# CONTINUOUS TRAINING OF TEACHERS IN TIMES OF PANDEMIC: CONTRIBUTIONS BY THE COORDINATOR FOR TEACHER TRAINING AND DISTANCE EDUCATION OF THE STATE OF CEARÁ

FORMAÇÃO CONTINUADA DE PROFESSORES EM TEMPO DE PANDEMIA? CONTRIBUIÇÕES DA COORDENADORIA DE FORMAÇÃO DOCENTE E EDUCAÇÃO A DISTÂNCIA DO ESTADO DO CEARÁ

FORMACIÓN CONTINUA DE DOCENTES EN TIEMPOS DE PANDEMIA: APORTES DE LA COORDINATORIA DE FORMACIÓN DOCENTE Y EDUCACIÓN A DISTANCIA DEL ESTADO DE CEARÁ

> Vitória Maria CUNHA<sup>1</sup> Jean Mac Cole Tavares SANTOS<sup>2</sup> Emerson Augusto de MEDEIROS<sup>3</sup>

ABSTRACT: This text presents a research whose main objective was to investigate whether the courses offered by the Coordination of Teacher Training and Distance Education CODED/CED, from the Ceará State Department of Education, in 2020, contributed to the strengthening of teaching practice with remote teaching. In the same perspective, it intended to identify the main challenges encountered by CODED/CED for the implementation of courses and training in the period of the pandemic caused by COVID-19 with teachers from the state education network of Ceará. The work referred to a qualitative research. For the production of data, the questionnaire (composed of open questions) developed with four education professionals who work at CODED/CED and the document analysis stood out. In conclusion, it should be noted that the work promoted by CODED/CED, throughout 2020, was fundamental in contributing to the strengthening of teaching work towards the use of digital technologies and remote teaching. As challenges, the following were highlighted: a) time for training activities; b) the lack of adherence on the part of some basic education teachers; and c) the infrastructure, sometimes inadequate, among others.

**KEYWORDS**: Teacher training. Remote teaching. Public education. Education and pandemic.

RPGE- Revista on line de Política e Gestão Educacional, Araraquara, v. 26, n. esp. 4, e022106, 2022. DOI: https://doi.org/10.22633/rpge.v26iesp.4.17120

(CC) BY-NC-SA

<sup>&</sup>lt;sup>1</sup> State University of Rio Grande do Norte (UERN), Mossoró – RN – Brazil. Professor of the Department of Education of the State of Ceará. Master's Student in Teaching, Graduate Program in Teaching (PONSENSINO). ORCID: https://orcid.org/0000-0002-6066-5632. E-mail: vitoria.cunha1961@gmail.com

<sup>&</sup>lt;sup>2</sup> State University of Rio Grande do Norte (UERN), Mossoró - RN - Brazil. Permanent Professor of the Graduate Program in Teaching. PhD in Education (UFPB). ORCID: https://orcid.org/0000-0001-7800-8350. E-mail: maccolle@hotmail.com

<sup>&</sup>lt;sup>3</sup> Federal Rural University of Semi-Arid (UFERSA), Mossoró - RN - Brazil. Permanent Professor of the Graduate Program in Teaching. PhD in Education (UECE). ORCID: https://orcid.org/0000-0003-3988-3915. E-mail: emerson.medeiros@ufersa.edu.br

RESUMO: Este texto apresenta uma pesquisa que teve como objetivo central investigar se os cursos ofertados pela Coordenadoria de Formação Docente e Educação a Distância CODED/CED, da Secretaria de Educação do Estado do Ceará, no ano de 2020, contribuíram para o fortalecimento da prática docente com o ensino remoto. Na mesma perspectiva, intencionou identificar os principais desafios encontrados pela CODED/CED para a efetivação dos cursos e formações no período da pandemia causada pela COVID-19 com os professores da rede estadual de ensino do Ceará. O trabalho se referiu a uma pesquisa de caráter qualitativo. Para a produção dos dados, destacaram-se o questionário (composto por questões abertas) desenvolvido com quatro profissionais da educação que atuam na CODED/CED e a análise documental. Como conclusão, salienta-se que o trabalho promovido pela CODED/CED, ao longo do ano de 2020, foi fundamental no sentido de contribuir para o fortalecimento do trabalho docente para com o uso das tecnologias digitais e o ensino remoto. Como desafios, pontuaram-se: a) o tempo para as atividades de formação; b) a ausência de adesão por parte de alguns professores da educação básica; e c) a infraestrutura, algumas vezes, inadequada, entre outros.

