psychologiya. Zhurnal vysshey shkoly ekonomiki – Psychology. Journal of Higher School of Economics, 1*, 5-19.

Shin, J. Y., Steger, M. F., & Henry, K. L. (2016). Self-concept clarity's role in meaning in life among American college students: A latent growth approach. *Self and Identity*, *15*(2), 206-223. DOI: 10.1080/15298868.2015.1111844

Showers, C. J, Ditzfeld, C. P, Zeigler-Hill, V. (2015) Self-Concept structure and the quality of self-knowledge. *Journal of Personality, 83*(5), 535-551. DOI: 10.1111/jopy.12130.

Slobodchikov, V. I. (1986). Psychological problems in formation of the inner world of man. *Voprosy psikhologii, 6*, 14-22.

Vazire, S., & Carlson, E. N. (2010). Self-knowledge of personality: Do people know themselves?. *Social and personality psychology compass*, *4*(8), 605-620. DOI: 10.1111/j.1751-9004.2010.00280.x

Developing Individual Educational Paths for Future Teachers Based on the Requirements of the Updated Federal State Education Standards of Higher Education (FSES of HE)

Elena A. Khodyreva[1]

[1] Innopolis University, Innopolis, Russia;
Vyatka State University, Kirov, Russia
Email: khodyreva.e@inbox.ru
ORCID: https://orcid.org/0000-0001-7079-6372

Abstract
There is a need for individualization of professional education, which can ensure that the quality of training of graduates of pedagogical specialties meets the changing requirements of this activity. This requires the development of individual educational paths of future teachers, providing each student with his/her own ways to achieve common and individual educational goals, to develop those universal and professional competencies, demanded by modern society and the labor market. The research goal is to substantiate the concept and technology for developing individual educational paths of future teachers in higher education institutions based on the requirements of the updated Federal State Educational Standards. The study used pedagogical modelling, a study of regulatory legal acts in the field of education, benchmarking and expert methods.

This article substantiates the methodological foundations of the research, presenting competency-based and systemic approaches for the development of individual educational paths. It proposes a technology for developing these paths of future teachers based on the requirements of the updated Federal State Educational Standards. The content and design procedures are described, together with the criteria for the effectiveness of developing the paths based on the study of the best practices in those higher education institutions participating in the project of modernization of pedagogical education.

It provides recommendations for developing individual educational paths based on three aspects, substantial, activity and procedural. The recommendations will be useful for modernizing the content and procedures for the main professional educational programs of bachelor's and master's degrees, to ensure that these educational paths are correlated with the requirements of the regional labor market, and the updated Federal State Educational Standards in the training programs "Pedagogical Education", as well as students' individual needs and opportunities.

Keywords: individual educational paths, future teachers, Federal State Educational Standards, professional teacher standards

Проектирование индивидуальных образовательных траекторий будущих педагогов на основе требований актуализированных федеральных государственных образовательных стандартов высшего образования (ФГОС ВО)

Елена А. Ходырева[1]

[1] Университет Иннополис, Иннополис, Россия;
Вятский государственный университет, Киров, Россия
Email: khodyreva.e@inbox.ru
ORCID: https://orcid.org/0000-0001-7079-6372

Аннотация

Актуальность исследуемой проблемы обусловлена необходимостью индивидуализации профессионального образования, которая может обеспечить соответствие качества профессиональной подготовки выпускников педагогических специальностей изменяющимся требованиям профессиональной деятельности. Проектирование индивидуальных образовательных траекторий будущих педагогов, предусматривающее, что каждый студент имеет собственные пути достижения общих и индивидуальных целей образования, развивает универсальные и профессиональные компетенции, которые востребованы современным обществом и рынком труда, является перспективным вектором развития профессионального образования будущего учителя. Повышение значимости вариативности профессионального образования будущих педагогов и необходимость предоставления обучающимся возможности реального выбора траектории профессионального развития требуют исследования потенциала актуализированных федеральных государственных образовательных стандартов высшего образования, относящихся к укрупненной группе специальностей (направлений подготовки) «Образование и педагогические науки» (далее ФГОС ВО). Оценка данного потенциала позволит комплексно реализовать новые подходы к структурированию содержания образования будущих учителей, его организации и технологическому обеспечению. **Цель** исследования заключается в обосновании концепции и технологии проектирования индивидуальных образовательных траекторий будущих педагогов в сфере высшего образования на основе требований актуализированных федеральных государственных образовательных стандартов. Ведущими **методами** исследования данной проблемы явились: педагогическое моделирование; изучение нормативных правовых актов в сфере образования; методы бенчмаркинга, предполагающие анализ, оценку и адаптацию лучших практик разработки индивидуальных образовательных траекторий будущих педагогов в сфере высшего образования, реализующих образовательные программы по направлению подготовки «Педагогическое образование»; экспертные методы, позволяющие сформулировать предложения по совершенствованию содержания и процедур проектирования индивидуальных образовательных траекторий обучения будущих учителей при освоении ими образовательных программ бакалавриата и магистратуры. **Выводы и рекомендации.** Проведенное исследование позволило разработать подходы к проектированию индивидуальных образовательных траекторий будущих педагогов на основе концепции, теоретическими основами которой стали системный и компетентностный подходы, а базовыми идеями – идея выбора, идея движения и «образовательного следа», идея педагогической поддержки и тьюторского сопровождения. Реализация данных подходов позволит эффективно решать задачи освоения будущими педагогами образовательной программы, исходя из их возможностей и потребностей, с учетом актуальных и перспективных требований к профессиональной деятельности. Предложенная технология проектирования индивидуальных образовательных траекторий будущих педагогов предполагает реализацию трех взаимосвязанных этапов – подготовительного, основного, завершающего. Она позволит обеспечить комплексную реализацию субъектами проектирования рефлексивной, поддерживающей и нормативной позиций, определяя специфику содержательного, процессуального и деятельностного аспектов данной деятельности на различных уровнях проектирования. Материалы

статьи представляют ценность для руководителей и разработчиков основных профессио-нальных образовательных программ высшего образования на основе требований актуали-зированных федеральных государственных образовательных стандартов; для тьюторов, уча-ствующих в организации и сопровождении индивидуальных образовательных траекторий будущих педагогов; для научно-педагогических работников, обеспечивающих индивидуали-зацию содержания и технологий профессионального образования будущих педагогов; для работодателей, участвующих в проектировании индивидуальных образовательных траекто-рий и оценке качества их реализации. **Результаты исследования могут быть использованы** при разработке вузами основных профессиональных образовательных программ нового по-коления, относящихся к укрупненной группе «Образование и педагогика», для обеспечения их соотнесенности с требованиями современного общества и рынка труда, а также с инди-видуальными запросами и возможностями обучающихся.

Ключевые слова: проектирование, индивидуальные образовательные траектории будущих педагогов, актуализированные федеральные государственные образовательные стандарты, профессиональный стандарт педагога.

Introduction

There is a need for individualization of professional education, which can ensure that the quality of training of graduates of pedagogical specialties meets the changing requirements of this activity. Thus, a current priority for pedagogical education is the alignment of the professional training of future teacher with the new social and professional realities is (Bondarevskaya, 2013; Margolis, 2014; Yurlovskaya, 2016). This is reflected in the National Educational Doctrine, where individualization, as a focus on the diversity of educational programs, forms and methods of professional education, is defined to be the dominant development factor (Government of the Russian Federation, 2000). The Federal law on Education in the Russian Federation defines the possibility of studying according to an individual curriculum, including the development of accelerated learning within the framework of the educational program, and also specifies the need to individualize the educational content and the conditions for organizing training and upbringing of students with disabilities within the framework of an adapted educational program (Government of the Russian Federation, 2020).

The selection, construction and implementation of an individual educational path allow the student to develop precisely those universal and professional competencies which are demanded by modern society and the labor market (Khodyreva, 2011; Shaposhnikova, 2015; Zeer & Symanuk, 2014). The increasing significance of the variability of professional education of future teachers, the need to provide the students with opportunities for a real choice of a professional development path, requires the capabilities set out in the updated Federal State Educational Standards of Higher Education relating to the enlarged group of specialties (areas of training) "Education and Pedagogical Sciences (hereinafter referred to as FSES of HE) (Ministry of Education and Science of the Russian Federation, 2018a, 2018b, 2018c). An assessment of this potential will enable educators to substantiate the concept and technology of developing these individual educational paths based on the requirements of updated Federal State Educational Standards, and comprehensively implement new approaches to structuring the content of future teachers' education, its organization and technological support.

Purpose and objectives of the study

The purpose of the study is to substantiate the concept and technology for developing individual educational paths of future teachers in higher education institutions based on the requirements of the updated Federal State Educational Standards. The research addressed the following tasks relating to the development of individual educational paths of future teachers:

1. to substantiate the concept of developing the paths based on the requirements of the updated Federal State Educational Standards of Higher Education;

2. to offer a technology for developing the paths;

3. to set out recommendations for the substantive, activity and procedural aspects of developing the paths.

Literature review

Researchers have considered students' individual educational paths from the standpoint of variability of the organization and implementation of professional education, and from the standpoint of the unique content of the educational process, which allows the individual potential of the future specialist to be maximized. An individual education path is determined by the student together with the teacher, taking into account the student's motivation, abilities, emotional, psychological and physiological characteristics, as well as social, economic and time possibilities (Shaposhnikova, 2015). Grinko (2011) describes a student-centered organization of educational activity of students in higher education institution, designed to build the educational process in the context of realization of individual aspirations, developing life strategies, forming individual creative and professional development of the individual student. Gayazov (2020) sees a trajectory of the educational program, while for Shemanaeva (2017) it is a sequence of activities for each student to implement their own educational purposes. The authors agree with the description of multi-dimensionality of "individual educational paths", and see it as a selection by the students of the contents, forms and methods of professional development, correlated with the requirements and possibilities of social and professional environment, which are reflected in the basic education program.

Researchers agree that the development of an individual educational path, in which each student has his/her own ways to achieve common and individual goals of education, is a promising direction for creating a new generation of educational programs (Belyakova, 2018; Cai et al., 2017), and also represents the first and most general level of educational development (Akhtarieva, 2015; Zhdanko et al., 2014). An educational program is defined in the Federal Law on Education in the Russian Federation as a set of key educational characteristics (scope, contents, deliverables), organizational and pedagogical conditions and forms of certification, developed by the educational organization of higher education in accordance with FSES of HE, and based on the approximate basic educational programs (Government of the Russian Federation, 2020). If researchers consider the educational program as an initial set system, ensuring the achievement of the required learning results expressed in a set of competencies, then the individual learning path is characterized as a personal way to achieve the goals of professional education for specific students, corresponding to their abilities, motives, interests and needs. Thus, a significant number of different lines of an educational process – individual educational paths – can be implemented on the basis of the educational program.

From the perspectives of competence and system approaches, the development of individual educational paths of future teachers is considered by some scientists (Bagrij, 2017; Belyakova & Zakharova, 2020; Roi, 2016) as the activity of the educational process subjects in the development and implementation of a personal path to achieve the goals of professional education by particular students.

From this, psychological and pedagogical research defines the purpose and objectives of the activity, including:

– Ensuring successful adaptation of future teachers in the labor market;

– Implementation of individual preferences, interests, aspirations of students, development of their abilities and creative potential;

– Satisfaction of individual needs of the future teacher, including their individual educational needs;

– Formation of the subject position of the student, his/her readiness to form their own learning results, realized in the process of mastering the main professional educational program of higher education;

– Improving the quality of professional education through implementing variable content and alternative methods of education, depending on the student's individual characteristics.

Scientists agree that the developing of individual educational paths ensures the students' mastery of the educational program, based on their capabilities and needs, as well as taking into account the requirements of professional activity.

The researchers have identified conceptual ideas, the implementation of which will ensure the effectiveness of the progress and results of developing individual educational paths of future teachers, including the ideas of:

– choice, which involves introduction of personal meanings in the educational process, the formation of a teacher's "own educational order", his/her ability to see the prospects for his/her own personal and professional development (Drobotenko et al., 2019; Grinko, 2011);

– movement and "educational trace" as a spatio-temporal characteristic of an individual educational path, formed by fixing the activity and educational achievements of the teacher, including the implementation of a system of professional tests, which record individual experience, personal success and problems arising in the teacher's professional activities (Baiborodova et al., 2014);

– pedagogical and tutor support for the development of individual educational paths, which suggests that it is necessary to help teachers to decide on the content and individual ways of professional education, to realize their own goals and objectives for professional education, forming "semantic mechanisms of professional self-determination" (Belyakova, 2018).

