

Competence of the Modern Educator: In Search of Finding Values (Brazilian case)

Maria Alzira de Almeida Pimenta

University of Sorocaba, Sorocaba, Brazil

E-mail: alzira.pimenta@gmail.com

ORCID: <https://orcid.org/0000-0002-5775-5856>

DOI: 10.26907/esd.18.3.06

EDN: NWBGKS

Submitted: 1 March 2023; Accepted: 1 June 2023

Abstract

The idea of competence is widely discussed in education, accompanied by fierce controversy, when it is strictly associated with work training and, therefore, is criticized. This process of seeking solutions to problems reveals someone's competence. In light of this, the competence of modern educators should deserve to be treated with more attention than a research topic. It is crucial because teacher competence is fundamental to developing student competence which should be the school's priority function. Having as a premise the controversies that involve the concept of competence, the relevance of developing competence in a humanistic perception, and also the centrality of the Attitude dimension (values) in education, we set out to reflect on how teacher competence influences the development of the student's competence. The methodology involved was bibliographic research. The results indicate that the association of the competence concept with the corporate world and the lack of a clear and shared definition of competence need to be overcome to favor that it could be developed.

Keywords: competence, teacher competence, KSA Theory, attitude dimension, values.

Компетентность современного педагога: в поисках ценностей (кейс Бразилии)

Мария Алзира де Алмейда Пимента

Университет Сорокаба, Сорокаба, Бразилия

E-mail: alzira.pimenta@gmail.com

ORCID: <https://orcid.org/0000-0002-5775-5856>

DOI: 10.26907/esd.18.3.06

EDN: NWBGKS

Дата поступления: 1 марта 2023; Дата принятия в печать: 1 июня 2023

Аннотация

Вопрос компетентности широко обсуждается в образовании. Дискуссия становится ожесточенной, если понятие «компетентность» сводится лишь к подготовке к профессиональной деятельности. Такое узкое толкование, как правило, подвергается критике профессионального сообщества. Необходимость решения постоянно возникающих проблем требует от специалиста широкого круга компетенций. Компетентность современного педагога – это крайне важная проблема, поскольку компетентность преподавателя играет ключевую роль в формировании компетенций обучающихся, что является приоритетной задачей школы. Актуальность компетентного подхода определяется также тем, что основополагающую роль в современном образовании играют гуманистические ценности. В связи с этим цель настоящей статьи – анализ того, как компетентность педагога влияет на развитие компетенций обучающихся. Для достижения поставленной цели было проведено библиографическое

исследование. Результаты показали, что следует разорвать связь понятия «компетентность» с миром бизнеса, свести к минимуму зависимость образования от коммерческих интересов. По мнению авторов, необходимо более ясное определение компетентности, которое будет способствовать развитию исследований в этой области.

Ключевые слова: компетентность, компетентность педагога, теория KSA, отношение, ценности.

Introduction

Daily life is full of personal and corporative problems: a malaise or illness; a family or neighbor conflict; or a loss to be managed by the company, different people deal with them in different ways, which result in more adequate (positive) solutions or not. This process of seeking solutions to problems reveals someone's competence. Considering the development of student competence depends, to a large extent, on the teacher's competence, it is important to reflect on how to instruct competent teachers. This should be the primary focus of a school's mission and should be regarded as more significant than a subject of research.

The idea of competence is widely discussed in education, accompanied by fierce controversy, when it is strictly associated with work training and, therefore, is criticized. If on the other hand, we consider that competence involves all dimensions of a person's existence, namely individual, social, and professional, it starts to deserve attention from educators. If we consider that it is not innate and acquired/developed, the school takes a central role in its development.

We contend that educators, teachers, school managers, and educational policymakers need to explore how and why the development of competence deserves to guide the pedagogical practice. However, some may think that this is obvious. This idea is corroborated by several published papers on competence in education. In addition, the European Commission which develops and implements EU policies has declared 2023 as the Year of Skills (European Commission, 2023).

However, we understand that the need to discuss the concept of competence, seeking to mitigate the discussions around it, is due to three aspects. First, educators who are critical of the use of the concept usually associate it with the corporate world, the job market, and competitiveness. That is, associating competence with a practical perspective, is often confused with a capitalist viewpoint - which the description, from the European Commission, about everyone's rights focused on the labor market: "acquire skills that allow full participation in society and successful transitions in the labor market. It also states the right of everyone to timely and tailor-made assistance to improve employment or self-employment prospects, to training and re-qualification, to continued education and to support for job search" (European Commission, 2023).