**PALAVRAS-CHAVE**: Formação de professores. Ensino remoto. Educação pública. Educação e pandemia.

RESUMEN: Este texto presenta una investigación cuyo principal objetivo fue investigar si los cursos ofrecidos por la Coordinación de Formación de Profesores y Educación a Distancia CODED/CED, de la Secretaría de Educación del Estado de Ceará, en 2020, contribuyeron para el fortalecimiento de la práctica docente con educación a distancia. En la misma perspectiva, pretendió identificar los principales desafíos encontrados por CODED/CED para la implementación de cursos y capacitaciones en el período de la pandemia provocada por la COVID-19 con docentes de la red estatal de educación de Ceará. El trabajo se refiere a una investigación cualitativa. Para la producción de datos, se destacó el cuestionario (compuesto por preguntas abiertas) desarrollado con cuatro profesionales de la educación que actúan en CODED/CED y el análisis de documentos. En conclusión, cabe señalar que el trabajo impulsado por CODED/CED, a lo largo de 2020, fue fundamental para contribuir al fortalecimiento de la labor docente enfocada en el uso de las tecnologías digitales y la educación a distancia. Como desafíos se destacan: a) tiempo para actividades de capacitación; b) la falta de adhesión por parte de algunos docentes de educación básica; yc) la infraestructura, en ocasiones inadecuada, entre otros.

**PALABRAS CLAVE**: Formación de professores. Enseñanza a distancia. Educación publica. Educación y pandemia.

#### Introduction

The teaching and learning process consists of a complex reality. Every day, the school assumes a primary role in the integral formation of the student. It needs qualified and prepared professionals to promote quality education, meet the demands and deal with the diversity of ideas present in the school environment and in the classroom itself.

The need for qualified professionals became even more evident in 2020, in the face of the scenario of the pandemic and social isolation that forced educational institutions to suspend their face-to-face activities and start remote/home education, in order to ensure greater health security and prevent the unrestrained advance of people contaminated by the new coronavirus.

According to the Todos pela Educação Movement (2020), 91% of the world's total students and more than 95% of Latin America were temporarily out of school due to Covid-19. In Brazil, the interruption of face-to-face activities occurred in mid-March and in several educational networks remained until the present time (year 2022), with exclusively remote activities. Teachers and students, overnight, had to adapt and start using, as a priority, digital platforms and social networks to continue promoting pedagogical activities.

Education had to rethink the conceptions of pedagogical practice, based, according to Franco (2016), on an action that arises "from the multidimensionality that surrounds the educational act" (p. 536, our translation).

In the face of this reality, numerous questions arise, among which we can highlight the questions related to the continued formation of teachers. As much as we talked about information and communication technologies, as a pedagogical tool before the pandemic, few teachers were in fact prepared to leave the traditional mode of the class, which until now happened in person, to take exclusively remote classes. Considering this reality, this research brings a reflection on the continued education of teachers in pandemic time. With the face-to-face activities suspended, continuing education in the school environment was also hampered, due to social leave, just at the moment when teachers needed this support a lot.

In this context, in the State of Ceará there is the Coordination of Teacher Training and Distance Education, which associated with the State Department of Education, promotes several courses and possibilities of continuing education for teachers of the state network. The question, which can be validated as an investigative problem of the present study, is it: how has the Coordination of Teacher Training and Distance Education - CODED/CED been contributing to the continued training of teachers in the State network of Ceará during the pandemic period?

Based on this question, the research aimed to investigate whether the courses offered by the Coordination of Teacher Training and Distance Education CODED/CED, over the time of pandemic, are contributing to the strengthening of teaching practice with remote teaching, as well as identifying the main challenges encountered by the team of the Teaching Training Coordination for the implementation of courses and training during this period.

The work consists of qualitative research that, according to Minayo, Deslande and Gomes (2007), proposes an approach that works with the universe of meanings, motives, aspirations, beliefs, values and attitudes. To achieve the objective, we gathered two data production techniques used, often, in qualitative studies: the questionnaire (composed of open questions) and the documentary analysis (LUDKE, 2006; MEDEIROS. VARELA; NUNES, 2017). In addition, we have bibliographic research.