Methodology

The research employed a number of methods including:

– Theoretical methods – a retrospective analysis, to identify the nature and characteristics of individual educational paths; a study of the legal documents – the analysis of normative legal acts in the sphere of higher education, including the updated Federal State Educational Standards of Higher Education in training programs 44.03.01 "Pedagogical Education (bachelor degree level), 44.03.05 "Pedagogical Education" (bachelor degree level), 44.04.01 "Pedagogical Education" (master degree level), based on which the regulatory framework analysis for developing individual educational paths of future teachers; pedagogical modeling – when creating concepts and technologies of developing individual educational paths at the main stages of professional education at the University, based on the requirements of the updated FSES of HE;

– The empirical methods included benchmarking, analysis, evaluation and adaptation of the best practices for developing individual educational paths, and implementing educational training program in "Pedagogical Education," and expert methods which made it possible to formulate proposals for improving the content and design procedures of paths for training teachers after their bachelor's and master's educational programs.

The research was conducted in three stages:

The first stage, established the methodological basis and defined the concept of developing individual educational paths of future teachers in higher education institutions.

The second stage proposed a technology for developing individual educational paths of future teachers, based on the analysis of the best practices of professional education, and the requirements of updated Federal State Educational Standards of Higher Education at the initial, main and final stages of professional education.

In the third stage, based on expert assessments, the project developed recommendations for developing the substantive, activity and procedural aspects of individual educational paths of future teachers.

Results

Data from 15 educational organizations, participating in the project of modernization of pedagogical education in the subsections "Education" and "Applicants" of the special section "Educational Institution Data" was analyzed (see Table 1).

Table 1: Implementation features of substantive, activity and procedural aspects of developing individual educational paths of future teachers in educational programs of higher education institutions participating in the project of modernization of pedagogical education

Implementation features of substantive, activity and procedural aspects of developing individual educational paths of future teachers in educational programs	Percentage of educational programs having these features
Substantive aspect	
Availability of selection of disciplines (modules) defined by the educational program in the part formed by the participants of educational relations	100.0
Availability of variable selection of disciplines (modules) defined by the educational program in the part formed by the participants of educational relations	16.7
Procedural aspect	
Capability implementation of individual pace of educational program mastery (accelerated training according to an individual curriculum)	26.7
Capability implementation of individual pace of educational program mastery (for the disabled and people with disabilities)	6.7
Availability of mastery of disciplines (modules) defined by the educational program in the part formed by the participants of educational relations in variable non-permanent groups	10.0
Activity aspect	
Availability of using e-learning and distance learning technologies, including when mastering a part of educational program in the form of online courses	40.0
Availability of adaptive educational technologies (including for the disabled and people with disabilities)	100.0
Availability of a network for implementing educational programs	6.7

The analysis of 30 educational programs posted on the present sites in training programs 44.03.01 "Pedagogical Education" (bachelor degree level), 44.03.05 "Pedagogical Education" (bachelor degree level), 44.04.01 "Pedagogical Education" (master degree level), found that the development of teachers' individual educational paths is a component of the educational program development as a whole. The possibility for the participants to select their own modules was investigated and the analysis found that all of the educational programs provide the future teacher with such an opportunity. At the same time, it should be noted that there is no selection "guide", since only 16.7%

of educational programs offered the possibility of variable selection (the ability to select more than two disciplines or the selection of several modules).

To assess the procedural aspect of individual paths development, individual curricula for these programs were studied. Only in 26.7% of the educational programs analyzed was it possible to provide students with the opportunity of mastering the program at an accelerated pace and in 6.7% of educational programs there was the possibility of increasing the training duration for students with disabilities. Content analysis of curricula showed that most have a structure, which does not fully provide the possibility of operational "construction" of the teacher's activities (including project activities) in variable temporary groups.

The descriptions of ongoing educational programs were examined for the activities they included. This showed that 40% included the possibilities of using e-learning and distance learning technologies, and all of them offered the possibility of using adaptive educational technologies, including people with disabilities, (unfortunately, only half of educational programs specify these technologies in terms of the specific disability). The concept of network implementation was found in only 6.7% of the programs, indicating that their capabilities are insufficient for developing teachers' individual educational paths.

The available best practices in universities show that the search for possible conditions for the development and implementation of individual educational paths of students is an important area of their activities, but the technology does not enable them to fully implement the regulatory capabilities and limitations of the updated Federal State Educational Standards of Higher Education and needs to be improved.

The technology of developing individual educational paths for teachers, based on the requirements of updated Standards is a step-by-step sequence of purposeful actions to develop and implement a personal path to achieve goals of professional education for a specific student.

The technology for developing individual educational paths for future teachers involves the implementation of three interrelated stages – preparatory, basic and final.

At the preparatory stage, the task is to determine the opportunities and limitations for the development of individual paths for teachers using the main development subjects. These are determined by the need to carry out joint activities on the development of individual educational paths with the teachers themselves, heads of the educational program, scientific and pedagogical workers involved in its implementation, potential employers - heads of educational organizations and educational management bodies. These are characterized by:

− The regulatory position of the educational program developers, taking into account capabilities and limitations of the development of individual educational path, ensuring implementation of requirements of the updated FSES of HE and the development of the students' readiness to solve issues of future professional activity;

− The reflexive position of the teacher as a subject of selection of substantive, procedural and activity characteristics of the educational program through mastery, mediated by the individual capabilities and student's needs, and the features of his/her educational and professional plans;

− Supporting the positions of higher school teachers, providing assistance in choosing students, based on their capabilities and needs, and the appropriate individual educational path.

The regulatory requirements for the development of individual educational paths of future teachers are set by a number of documents, including updated Federal State Educational Standards of Higher Education, the analysis of which enables the

determination of the content for the development, setting regulatory opportunities and restrictions for the implementation of the activity by the educational program developers.

In summary, the requirements of the updated FSES of HE of the bachelor's and master's programs in training programs "Pedagogical Education" generally maintain continuity in the development of individual educational paths with the previous version of the FSES of HE and include:

– the ability to use e-learning and distance learning technologies in the implementation of the educational program (p. 1.5 of the FSES of HE);

– the possibility of training according to an individual curriculum for people with disabilities, in an accelerated form (p. 1.8 of the FSES of HE);

– allocation within the framework of the bachelor's and master's programs of the mandatory part and the part formed by the participants of educational relations (p. 2.9 of the updated bachelor's FSES of HE and p. 2.7 of the updated master's FSES of HE) for disciplines (modules) and practices, ensuring that the development the formation of universal competencies is included in the mandatory part of the program and in the part formed by participants of educational relations. The disciplines (modules), providing the formation of general professional competencies, as well as professional competencies, established by the approximate basic educational program as mandatory, are included in the mandatory part of the program;

– providing disabled students with the opportunity to study, taking into account peculiarities of their psychophysical development, individual capabilities and, if necessary, providing the correction of developmental disorders and social adaptation (p. 2.10 of the updated bachelor's FSES of HE and p. 2.8. of the updated master's FSES of HE).

The main task consists of the integrated implementation by the development subjects of a reflective, supportive and normative positions, allowing them to determine jointly the specifics of the substantive, procedural and activity aspects of developing of individual educational paths of future teachers, both at the level of the educational program as a whole, and at the level of its components, and also at the level of a specific form of contact or independent work used in the course of educational program development.

The substantive aspect of the development ensures individualization of the education content of future teachers, with the possibility of selection of disciplines (modules), to set an individual educational path.

The procedural aspect of the development involves implementing the possibility of determining the individual pace of educational program development, mastery of components of the educational program individually or in variable non-permanent groups.

The activity aspect of the development determines the selection of variable pedagogical technologies, including adaptive methods for mastering the content of professional education; using e-learning resources and distance learning technologies; possibilities of network and other innovative forms of implementing educational programs, as well as a variety of ways of monitoring the results of professional education (including a system of professional tests, and the results of participation in research and project activities).

It should be noted that the present design aspects can be implemented at various development levels:

– individual educational learners' paths teachers at the level of the educational program as a whole;

– individual educational paths at the level of individual components of the educational program (disciplines (modules), practice, and state final examination);

– individual educational paths at the level of a specific form of contact or independent work used during the development of the educational program.

In the final stage, the task is determined by the need to assess the quality of development of individual educational paths based on the integrated implementation by design entities of reflective, supportive and normative aspects. This must take into account the regulatory capabilities and limitations established by the updated FSES of HE. Two groups of indicators provide the main criteria for the effectiveness of development of individual educational paths. The first group includes performance indicators related to the quality of professional education of the future teacher, the level of development of universal, general professional and professional competencies, thus ensuring the implementation of the main types of professional activities established by the Professional Standard of a General Education Teacher. The second group includes indicators which characterize the quality of the design process itself, including its functionality, flexibility, adaptability, efficiency and reliability.

To formulate proposals for improving the content and procedures for developing individual educational paths of future teachers when mastering higher education programs, a survey was carried out of 25 expert developers of educational programs in training programs 44.03.01 "Pedagogical Education" (bachelor degree level), 44.03.05 "Pedagogical Education" (bachelor degree level), 44.04.01 "Pedagogical Education" (master degree level). The experts were invited to formulate five recommendations on developing of individual educational paths of future teachers in substantive, activity and procedural aspects, taking into account the requirements of the updated FSES of HE. Table 2 presents the most chosen recommendations.

Table 2. Recommendations from experts for developing individual educational paths of future teachers in substantive, activity and procedural aspects

Recommendations for developing individual educational paths of future teachers	Percentage of experts with this recommendation
Using mostly modular structure of the educational program, allowing to "assemble" it to meet the needs and capabilities of the student	72
Possibility to select one module/discipline from several, which are equal in effort, or the selection of several modules/disciplines from the offered ones for a given effort	52
Providing opportunity to choose options for mastering of the discipline (module) by means of choosing a specific teacher or technology	76
Allocation of a significant part of the effort of the educational program in the framework of development of disciplines/ modules for students to implement the system of professional tests in accordance with their individual needs and requirements	92
Application of project-based learning for the development of a complex of universal and professional competencies among students within the modules of the educational program	100
The use of e-learning, distance learning technologies, including the use of open online courses	56
Possibility for students to implement in academic mobility, including in the framework of network interaction, followed by subsequent transfer of effort	80
Ensuring optimization of the resource when developing individual educational paths (number of students in groups; avoiding schedule conflicts, etc.)	72
Providing the possibility of training in variable temporary groups, formed for each module/discipline	48

As can be seen from the table, the recommendations relate to the individualization of the educational content, which sets an individual educational path, the individualization of forms and methods of mastering the educational content, including the possibility of using e-learning, distance learning technologies, and networked educational programs, and individualization of the development pace of the educational program. The expert survey also showed that the implementation of substantive, activity and procedural components of development of individual educational paths based on updated Federal State Educational Standards is associated with risks due to the unwillingness of project subjects to implement reflexive, supportive, and normative positions at various project levels.

The data provides the basis for the development of professional education competencies and for developing individual educational paths of future teachers. It shows a promising direction for the development of new generation of educational programs, providing each student with his/her own ways to achieve common and individual goals of professional education.

Discussions

The system framework and the competence approach to developing individual educational paths of students in general, as well as in pedagogical education comes from the theoretical basis of the proposed concept. The research has developed a methodology and technologies for developing individual educational paths of future teachers in respect of contact or independent work, as well as the individual components of the educational program. However, due to the introduction of the updated FSES of HE in training programs 44.03.01 "Pedagogical Education" (bachelor degree level), 44.03.05 "Pedagogical Education" (bachelor degree level), 44.04.01 "Pedagogical Education" (master degree level), it is necessary to explore the specific development of individual educational paths of future teachers at the level of the educational program as a whole, based on the regulatory opportunities and constraints and to implement the activities set out in the updated FSES of HE, taking into account variable position of professional education subjects.

Conclusion

The research allowed us to develop approaches to the development of individual educational paths of future teachers based on the concept of the system and competence approaches, and the basic ideas of choice, of movement and "educational trace," and of pedagogical and tutor support. Their implementation will effectively solve the problems of mastering the educational program by future teachers, based on their capabilities and needs, as well as taking into account current and future requirements for professional activity. The proposed technology for developing of individual educational paths of future teachers, involving implementation of three interrelated stages – preparatory, main and final - will enable a comprehensive implementation of reflexive, supportive and normative positions in order to determine jointly the specific substantive, procedural and activity aspects of this activity at various project levels.

The results are valuable for managers and developer teams of the main professional educational programs of higher education based on the requirements of updated Federal State Educational Standards, for tutors involved in the organization and maintenance of individual educational paths of future teachers, and for the research and teaching staff of educational organizations of higher education, providing individualization of the content and technologies of professional education of future teachers, as well as for employers

involved in the development of individual educational paths and in the quality assessment of their implementation.

The results also inform implementation by the universities of the main professional educational programs related to the enlarged group "Education and Pedagogy" of a new generation, to ensure they meet the requirements of modern society and the labor market, as well as individual requests and needs of students.

