

THE PANDEMIC OF COVID-19: The impacts and trends in the process of continuing teacher education

A PANDEMIA DA COVID-19: Os impactos e tendências nos processos de ensino, aprendizagem e formação continuada de professores

LA PANDEMIA DE COVID-19: Impactos y tendencias en los procesos de enseñanza, aprendizaje y formación continua del profesorado

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RESUMO:

The article aims to analyze the implications of the COVID-19 Pandemic for the field of education in the region of Tocantins' Amazon, especially for the process of continuing education for teachers in the State Education System. The research is based on historical dialectical materialism, having as reference the bibliographic and documentary research in ordinances, provisional measures, decrees, opinions and other normative mechanisms issued, mainly, by the Ministry of Education, National Council of Education, Government of the State of Tocantins and State Education Council. From а critical perspective, it is assumed that the adoption of public-private partnerships as an educational policy and the expansion of distance education greatly compromises the constitutional principle of democratic management and the quality of education.

KEYWORDS: Public Educational Policy. Democratic management. Public-private partnership. Continuing Teacher Education. Covid-19.

Introduction

This article aims to reflect on the importance of teacher education intertwined with teaching strategies, considering the knowledge, techniques, and practices of teaching, and learning in the contemporary educational process. In this perspective, the importance of teacher training is presented in the emerging perspective that requires teachers to have contextualized, connected training that meets the needs of increasingly complex students.

In this sense, it is essential that they know the teaching strategies and can, during the process, identify and propose the techniques that best match the activities to be inserted in the practices carried out in the educational environment. For Anastasiou



and Alves (2003, p. 68), the term strategies are used "as the art of applying or exploring the favorable and available means and conditions, aiming at the effectiveness of teaching"¹.

The guarantee of effective practice based on effective teaching strategies, in the school environment, will depend on the educator's knowledge and willingness to develop them to make learning meaningful and profitable for both. In this sense, teacher training committed to the quality of teaching helps and enhances the students' learning process. This paper will be organized into two topics: teacher training in an emerging perspective and epistemological knowledge of teaching strategies and teaching and learning in the educational process.

Teacher training in the emerging perspective

The current scenario requires educators to adopt a new attitude, a new way of thinking, and this is still a great challenge, as they are used to working with certainties and truths, with predictability. Understanding the order contained in the disorder, uncertainty, non-linearity as part of the educational process depends on teacher training - both initial and continuing - essential for the construction and re (construction) of professionalism to meet the contemporary reality.

According to Penin (2008, p. 646), it is possible to understand the word professionality as:

[...] the fusion of profession and personality terms. The link between person/profession occurs throughout a productive life, in a continuous process, involving experiences that are stimulating, tense, and conflicting. The term professionalization indicates the initial training process and goes through all moments of continuing training.²

Based on this assumption, teacher education is understood as capable of providing a vision that goes beyond the linear and fragmented, in which the subjects are mere executors of others' decisions. In other words, training that makes professionals capable of participating, reflecting, and proposing improvements to their training and, thus, promoting the training of students, giving prestige to the

¹ "Como a arte de aplicar ou explorar os meios e condições favoráveis e disponíveis, visando à efetivação da ensinagem".

² "(...) a fusão dos termos profissão e personalidade. A relação pessoa/profissão ocorre ao longo da vida produtiva, num processo contínuo, eivado, como é comum, de experiências tanto estimulantes quanto tensas e conflituosas. O termo profissionalização indica o processo de formação inicial e atravessa todos os momentos de formação continuada".



ontological being, and the appreciation of subjectivity. In this sense, Moraes (2015, p. 53) states

It is necessary that all education professionals analyze, understand, and integrate knowledge about learning subjects and also about the context behind them, their possibilities, and limitations. This principle indicates that teachers also need to be trained not only disciplinarily, but also transdisciplinarity, in other words, they need to work with integrated, transversal, connective, contextualized knowledge, so knowledge has a lot to do with other subjects, such as psychology, sociology, organization sciences, with popular knowledge, like any other related to the needs of its students.³