Initially, we conducted a bibliographic study, knowing what theorists propose about continuing education and what the legislation on this theme provides. To this, we are based on authors such as Imbernón (2001), Gadotti (1997), Franco (2012), Nóvoa (2013), Medeiros (2019) and Gatti *et al.* (2019), which contribute to the reflections on teacher education in Brazil.

Later, we forwarded a questionnaire, virtually, through a form in Google Forms, to professionals working at CODED/CED. The objective of the questionnaire is to understand how CODED/CED has been planning and developing its training program with teachers from the state network of Ceará during the pandemic scenario. In the questionnaire, the professionals were asked about the dynamics and courses offered during this period, envisioning whether any of them are directed to the strengthening of remote education and about the main difficulties encountered by the CODED/CED team, to develop their teacher training courses. After the questionnaires were answered, we performed the analysis of the data produced.

The theme of continuing training of teachers of Basic Education is relevant, considering that this discussion provides support for an analysis both of the public policies that are thought and implemented, as well as for the teaching and learning process itself that is put into practice in schools.

## Continuing education of basic education teachers - some notes

The training of basic education teachers is a fundamental device for the improvement of teaching and learning processes in school, since it is associated with the social, political and pedagogical knowledge of the school institution. The teacher, in the school context, exercises the function of guiding the different knowledge, hence the importance of thinking and rethinking their knowledge and practices constantly.

The pedagogical action of the teacher has a marked influence on the way students act and think. Through their actions, he is able to provoke changes in conception, understanding and coping with the student's daily situations. Hence the importance of the teacher not losing his formative essence and being trained.

RPGE- Revista on line de Política e Gestão Educacional, Araraquara, v. 26, n. esp. 4, e022106, 2022. DOI: https://doi.org/10.22633/rpge.v26iesp.4.17120

Freire (1987, p. 43, our translation) emphasizes about "critical reflection on practice", because, according to him, "it is critically thinking the practice of today or yesterday, that one can improve the next practice". That is, it is necessary to be in constant dialogue and reflection, in order to adapt its practice, to each reality. Thus, to be able to promote the development of critical and reflective knowledge in the student.

Franco (2012) shares this idea, emphasizing that "pedagogical practice is a producer of a social process, which influences inside and outside the room, and that pedagogical practices consist of a dialogue of resonance and reverberation of mediations between society and the classroom" (FRANCO, 2012, p. 180, our translation). Therefore, it is up to the teacher to develop skills of trainer and stimulator of the student's thought and intelligence (PERRENOUD, 2000). To do so, it needs to be trained and stimulated to develop skills and competencies for the constant improvement of its practice.

At the moment, this aspect is even more remarkable, because the teacher had to rebuild his practice, overnight, with no time to plan what to do and how to do it. He had to do in record time, which Franco (2012) points out as "building, rebuilding, starting again, monitoring and seeking new means and possibilities (FRANCO, 2012, p. 186, our translation). In this context, professional qualification and continuing education has become an urgent demand. If continued training was once important, it has now become essential.

We reaffirm that the continuing education of basic education teachers is a theme very present in the educational debates and in the school environment itself. Whether it is focused on the expansion of knowledge, through available courses, in an appropriate place and period and that meets their needs and personal and professional interests of the teacher, it is focused on reflection on practice, where the teacher shares knowledge with peers, seeking to improve their pedagogical practice.

At the present time, the two strands are essential. At the same time that the teacher needs to seek technical knowledge to better meet the needs of students and favor an effective pedagogical interaction, considering that classes are being held remotely and a large portion of students do not have appropriate equipment and connectivity, he also needs support and strengthening of the pedagogical team and peers, considering that the experiences that have been achieving success, as well as those that are not working, need to be shared and realized reflections on them, to strengthen the teaching and learning process.

When thinking about teacher training for the pandemic period, the ideas of Gatti *et al* emerge (2019, p. 17, our translation), which state that "teaching education refers to the background of educational processes, especially those that are intentional and structured as the

educational processes and practices that take place in school education networks". At the present time, continuing education really needs to meet the entire network of schools and be well intentional, to fill the various gaps in teaching at this point in history.