References

Akhtarieva, R. F. (2015). Development of the main professional educational programs (MPEP) for training teachers in accordance with the Professional Standard of a Teacher. *Psychological Science and Education, 4*, 60-72.

Baiborodova, L. V., Knyazkova, L. N., & Krivun, M. P. (2014). *Individualization and support in the educational process of a pedagogical University.* Yaroslavl: Publishing Department of Yaroslavl State Pedagogical University.

Bagrij, V. (2017). Pedagogical (professional) practical training in designing the student's individual educational path. *Social Work and Education*, *4*(1), 93-101.

Belyakova, E. G., & Zakharova, I. G. (2020). Professional self-determination and professional identity of student teachers in the conditions of individualization of education. *Education and Science, 22*(1), 84-112.

Belyakova, E. G. (2018). An issue of supporting professional self-determination of students teachers in the conditions of implementation of individual educational paths. In *Education: young specialists, competitiveness: proceedings of the International Scientific and Practical Conference dedicated to the 80th anniversary of the academician of the Russian Academy of Education, doctor of philosophy, Professor G.F. Shafranova-Kutseva* (pp.174-178).

Bondarevskaya, E. V. (2013). Methodology for developing of the innovative space of pedagogical education at the Federal University. *Proceedings of the Voronezh State Pedagogical University, 7*(82), 4-13.

Cai, J., Yungblood, V. T., Khodyreva, E. A., & Khuziakhmetov, A. N. (2017). Higher education curricula designing on the basic of the regional labor market demands. *Eurasia Journal of Mathematics, Science and Technology Education, 13*(7), 2805-2819.

Drobotenko, J. B., Duka, N. A., & Kurdumanova, O. I. (2019). Educational autonomy of the future teacher as a new quality of the professional training. *Bulletin of the National Academy of Sciences of the Republic of Kazakhstan, 6*, 280-287.

Gayazov, A. S. (2020). *Individual paths of the personality formation.* Retrieved from https://docplayer.ru/36819866-Individualnye-traektorii-obrazovaniya-lichnosti.html

Grinko, M. A. (2011). Developing of individual paths of teaching foreign language for the students of pedagogical universities. *Reporter of the Adygeya State University, 3*(3), 18-22.

Government of the Russian Federation. (March 01, 2020). *On Education in the Russian Federation* (N 273-FZ). Retrieved from http://www.consultant.ru/document/cons_doc_LAW_140174/

Government of the Russian Federation. (October 4, 2000). *On the national doctrine of education in the Russian Federation* (No. 751*).* Retrieved from http:rg.ru/2000/10/11/doktrinadok.html

Khodyreva, E. A. (2011). *Innovative technologies of professional education: competence, independence, creativity.* Kirov: Publishing House of Vyatka State University.

Margolis, A. A. (2014). Requirements for modernization of the main professional educational programs (MPEP) for training teachers in accordance with the Professional Standard of a Teacher: proposals for the implementation of an activity-based approach for training teachers. *Psychological Science and Education, 6*(2), 1-18.

Ministry of Education and Science of the Russian Federation. (February 22, 2018a). *Federal State Educational Standard of Higher Education - bachelor's degree in the training program 44.03.01 Pedagogical education* (No. 121). Retrieved from http://fgosvo.ru/uploadfiles/FGOS%20VO%20 3++/Bak/440301_B_3_16032018.pdf

Ministry of Education and Science of the Russian Federation. (February 22, 2018b). *Federal State Educational Standard of Higher Education - bachelor's degree in the training program 44.03.05*

Pedagogical education (No. 125). Retrieved from http://fgosvo.ru/uploadfiles/FGOS%20VO%20 3++/Bak/440305_B_3_16032018.pdf

Ministry of Education and Science of the Russian Federation. (February 22, 2018c). *Federal State Educational Standard of Higher Education – master's degree in the training program 44.04.01 Pedagogical education* (No. 126). Retrieved from http://fgosvo.ru/uploadfiles/FGOS%20VO%20 3++/Mag/440401_M_3_16032018.pdf

Roi, S. (2016). Individual educational trajectories as means of enhancement of information culture of future teachers. *Science and Education, 4*, 59-64.

Shaposhnikova, N. Yu. (2015). Individual educational path of a student: analysis of concept interpretations. *Pedagogical Education in Russia, 5*, 39-44.

Shemanaeva, M. A. (2017). On interpretations of the term "Individual educational path". *Electronic Scientific and Methodological Journal Concept,* S12, 1-5.

Yurlovskaya, I. A. (2016). *Individualization of the educational process as an innovative activity in a modern pedagogical University* [Doctoral dissertation, North Ossetian State University, Vladikavkaz, Russia]. Retrieved from https://rusneb.ru/catalog/000199_000009_006661461/

Zhdanko, T. A., Zhivokorentseva, T. V., & Chuprova, O. F. (2014). Developing of individual educational paths (IEP) for students in higher education institutions. *Magister Dixit, 1*(13), 140-146.

Zeer, E. F., & Symanuk, E. E. (2014). Individual educational paths in the system of continuing education. *Pedagogical Education in Russia, 3*, 74-82.

Концептуальные подходы к идентификации цифровых компетенций педагогов: Когнитивное моделирование

Ольга М. Чоросова[1], Расуля Р. Аетдинова[2], Галина С. Соломонова[3], Галина Ю. Протодьяконова[4]

[1] *Северо-Восточный федеральный университет имени М.К. Аммосова, Якутск, Россия*
Email: chorosovaom@mail.ru
ORCID: https://orcid.org/0000-0001-6240-3006

[2] *Набережночелнинский институт Казанского (Приволжского) федерального университета, Набережные Челны, Россия*
Email: rasulya_a@mail.ru
ORCID: http://orcid.org/0000-0002-3047-5918

[3] *Северо-Восточный федеральный университет имени М.К. Аммосова, Якутск, Россия*
Email: solomonovags@mail.ru
ORCID: https://orcid.org/0000-0002-1733-9911

[4] *Северо-Восточный федеральный университет имени М.К. Аммосова, Якутск, Россия*
Email: protogalina@mail.ru
ORCID: https://orcid.org/0000-0002-0432-4016

Аннотация
Необходимость формирования цифровой компетентности педагога актуализирует создание фундаментальной научной базы процесса подготовки педагогических кадров и повышения их квалификации для работы в условиях цифровизации общего образования. Это становится тем более востребованным в условиях пандемии, обусловившей особенности происходящих глобальных трансформаций в сфере образования, которое полностью перешло на дистанционный режим во всех регионах России. Однако общей проблемой для всех регионов является то, что многие педагоги, школьники и их родители оказались недостаточно готовы психологически к полному переходу на цифровое образование. В связи с этим есть основания говорить о проблемной ситуации в образовании в процессе цифровизации и необходимости ее преодоления.

Проведен анализ текущей ситуации в школьном образовании в условиях цифровизации и всеобщего перехода к онлайн-обучению обучению и связанных с ней тенденций в педагогическом образовании, выявленных путем опроса педагогов и руководителей образовательных организаций (более 150 чел.), изучения современных концептуальных подходов к цифровизации образования, связанного с этим процессом идентификации цифровых компетенций педагогов, разработки объективного инструментария для их измерения.

Представленные в статье материалы позволяют определить концептуальные подходы к разработке карты цифровых компетенций педагогов, механизмов и инструментов выявления, идентификации и оценки цифровых компетенций современного педагога, автоматизированной системе выявления сформированности: 1) ключевых компетенций педагога в условиях цифровой экономики; 2) цифровых компетенций педагога

Ключевые слова: цифровые компетенции, ключевые компетенции цифровой экономики, инструментарий, цифровой тренажер, программа-тестировщик, карта компетенций, когнитивное моделирование, Якутия, электронное обучение, цифровизация образования, дополнительное профессиональное образование.

Conceptual Approaches to the Identification of Teachers' Digital Competence: Cognitive Modelling

Olga M. Chorosova[1], Rasulya R. Aetdinova[2], Galina S. Solomonova[3],
Galina Yu. Protodyakonova[4]

[1] *M.K. Ammosov North-Eastern Federal University, Yakutsk, Russia*
Email: chorosovaom@mail.ru
ORCID: https://orcid.org/0000-0001-6240-3006

[2] *Naberezhnye Chelny Institute, Kazan Federal University, Naberezhnye Chelny, Russia*
Email: rasulya_a@mail.ru
ORCID: http://orcid.org/0000-0002-3047-5918

[3] *M.K. Ammosov North-Eastern Federal University, Yakutsk, Russia*
Email: solomonovags@mail.ru
ORCID: https://orcid.org/0000-0002-1733-9911

[4] *M.K. Ammosov North-Eastern Federal University, Yakutsk, Russia*
Email: protogalina@mail.ru
ORCID: https://orcid.org/0000-0002-0432-4016

Abstract
The need for developing a teacher's digital competency requires the creation of a fundamental scientific base for the process of training teachers and their professional development to enable them to work in the context of digitization of general education. In the Covid-19 pandemic, global transformations are taking place in the field of education. All regions of Russia have switched completely into remote mode. According to Interfax, based on the research of the Higher School of Economics NRU, the Republic of Sakha (Yakutia) is the best in Russia in terms of technical equipment for teachers and schoolchildren today. This study covered 22,600 teachers in 73 regions of the country. In Yakutia 61% of teachers conduct online learning, while the average in Russia is 25%. However, the common problem across all regions is that teachers, schoolchildren and their parents lack psychological readiness for a complete transition to digital education. This explains the emerging situation of conflict, background stress, as well as frequent cases of imitative distance education and e-learning. In this regard, there is a need to discuss the problems facing education in the digitization process and the need to overcome them. This paper analyses the current situation in school education in the context of digitization and a universal transition to online learning. Graduate students of the NEFU Institute for Continuing Professional Education conducted a survey of teachers and school leaders. This was aimed at identifying attitudes towards the process of digitization of school education and ownership of ICT, and some digital competencies of teachers and educational leaders. The results confirmed the relevance of the research problem and revealed the most acute contradictions associated with the lack of digital competencies among teachers in Yakutia.
The study examined modern conceptual approaches to the digitization of education, the identification of digital competencies of teachers, and the development of objective measurement tools. A digital teacher competency map is being developed, with a toolkit that integrates key competencies of the digital economy and digital competencies, together with tester program (a digital simulator) to identify the formation of: (a) a set of the teacher's core competencies in the digital economy and (b) a set of teachers' digital competencies.
The following factors were taken into account in developing the tools: conceptual approaches in modern scientific and pedagogical research to identify, identify and assess the level of formation of digital competencies of a modern teacher; methodological substantiation of cognitive modeling of the competencies studied; assumptions of the most optimal combinations of key and digital

competencies for teachers of different subject areas and levels of education; interconnection and interdependence of some professional deficits associated with a deficit of key and digital competencies.

Keywords: digital competencies, key competencies of the digital economy, tools, digital simulator, tester program, competency map, cognitive modeling, Yakutia, e-learning, digitization of education, continuing professional education

Введение

Содержание цифрового образования педагогов в настоящее время усиленно исследуется учеными многих стран. Понятия «цифровая дидактика», «цифровая грамотность», «цифровое образование» широко обсуждаются в профессиональной среде.

Современный педагог постоянно находится в зоне развития, особенно в цифровой, технологически насыщенной среде. События последнего месяца в России, связанные с коронавирусной пандемией в мире, в том числе и в России, и в Республике Саха (Якутия), резкий повсеместный переход в дистанционную форму обучения четко показали, в каком русле должно идти развитие педагогов в профессиональном плане именно в цифровой среде.

Республика Саха (Якутия), входя в состав Дальневосточного федерального округа, имеет свои специфические особенности, такие как экстремальные природно-климатические и географические условия, удаленность населенных пунктов от центров, слабо развитая транспортная схема и значительная разреженность населения, обусловливающие социально-экономические особенности и др. При этом экономику самого северного региона России можно охарактеризовать как динамично развивающуюся. Сегодня Якутии нужна собственная экономика несырьевого сектора, креативная индустрия. В связи с этим на современном этапе перед образованием Республики Саха (Якутия) стоит задача трансформации системы образования, введения нового стандарта для всех уровней образования, ориентированности на «умную экономику». Важное значение придается современному оснащению образовательного процесса и интеграции в цифровую среду (Teachers and schoolchildren of Yakutia, 2020).

Развитие цифровых технологий и их масштабное внедрение во все отрасли формируют новые требования к компетенциям учителей. В образовательной системе цифровые компетенции становятся тем креативным фактором, который трансформируясь в интеллектуальный ресурс, генерирует эффективное развитие системы.

В современных условиях развития цифровизации общего образования, когда основное внимание уделяется формированию у обучающихся цифровых компетенций как интегральных качеств личности, в первую очередь это относится и к самим педагогам.

