# THEORY AND METHODS OF VOCATIONAL EDUCATION: COMPETENCE APPROACH IN TRAINING AND SELF-DEVELOPMENT

## The use of problem-based technologies in multicultural education of future teachers

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Implementation of the Strategic Academic units involves designing effective learning technology. This technology must comply with the conditions of the multicultural environment. In the context of carrying-out a strategic academic unit destined to raise effectiveness of higher education (including multicultural education of future teachers) we refer to StrAU's recommendations (StrAU's, 2015). Strategic academic units are understood to mean individual structural subdivisions (schools, departments, institutes, centers of excellence, RECs and others) or their associations ("consortiums") which are characterized by: effective administration system focused on solving practice-oriented educational, scientific and technological problems. But more often these units are understood only as the structures oriented on solving practical-oriented tasks. The structure itself can neither manage nor solve problems, if it doesn't have functional content. This content can provide technological filling of the structure that is, filling this structure with definite functional technologies. Now the technologies activating cognitive, developing and creative processes include the technologies connected with problem definition, problem situation analysis, effective ways of solving practical (including pedagogical) problems (Venguer, 1973), (Davydov, 1986); (Lloyd-Jones, Margetson, Bligh, 1998); (Spencer, Spencer, 1993); (Teodorescu, 2006), (Terenzini, Reason, 2010); (The Engineer of 2020, 2004) and others.

The relevance of the problem under study is determined by the necessity to intensify practical effect of multicultural education within future teachers' education on the one hand and the absence of algorithms of effective use of pedagogical technologies at universities on the other hand. In this respect the aim of the research presented in the article is to define the appropriate algorithm of using pedagogical technologies in multicultural education. The leading method in the problem research is project method which allows grouping the system of active methods and identifying the best algorithm (curriculum) for using problem-based technologies. As as a result of examining different combinations (algorithms) of using these technologies, we established that optimality (effectiveness) of multicultural education at university can be achieved at the teaching level by progressing from communicative technology to critical thinking technology, then to case-study technology, module learning, project technology, problem-based learning and moderation technology with an expert problem seminar at the end; at the level of study - by progressing from understanding the problem, determining the ways for solving the problem, selecting

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arguments before discussing the ways of problem solving and summing up at expert problem seminar. The article materials can be useful for pedagogical university teachers.

Keywords: algorithm, technology, multicultural education, university.

#### References

Strategic Academic Units (StrAU's) (2015). http://isi.sfu-kras.ru/ sites/ is. institute.sfukras.ru/files/ Rekomendacii CAE .pdf

Gabdulchakov V.F. Theory and practice of multicultural education: Study program. Kazan: KSU, 2015 http://repository.kpfu.ru/?p id=112087

Vygotsky L.S. (1997). Imagination and creativity in childhood / Vygotsky L.S. SBR: Sojuz. 96 p.

Davydov V.V. (1986). The problems of developmental education: The experience of theoretical and experimental psychological research. Moscow: Pedagogy. 240 p.

Venguer L.A. (1973). Pedagogics of capabilities. Moscow: Pedagogy. 96 p.

Matyushkin A.M. (1980). The problems of professional and theoretical thinking development. M.: Pedagogy.

Makhmutov M. I. (1975). Problem-based learning. M.: Pedagogy.

Makhmutov M. I. (1977). Organizing problem-based learning at school. Teacher's book. Moscow: Prosveshenie. 240 p.

Lloyd-Jones G., Margetson D., Bligh J. G. (1998). Problem-based learning: a coat of many colours. Med Educ. 1998 Sep.; 32(5): 492-494.

Mc. Gregor T. A. (2008). Universal Organisational Perfomance Dimension Model (OPD): The development of a Theoretical Based Competency Model [Electronic resource] Mode of access: http://www.opragroup.com/community/file/128.pdf.

Spencer, L. M., Spencer, S. M. (1993). Competence at work: models for superior performance. New York[etc]: John Wiley.

Teodorescu T. (2006). Competence verus competency: What is the difference? Performance improvement. 2006. Vol. 45. № 10 (Nov.-Dec.). P. 27-30.

Terenzini P., Reason R. (2010). Toward a More Comprehensive Understanding of College Effects on Student Learning. Center for the Study of Higher Education. 327 p.

The Engineer of 2020. (2004). Visions of Engineering in the New Century. National Academy of Engineering, USA. 2004 [Electronic resource] Mode of accers. https://inside.mines.edu/UserFiles/Assessment/Engr 2020.pdf http://repository.kpfu.ru/?p id=112087

Valerian F. Gabdulchakov (2014) Communicative Core of Interaction and its Influence on Education Results. *Procedia - Social and Behavioral Sciences*. Third Annual International Conference «Early Childhood Care and Education». Volume 146, 25 August 2014, Pages 381–384.http://authors. elsevier.com/sd/article/S1877042814047880

Valerian Faritovich Gabdulchakov, Olga Vladimirovna Yashina (2015) Prevention of Latent National Aggression in the Course of Future Teacher Education *Asian Social Science*. Vol. 11, No. 2, January 2015. P. 275.http://ccsenet.org/journal/index.php/ass/issue/view/1227

Carras, C. I. (2007). Le françaissur Objectifs Spécifiqueset la classe de langue. Paris: CLE International.

Cuq, J. P. i Gruca, I. (2002). Cours de didactique du français langue étrangèreetseconde. Grenoble: Presses Universitaires de Grenoble.

Gouiller, F. (2006). Les outils du Conseil de l'Europe en classe de langue. Paris: Didier.

Mangiante, J. -M. i Parpette, Ch. (2004).Le françaissurObjectifSpécifique: del'analyse des besoins à l'élaboration d'un cours. Paris: Hachette.

Porcher, L. (2004). L'enseignement des languesétrangères. Paris: Hachette Education.

Hanushek E. A. (2010) The economic value of higher teachequality // Working Paper No. 56. National Center for Analysis of Longitudinal Data in Education Research http://www.urban.org/ Upload-edPDF/1001507-Higher-Teacher-Quality.pdf

Schleicher A. (2011) Building a high-quality teaching profession: Lessons from around the world, OECD Publishing.

Teacher as a highly skilled specialist: profession. Lessons from around the world. *Education matters*. 2012. no.2. Pages 5-62.

Teacher Shortage Areas Nationwide Listing (2012) U. S. Department of Education, Office of Postsecondary Education http://www2.ed.gov/about/offices/list/ope/pol/tsa.pdf

Baum S., Payea K. (2011) Trends in student aid, 2011/Trends in Higher Education Series. N.Y., College Board Advocacy & Policy Center. http://trends.collegeboard.org/downloads/Student\_Aid\_2011.pdf

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http://kpfu.ru/psychology/struktura/zhurnal-39obrazovanie-i-samorazvitie39

Heilig J. V., Jez S. J. (2010) Teach for America: A review of the evidence. Boulder, CO: National Education Policy Center, Univ. of Coloradohttp://epicpolicy.org/publication/teach-for-america

Panin V.A., Krayushkina S.V., Zabelin A.V. (2015). On the preparation of non-teaching professions students to the teaching profession in the framework of the Federal Target Program development of education. Scientific notes: *Electronic Journal of Kursk the State University tion*. No 3 (35).

Vygotsky, LS (1928). The problem of the cultural development of the child. Pedology. Moscow.

El'konin D. (1999). Psychology of the game. Moscow: ñ. 360.

Zankov L.V. (1975). Education and development. Moscow.

Davydov V.V. (1986). Problems of developmental education. Moscow.