Second, there is confusion around the terminology that composes the conceptual field of competence, for example, the definition of ability, attitudes, competence, and skill. Attitude is frequently associated with proactivity and not with values. The use of the expression "competence and skill" is, at minimum, inadequate, because to develop competence the skill is one necessary dimension. This confusion implies inconsistent discussions and fragility in proposals on how to implement a teaching-learning process aimed at developing competence.

Third, in academic and reference documents like laws, resolutions, reports, and curricula, the use of any concept requires rigor. If it is not respected, i.e., there is a lack of conceptual rigor, there can be different interpretations. In the case of competence, the confusion around the terminology probably is the result of the different understandings about what it is, how it develops, and why it is essential to develop it.

This work proposes to contribute to mitigating the controversies surrounding the concept of competence and to systematize scholars' ideas that can serve as a basis for teachers' practice. We understand that this is a way to develop student's competence from a humanist perspective.

Purpose and objectives of the study

The paper aims to reflect on how teacher competence influences the development of student's competence. To achieve this, three intermediate objectives were defined:

- a) demonstrate the convergence between Pestalozzi's "keys of learning" and the KSA Theory - presented in Literature review;
- b) describe the controversies surrounding the term competence, based on legal documents and academic texts - presented in Results; and
- c) point out the priority aspects of competence-based teaching - presented in the Discussion.

Literature review

The necessity and desire to understand better the concept of competence leads the participants of the Research Group in Higher Education, Technology and Innovation, University of Sorocaba (São Paulo-Brazil), to research the topics related to competence. One of these participants is Mota (2021) who did bibliographic research about the origin of the concept as part of her master's thesis. The most important contribution of her dissertation was to systematize and reiterate the observation of Durand about the KSA Theory (Durant, 2000), which traces back to Johannes Pestalozzi, a Swiss pedagogue from the 18th century who created the "keys of learning".

keys of learning (Pestalozzi)		KSA Theory
Head	——	knowledge
Hands	——	Skills
Heart	——	Attitudes (values)

Figure 1. Correspondence between the elements of the "keys of learning" and the KSA Theory

The conceptual evolution of the "keys of learning" to the KSA Theory passed through several thinkers and scholars such as John Dewey and Harold Bloom. Figure 2 systematizes the sequence of authors who addressed the concept of competence.

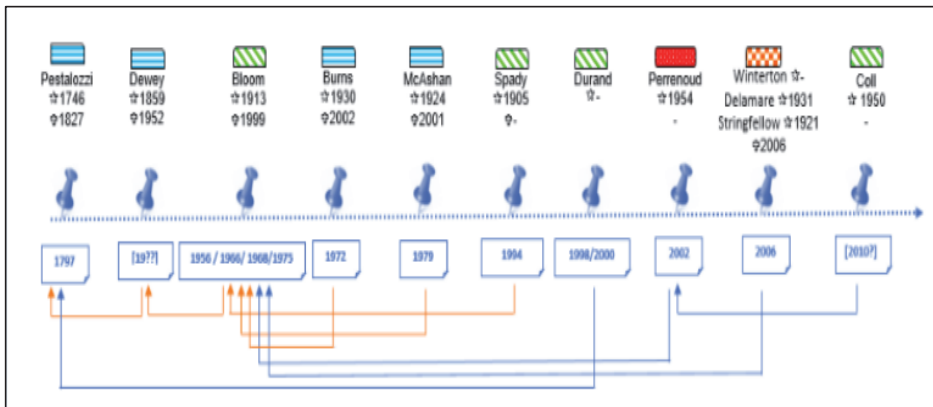


Figure 2. Timeline of the Competence Concept Origin

Mota (2021) observes that throughout the 20th century, the research and discussion on competence in the educational field were pushed into the background. Specialists in the administration area, on the other hand, researched and incorporated the concept into management practices, which ended up generating this association with the business and work world and, consequently, distancing it from school and education. The concept of competence has regained prominence in the education area with Philippe Perrenoud (1998), who wrote the book "Building Competence From School". In this book, he discusses whether the school's most important work is to transmit more or less knowledge or develop competence. In "Ten New Competences to Teach", written by Perrenoud in 1999, he adopts the perspective of the KSA Theory and relies on Dr. Le Boterf, a specialist in competence and advisor to companies, whose vision of competence approximates performance.