Работа над статьей совпала со временем глобальных, повсеместных изменений в образовании, когда за несколько дней все уровни образования перешли в онлайн-формат. Можно утверждать, что в настоящее время мы переживаем период самых радикальных и глубинных трансформаций образования в связи с пандемией, вызванной коронавирусной инфекцией. Об этом свидетельствуют и непосредственный опыт авторов статьи, и наблюдаемая практика, и множество аналитических публикаций. Так, Е. Каганер, говоря о подключении университетов к онлайн-обучении в шоковом режиме и вызванных этим противоречиях, отмечает необходимость образовательной аналитики, которая будет способствовать формированию качественного онлайн-образования. Для него характерны такие качества, как частая смена активностей каждые 5–20 минут; качественное интерактивное обсужде-

ние с большой группой; сочетание синхронного (обсуждение кейса с участниками) и асинхронного (выполнение заданий в удобное для них время; видео и аудио, выстроенные в целостный курс) режимов работы (Kaganer, 2020).

На первом этапе исследования нас интересовали следующие вопросы:

1. Каковы концептуальные подходы в современных научно-педагогических исследованиях к выявлению, идентификации и оценке уровня сформированности цифровых компетенций современного педагога?

2. Каковы наиболее оптимальные сочетания ключевых и цифровых компетенций для педагогов разных предметных областей и ступеней образования?

3. Какие квалификационные (профессиональные) дефициты возможно выявить наряду с дефицитом ключевых и цифровых компетенций?

4. Каковы методологические обоснования когнитивного моделирования исследуемых компетенций?

Материалы и методы

В педагогической науке накоплен достаточный объем исследований, посвященных различным аспектам образования взрослых, непрерывного педагогического или дополнительного профессионального образования педагогов. Не имея возможности в рамках статьи останавливаться на обзоре трудов уважаемых и признанных российских и зарубежных исследователей прошлых лет, отметим, что в последние годы все больше научных работ посвящено российскому и зарубежному опыту внедрения национальной рамки квалификаций и связанных с ним преобразованиях в профессиональном образовании на основе интеграции теории и практики профессионального образования, обеспечению взаимодействия сфер образования и труда, связанным с этим актуальным проблемам сопряжения систем образования и независимой оценки квалификаций, цифровизации образования, развития электронного обучения, в т.ч. в ДПО, и др.

Анализ существующих работ по теме исследования показывает, что в настоящее время недостаточно исследованы задачи, связанные с оценкой и формированием цифровых компетенций педагога. Требуют решения и вопросы оценки цифровых компетенций педагога, с точки зрения системного анализа, разработки универсального алгоритма оценки цифровых компетенций педагогов на соответствие требованиям цифровизации образовательного процесса.

Формирование цифровых компетенций педагогов происходит в процессе реализации компетентностных программ дополнительного профессионального образования. Реализация компетентностной модели программ повышения квалификации педагогов требует кардинальной смены содержания и структуры дидактических и оценочных средств, а также методов и технологий их применения в образовательном процессе. Компетентностный подход основывается на оценивании уровня сформированности компетенций, включающих наряду со знаниевым компонентом когнитивную, личностную, ценностную, межкультурную и другие составляющие (Matukhin & Nizkodubov, 2013). Данные компоненты учитываются при оценивании любых компетенций, в том числе цифровых.

Проведен анализ научных статей, опубликованных в изданиях, индексируемых в базах данных WoS и Scopus за период 2018 – 2020 гг. Поиск и отбор материала осуществлялся по ключевым словам «цифровые компетенции педагогов», «цифровизация образования», «электронное обучение», «оценка компетенций». Здесь необходимо отметить, что, как в Рекомендациях ЮНЕСКО, так и в изученных материалах, зарубежными авторами часто используется понятие «ИКТ-компетенции» как идентичное или равнозначное понятию «цифровые компетенции». Термино-

логический аспект проблемы исследования требует отдельного рассмотрения, что в рамках настоящей статьи не является предметом анализа.

McGarr и McDonagh в опубликованных исследованиях цифровой компетентности будущих педагогов выделяют три основных подхода: 1) определение количественных и качественных характеристик использования цифровых технологий в школе, 2) выявление владения педагогами ИКТ в соответствии с требованиями национальных стандартов и программ, 3) оценивание навыков учащихся по выполнению заданий в области ИКТ (McGarr & McDonagh, 2019, p. 36). По мнению ученых, значительный разрыв между теорией ИКТ-компетенций, отраженной в науке и национальных стандартах и требованиях, и практикой их применения в обучении и оценивании знаний ставит проблему как точного определения ИКТ-компетенций педагогов (терминологический аспект), так и разработки соответствующих инструментов для их оценки.

Ketil-Engen (2019) отходит от традиционного понимания ИКТ-компетенций как универсальных знаний и умений, подходящих для решения любых задач без привязки к конкретной области или ситуации, и говорит о комплексе взаимосвязанных ИКТ-компетенций. Опираясь на теорию «доместикации», Ketil-Engen (2019) рассматривает компетентность педагога в области ИКТ не только как умение применять цифровые технологии для поддержки учебной деятельности, но и как более широкий навык использования электронных средств и технологий применительно к различным задачам и ситуациям, согласно особенностям знаниевого общества, а также более глубокое осознание социокультурной роли цифровых технологий.

В работе колумбийских исследователей Manzuoli, García и Cifuentes (2016) освещаются некоторые методологические подходы к измерению ИКТ-компетенций педагогов. Был разработан опросник из 47 вопросов, разбитых на четыре группы: использование информационных технологий: 1) в академических целях, 2) в преподавании, 3) для обучающихся и 4) инновации в образовании, связанные с ИКТ.

В статье Kiss (2017) приведены результаты сравнительного исследования ИКТ-компетенций словацких и сербских студентов с использованием опросника из 14 пунктов, сгруппированных по трем разделам: базовые компетенции, прикладные компетенции и этические компетенции. Инструментарий Kiss (2017) разработан на основе шкалы Лейкерта из четырех градаций, при анализе данных был использован U-критерий Манна-Уитни, которые позволилио получить достоверно точные результаты.

Исследователи Гентского университета Tondeur et al. (2017) при разработке инструмента самооценки по владению ИКТ-компетенциями для студентов педагогического профиля выделяют два основных, взаимозависимых вида ИКТ-компетенций педагогов: а) компетенции по оказанию поддержки учащимся в использовании ИКТ в классе и б) компетенции по использованию ИКТ для разработки образовательных программ.

В работе норвежских исследователей Langset, Jacobsen и Haugsbakken (2018) освещен опыт реализации программ непрерывного образования в формате MOOC на основе кооперации преподавателей на мезоуровне. Это позволяет предложить педагогам более востребованный цифровой контент, в отличие от директивно предлагаемых учебных ресурсов, которые не воспринимаются должным образом педагогами, не способствуют распространению новых цифровых практик и не поддерживают необходимые изменения цифровой культуры. Langset и соавторы (2018) в процессе международного сравнительного исследования выявляли факторы, содействующие или, напротив, препятствующие формированию и развитию

ИКТ-компетентностей учителей и информационной грамотности учащихся. Исследование отвечало на два основных вопроса: 1) влияние на использование ИКТ в обучении в разных образовательных системах оказывают таких показателей, как оснащенность школ ИКТ, профессиональные компетенции и квалификации учителей, цели школьного образования и уровень профессиональной самооценки учителей; 2) связь между принятым уровнем приемлемого применения учителями компьютеров в школе с компьютерной грамотностью учащихся в разных образовательных системах. Для анализа авторы использовали данные четырех стран: Австралии, Норвегии, Чехии и Германии, полученные в ходе Международного исследования компьютерной и информационной грамотности ICILS 2013 года (ICILS — International Computer and Information Literacy Study), организованного Международной ассоциацией по оценке учебных достижений (IEA). Данные были распределены на четыре информационных составляющих: 1) личные анкетные данные учащихся 8-го года обучения (пол, эмиграционный статус, образовательный уровень родителей); 2) результаты тестирования компьютерной грамотности учащегося; 3) данные о школе (о технической оснащенности ИКТ-средствами, целях образования и качестве профессиональных кадров); 4) показатели профессиональной самооценки учителей.

В исследовании Ally (2019) рассмотрены факторы, влияющие на формирование параметров образования будущего, и разработка на их основе компетенций педагога. В основе методологии исследования лежит анализ и обобщение экспертного мнения специалистов из шести стран (Австрия, Канада, Китай, Греция, Малайзия и Швеция) на основе их опыта использования инновационных технологий для преподавания, а также опыта использования цифровых технологий и инновационных методов обучения, как МООС, искусственный интеллект, дополненная и виртуальная реальности, онлайн и мобильное обучение. В ходе исследования были выделены 105 компетенций педагогов, сгруппированные затем по девяти областям: ключевые, основные (General); использование цифровых технологий (Use digital technology), использование различных цифровых образовательных ресурсов (Remix digital learning resources), коммуникация (Communication), содействие обучению (Facilitate Learning), педагогические стратегии (Pedagogical strategies), оценивание обучения (Assess learning) и личные качества (Personal characteristics).

По Ally (2019), педагог в недалеком будущем будет вести образовательную деятельность в партнёрстве с роботами-учителями, в виртуальной среде, поэтому одной из основных областей компетенции автор считает область компетенций содействия, поддержки образования (Facilitate Learning), в рамках которой педагог должен уметь, в частности: персонализировать обучение для отдельных учеников, своевременно отвечать на вопросы учащихся, мобильно менять стратегии обучения для удовлетворения потребностей учащегося, быть примером профессионала цифровой эпохи, мотивировать учащихся учиться, поощрять социальное взаимодействие между учащимися, демонстрировать правильное виртуальное поведение, быть доступным и быть примером гражданственности и ответственности в цифровой среде.

Tomczyk (2020) исследована цифровая грамотность польских педагогов в области противостояния цифровым угрозам. По мнению автора, современная школа – это социальный институт, который не только активно внедряет цифровые технологии в образовательную практику, но и готовит учащихся к защите от растущего числа интернет-угроз, а ключевым элементом данного процесса является компетентный, целенаправленно действующий педагог. Опросник Tomczyk (2020) состоял из двух разделов: 1) личная информация и самооценка (пол, возраст, опыт

работы, частота применения цифровых технологий в обучении, самооценка цифровой грамотности и т.д.), 2) измерение компетенций, связанных с обеспечением цифровой безопасности, по шести направлениям: техническая безопасность при использовании медиа; оценка достоверности информации; безопасная коммуникация; сохранение анонимности; создание безопасных логинов и паролей; авторское право и интеллектуальная собственность в цифровой среде.

Результаты и обсуждение

Переживаемый российским образованием опыт стремительного перехода на онлайн-формат требует серьезного изучения и осмысления. При организации дистанционного обучения в неравных условиях оказываются педагоги городских и сельских поселений, Центральной зоны Якутии и северных, особенно арктических отдаленных районов, где не только хуже техническая оснащенность субъектов образования и существенно медленнее скорость интернет-соединения, но и больше педагогов, у которых имеются профессиональные дефициты, вызванные отчасти указанными выше причинами. К таким выводам авторы статьи пришли в результате исследований, проводившихся в 2015-2017 гг.: в процессе реализации государственного контракта №15-01/01 от 10.06.2015 г. по дистанционному интерактивному обучению педагогов образовательных организаций Республики Саха (Якутия) английскому языку преподавателями - носителями языка; НИР «Дополнительное профессиональное образование в условиях современных трансформаций и их влияние на качество жизни педагогов (на примере Республики Саха (Якутия) и Республики Казахстан, при поддержке эндаумент фонда СВФУ); участие в Комплексных научных исследованиях в Республике Саха (Якутия), направленных на развитие производительных сил, по направлению «Современное состояние и тенденции развития дополнительного профессионального образования Республики Саха (Якутия)» в 2016 – 2017 гг.

Рисунок 1. Количество педагогов и педагогических
работников, прошедших обучение в СВФУ за 2016-2019 гг.

В рамках поддержанного в 2019 г. проекта «Когнитивные модели и алгоритмы формирования цифровой компетентности педагога в условиях цифровизации общего образования» (грант РФФИ № 19-29-14030) в ФГАОУ ВО «Северо-Восточный федеральный университет имени М.К.Аммосова» в январе 2020 г. начато исследо-

вание, целью которого является повышение эффективности деятельности педагога в условиях цифровизации общего образования посредством развития цифровой компетентности педагога на основе внедрения когнитивных моделей и алгоритмов оценки цифровых компетенций педагогов и принятия решений по проектированию или корректировке программ повышения квалификации.