On this approach, Imbernón (2001, p. 48-49, our translation) states that:

The training will be based on a reflection of the subjects on their teaching practice, in order to allow them to examine their implicit theories, their schemes of functioning, their attitudes, etc., performing a constant process of self-evaluation that guides their work. The orientation to this process of reflection requires a critical proposal of the educational intervention, an analysis of the practice from the point of view of the underlying ideological and behavioral assumptions.

The construction of knowledge takes place dynamically and constantly. It is being improved over time, with the insertion of new concepts, values and theories. For this process to happen effectively, it is necessary to carry out evaluations, identifying existing gaps and solutions for them. With the diagnosis of the gaps made, it is time to go to the qualification, aiming at a better professional performance.

In this perspective, Garcia (1999, p. 21-22, our translation) states:

Formation consists of a complex and diverse phenomenon on which there are only scarce conceptualizations and even less agreement in relation to the dimensions and theories more relevant to its analysis. [...] Firstly, training as a conceptual reality is not identified or diluted within other concepts that are also used, such as education, teaching, training, etc. Secondly, the concept of training includes a personal dimension of global human development that needs to be taken into account in the face of other eminently technical conceptions. Thirdly, the concept of training has to do with training capacity, as well as with the desire for training.

The author reinforces the need for continuing education that goes beyond the walls of the university. In addition to academic training, the teacher needs to reflect, innovate and seek new strategies to act in the classroom, in order to promote the interest and willingness to learn in the student. It needs to learn how to promote the autonomy and critical awareness of the student, contextualizing theory and practice in his pedagogical practice. It needs to take into account school culture, the place where the school is installed, the reality of students, to encourage students to participate in classes and develop different skills and abilities.

According to Libâneo (2004, p. 227, our translation), "continuing education is the extension of initial training, aiming at theoretical and practical professional development in the work context itself and the development of a broader general culture, beyond professional practice". Associating himself with this idea, Nóvoa (2009, p. 06, our translation) states that

(cc) BY-NC-SA

"[...] it is necessary to move teacher training into the profession" and adds that "there will be no significant change if the 'community of teacher trainers' and the 'community of teachers' does not become more permeable".

Another author who emphasizes the importance of continuing education is Gadotti (2011, p. 41, our translation), he explains that:

[...] the teacher's continuing education should be conceived as reflection, research, action, discovery, organization, foundation, review and theoretical construction and not as mere learning of new techniques, updating in new pedagogical recipes or learning of the latest technological innovations.

The author's thinking reinforces what has been mentioned above and fits exactly in the perspective of the current moment. It is not enough for the teacher to learn the new techniques and use the digital tools. He needs more than ever to reflect on the practice that came and has been developing, to improve his methodology after the closure of remote activities and the return to face-to-face activities.

For many this is not an easy task, because, as Santos (2002, p. 29, our translation) states, "traditional thinking and mechanistic and technical didactic positioning remained in Brazil for many decades and is still present in pedagogical practices in many schools", also configuring a model of teacher education.

Despite the challenge of some resistance from many educators, it is worth mentioning that continuing education is materialized in the documents that legitimize national education, even if often, in a not very detailed way.

The Law of Guidelines and Bases of National Education – Law No. 9,394, of December 20, 1996, refers to the continuing education of teachers in Chapter IV, Art. 43, when it states that Higher Education has as one of the purposes "to train graduates in different areas of knowledge, suitable for insertion in professional sectors and for participation in the development of Brazilian society, and collaborate in their continuing education" (BRASIL, 1996).

In Chapter VI, Art. 62, speaks of education professionals, states in § 2 that "the continuing training and training of teaching professionals may use resources and technologies of distance education" (BRASIL, 1996). Also in Art. 62, a single paragraph, it provides that "continued training will be guaranteed for the professionals referred to in the caput, in the workplace or in basic and higher education institutions, including professional education courses, full or technological and graduate higher education courses" (BRASIL, 1996).

Similarly, the National Education Plan (2014-2024) establishes in Goal 16 "[...] ensure that all professionals of basic education continue to be trained in their area of activity, considering the needs, demands and contextualization of education systems" (BRASIL, 2014, our translation). It textualizes as a strategy:

16.1) to carry out, on a collaborative regime, the strategic planning to dimension the demand for continuing education and to promote the respective offer by public institutions of higher education, in an organic and articulated way to the training policies of the States, the Federal District and the Municipalities;

16.2) consolidate the national policy of training teachers and teachers of basic education, defining national guidelines, priority areas, training institutions and certification processes of training activities;

16.4) expand and consolidate electronic portal to support the performance of teachers and teachers of basic education, providing free of charge supplementary teaching and pedagogical materials, including those with accessible format (BRASIL, 2014, our translation).