To meet the challenges of contemporary society, the school needs to reinvent itself, seek continuing education to break with secular practices rooted in the educational context. However, the transition from the traditional paradigm requires the complexity4 of pedagogical thinking, as the teacher, as stated by Moraes (2015, p. 156), is still "imprisoned in his epistemological and disciplinary cages, in the pedagogical and didactic routines that need to be built". Educators must understand the complexity5 that, for Morin (1990), means a common fabric that places the individual and the context, the order and disorder, the subject and the object, the teacher and the student, and all other tissues as inseparably associated that govern events, actions, and interactions, that weave the fabric of life.6

The complexity paradigm seeks to overcome linear vision and proposes a new conception with the articulation of totality and interconnection. Complexity tends to sow a new vision of man, society, and the world (Moraes, 1997, 2004; Behrens, 2005a, 2006). This movement of change affects all professionals, including teachers. In this sense, teacher training requires continuous qualification processes that include a critical, reflective, and transforming vision.

³ "É preciso que todo o profissional de educação analise, compreenda e integre tanto o conhecimento a respeito dos sujeitos aprendentes como o conhecimento do seu contexto, suas possibilidades e limitações. Esse princípio indica que os professores necessitam também serem formados não apenas disciplinarmente, mas também transdisciplinarmente, ou seja, necessitam trabalhar com saberes integrados, transversais, conectivos, contextualizados, com saberes que tenham muita relação com outras disciplinas, como psicologia, a sociologia, as ciências da organização, com os saberes populares, como qualquer outro relacionado à necessidade de seus educandos".

⁴ For Edgar Morin (1990) complexity means, briefly, a common weaving in which the individual and the context are associated and inseparable, order and disorder, the subject and the object, the teacher and the student, and all other stuff that are part of events, actions and organizational interactions that are part of the fabric of life.

⁵ Morin (1990, p. 20), says: "complex occurs when something is created and put together".

⁶ "Aprisionado em suas gaiolas epistemológicas e disciplinares, nas rotinas pedagógicas e didáticas que necessitam ser construídas".

Thus, continuing education is essential for the realization of the epistemology of complexity and transdisciplinarity that contemplates the cognoscenti being and the reconnection of knowledge, recognizes the existence of diverse knowledge and the dialogue between scientific and humanistic knowledge, between academics and popular, laypeople, traditional and those from other cultures.

The overcoming of disunited, separate, and fragmented knowledge requires a paradigmatic reform, which according to Morin (2000, p. 36), needs to point to the knowledge arising from reality and that provide the "multidisciplinary, transversal, multidimensional, transnational, global and planetary vision"7. Thus, this is a great challenge to be faced by the education of the present with a view to a more integrated and humane future.

Furthermore, the path of overcoming requires the search for paths that lead to reflection on and for action (Nóvoa, 1991). Thus, training needs to be continuous, progressive, and wide, to provide the development and improvement of theory in line with teaching practice.

In this way, teacher education must overcome reductionism, fragmentation, linear causality, and technical and didactic formalism, with a view to an education that recognizes the complexity of the human condition and goes to meet the subject. Thus, for the process of construction and reconstruction of the teaching profession, it is necessary to constantly search for new information, scientific and pedagogical knowledge, questions about theories and practices, and creativity to face teaching situations in the school context.

Epistemological knowledge of teaching strategies and the fabric of teaching and learning in the educational process

Given the changes that characterize contemporaneity, schools must expand their possibilities of actions to contemplate students' needs invested with the current complexity. Thus, teachers are no longer in charge of traditional practices rooted in conservatism, in other words, continue to teach the way they were taught.