Аспирантами Института непрерывного профессионального образования СВФУ проведено исследование среди педагогов и руководителей образовательных организаций Республики Саха (Якутия) (Ignatiev, Ivanova, & Ivanova, 2020) (Рис. 2.1, 2.2).
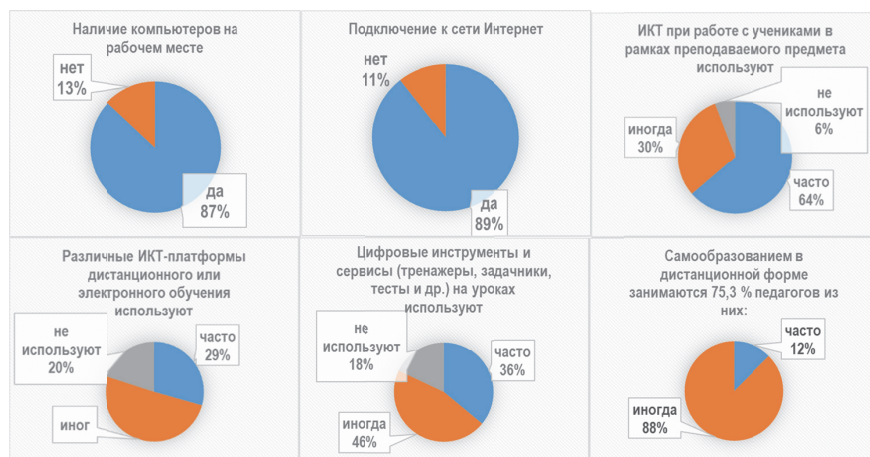
Рисунок 2.1. Результаты исследования по цифровым и ИКТ-компетенциям педагогов, проведенных аспирантами ИНПО СВФУ

Данное исследование выявило, что в условиях цифровой трансформации школьного образования все еще есть небольшая доля педагогов, не имеющих оборудованного рабочего места (13%), не имеют дома доступ к интернету (11%), не используют информационно-коммуникационные технологии в профессиональной деятельности (6%), не имеют опыта дистанционного самообразования (около 24%), не используют цифровые инструменты и сервисы в процессе обучения (18%), не используют образовательные платформы дистанционного или электронного обучения (20%).

Среди 101 чел., занимающих руководящие должности в школах республики, 5% не используют платформы электронного обучения в целях повышения своей квалификации, персональный сайт имеют лишь 8% руководителей, однако мобильные приложения используют 82%, предпочтение дистанционным и очным формам повышения квалификации отдают примерно одинаковое количество руководителей (34% и 38% соответственно), в повседневной работе планерные совещания в онлайн-режиме практикуют системно 21%, иногда – 15%, не практикуют такую форму работы больше половины – 53% руководителей общеобразовательных организаций.

Полученные результаты подтвердили необходимость специального исследования объективной ситуации по цифровизации школьного образования, выявили противоречие между показателями массового перехода школ на дистанционное и онлайн-обучение и результатами проведенного опроса по выявлению ИКТ- и цифровых компетенций педагогов и руководителей Якутии.
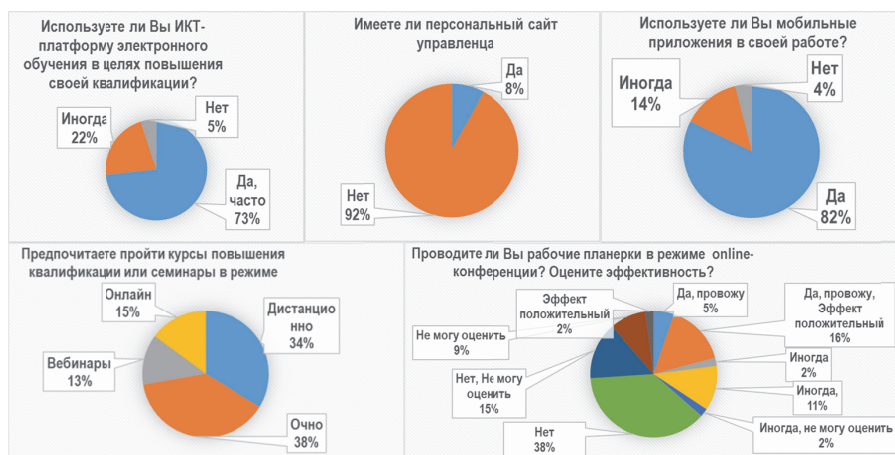
*Рисунок 2.2. Результаты исследования по цифровым
компетенциям руководителей образовательных организаций*

На первом этапе исследовано современное состояние проблемы профессионального и личностного развития педагогов в условиях цифровизации образования, их цифровой компетентости, подходов к идентификации цифровых компетенций и их оценке; определены концептуальные подходы к идентификации цифровых компетенций педагогов, разработаны основные показатели оценки цифровой компетенции; изучены подходы к классификации цифровых компетенций; разработаны дескрипторы ключевых компетенций цифровой экономики, цифровых компетенций; разработаны критерии оценивания компетенций – основные показатели оценки результатов (ОПОР), шкала оценивания уровня сформированности компетенций; на основе ОПОР разработаны матрицы компетенций для всех этапов формирования компетенций; разработан фонд оценочных средств (ФОС), состоящий из различных компетентностных, уровневых оценочных средств, имеющих и формирующие, и оценочные функции.

Для выявления и оценки начального (исходного) уровня сформированности у педагогов ключевых компетенций цифровой экономики, также самих цифровых компетенций разработан инструментарий, призванный определить актуальные реальные потребности педагогов в условиях развития цифровой экономики, цифровизации общего образования. При разработке инструментария ориентировались на следующие факторы: концептуальные подходы в современных научно-педагогических исследованиях к выявлению, идентификации и оценке уровня сформированности цифровых компетенций современного педагога; методологические обоснования когнитивного моделирования исследуемых компетенций; предположение о наиболее оптимальных сочетаниях ключевых и цифровых компетенций для педагогов разных предметных областей и ступеней образования; взаимосвязь и взаимообусловленность некоторых профессиональных дефицитов, связанных с дефицитом ключевых и цифровых компетенций.

За исключением первого раздела «Сведения о себе», вопросы сгруппированы по разделам, выделенным на основе анализа Европейской рамки цифровых компетенций педагогов (Redecker & Punie, 2017), Перечня ключевых компетенций цифровой экономики (Kiss, 2017) (Приложение 1.1.), Рекомендаций ЮНЕСКО «Структура ИКТ-компетентности учителей» (UNESCO, 2019): 1) Работа с данными. Управление информацией и данными; 2) Коммуникация и сотрудничество. Комму-

никация и кооперация в цифровой мультикультурной среде; 3) Создание цифрового контента: креативное мышление; 4) Безопасность и решение проблем; 5) Информационная и цифровая грамотность. Критическое мышление в технологически насыщенной среде; 6) вопросы по 11 цифровым компетенциям.

При разработке карты цифровых компетенций педагога использованы: Перечень ключевых компетенций цифровой экономики Ministry of Economic Development of Russia, 2020); Рекомендации ЮНЕСКО по структуре ИКТ-компетентности учителей (UNESCO, 2019); материалы Европейского фонда образования по цифровым навыкам и компетенциям, цифровому и онлайн обучению (Brolpito, 2019; Redecker & Punie, 2017) и др.

Карта компетенций предназначена для решения фундаментальной задачи по разработке концептуально новых когнитивных моделей и алгоритмов комплексной оценки цифровых компетенций педагогов, ориентированных на повышение качества управленческих решений при формировании цифровых компетенций в условиях цифровизации общего образования. Необходимость формирования цифровой компетентности педагога актуализирует создание фундаментальной научной базы процесса подготовки педагогических кадров и повышения их квалификации для работы в условиях цифровизации общего образования.

Карта цифровых компетенций педагогов позволит решить задачи разработки: основных показателей оценки цифровой компетенции педагогов и их идентификации; структурной модели организации повышения квалификации педагогов с учетом требований цифровизации общего образования на основе компетентностного подхода; когнитивной модели цифровой компетентности педагога, позволяющей учитывать связи между цифровыми и другими компетенциями и стадиями их формирования; когнитивной модели программы повышения квалификации (ППК), позволяющей учитывать силы связей между изучаемыми модулями и цифровыми компетенциями; критериев оценки соответствия программы повышения квалификации (ППК) требованиям цифровизации образовательного процесса.

Разработана программа-тестировщик («цифровой тренажер»), цель которого – выявление уровня сформированности (теоретический блок) и развитие (практический блок) цифровых компетенций у современного педагога общего образования. В практический блок включены задания по цифровым компетенциям, таким как «Кибербезопасность и защита данных», «Программирование и создание ИТ-продуктов», «Цифровой маркетинг и медиа», «Цифровой дизайн».

Началась работа по апробации блока опросника по цифровым компетенциям и программы – тренажера: производится первоначальный замер уровня сформированности у педагогов Республики Саха (Якутия) цифровых и ключевых компетенций цифровой экономики.

На данном этапе исследования разработана универсальная унифицированная методика оценивания уровня сформированности у педагогов ключевых и цифровых компетенций. В феврале – марте 2020 г. в рамках исследования проведено тестирование 85 педагогов общего образования Горного улуса Республики Саха (Якутия). Получены предварительные результаты. На основе результатов исследования будут приняты управленческие решения по проектированию или корректировке программ повышения квалификации для повышения эффективности деятельности педагога в условиях цифровизации общего образования.

Оценка компетенции производится по интегральному методу оценивания основных показателей оценки результатов (Protodyakonova, 2018). Каждый ОПОР оценивается в 1 или 0 баллов, в зависимости от сформированности или отсутствия каждой компетенции. Уровень оценки компетенций производится суммированием

количества ответов «да» в процентном соотношении от общего количества ответов. Далее выводится процент результативности по сумме баллов. И по разработанной шкале оценки образовательных достижений оценивается уровень сформированности компетенций: от 90%-100%: высокий уровень, 70%-89%: повышенный уровень, 50-69%: пороговый, менее 50% - допороговый (не сформировано) (табл. 1).

Таблица 1. Пример матрицы - оценочной ведомости сформированности компетенций

№	Р	КК1	КК2	КК3	КК4	КК5	ЦК.01	ЦК.02	ЦК.03	ЦК.04	ЦК.05	ЦК.06	ЦК.08	Сумма max=	% результата	Оценка компетенции
		4	*4*	*3*	*3*	*3*	*2*	*2*	*4*	*5*	*4*	*3*	*3*	*40*		
1	А	да	да	нет	да	нет	да	да	нет	нет	да	да	нет			Пороговый
		3	2	1	2	1	2	1	1	2	2	2	1	20	50	
2	Б	да	да	да	да	да	да	да	да	нет	да	да	нет			Повышенный
		3	2	3	2	3	2	2	4	2	3	2	1	29	72,5	
3	В	да	да	да	да	да	да	да	да	да	да	да	да			Высокий
		4	4	2	3	3	2	2	4	4	3	2	3	36	90	
4	Г	да	да	нет	да	нет	да	да	нет	нет	да	да	нет			Пороговый
		3	2	1	2	1	2	1	1	2	2	2	1	20	50	
ИТОГО		да	да	да	да	да	да	да	да	да	да	да	да			Пороговый
		3,3	2,5	1,8	2,3	2	2	1,5	2,5	2,5	2,5	2	1,5	26,3	65,6	

Примечание: В матрице использованы обозначения: Р – респонденты, участвовавшие в тестировании; КК - ключевые компетенции цифровой экономики; ЦК – цифровые компетенции.

Во второй выделенной строке приведено количество основных показателей оценки результатов по каждой компетенции.

По столбцу **Сумма max=** приведена сумма всех количественных показателей по соответствующей строке.

В четвертой строке приводится количество баллов за показатели компетенций, полученных каждым респондентом. По количеству показателей в данной строке выводится результат освоенности компетенции: «да», «нет» по формуле: =ЕСЛИ(C6>=(C$4/2);"да";"нет") (если более половины показателей освоены, то «да»).

По столбцу **Процент результата** вычисляется процент полученных баллов от максимальной суммы всех баллов (O8*100/O4).

Уровень сформированности компетенций вычисляется в соответствии со шкалой оценки образовательных достижений (=ЕСЛИ(J6>=90;"Высокий"; ЕСЛИ(J6>=70;"Повышенный"; ЕСЛИ(J6>=50;"Пороговый";"Допороговый"))). В данном случае таксономия целевых результатов образования представляется уровнями: высокий, повышенный, пороговый и допороговый.

Заключение

В настоящее время формат знаниевой парадигмы ориентирован на формальное прагматическое освоение и применение знаний. В новой парадигме образования основной упор делается на то, чтобы все субъекты образовательной системы добывали и управляли знаниями самостоятельно. В данных условиях базовым элементом цифровых компетенций педагогов необходимо выделить ее когнитивный компонент, обусловленный его профессиональной педагогической деятельностью. Ключевые компетенции цифровой экономики, формируемые у педагогов позволяют им осваивать умения коммуникации, саморазвития, сбора, обработки и управления данными и информацией, что в сущности и есть когнитивная составляющая цифровых компетенций.