BNCC for High School also refers to continuing teacher training when it prints: "to create and provide guidance materials for teachers, as well as to maintain permanent processes of teacher education that enable continuous improvement of teaching and learning processes" (BRASIL, 2018, our translation).

In the same ballast, the National Curriculum Guidelines, in their text, mention that the "school of social quality adopts dialogue, collaboration, the subjects and learning as its centrality" (BRASIL, 2010, our translation), which undoubtedly presupposes meeting requirements, such as: "valuing education professionals, with a continuing training program, criteria of access, permanence, remuneration compatible with the working hours defined in the political-pedagogical project [...]" (BRAZIL, 2015, our translation).

When we analyze the documents that guide national education, we realize that they provide for continuing education, however, the theme is still little present, according to our professional experience, if we consider the importance that this theme has for the educational context.

To understand one of the perspectives of continuing education of basic education teachers at the state level, we chose to conduct research with professionals working in the organization of distance courses and training at the Center for Teacher Training and Distance Education - CODED/CED, of the State of Ceará. In the next section, we will present the research and its findings.

(cc) BY-NC-SA

# Continuing teacher training in practice - research

Based on the importance that continuing education has for the educational context and considering the moment of the pandemic and social isolation that led to educational activities to occur remotely, we seek to understand how the Coordination of Teacher Training and Distance Education - CODED/CED - developed the courses and continuing training throughout the year 2020. For this, a questionnaire was applied with open questions in google forms form, with four professionals of the Teacher Training Coordinator. To maintain confidentiality regarding the identity of the research subjects, the letters A, B, C and D were used – each letter represents a professional of this space.

Initially, we asked about the role that the research subjects play in the CODED/CED. As answers we obtained: two technical assistants, a pedagogical technical advisor and a member of the coordination.

The second question referred to the time of experience in CODED/CED. Of the research subjects, three professionals work in the CODED/CED between two and five years and only one of the research subjects works between one and two years. The third question referred to the main training offered by CODED/CED over the time of pandemic and social isolation. The responses were unanimous: training itineraries, with curriculum for: teachers crowded in science laboratories, computer laboratories, multimedia centers, in the areas of Applied Human and Social Sciences; Course Digital Skills for Teaching (SEDUC - CE /CIEB), offered to all teachers of the state network; SEDUC connection (weekly webinars and colloquia, aimed at the school public in general); support environments for teacher training and support for home studies, as well as specific training, requested by the Regional Teaching Coordinators.

We noticed that there are several possibilities of courses and trainings, such as training itineraries, for professionals who support pedagogical activities, a course focused on digital skills, webinars and support environments, open to the public, among others. This enables an interaction between teachers, students and management that favors and enables interdisciplinary activities, because these courses serve the different areas of knowledge. Fazenda (2009 apud MEDEIROS, 2019) says that "interdisciplinarity has been an object of interest in the scientific scenario.

Thus, researchers from different areas of knowledge raise their importance for the formation of the contemplative subject to current society. It is worth mentioning what Feistel (2012 apud MEDEIROS, 2019, p. 101, our translation) emphasizes: "interdisciplinary training is not only the inclusion or integration of areas of knowledge in training, but also the

construction of a conscious, problematizing and active subject/teacher in reality". Thus, it is not enough to offer several courses. It is up to the educators to adapt the topics discussed, to the projects promoted in the school and interaction between the contents experienced in the courses and their practice in the classroom (even if virtually).

He was then asked about the way the courses and themes for the training promoted by CODED/CED are chosen. In this respect, all answered that the demands are defined from the determinations presented by the Regional Coordinators, in addition to demands requested by teachers and the Department of Education as a whole.

Furthermore, we ask, if in the opinion of CODED/CED professionals, the trainings contributed to the strengthening of remote education. Everyone responded positively. As for contributions, we listed the records:

The CED offered important training for the improvement of teaching practice, among them the Course of Digital Skills for Teaching with information relevant to remote education (A - CODED/CED, Fortaleza - CE, 2021).

Through tools made available to teachers that facilitated planning of activities as well as access to technologies (B - CODED/CED, Fortaleza - CE, 2021).