As a result of a long research on competence, Perrenoud (1999, p. 17) identifies what would be the "new profession" of the teacher. It would include: working from problem situations and a more integrated and less segmented view of knowledge; improvising, creating, and diversifying teaching strategies; negotiating and conducting projects with students; adopting flexible planning; implementing and explaining a new didactic contract; and practicing the formative function of assessment. These are key to developing competence.

Perrenoud (1999) reiterates the role of the teacher even considering that there is a genetic predisposition that determines the maturation of the nervous system and, thus, influences the development of each individual's competence. However, it observes that the subject's potential only becomes effective competencies through learning, thus reinforcing the relevance of the teacher's competence.

In addition to Perrenoud's contribution to the approach of teaching by and for competence, it is important to highlight the contributions of Sacristán et al. (2008) and Zabala & Arnau (2010). Sacristán et al. (2008) make a pertinent and grounded critique of the approaches given to teaching by competence in education. Among several aspects, he analyzes systemic evaluations and the usefulness of rankings; the crucial role of language and terminology, for example, the notions of outcome, indicator, and performance; the political and economic use of competence as an important competitive factor; development of the guidelines proposed by such bodies as the Organisation for Economic Cooperation and Development (OECD) and the European Union (EU) to name a few. His critique is essential for educators who want to work from a humanist perspective, not a pragmatic and/or utilitarian perspective of competence.

Zabala and Arnau (2010), on the other hand, assume competency-based teaching as a rigorous, fair, and lifelong integral training method and propose how to work in the classroom. They argue that teaching based on competencies represents training with the fundamental characteristic of being applied in real contexts. The two fundamental categories of competency-based teaching are functionality and relevance in any new or familiar problem situation. As new situations and contexts are unpredictable and can be infinite, they believe that competence cannot be taught, which makes perfect sense. The teacher can offer concepts, practice skills, raise awareness, and help reflect on values, but each one learns and builds his/her competence. In addition to this important observation, Zabala and Arnau (2010) also point out the difficulty of working with attitudes (values) and evaluating learning in competency-based teaching.

Methodology

This qualitative and essayistic research was based on a narrative literature review study that sought to obtain a comprehensive view of publications on the concept of competence and KSA Theory in the context of education. This research design was chosen because "... [it] may be most useful for obtaining a broad perspective on a topic" (Cook et al, 1997, p. 378), in diverse sources selected based on their contribution. In this article, the narrative literature review is used to reflect on how the concept of competence has been used in the area of education. The research had a historical perspective focused on document analyses (laws, resolutions, and curriculum guidelines of government institutions) and texts about the controversies surrounding competency-based teaching. This review was done during the supervision of the Master's research performed by Mota (2021), Pires (2021), Silva (2021), and Corrêa's doctorate (2023).

Results

The results that aim to clarify the three aspects previously presented are based on Cristiane Mota's (2021) research at the master's level with my guidance.

First, the association with the corporate world is explained by the preponderance of research in the administration area, from the 1980s until 2010, and a smaller production, in the education area, which indicates the variation of interest of the respective areas about the topic. Another aspect to be highlighted is that Perrenoud (1998, p. 10) observes the return of interest in competence and its discussion at school from the 1990s caused by a "kind of contagion: as the world of work appropriated the notion of competence, the school would be following in its footsteps, under the pretext of modernizing and to insert itself in the current of market economy values, such as human resources management, the pursuit of total quality, appreciation of excellence, demand for greater mobility of workers and work organization". This leads to a strong association of competence with the market economy and, therefore, capitalism. This is insightful feedback also observable in the academic production of education.