Компетентностный формат предполагает, что по структуре формируемая компетенция многомерная. На этой основе разработана когнитивная модель формирования цифровой компетентности педагога в условиях цифровизации общего образования. У каждого педагога должны быть сформированы ключевые компетенции цифровой экономики: коммуникация и кооперация в цифровой мультикультурной среде; саморазвитие в условиях неопределенности; креативное мышление; управление информацией и данными; критическое мышление в цифровой среде.

Формирование цифровых компетенций у педагогов будет способствовать обеспечению мобильного доступа всех участников образовательного процесса: и педагогов, и обучающихся к цифровым ресурсам образования, формированию цифровых компетенций у обучающихся, тем самым будут достигаться повышение качества образования, профессиональное развитие педагогов, эффективность управления образованием в современных условиях.

Для управления образовательной деятельностью применяются специфические уровневые задания, выполняющие формирующие и оценочные функции, и являющиеся особенностью когнитивной технологии. При этом разрабатываются необходимые оценочные средства для выявления уровня сформированности цифровых компетенций педагогов, с учетом характеристик их когнитивного компонента.

Финансирование

Список литературы

Брольпито, А. Цифровые навыки и компетенция, цифровое и онлайн обучение [Электронный ресурс]. Европейский фонд образования, Турин, 2019. URL: https://www.etf.europa.eu/sites/default/files/2019-08/dsc_and_dol_ru_0.pdf (дата обращения: 21.08.2020).

Игнатьев, В.П., Иванова, А.С., Иванова, М.Д. ИКТ-компетентность педагога как основа цифровой грамотности обучающихся [Электронный ресурс] // Современные проблемы науки и образования. – 2020. – 2. URL: https://science-education.ru/article/view?id=29709 (дата обращения: 21.08.2020).

Каганер Е. После пандемии онлайн-образование не будет прежним. Как оно изменится? [Электронный ресурс]. URL: https://tass.ru/opinions/8242615 (дата обращения: 20.04.2020).

Матухин, Д.Л., Низкодубов, Г.А. Компетентностный подход в системе высшего про-фессионального образования // Язык и культура. – 2013. – № 1 (21). – С. 83-89.

Приказ Минэкономразвития России от 24.01.2020 № 41 «Об утверждении методик расчета показателей федерального проекта «Кадры для цифровой экономики» национальной программы «Цифровая экономика Российской Федерации» [Электронный ресурс]. Ре-

жим доступа: http://www.consultant.ru/document/cons_doc_LAW_344498/ (дата обращения: 21.08.2020).

Протодьяконова, Г.Ю. Особенности формирования и оценивания общепрофессиональных, профессионально – специализированных и профессиональных компетенций // Профессиональное образование и рынок труда. – 2018. – №4 (35). – С. 16-19.

Структура ИКТ-компетентности учителей. Рекомендации ЮНЕСКО (2019) [Электронный ресурс]. URL: https://iite.unesco.org/ru/publications/struktura-ikt-kompetentnosti-uchitelej-rekomendatsii-unesco/ (дата обращения: 21.08.2020).

Учителя и школьники Якутии оказались самыми продвинутыми в РФ по техническому оснащению [Электронный ресурс]. URL: https://news.ykt.ru/article/99571 (дата обращения: 16.04.2020).

Ally M. Competency profile of the digital and online teacher in future education //International Review of Research in Open and Distributed Learning. – 2019. – Т. 20. – №. 2.

Gerick J., Eickelmann B., Bos W. School-level predictors for the use of ICT in schools and students' CIL in international comparison //Large-scale Assessments in Education. – 2017. – Т. 5. – №. 1. – С. 5.

Ketil-Engen B. Understanding social and cultural aspects of teachers' digital competencies. – 2019.

Kiss G. Measuring the ICT competencies in Slovakia and in Serbia in the higher education //SHS Web of conferences. – EDP Sciences, 2017. – Т. 37. – С. 01075.

Langset I. D., Jacobsen D. Y., Haugsbakken H. Digital professional development: towards a collaborative learning approach for taking higher education into the digitalized age // Nordic Journal of Digital Literacy. – 2018. – Т. 13. – №. 01. – С. 24-39.

Manzuoli C. H., García H. R., Cifuentes Y. S. Training professors in ICT: Personal Learning Environments. A grounded theory research study // Journal of E-Learning and Knowledge Society. – 2016. – Т. 12. – №. 1.

McGarr O., McDonagh A. Digital competence in teacher education. – 2019.

Redecker C. et al. European framework for the digital competence of educators: DigCompEdu [Electronic resource]. – Joint Research Centre (Seville site), 2017. – №. JRC107466. URL: https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/european-framework-digital-competence-educators-digcompedu.

Tomczyk Ł. Skills in the area of digital safety as a key component of digital literacy among teachers // Education and Information Technologies. – 2020. – Т. 25. – №. 1. – С. 471-486.

Tondeur J. et al. Developing a validated instrument to measure preservice teachers' ICT competencies: Meeting the demands of the 21st century // British Journal of Educational Technology. – 2017. – Т. 48. – №. 2. – С. 462-472.

References

Ally, M. (2019). Competency profile of the digital and online teacher in future education. *International Review of Research in Open and Distributed Learning*, 20(2).

Brolpito, A. (2019). Digital skills and competencies, digital and online training. European Education Foundation, Turin. Accessed August 21, 2020 at: https://www.etf.europa.eu/sites/default/files/2019-08/dsc_and_dol_ru_0.pdf.

Gerick, J., Eickelmann, B., & Bos, W. (2017). School-level predictors for the use of ICT in schools and students' CIL in international comparison. *Large-scale Assessments in Education*, 5(1), 5.

Ignatiev, V. P., Ivanova, A. S., & Ivanova, M. D (2020). Teacher ICT competence as the basis for students' digital literacy. *Modern problems of science and education, 2*. Accessed August 21 at: https://science-education.ru/article/view?id=29709.

Kaganer, E. (2020). *After a pandemic, online education will not be the same. How will it change?* Accessed April 20, 2020 at: https://tass.ru/opinions/8242615.

Ketil-Engen, B. (2019). Understanding social and cultural aspects of teachers' digital competencies. *Comunicar, 27*(61), 9-19. DOI: 10.3916/C61-2019-01.

Kiss, G. (2017). Measuring the ICT competencies in Slovakia and in Serbia in the higher education. In *SHS Web of conferences* (Vol. 37, p. 01075). EDP Sciences.

Langset, I. D., Jacobsen, D. Y., & Haugsbakken, H. (2018). Digital professional development: towards a collaborative learning approach for taking higher education into the digitalized age. *Nordic Journal of Digital Literacy*, *13*(01), 24-39.

Manzuoli, C. H., García, H. R., & Cifuentes, Y. S. (2016). Training professors in ICT: Personal Learning Environments. A grounded theory research study. *Journal of E-Learning and Knowledge Society*, *12*(1).

Matukhin, D. L., & Nizkodubov, G. A. (2013). Competence approach in the system of higher professional education. *Language and Culture, 1*(21), 83-89.

Ministry of Economic Development of Russia (2020) Order as of January 24, 2020 No. 41 "On approval of calculation methods for the federal project "Personnel for the Digital Economy of the national program "Digital Economy of the Russian Federation". Accessed August 21, 2020 at: http://www.consultant.ru/document/cons_doc_LAW_344498 /

McGarr, O., & McDonagh, A. (2019). *Digital Competence in Teacher Education*. Output 1 of the Erasmus+ Funded Developing Student Teachers' Digital Competence (DICTE) Project.

Protodyakonova, G. Yu. (2018). Features of the formation and evaluation of general professional, professional - specialized and professional competencies. *Professional'noe obrazovanie i rynok truda – Vocational education and labor market, 4*(35), 16-19.

Redecker, C., & Punie, Y. (2017). *European Framework for the Digital Competence of Educators*. DigCompEdu. JRC Science for Policy Report. 2017. Accessed August 21, 2020 at: https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/european-framework-digital-competence-educators-digcompedu.

UNESCO (2019). *The structure of ICT competence of teachers*. UNESCO Recommendations. Accessed August 21, 2020 at: https://iite.unesco.org/ru/publications/struktura-ikt-kompetentnosti-uchitelej-rekomendatsii-unesco/.

Teachers and schoolchildren of Yakutia were the most advanced in the Russian Federation in terms of technical equipment. Accessed April 16, 2020 at: https://news.ykt.ru/article/99571.

Tomczyk, Ł. (2020). Skills in the area of digital safety as a key component of digital literacy among teachers. *Education and Information Technologies*, *25*(1), 471-486.

Tondeur, J., Aesaert, K., Pynoo, B., van Braak, J., Fraeyman, N., & Erstad, O. (2017). Developing a validated instrument to measure preservice teachers' ICT competencies: Meeting the demands of the 21st century. *British Journal of Educational Technology*, *48*(2), 462-472.

УДК 37.01

Непрерывное образование учителя математики и качество по PISA: от профессиональной компетентности к математической грамотности школьников

Надия Г. Юсупова[1], Галина Н. Скударёва[2]

[1] *Государственный гуманитарно-технологический университет, Орехово-Зуево, Россия*
Email: rektorat@ggtu.ru
ORCID: https://orcid.org/0000-0002-5488-4345

[2] *Государственный гуманитарно-технологический университет, Орехово-Зуево, Россия*
Email: skudarevagalina@yandex.ru
ORCID: https://orcid.org/0000-0001-5254-4948

Аннотация
Актуальность исследования данной проблемы обусловлена тем, что качество образования является системообразующим фактором в социальном развитии личности, общества, государства. Данная статья направлена на теоретическое осмысление понятия «качество образования» в контексте международного сравнительного исследования PISA и обоснование непрерывного образования учителей математики, как условия формирования математической грамотности школьников.
Диагностические методы опроса и анкетирования учителей, учащихся и родителей позволили выявить проблемы в преподавании математики. Ведущим методом исследования избран контекстный анализ деятельности Центра повышения профессионального мастерства педагогов ГГТУ. Представленные в статье Программа повышения квалификации «Формирование практической математической грамотности школьников» и авторское учебно-методическое пособие «Жизнь как математический сюжет» демонстрируют их практическую направленность на формирование профессиональной предметной компетентности учителя математики, развитие математической грамотности школьников и, как следствие, повышение качества общего образования по результатам PISA.
Ключевые слова: непрерывное образование, национальный проект, PISA, качество образования, математическая грамотность, учитель математики, математическая компетентность, математическая задача.

Ongoing Education of Math Teachers and PISA Quality Assessment: from Professional Competence to the Mathematical Literacy of Schoolchildren

Nadia G. Yusupova[1], Galina N. Skudareva[2]

[1] State University of Humanities and Technology, Orekhovo-Zuevo, Russia
Email: rektorat@ggtu.ru
ORCID: https://orcid.org/0000-0002-5488-4345

[2] State Universityy of Humanities and Technology, Orekhovo-Zuevo, Russia
Email: skudarevagalina@yandex.ru
ORCID: https://orcid.org/0000-0001-5254-4948

Abstract
The quality of education is a key factor in the social development of the individual, society, and the state. This article is aimed at identifying the theoretical essence of the concept, the "quality of education" in the context of the international PISA comparative study and the ongoing education of math teachers as a factor in the development of students' mathematical literacy. The diagnostics for interviewing and questioning teachers, students and parents revealed problems and difficulties in teaching and studying mathematics. A key tool was context analysis of the GGTU Center for teachers' professional development activities. The Ongoing Education Program "Schoolchildren Practical Math Literacy Formation" presented in the article and the author's teaching manual "Life as a Math Plot" reveal their practical focus on the development of math teachers' professional subject competence, on schoolchildren's math literacy development, and, as a result, a general improvement in the quality of education according to the PISA results.
Keywords: ongoing education, national project, PISA, education quality, math literacy, math teacher, math competence, math problem.

Введение

1.1. Актуальность

Образовательная политика XXI века основана на приоритетах качества и непрерывности российского образования, что подтверждено её нормативным, научным, методическим обоснованием (Skudareva, 2013). Качество и непрерывность образования являются системообразующими факторами в социальном развитии личности, общества, государства как субъектов социального заказа (Skudareva, 2013).

Пристальное внимание к качеству образования прослеживается в общей позиции В.В. Путина и воплощается во вполне конкретных мерах: ежегодном Послании Президента к Федеральному собранию (The plan of President Putin, 2018), майском указе 2018 года (Decree of the President, 2018), где главой государства обозначена цель России войти к 2024 году в десятку стран – мировых лидеров по качеству школьного образования: «…Вопросы образования чрезвычайно важны. Добиться развития технологий будущего невозможно без качественного образования, а Россия должна быть на шаг впереди в этой сфере» (Kuz'min, 2018). Кроме того, качество образования нормативно закреплено в Законе об образовании (Federal Law, 2013).