The preparation to be a teacher for many centuries remained focused exclusively on the domain of content. The teacher needed to have a knowledge domain to teach subjects. In this perspective, Garcia (1999, p. 33) refers to the teacher's conservative training encyclopedia as a "process of transmitting scientific and cultural knowledge to

⁷ "Multidisciplinar, transversal, multidimensional, transnacional, globais e planetários".

provide teachers with specialized training, focused mainly on concepts domain and subjects' structures in which it is an expert ".8

Times are different and it is up to the training process of teachers to seek, understand, and insert current practices to offer an education in which the full learning of students is prioritized. However, to teach, teachers use strategies that are part of the teaching-learning process9. Thus, the assertive choices of strategies according to activities to be offered and theoretical knowledge a priori make all the difference in the educational process. Therefore, an aspect referring to the term "strategy": in the Greek language it's called estrategía and in the Latin language it's called strategia, it means the art of applying or exploring favorable and available means and conditions to achieve specific objectives.

In this perspective, teachers must be a true strategist, which justifies the term strategy adoption. Thus, studying, selecting, organizing, and proposing are the best facilitating tools for students to appropriate knowledge (Anastasiou & Alves, 2003). This makes planning essential for defining which strategy is going to be used according to the activity's goals.

Strategies aim to achieve objectives, so it is necessary to be clear about what is intended with the teaching process. The guiding objectives must be clear to people involved - teachers and students - and be present in the didactic contract. These objectives will guide paths taken in carrying out the performed actions by students and teachers in strategies achievement (Anastasiou & Alves, 2003).

Teachers' difficulties are noticeable when dealing with many strategies due to habits they bring from the past, so they will often use only the content exposure method in expository classes, reinforcing transmission of ready and finished content and that means content's reproduction. However, it is not intended to cancel these lectures, but to propose to teachers' other possibilities that when well-planned can achieve good results.

To awake teachers to other possibilities, it must be through training and that's Zabalza's view (2004) when stating that "the exercise of teaching profession requires solid training, not only inside the subjects' scientific content but also in aspects

⁸ "De transmissão de conhecimentos científicos e culturais de modo a dotar os professores de uma formação especializada, centrada principalmente no domínio de conceitos e estrutura disciplinar da matéria em que é especialista".

⁹ According to Anastasiou and Alves (2003), the term strategy is considered as the art of explaining or exploring instruments and favorable conditions aiming to achieve teaching effectiveness.



corresponding to its didactics and the forwarding variables that characterize teaching."10 (p. 144). The author specifies about which are the dual competences development good teachers need as "scientific competence as reliable experts in the scientific field and pedagogical competence as people committed to their students' training and learning"11.

It bases effective teaching practice and development within students' commitment to the learning process, which requires their willingness for a fresh and incessant search for current complexity. Thus, the teacher's will is a major factor for significant change. To change it, the teacher needs support and pedagogical guidance besides dedication, since the transition from a conservative approach to an innovative one requires processes that abandon learning actions only focused on "listen, read, memorize and repeat"12 (Behrens, 2005b). Therefore, these actions should cause both teachers and students to produce, question, reflect, build, and create knowledge.

When choosing a strategy, the teacher allows students to carry out many mental operations, so teachers must be attached to students' knowledge and realities to choose which strategy will be used for significant learning. Besides, teachers need to master the learning process, chosen strategy, and knowing all the steps to teach. Under these circumstances "working beyond content is a challenge, which corresponds to autonomy to be achieved with the student and for the student"13 (Anastasiou & Alves, 2003). Right below, there are some strategies listed by authors Anastasiou and Alves (2003) about decisive elements for teaching work, highlighting the type and strategies' conceptualization that can be used by the teachers according to proposed objectives in activities to be undertaken.

STRATEGY TYPES	DESCRIPTION
	The teacher exposes the subject to students' through active participation,
	whose prior knowledge must be considered and can be taken as a
	starting point. The teacher should lead students to question, interpret,

¹⁰ "O exercício da profissão docente requer uma sólida formação, não apenas nos conteúdos científicos próprios da disciplina, como também nos aspectos correspondentes a sua didática e ao encaminhamento das diversas variáveis que caracterizam a docência".

¹¹ "A competência científica, como conhecedores fidedignos do âmbito científico ensinado, e a competência pedagógica, como pessoas comprometidas com a formação e com aprendizagem de seus estudantes".