It sought to support students, managers, teachers, school managers and regional coordinators in the development of skills and skills for the use of TDIC (C - CODED/CED, Fortaleza - CE, 2021).

Providing a course of improvement and learning the use of remote tools and promoting events to share successful experiences of remote teaching (D - CODED / CED, Fortaleza - CE, 2021).

The research participants mentioned the importance of courses for the improvement of teachers. They emphasized, in general, that the courses contributed both to the planning of teachers and to their practice in the classroom. This is a factor of relevance, because continuing education needs to be focused on the classroom, it is in it that the teacher's challenges happen. According to Libâneo (2004), the key idea of continuing education is that the school is the place of learning of the teaching profession, because it is in it that the teacher develops knowledge and skills about teaching.

All participants of the research agreed that CODED/CED contributed to strengthen teaching in the modality of remote education. We noticed that the four professionals cited improvement with digital tools as one of the main contributions of CODED/CED for basic education teachers. In this ballast, Garofalo (2018, p. 60, our translation) states that "the internet has enabled knowledge to occur anywhere, becoming a powerful ally to the extension of the classroom". The teacher can establish bridges for this to occur, inserting the equipment in his

(CC) BY-NC-SA

classes for pedagogical purposes. Participant "D", in his record, emphasized the sharing of successful experiences, which reinforces the idea of the bridges mentioned by Garofalo (2018), not only between students and teachers, but also between the teacher and his peers.

Asked about the difficulties encountered by the training coordinator to develop the courses and trainings, throughout the year 2020, we had as records:

*The time required to carry out the training* (A - CODED/CED, Fortaleza - CE, 2021).

Teachers' uptake (B - CODED/CED, Fortaleza - CE, 2021).

Technological infrastructure, connectivity and culture of pedagogical strategies supported by technologies (C - CODED/CED, Fortaleza - CE, 2021).

The short time for structuring content and partnerships. And number of trained professionals (tutors) who covered the entire state network (D - CODED/CED, Fortaleza - CE, 2021).

We identified that there are several challenges to put into practice a continuous training for teachers of the state school system of Ceará. The time for preparation and organization was a factor raised by the study participants. The support by teachers, infrastructure, connectivity and professionals available to meet the large number of teachers in the state school system also emerge as challenges. According to Nóvoa (1995, p. 25), "being in training implies a personal investment, a free and creative work on the paths and projects of their own with a view to building an identity". We understand that in continuing education we face challenges, but the possibilities it brings to pedagogical practice are greater.

### **Final considerations**

(CC)) BY-NC-SA

By validating the reflections presented in this study, we realized the importance of offering teachers subsidies for their professional improvement. In this sense, continuing education has always been a great challenge for the school, however, there are indications in the educational literature that, increasingly, there is the progress of the qualification of teachers of Basic Education.

During the period of social isolation, the need became more evident, considering that, in addition to pedagogical improvement, it is necessary to constantly qualify teachers. This aspect became imperative more than ever, since educators and students began to use technological tools to carry out teaching and learning activities.

Despite the progress in the area of teacher training, especially the continuing education of teachers, there are still many challenges to be overcome. In the research conducted with CODED/CED there is a concern with teacher training, especially with regard to support in remote activities.

Among the conclusive notes, we emphasize that CODED/CED plays a fundamental role in the qualification of teachers in the state network of Ceará. Training courses, seminars, round tables, among others, deserve reference. We understand that in the long term their actions will add up to the educational scenario of the State of Ceará, directly resonating in the teaching work.

### REFERENCES

BRASIL. Lei n. 9.394, de 20 de dezembro de 1996. Estabelece as diretrizes e bases da educação nacional. Brasília, DF: Presidência da República, 1996. Available: http://www.planalto.gov.br/ccivil 03/Leis/L9394.htm. Access: 02 Dec. 2020.

BRASIL. Parecer CNE/CEB n. 7/2010, de 07 de abril de 2010. Diretrizes Curriculares Nacionais Gerais para a Educação Básica. Brasília, DF: MEC, 2010. Available: http://portal.mec.gov.br/index.php?option=com\_docman&view=download&alias=5062parecercne-seb7-2010&Itemid=30192. Access: 21 Aug. 2021.