Как видно, приоритеты государственной власти относительно качества образования сформулированы вполне чётко, понятно и достаточно жёстко. В дополнение к этому нам представляется важным проанализировать практический опыт уни-

верситетских образовательных структур в организации непрерывного послевузовского образования учителя, обосновать взаимообусловленность и взаимовлияние качества образования и непрерывного педагогического образования.

1.2. Анализ литературы

Прежде всего определим теоретические основы понятия «качество», опираясь на различные подходы к его рассмотрению, отражённые в современной отечественной научной литературе.

В. А. Сластёнин соотносит качество образования с его гуманизацией и акцентирует внимание на векторной переориентации качества знаний к качеству образования, объединяя в своей концепции его процесс и результат. Значимым в определяющих характеристиках качества образования является личностный компонент, в рамках которого личность рассматривается в контекстах культуры, социализации, гражданственности, творчества (Slastenin, 2020).

С позиций социализации и гражданственности личности представляет качество образования и А. И. Адамский. Более того, в качестве результатов, обеспечивающих успешность освоения образовательных программ, автор предлагает рассматривать совокупность академических знаний, социальных компетенций и социального опыта. Важными при этом являются условия, обеспечивающие высокое качество образования. Кроме того, автор обозначает междисциплинарную проблему качества образования, заключающуюся в том, что это понятие становится не только педагогическим, но и экономическим, точнее, организационно-финансовым (Adamsky, 2009).

Академик РАО А. М. Новиков считает несколько утилитарным восприятие качества образования лишь в контексте оценки образовательных результатов учащихся и деятельности образовательных учреждений, в процедурах их государственных аттестаций, лицензирований и аккредитаций. В его понимании качество образования – это соответствие уровня достижений образовательных результатов обучающихся их личностным потребностям, а также социальным ожиданиям и нормативным требованиям (Lomakina, 2016).

Восприятие качества образования Л. Б. Железновой базируется на его социальных контекстах и включает результирующий компонент, нацеленный на соответствие социальным потребностям, формирование личностных и профессиональных компетенций, развитие гражданственности. Соответственно обобщающими характеристиками качества образования исследователь считает некую совокупность признаков, свойств и функций, определяющих современные социально- образовательные требования к инновационным педагогическим теориям и успешным образовательным практикам, способным удовлетворить социальный заказ личности, общества и государства (Zheleznova, 2008).

Весьма нестандартно формулирует качество образования И.А. Вальдман, подчёркивая неоднозначность восприятия его смыслов разными субъектами – социальными партнёрами в образовании: учащимися, их родителями, педагогами, местным сообществом, страной и мировым сообществом. Базовыми критериями качества образования в зависимости от масштабности его восприятия автором представляются качество оценки, система ценностей, национальное согласие, международная конкурентоспособность, мирное сосуществование (Waldman, 2015).

Промежуточно резюмируя, можно видеть, что представленные научные позиции имеют как концептуальное сходство в понимании социально-образовательной миссии качества образования, так и принципиальные различия, касаемые его субъектности, целевой ориентации, методологических подходов, масштабности.

Цель:

Осуществив краткий теоретический анализ понятия «качество образования» и выявив его сущность, логично рассмотреть данный феномен в контексте проблемы сравнительного исследования качества общего образования PISA, которое организуется и проводится международными организациями, и предложить практические пути повышения показателей российской системы общего образования в определении математической грамотности 15-летних школьников на примере опыта деятельности Центра повышения профессионального мастерства педагогов ГОУ ВО МО ГГТУ (г. Орехово-Зуево) «Учитель будущего».

Ведущими методами исследования стали метод контекстного анализа и диагностические методы опроса и анкетирования учителей, учащихся и их родителей при обучении и изучении математики. Результаты диагностики изложены в контекстном анализе ситуации.

Результаты исследования

PISA является одним из крупнейших международных широкомасштабных мониторинговых исследований в области образования, выявляющих функциональную грамотность 15-летних школьников в области чтения, естествознания, математики и др. PISA проводится с 2000 года и становится всё более масштабным: если в первом цикле в исследовании участвовали 32 страны, то в 2018 году — уже 78. Цель исследования – оценка практикоориентированности школьного образования, то есть сформированнности у школьников способности решать не академические задачи, а практические проблемы.

PISA один раз в три года позволяет оценить не только грамотность учащихся, но и динамику контекстных показателей национальных систем общего образования. Исследование PISA сосредоточено на оценке практических навыков учащихся и их умении применять академические знания в жизни, в отличие от других международных мониторингов (TIMSS и PIRLS), которые проверяют уровень академических знаний, заложенных в учебные программы. Подчёркивается, что результаты PISA коррелируют с экономическим и социальным развитием страны. Поэтому в образовательной политике многих стран результатам этого исследования придаётся ключевое значение.

Данные по оценке образовательных достижений учащихся (PISA) Российской Федерации за период 2000-2015 гг. являются весьма неутешительными: 23 место в 2015 году по математической грамотности и 26 место по читательской грамотности.

С 2019 года несущей конструкцией современной российской образовательной политики стал Национальный проект «Образование», по своей сути отклик на майский указ Президента РФ В. В. Путина (Kuz'min, 2018).

Прогнозируется, что повышение уровня успешности участия России в международных исследованиях должно обеспечиваться вкладом федерального проекта «Учитель будущего», одного из десяти Национального проекта «Образование». То есть ключевой фигурой российского образования становится учитель, обладающий личностными, социальными и профессиональными компетенциями, владеющий широким инновационным технологическим спектром и готовностью работать в новых социально-образовательных условиях**.**

Всё более важное значение в государственном, институциональном и мировом масштабах приобретает проблема непрерывного образования учителя на этапе после вуза, как условие обеспечения качества образования его учеников. Необходимость в непрерывном образовании проистекает из изменившихся социальных

требований к роли образования. Непрерывное образование, или «образование в течение всей жизни», понимается мировым социально-образовательным сообществом как личностная и социальная потребность человека в непрерывном обучении, в приобретении и развитии им личностных, социальных и профессиональных компетенций и как воплощение приобретённых знаний, умений, развитых способностей в реальной социально полезной деятельности во благо общества и государства. В данной связи ключевым субъектом в системе непрерывного педагогического образования становится учитель, стремящийся повышать свой профессиональный уровень и совершенствовать личностные и социальные компетенции, чтобы целенаправленно и векторно проецировать их на личностное, социальное и профессиональное развитие обучаемых.

Центр повышения профессионального мастерства педагогов ГГТУ «Учитель будущего» начал свою активную деятельность с сентября 2019 года с реализации Программы «Формирование практической математической грамотности школьников», которая используется в процессе повышения квалификации учителей математики в данной структуре и направлена на совершенствование их профессиональной компетенции в решении и разработке учебных заданий по формированию и развитию математической грамотности школьников, прогнозируя их успешность в оценке образовательных достижений PISA.

Программа нацелена на получение такого образовательного результата, как сформированность у слушателей умений и навыков по разработке комплекса учебных заданий по математике под планируемые результаты развития математической грамотности и математической компетентности учащихся.

Актуальность и значимость прогнозируемого образовательного результата определяется следующим фактором: одним из главных вызовов XXI века современному образованию является необходимость в формировании функциональной (в том числе и математической) грамотности у всех учащихся независимо от ступени обучения и их дальнейших образовательных и профессиональных планов. В таблице 2 охарактеризованы уровни математической грамотности обучающихся. Прослеживается прямая корреляция между высшими уровнями овладения профессиональной предметной математической компетентностью учителя и достижением высших уровней математической грамотности обучающимися.

Таблица 2. Уровни математической грамотности

Уровни	Описание уровня
6	Владение способностями математического мышления и рассуждения, умение выдвигать собственные гипотезы
5	Умение самостоятельно мыслить, анализировать, выдвигать собственные гипотезы
4	Владение навыком применения имеющихся знаний и умений в поиске необходимой информации
3	Владение способами использования знаний и умений для получения новой информации
2	Умение применять имеющиеся знания и навыки в простейших неучебных ситуациях
1	Низкий уровень элементарных знаний

Практическая значимость результатов исследования, представленных в статье.

В целях достижения оптимальных результатов обучения слушателей, нацеленных на формирование у учителей умений и навыков по разработке учебных зада-

ний по математике под планируемые результаты развития математической грамотности обучающихся, организовано анкетирование (25 человек) по выявлению их затруднений в организационно-методическом сопровождении образовательного процесса, результаты которого отражены в таблице 3.

Таблица 3. Анализ затруднений в организационно-методическом сопровождении образовательного процесса

№ n/n	Трудности	Доля анкетируемых (в %)
	Уточнение и конкретизация целей урока	68%
	Планирование образовательных результатов	68%
	Подбор адекватных методов обучения	32%
	Технологическая организация образовательного процесса	35%
	Цифровое обеспечение	26%
	Актуальность методического инструментария	88%

Анализ результатов анкетирования учителей математики перед началом обучения на курсах повышения позволил выявить их затруднения в организационно-методическом сопровождении образовательного процесса и по результатам скорректировать содержание программы курсовой подготовки.

Наибольшие затруднения вызвали у учителей целеполагание (68%) и планирование образовательных результатов учащихся (68%). Это объясняется устаревшим методическим обеспечением и его неадекватностью новым целям и задачам повышения методической грамотности школьников. Данная проблема отмечена наибольшим количеством анкетируемых (88%). Примерно равное количество учителей отметили затруднения в технологической организации нового образовательного процесса (35%) и, соответственно, в подборе адекватных целям и задачам методов обучения (32%). Недостаточность цифрового обеспечения отметили 26% учителей, в основном, малокомплектных сельских школ.

Исходя из вышесказанного, сформулирована цель реализации программы: совершенствование профессиональной компетенции учителей математики по решению и разработке учебных заданий, направленных на формирование и развитие математической грамотности школьников. Планируемые результаты их курсового обучения представлены в таблице 4.

Таблица 4. Планируемые результаты обучения

№ n/n	Знать
1.	– содержание и средства формирования и развития математической грамотности обучающихся;
2.	– уровни, критерии и показатели развития математической грамотности;
3.	– требования к отбору и разработке заданий на формирование и развитие математической грамотности.
	Уметь
1.	– формулировать цели, планируемые образовательные результаты, пути и способы формирования и развития математической грамотности обучающихся;
2.	– анализировать задания PISA и соотносить их с планируемыми результатами, типовыми задачами формирования и развития математической грамотности;

3.	– отбирать и разрабатывать учебные задания по формированию и развитию математической грамотности обучающихся.
Иметь практический опыт	
1.	– разработки комплекса учебных заданий по предмету под планируемые результаты формирования и развития математической грамотности обучающихся;
2.	– оформления комплекса учебных заданий по предмету под планируемые результаты формирования и развития математической грамотности обучающихся

Профессиональная компетентность учителей в области математики может приобрести очертания математической компетентности посредством формирования общих математических способностей, умений, математического мышления, математической аргументации, математического моделирования, умения использовать математический аппарат, а также цифровые технологии в практической деятельности. На её формирование нацелены национальные образовательные системы Европы и других стран мира. Математическая компетентность слушателей формируется на интерактивных занятиях курса, где:

• изучаются содержание и средства развития математической грамотности обучающихся;

• определяются уровни, критерии и показатели развития математической грамотности;

• изучаются требования к отбору и разработке заданий на развитие математической грамотности;

• анализируются задания PISA и основные ошибки, допускаемые 15-летними школьниками при решении заданий с проведением анализа тестовых заданий и результатов тестирования PISA;

• познаётся классификация практикоориентированных заданий по математике.

Результатом обученности слушателей – учителей математики общеобразовательных школ и методистов – можно считать приобретение практического опыта: в отборе и разработке учебных заданий по развитию математической грамотности обучающихся; в формулировании цели, планировании образовательных результатов, путей и способов развития математической грамотности обучающихся; в разработке математической игры, подготовке комплекта визуальных материалов для сопровождения образовательного процесса.

На зачётном итоговом занятии учителя осуществляют подборку математических заданий по темам цикла «Математические сюжеты в жизни»: «Математика в лесу (в поле, на речке)», «Математика в торговом центре», «Математика строительства и ремонта» и т.п.

В целях выполнения образовательного заказа слушателей на методическое обеспечение образовательного процесса, преподаватели университета, руководители Программы «Формирование практической математической грамотности школьников» объединились в проектную группу с целью разработки учебного пособия как инструментария методического сопровождения учителей математики в процессе подготовки школьников к международному тесту PISA.

Перед разработкой пособия авторы проанализировали проблемы, с которыми сегодня сталкивается учитель математики, и наметили пути их решения, ориентируясь на конкретные целевые установки: формировать у учащихся умение применять математические знания в обыденной жизни.