¹² "Escute, leia, decore e repita".

¹³ "Trabalhar para além do conteúdo é um desafio, que corresponde ao processo de autonomia a ser conquistada com e pelo aluno".

The discussion	and discuss the object of study, based on recognition and confrontation
method	reality.
	It is the exploration of an author's ideas from texts' critical study in search
	of information and exploration of ideas by the studied authors.
Studying	
text/learning from	
text method	
	It is the identifying and constructing process of a study using the steps of
	registering, analyzing, selecting, and reflecting on the most significant
	parts or by identifying what are the biggest challenges to the object of
Portfolio	study, as well as the ways found to overcome it.
asssesment	
method	
	It is the stimulus for creating new ideas spontaneously and naturally,
	letting student's imagination flow. There is no right or wrong. Everything
	will be considered, and if necessary, the teacher can request a further
Brainstorming	explanation from the student.
	' It comprises a diagram creation showing concepts links in a two-
	dimensional perspective, seeking to show hierarchical links between
Concept map	relevant concepts to a study's structure.
	It is the act of studying under the guidance and direction of the teacher
	who will be available to answer specific questions. It is necessary to know
Directed study	about what a directed study is, its aim, and how it is prepared.
	It is the opportunity that a group of people has to debate on an online
	platform about a topic on which these people are specialists or have had
Online discussion	a previous study or want to intensify discussions about it on the internet.
groups	a previous study of want to intensity discussions about it on the internet.
groups	By facing a new situation it is required from the student to be reflective,
	critical, and creative based on the existing data in the problem
Droblom coluing	description; it demands principles and law application that may or may
Problem solving	not be expressed in mathematical formulas.
	It is a group activity in which students analyze and discuss on
The Phillips	topics/problems of the object of the study.
66 Method	
	It is performed under teachers' guidance after the division of students
	into two groups where they can analyze a problem. One group is
Group Dynamics	responsible for verbalization and the other for observation. It is a



(GVGO method)	successful strategy applied to the entire process of knowledge
	construction.
	It is a theatrical representation of a problem or theme that can explain
	ideas, concepts, arguments, and be a particular way of case studies.
Dramatizati	
on method	
	It is a space where ideas should be born or encouraged; groups can
Seminar	discuss topics or problems.
	It is a detailed analysis of an actual situation that needs investigation. A
Case study	case study can challenge students.
	A mock trial is based on a problem where someone makes a legal defense
Mock trial	and the other makes a legal accusation.
	It is known as brief lectures by several people on a subject or various
Symposium	aspects of a subject.
	It is the informal discussion of a group of students previously appointed
	by the teacher in which the group presents different points of view to
Panel studies	others.
	It is a "meeting" space, in which all group members can participate and
Forum	debate on a specific topic or problem.
	It is a small group of people with common interests meeting to study and
	work to understand or to go deeper on a topic under a specialist's
Workshop	guidance.
	It is a study in which the student experiences the natural and social
Milieu Analysis	context to verify a certain problem in an interdisciplinary way.
	It is known as the use of teaching principles associated with research
	principles where there are knowledge and science conception in which uncertainty and criticism are fundamental elements.
Teaching as	uncertainty and efficient are fundamental elements.
Research	

Source: Léa das Graças Camargos Anastasiou and Leonir Pessate Alves (2003). In Processos de Ensinagem na Universidade: pressupostos para as estratégias de trabalho em aula. Joinville, SC: Univille,

It is noticeable several strategies possibilities useful for teachers in their daily lives in the classroom according to the proposed goals. The development of the class depends on the teachers' technical competence and pedagogical preparation to act in a committed way with the students learning. Furthermore, "teaching needs to follow a complex vision that brings theory and practice together in a transformative action" and DOI: http://dx.doi.org/10.20873/uft.2447-4266.2020v6n4a15en Revista Observatório, Palmas, v. 6, n. 4, p. 1-11, July.-Sept. 2020



this challenge implies "offering and instigating them to seek a pedagogical practice that contemplates learning for life: understanding, acting, living and being" (Behrens, 2007, p. 454).