BRASIL. Base Nacional Comum Curricular. Brasília, DF: MEC, 2018. Available: http://basenacionalcomum.mec.gov.br/images/BNCC EI EF 110518 versaofinal site.pdf. Access: 12 Apr. 2021.

FRANCO, M. A. R. S. Prática pedagógica e docência: Um olhar a partir da epistemologia do conceito. **Bras. Estud. Pedagog**., Brasília, v. 97, n. 247, p. 534-551, set./dez. 2016. Available:

https://www.scielo.br/j/rbeped/a/m6qBLvmHnCdR7RQjJVsPzTq/abstract/?lang=pt. Access: 09 Set. 2020.

FREIRE, P. Pedagogia do oprimido. 17. ed. Rio de Janeiro: Paz e Terra, 1987.

GADOTTI, M. Boniteza de um sonho: Ensinar-e-aprender com sentido. 2. ed. São Paulo: Instituto Paulo Freire, 2011.

GADOTTI, M. Escola cidadã. 4. ed. São Paulo: Cortez, 1997.

(CC) BY-NC-SA

GARCIA, C. M. Formação de professores: Para uma mudança educativa. Porto: Porto Editora, 1999.

GAROFALO, D. Como as ferramentas digitais contribuem para o processo de aprendizagem? Nova Escola, 2018. Available: https://novaescola.org.br/conteudo/12714/como-asferramentas-digitais-contribuem-para-o-processo-de-aprendizagem. Access: 20 Apr. 2021.

IMBERNÓN, F. **Formação docente e profissional**: Formar-se para a mudança e a incerteza. São Paulo: Cortez, 2001.

LIBÂNEO, J. C. **Organização e gestão da escola**: Teoria e prática. Goiânia: Alternativa, 2004.

LÜDKE, M. A complexa relação entre o professor e a pesquisa. *In*: ANDRÉ, M. (org.) **O** papel da pesquisa na formação e na prática dos professores. 5. ed. Campinas, SP: Papirus, 2006.

MEDEIROS, E. A. **Formação interdisciplinar de professores**: Estudo pedagógico curricular sobre a licenciatura em educação do campo da Universidade Federal do Semi árido. 2019. Tese (Doutorado em Educação) — Universidade Estadual do Ceará, UECE, CE. 2019. Available: https://bdtd.ibict.br/vufind/Record/UECE-0 9fd8c6d01660c2d9488b9d65770626be. Access: 06 May 2021.

MEDEIROS, E. A.; VARELA, S. B. L.; NUNES, J. B. C. Abordagem Qualitativa: Estudo na Pós-Graduação em Educação da Universidade Estadual do Ceará (2004 – 2014). **Holos**, v. 2, p. 174-189, ago. 2017. Available: https://www.redalyc.org/pdf/4815/481554847013.pdf. Access: 19 Oct. 2020.

MINAYO, M. C. S.; DESLANDES, S. F. D. R.; GO-MES, R. **Pesquisa Social**: Teoria, método e criatividade. 25. ed. Petrópolis, RJ: Editora Vozes, 2007.

NÓVOA, A. Prefácio. *In*: NÓVOA, A. (org.). **Vida de Professores**. 2. ed. Porto: Porto Editora, 1995.

PERRENOUD, P. As dez novas competências para ensinar. Porto Alegre: Artmed, 2000.

SANTOS, C. F. O ensino da leitura e a formação em serviço do professor. **Revista Teias**, Rio de Janeiro, v. 3, n. 5, p. 29-34, jan./jun. 2002. Available: https://www.e-publicacoes.uerj.br/index.php/revistateias/article/view/23907/0. Access: 03 June 2021.

(cc) BY-NC-SA

## How to refer to this article

CUNHA, V. M.; SANTO, J. M. C. T.; MEDEIROS, E. A. Continuous training of teachers in times of pandemic: Contributions by the coordinator for teacher training and distance education of the state of Ceará. **Revista on line de Política e Gestão Educacional**, Araraquara, v. 26, n. esp. 4, e022106, 2022. e-ISSN: 1519-9029. DOI: https://doi.org/10.22633/rpge.v26iesp.4.17120

**Submitted**: 05/04/2022

Revisions required: 19/06/2022

**Approved**: 21/08/2022 **Published**: 01/09/2022

Processing and publication by the Editora Ibero-Americana de Educação.

Correction, formatting, standardization and translation.