Практикоориентированные задания должны базироваться на ситуациях, связанных с реальной жизнью человека и общества, с будущей профессией, обучением, наукой; они должны формировать у обучающихся умения анализировать изме-

няющиеся условия и адаптироваться к ним, работать с различными источниками информации (графиками, таблицами, диаграммами), планировать и прогнозировать процессы и явления; они должны быть основаны на уже изученном материале по предмету.

В тестировании PISA практикоориентированные задания по математике классифицированы по 4 категориям:

• по виду познавательной деятельности (одному из четырёх: рассуждать, формулировать, применять и интерпретировать);

• по области содержания (одной из четырёх: «Количество», «Неопределённость и данные», «Изменение и зависимости», «Пространство и форма»);

• по контексту (одной из четырёх ситуаций: личностные, общественные, профессиональные, научные);

• по типу требуемого ответа на задание (одному из трёх: с выбором ответа, с закрытым свободным ответом и открытым свободным ответом).

Становится очевидным: чтобы сформировать (или проверить уровень сформированности) у учащихся умения применять математические знания в обыденной жизни, учителю математики нужно пройти следующие этапы:

1. Осуществить подборку заданий из ранее использованных в тестировании PISA и разработанных российскими исследователями;

2. Провести тестирование;

3. Выявить недочёты в знаниях и умениях учащихся;

4. Устранить недочёты (для этого потребуются новые задания, которые учителю придётся разработать и дополнить вопросами (развивающими, уточняющими предложенную в задании ситуацию).

С применением метода опроса выявлены трудности, возникающие у российских учеников при решении практикоориентированной математической задачи:

• сложно понять суть практикоориентированного задания,

• сложно построить математическую модель (перевести жизненную ситуацию на язык математики),

• сложно дать интерпретацию полученному математическому решению и т.д.

Именно эти этапы мыслительной деятельности заложены в содержании заданий тестирования PISA. Чтобы понять суть практикоориентированного задания, обучающийся должен «прожить» ситуацию, описанную в задаче. Это становится возможным, если он уже сталкивался с подобной ситуацией в жизни. В противном случае, учителю математики придётся самому моделировать реальную ситуацию и проблему, которая решается математическими методами.

Для моделирования реальной ситуации предлагается применение в процессе обучения математических игр (работа в командах) и проектная деятельность школьников. Несомненными плюсами командной работы являются следующие: обучающиеся предлагают интересные идеи, которые сразу же реализуются, выражается поддержка со стороны окружающих и формируется чувство ответственности.

В процессе игры обучающиеся сами придумывают сюжет задачи. Главный результат – в самостоятельной работе школьника с практикоориентированным математическим заданием.

Итак, продукт проекта – учебно-методическое пособие по формированию математической компетентности учащихся 7-8 классов «Жизнь как математический сюжет» (Sachkova E.N., Buharenkova O.Yu., Kamenskaya N.A., Mishina O.S., Pshenitsyna N.S., Serov A.S., 2019). В пособии представлены уникальные авторские задания в логике стандартов международного теста PISA, выполнение которых будет способствовать формированию у обучающихся 7-8 классов математической грамотности.

В структуре пособия две части. Первая часть – это «Практические задания», выполнение которых будет способствовать развитию:

– умения анализировать графики; рассчитывать вероятности независимых событий; создавать ментальный динамический образ; выполнять нестандартные задания и искать ответы на вопросы, с которыми встречаются достаточно редко или видят их впервые в жизни; использовать статистические данные для изучения различных реальных явлений и процессов; выполнять действия с различными единицами измерения;

– навыков смыслового чтения (в том числе читать и интерпретировать количественную информацию, представленную в различной форме); построения математической модели; поиска информации и работы с графическими данными;

– пространственного и геометрического представления, видения математических моделей в конкретных жизненных ситуациях.

Первая часть пособия содержит 36 практикоориентированных заданий (80 вопросов) различной сложности и содержания, связанных с повседневной жизнью, со школьной жизнью, с будущей профессией. На страницах сборника оживают математические формулы, оживают точки в системе координат, дети клеят математические обои, играют в математический кубик, знакомятся с профессиями, играют в футбол, учатся планировать, прогнозировать, анализировать и т.д. Темы заданий сборника коррелируют с тематикой уроков математики в 7-8 классах.

Во второй части пособия сформулированы «Рекомендации к решению и оцениванию практикоориентированных заданий», дополненные контентом базовых математических знаний и умений, необходимых для решения задания, а также приведены рекомендации к решению некоторых из них.

Апробация пособия осуществлена на интерактивных занятиях учителей математики общеобразовательных школ и методистов методических центров. В качестве рефлексии слушателям был предложен опросник, ответы на которые в обобщённом виде и авторской редакции предложены в таблице 5.

Таблица 5. Результаты опроса слушателей по итогам их обучения с апробацией нового пособия

№ п/п	Вопрос	Обобщённые варианты ответов
	Что вам удалось узнать в процессе освоения содержания курсовой подготовки?	– средства формирования и развития математической грамотности обучающихся; – требования к разработке заданий на формирование и развитие математической грамотности.
	Какие практические навыки вы приобрели на интерактивных занятиях?	– навык решения практических задач с применением абстрактных математических понятий.
	Какими умениями вы овладели в целях формирования и развития математической грамотности обучающихся?	– отбор и разработка учебных заданий; – разработка математических игр; – подготовка визуальных материалов.
	Как вы характеризуете новое математическое пособие?	– доступное, понятное по изложению материала; – удобное, потому что темы заданий сборника не противоречат тематике уроков математики в 7-8 классах; – содержит готовые рекомендации к решению задач; – может применяться для занятий с одарёнными детьми при их подготовке к олимпиадам.

Как видно, учитель математики, используя настоящее пособие, может перейти от абстрактных математических понятий к решению практических задач в реальной жизни школьника, а также может использовать задания для занятий с одарёнными детьми при подготовке к олимпиадам, тем самым выполняя требования ФГОС общего образования как общественного договора между личностью, обществом и государством (General Education Standard, 2006), обеспечивая достижение национальных целей, решая стратегические задачи развития Российской Федерации по вхождению нашей страны в десятку мировых лидеров по качеству общего образования.

Сформулированный тезис инициировал выявление мнения родительского со-общества об использовании нового пособия при формировании математической грамотности. Опрос проведён среди родителей учащихся 7-го класса базовой школы университета в г. Электросталь. Его содержание и результаты представлены в таблице 5.

Таблица 5. Результаты опроса родителей об использовании пособия в процессе обучения их детей математике

№ п/п	Вопросы родителям	Обобщённое мнение родителей учащихся
1.	Какое влияние на Вашего ребёнка оказало обучение с применением данного пособия?	1. Повышен интерес к изучению математики; 2. Повышена мотивация к решению задач; 3. Применяются в жизни математические знания; 4. Активизирован самостоятельный поиск информации для решения нестандартных задач; 5. Развиваются навыки анализа, планирования и прогноза.
2.	Способствует ли пособие повышению уровня обученности Вашего ребёнка?	Однозначно да
3.	Удовлетворены ли Вы результатами успеваемости Вашего ребёнка по математике?	В целом да, но очевидны перспективы её повышения
4.	Ваши пожелания	1. Дополнить пособие рабочими тетрадями; 2. Выражаем готовность оказать финансовую поддержку изданию пособия и рабочих тетрадей

Заключение

Таким образом, актуальность проблемы повышения качества образования сегодня очевидна. Качество образования является системообразующим фактором в социальном развитии личности, общества, государства. Философские, социальные, педагогические подходы к рассмотрению понятия «качество образования» позволили выявить, что данный феномен определяет состояние и результативность процесса образования в обществе. Исходя из этого, его соответствие потребностям и ожиданиям социума рассматривается в контексте проблемы непрерывного педагогического образования. В образовательной политике многих стран взаимообусловленности данных феноменов придаётся ключевое значение, равно как и пониманию прямой зависимости между уровнем качества образования и уровнем непрерывного педагогического образования.

В статье представлено авторское учебно-методическое пособие по формированию математической компетентности учащихся 7-8 классов «Жизнь как математический сюжет» как методический инструментарий программы «Формирование

практической математической грамотности школьников» для повышения квалификации учителей математики в процессе их непрерывного послевузовского образования, которое способно обеспечить практические подходы к повышению показателей российской системы общего образования в определении математической грамотности 15-летних школьников в международном исследовании PISA.

Список литературы

Адамский, А.И. Что такое качество образования? – М.: Эврика, 2009. – 164 с.

Вальдман, И.А. Модель использования результатов мониторинговых исследований для повышения качества обучения и обеспечения эффективного управления образовательными системами // Управление образованием: теория и практика. –2015. – №1(17). – С.116-122.

Железнова, Л.Б., Масловская, С.В. Гуманитаризация образовательных практик в системе // Молодой ученый. – 2008. – №1. – С. 246-251.

Кузьмин, В. Условия для лидерства // Российская газета - Столичный выпуск. – № 195(7658). – 03.09.2018.

Ломакина, Т.Ю. Вспоминая учителя. Методология профессионального образования // Сборник материалов международной научно-практической конференции, посвященной А.М. Новикову – М.: ФГБНУ «Институт стратегии развития образования РАО, 2016. – 648 с.

План президента Путина // Российская газета – Федеральный выпуск №46 (7509). –02.03.2018.

Сачкова, Е.Н., Бухаренкова, О.Ю., Каменских, Н.А., Мишина, О.С., Пшеницына, Н.С., Серов, А.С. Жизнь как математический сюжет: Учебно-методическое пособие по формированию математической компетентности учащихся 7-8 классов. – Орехово-Зуево: ГГТУ, 2019. – 72 с.

Скударёва, Г.Н. Качество образования: от педагогической теории к практике общественной оценки // Alma mater (Вестник высшей школы). – 2013. – № 6. – С. 57-60.

Скударёва, Г.Н. Общество и образование в современной России: социокультурный контекст // Общество и образование в современной России: социокультурные ориентиры. – Орехово-Зуево: 2015. – С. 1-11.

Сластёнин, В.А. Психология и педагогика в 2 ч. Часть 2. Педагогика: учебник для вузов. – М.: Юрайт, 2020. – 374 с.

Стандарт общего образования: на пути к общественному договору. – М.: Просвещение, 2006. – 39 с.

Указ президента Российской Федерации от 07.05.2018 г. № 204 «О национальных целях и стратегических задачах развития Российской Федерации на период до 2024 года» // Российская газета – №75601. – 09.05.2018.

Федеральный закон «Об образовании в Российской Федерации». – Москва: Проспект, 2013. – С.6.

References

Adamsky, A.D. (2009). *What is the quality of education?* Moscow: Evrika.

Decree of the President of the Russian Federation "On national goals and strategic objectives of the development of the Russian Federation for the period until 2024" (2018, May). Rossiyskaya gazeta – Russian Newspaper, 75601.

Federal Law "On Education in the Russian Federation" (2013). Moscow: Prospekt.

General Education Standard: Towards a Social Contract (2006). Moscow: Prospekt.

Kuz'min, V. (2018, September). Conditions for leadership. *Rossiyskaya Gazeta – Russian Newspaper,* 195(7658).

Lomakina, T.Yu. (2016). Remembering the teacher. Methodology of Professional Education. *Collected materials of the international scientific-practical conference dedicated to A.M. Novikov.* Moscow: Federalniy Gosudarstvenniy Budzetniy Nauchniy Institut Institut Strategii Razvitiya obrazovaniya RAN.

Sachkova, E. N., Buharenkova, O. Yu., Kamenskaya, N. A., Mishina, O. S., Pshenitsyna, N. S., & Serov, A. S. (2019). *Life as a mathematical plot: An educational methodological manual for the formation of students' mathematical competence in grades 7-8.* Orekhovo-Zuevo: GGTU.

Skudareva, G. N. (2013). The quality of education: from pedagogical theory to the practice of social assessment. *Alma mater (Vestnik Visshey Shkoly) - Alma mater (Higher School Herald), 6*, 57-60.

Skudareva, G. N. (2015). Society and education in modern Russia: Sociocultural context. In *Society and education in modern Russia: Sociocultural guidelines* (pp. 1-11). Orekhovo-Zuevo.

Slastenin, V. A. (2020). *Psychology and pedagogy in 2 parts. Part 2. Pedagogy*. Moscow: Yurayt izdatelstvo.

The plan of President Putin (2018, March). *Rossiyskaya Gazeta – Russian Newspaper*, 46 (7509).

Waldman, I. A. (2015). A model for using the results of monitoring studies to improve the quality of training and ensure effective management of educational systems. *Upravlenie obrazovaniem: teoriya i praktika - Education Management: Theory and Practice, 1*(17), 116-122.

Zheleznova, L. B. & Maslovskaya, S. V. (2008). Humanitarization of educational practices in the system. *Molodoy Ucheny - Young Scientist, 1*, 246-251.

Contents

Содержание