Therefore, teacher's mediation is essential to enable the knowledge to students using selected strategies, aiming to go beyond the easier way to transfer information, overcoming learning that has been summarized into memorization process to provide the learning that holds, grabs, takes, absorbs mentally, and understands.

In conclusion, for effective teaching14 in schools, it is necessary to base on teachers' knowledge and commitment from their academic backgrounds, aiming to use strategies that allow students to have a conscious and critical education, as well as a focus on reflection, autonomy, and the construction of new knowledge.

Considerations

Contemporary education requires teachers the vision of a new world that contemplates the human being in all ways. Thus, knowledge needs to be linked and make sense to the subjects involved in the process. In this new scenario, there is no place for traditional education because it only teaches the reproduction of knowledge using memorization and repetition. However, education must give students strategies that guarantee integral, participatory, and reflective teaching. In this context, this research aims to reflect on the importance of constant teacher's academic training in a way so it can be valued and can integrate teaching strategies in the contemporary educational process.

It is essential to teach teachers how to overcome old and deep-rooted visions in their way of being an education professional and while teaching students. Also, professional qualification is understood as initial and continuing education as essential for learning and educational strategies for the 21st century.

¹⁴ The term "teaching" was initially presented in the paper produced by ANASTASIOU, L. G. C., resulting from the doctoral research named as "Methodology of Higher Education: from teaching practice to a possible pedagogical theory". The term is adopted to mean the teaching situation in which learning necessarily has to take place; it is a partnership between teacher and student, thus there is a fundamental condition for coping with the necessary knowledge for students' education during the undergraduate course.



Teachers propose a new way of thinking and rethinking education when they conceive a new paradigm of complexity. Accordingly, professional qualification and training must include teaching strategies that allow analyzing and understanding which one is the best strategy to be used in the classroom for contemporary learning to occur in the educational process.

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RESUMO:

O artigo objetiva analisar as implicações da Pandemia da COVID-19 para o campo da educação na região da Amazônia tocantinense, especialmente, acerca do desenvolvimento de atividades escolares à distância devido a suspensão das aulas e a respeito dos programas, ações e projetos de formação continuada ofertadas aos professores do Sistema Estadual de Ensino. A pesquisa assenta-se no materialismo histórico dialético, tendo como referência a pesquisa bibliográfica e documental em portarias, medidas provisórias, decretos, pareceres e demais mecanismos normativos emitidos, principalmente, pelo Ministério da Educação, Conselho Nacional da Educação, Governo do Estado do Tocantins e Conselho Estadual de Educação. Numa perspectiva crítica, presume-se que a adoção por parcerias público-privadas como política educacional e a ampliação da educação à distância compromete sobremaneira o princípio constitucional da gestão democrática e da qualidade da educação.

PALAVRAS-CHAVES: Amazônia; CAPES; Comunicação; Avaliação.

RESUMEN:

El artículo tiene como objetivo analizar las implicaciones de la pandemia COVID-19 para el campo de la educación en la región de la Amazonía de Tocantins, especialmente en relación con el desarrollo de actividades de la escuela a distancia debido a la suspensión de clases y con respecto a programas, acciones y proyectos de educación continua, ofrecido a los docentes del Sistema de Educación del Estado. La investigación se basa en el materialismo dialéctico histórico, teniendo como referencia la investigación bibliográfica y documental en ordenanzas, medidas provisionales, decretos, opiniones y otros mecanismos normativos emitidos, principalmente, por el Ministerio de Educación, el Consejo Nacional de Educación, el Gobierno del Estado de Tocantins. y Consejo de Educación del Estado. Desde una perspectiva crítica, se supone que la adopción de asociaciones público-privadas como una política educativa y la expansión de la educación a distancia compromete en gran medida el principio constitucional de la gestión democrática y la calidad de la educación.

PALABRAS-CLAVES: Política educativa pública. Gestión democrática. Asociación público-privada. Formación continua del profesorado. COVID-19.