Second, the confusion over the terminology is explained by the lack of a clear and shared definition of competence. Skill and ability are two frequently used words when it comes to competence. However, in the Oxford Dictionary, ability is defined as the fact that somebody can do something; a level of skill or intelligence. And skill is defined as the ability to do something well; a particular ability or type of ability. We can observe that there are two linguistic aspects to consider: a) a redundancy, or circularity, in the sense that one term is used to define the other, leading to the understanding that they are synonymous; and b) skill is more specific (a particular ability or ability to do something well). And yet attitude is mistakenly understood as disposition and proactivity, quite frequently in a common sense. According to this understanding, attitude is what makes a person take initiative to act. In the KSA Theory, attitude is related to the values that the person assumes as guiding their choices and decisions. The confusion is understandable because there is a certain proximity between the two views, in the sense that Attitude is what motivates action. However, the orientation of action from values is completely different from a personal condition of initiative and daring, which can be guided by interests and not values.

The repetition of the expression "skills and competencies" in documents is another problem. According to the KSA theory, the skill is part of the competence, so it would be redundant to repeat both words in the same expression. This repetition occurs in documents issued in several countries, as well as in Brazil. Another problem found in

several documents is a series of competencies that are skills because they involve an action, a doing, even if cognitive, for example, to dissert, to analyze, to calculate.

This confusion can be explained by the fact that in the documents the required action/skill already involves/is associated with knowledge, which is already part of the competence, but it is not enough because the third dimension is missing, i.e. the attitude (the values, the heart).

Perrenoud (1998, p. 18) deliberated: “The word has many meanings, and no one can pretend to give the definition. What to do then? Refer to the Tower of Babel. Seeking to identify the most common meaning in an institution or a professional environment? Go ahead and retain an explicit definition. I will adopt this last position, without, therefore, departing from one of the current meanings”.

Third, we perceive the concept of competence as a condition of a person when he or she mobilizes resources, knowledge, skills, and attitudes (values) to solve a problem. Thomas Durant in *L'Alchimie de la Compétence* (Durant, 2000), refers to the concept of competence, according to the KSA Theory, to Johannes Pestalozzi, a Swiss pedagogue who created the “keys of learning”: head, hands, and heart and generated the KSA framework, i.e. Knowledge (head), Skills (hands) and Attitudes (heart).

Discussions

The interventions and research carried out on competence have revealed:

– “... no competence is stimulated from the beginning. The subject's potentialities are only transformed into effective competence through learning that does not intervene spontaneously, for example, along with the maturation of the nervous system, and which also does not take place in the same way in each individual” (Perrenoud, 1998, p. 20). Therefore, individuals with the same knowledge, skills, and attitudes will mobilize in different ways and, will generate different qualities of competence;

– it cannot be named as a competence to write, administer, etc. It can only be realized through the solution of a problem. For this reason, it is difficult for most people, including teachers, to understand what it is, in fact, and even more difficult to evaluate it.

– educating through competence implies changing the way of thinking about learning and pedagogical practice, which generates a lot of resistance on the part of teachers and students. The teacher will need to overcome the view that “... teaching consists, above all, of transmitting, in an orderly manner, well-dominated erudite knowledge” (Perrenoud, 1998, p. 17). The student will have to “... work harder, take new risks, cooperate, project and question himself” (Perrenoud, 1998, p. 17).

– the attitude dimension, which involves values that guide a person's decisions, is the most fragile/delicate part of the development of competence. Durant (2000, p.17) examined “attitudes seem to have been largely neglected in the resource-based perspective as well as in the still emerging competency theory”. This is because knowledge and skill are easier to assess, whether the student has mastered them or not. As for the attitude, whether the student is imbued with values and will decide based on them or not is more difficult to identify/evaluate. The movies “The Boy Who Harnessed the Wind” (Ejiofor, 2020) and “Escape from Alcatraz” (Siegel, 1979) show, with didactic mastery, exactly how competence manifests itself and how values are decisive in its constitution.

To summarize the elements of competence, according to the KSA Theory, Figure 3 presents some relevant aspects.

KSA Theory elements	Relevant aspects
Concepts	<ul style="list-style-type: none"> • Without concepts it would be impossible to go beyond the scope of sensible experience and think complexly and abstractly; • Understanding a concept is essential for intellectual development; • Understanding and sharing concepts is essential for communication;
Skills	<p>Castro (2013) emphasizes that doing with hands helps brain development and shows the role of the hands, of motor skills, in the development of competence, citing important philosophers:</p> <ul style="list-style-type: none"> • By having hands, man is the most intelligent of animals (Anaxagoras); • What we have to learn, we learn by doing (Aristotle); • Knowledge lives in the head, but enters through the hands (J. Berger);
Attitudes (Values)	<ul style="list-style-type: none"> – It is the reference of our choices; – It is the hardest to work, in fact, teachers only raise awareness; – It is the most fragile part of education and competence.

Figure 3. KSA Theory elements and relevant aspects

Conclusion

One of the biggest problems is understanding the concept of competence, even by teachers. Perhaps that is why there is so much confusion and polarization about the pertinence of guiding pedagogical practice based on it.

In Brazil, the concept of competence is rejected, therefore, educational institutions do not develop it. We consider this a serious problem because without competence people become professionals who do not know how to solve their everyday problems. This perspective can frighten teachers, especially, those who believe that teaching consists, above all, of transmitting, systematically, well-dominated erudite knowledge. To develop competence, the teacher needs to face with students' resistance to any major transformation; to aid the students to work more, take new risks, cooperate, project, and question themselves. To overcome these challenges, the teacher must be competent. And their competence should be based on values (persistence, responsibility, solidarity) rather than on knowledge and skills.

In conclusion, the attitude dimension, which involves the values that guide a person's decisions, is practically not developed in our schools. And, unfortunately, it has been unvalued in the world with the idea of post-truth.

Acknowledgments

This paper has been supported by the Research Group on Higher Education, Technology and Innovation - GPESTI, the Research Group on Media Language in Education - GPLME and the Internética Project: R&D Project subsidized by the Spanish MCINN (PID 2019- 104689RB-I00), to which this work is linked.

References

- Castro, C. M. (2013). *The Intelligence of the Hands*. Lecture at Sala Mundo. <https://www.youtube.com/watch?v=kiyPtkInqdA>
- Cook, D. J., Mulrow, C. D., & Haynes, R. B. (1997). Systematic reviews: synthesis of best evidence for clinical decisions. *Annals of internal medicine*, 126(5), 376-380. <https://doi.org/10.7326/0003-4819-126-5-199703010-00006>
- Corrêa, V. G. G. (2023). *Law in Higher Education: Contribution to the development of competence and humanistic training* [Doctoral Dissertation. University of Sorocaba]. <https://uniso.br/mestrado-doutorado/educacao/teses/2023/vanessa-gurgel.pdf>

- Durand, T. (2000). *L'alchimie de la compétence* [The alchemy of competence]. *Revue Francaise de Gestion*. <https://doi.org/10.3166/rfg.160.261-292>
- Ejiofor, C. (2020). *The Boy Who Harnessed the Wind*. Мiдiа (on-line). Color (1h53). NETFLIX: Malawi.
- European Commission (2023). *European Year of Skills*. https://year-of-skills.europa.eu/index_en
- Mota, C. B. (2021). *The Competence Concept: Origin and applications in Education* [Master's degree thesis, University of Sorocaba] <https://uniso.br/mestrado-doutorado/educacao/dissertacoes/2021/cristiane-bevilaqua-mota.pdf>
- Perrenoud, P. (1998). *Construire des compétences dès l'école* [Building Competence From School]. ESF Éditeur.
- Perrenoud, P. (1999). *Dix Nouvelles Compétences pour Enseigner* [Ten New Skills for Teaching]. ESF Éditeur.
- Pires, C. (2021). *Convergencies Between Yoga and Education in Brazil: a path to competence and humanist training?* [Master's degree thesis, University of Sorocaba] <https://uniso.br/mestrado-doutorado/educacao/dissertacoes/2021/cristiane-sales-pires.pdf>
- Sacristán, J. G. et al. (2008). *Enseñar por Competencias, que hay de nuevo?* [Teach by Competencies, what's new?]. Ediciones Morata: Madrid.
- Siegel, D. (1979). *Escape from Alcatraz*. Мiдiа (on-line). Black and White (1h52). Paramount Pictures: Los Angeles.
- Silva, P. M. S. (2021). *Teacher Professional Development Programs and Pedagogical Competence in Higher Education: Systematic scope review*. [Master's degree thesis, University of Sorocaba]. <https://uniso.br/mestrado-doutorado/educacao/dissertacoes/2021/patricia-machado-sampaio.pdf>
- Zabala, A., & Arnau, L. (2010). *11 ideas clave. Cómo aprender y enseñar Competencias* [11 key ideas. How to learn and teach competencies]. Editorial Graó.