Rev.Pemo - Revista do PEMO



Initiation to research in the context of initial teacher education: notes on an experience

Isabel Maria Sabino de Fariasⁱ

Universidade Estadual do Ceará - UECE, Fortaleza, Ceará, Brasil

Lyanna Lourdes Lima Leal " 🕒

Universidade Estadual do Ceará - UECE, Fortaleza, Ceará, Brasil

Samily Oliveira Maiaii 🕒

Universidade Estadual do Ceará - UECE, Fortaleza, Ceará, Brasil

Abstract

The work approaches the initiation to research in the context of graduation. Its main objective is to present the "Adopt a Beginner Researcher Project - PAPI", which arose from the need to help, in addition, UECE Pedagogy students in the elaboration of their first research project. A training action mobilized by the question: can initiated researchers favor the learning of undergraduates in the insertion in the world of research during initial training? The analysis, in methodological terms, assumes a qualitative feature, with data production mediated by an electronic questionnaire with the students participating in the experience in the 2022.1 semester. It is evident that the execution of the PAPI promotes a situation of mutual benefit: a positive experience for students, as they received advice and instructions about the production of their first research project; a formative experience for the mentor researchers, as it provided experience with the practice of academic guidance.

Keywords: Research initiation. Research project. Educational Research. Orientation practice. Initial teacher training

Iniciação à pesquisa em contexto de formação inicial de professores: apontamentos sobre uma experiência

Resumo

O trabalho aborda a iniciação à pesquisa no contexto da graduação. Tem como objetivo principal apresentar o "Projeto Adote um Pesquisador Iniciante - PAPI", que surgiu da necessidade de auxiliar, complementarmente, alunos da Pedagogia da UECE na elaboração de seu primeiro projeto de pesquisa. Uma ação de formação mobilizada pelo questionamento: pesquisadores iniciados podem favorecer a aprendizagem de licenciandos na inserção no mundo da pesquisa durante a formação inicial? A análise, em termos metodológicos, assume feição qualitativa, com produção de dados mediada por questionário eletrônico junto aos discentes participantes da experiência no semestre 2022.1. Evidencia-se que a execução do PAPI promove situação de benefício mútuo: uma experiência positiva para discentes, pois receberam aconselhamento e instruções acerca da produção de seu primeiro projeto de pesquisa; uma

Rev.Pemo, Fortaleza, v.4, e49281, 2022 DOI:https://doi.org/10.47149/pemo.v4.49281 https://revistas.uece.br/index.php/revpemo

ISSN: 2675-519X

Esta obra está licenciada com uma Licença Creative Commons Atribuição 4.0 Internacional.

Rev.Pemo - Revista do PEMO



experiência formadora para os pesquisadores mentores, pois proporcionou experiência com a prática da orientação acadêmica.

Palavras-chave:Iniciação à pesquisa. Projeto de Pesquisa. Pesquisa Educacional. Prática de orientação. Formaçãoinicial de professores.

1 Introduction

Every teacher, from Elementary Education to Higher Education, at some point in his professional career, has certainly wondered what to do to mediate the learning of his students. The analysis registered in this article is precisely the result of a pedagogical experience motivated by these kinds of inquiries and focused on the initiation of research in teacher education. Its purpose is to present the "Adopt a Beginner Researcher Project - PAPI" (FARIAS, 2021), which arose from the need to support students of a degree course in the elaboration of their first research project.

The initiative results from the professional path of one of the authors of this text, whose performance in university teaching, since the early 1990s, is provoked by the challenge of teaching how to do research in the undergraduate level, more precisely in the Pedagogy Course in a public university located in the capital of Ceará. A training action that, virtuously, crosses the path of training and professional development of the other two authors of this text, who live and collaborate in the weaving of the "Adopt a Beginner Researcher Project - PAPI" in the institutional context in which it has been implemented since mid-2021 (FARIAS, 2021).

The PAPI is a non-curricular training action developed in the context of initial teacher training, an initiative mobilized by the question: how to support the research initiation of undergraduates who are taking their first steps in the world of research? Can experienced or initiated researchers support the learning of undergraduates in their scientific initiation during their initial training? These concerns have encouraged the conception, execution, monitoring and evaluation of this training project that integrates research, teaching and extension in its design.

Rev.Pemo - Revista do PEMO



In general terms, the Project involves the participation of more experienced researchers, who act as mentors. This is a voluntary action, undertaken by master's and doctoral students of the Graduate Program in Education (PPGE) at UECE, as well as university and basic education teachers who are members of the Education, School Culture and Society (EDUCAS) research group. It is a support action directed to undergraduate students in a situation of insertion in the world of research and regularly enrolled in the discipline Educational Research, offered in the morning shift, in the Pedagogy course at UECE. It is up to the mentor researchers to support the undergraduate student in the elaboration of the Research Project, an academic work required as a final requirement for the conclusion of the discipline Educational Research. This support is materialized in conversations to clarify doubts about the Research Project, quick queries, suggestions for reading and discussion of texts about the topic of interest, reading of the students' textual productions related to the Research Project, among other orientations that may be necessary.

The monitoring carried out by the mentor researcher is done by remote mediation, via WhatsApp, Google Meet or other platform that those involved have access to, and can occur individually or collectively. These moments are previously agreed upon between the collaborators and the undergraduates. The distribution of the students considering the approach of the mentor researcher to the undergraduate's research topic. The support and monitoring action occurs throughout the semester and in parallel with the curricular development of the Educational Research subject.

In the first semester of 2022, the first edition of the "Adopt a Beginner Researcher Project (PAPI) was carried out and its culmination was marked by a scientific event: the "Sarau Científico". On this occasion, the students present the research projects built during the semester and the mentor researchers participate in this moment by composing the boards that evaluate the socialized proposals.

The analyses registered in this text, which focus on the founding ideas of the PAPI experience and the perspective of the undergraduates who participated in its first edition, in methodological terms assume a qualitative feature (STAKE, 2011; MINAYO,

https://revistas.uece.br/index.php/revpemo



Rev.Pemo – Revista do PEMO



2015). It uses data from the literature review (ALVES-MAZZOTI, 1998) and questionnaire in electronic format (FARIAS; SILVA, 2009) applied to undergraduates participating in the first edition of the Project.

The "evidence from reading", as Bell (2008, p. 97) calls the data from the literature review, provided theoretical support for the discussion about: research-mediated teaching (FREIRE, 1996; SEVERINO, 2009); formative practice oriented towards reflexivity (SACRISTÁN, 1999; FARIAS et al. (2014); the articulation of theory and practice (VÁZQUEZ, 1977; CANDAU; LELIS, 2002; GATTI, 2009, 2010; ANDRÉ, 2006) and collaborative peer learning (COCHRAN-SMITH, 2012; MARCELO GARCIA, 1999).

The online questionnaire, containing open and closed questions, was structured in the Google Forms platform and sent via e-mail to the students of the Educational Research discipline of the Pedagogy course participating in the PAPI. The adoption of the questionnaire as a procedure for data production was due to the possibility of systematizing the questions, as well as due to the instantaneous reach of a larger number of participants (FARIAS; SILVA, 2009). The electronic questionnaire had the Informed Consent Form (ICF) and was applied between July 10, 2022 and August 10 of the same year.

The data produced through these procedures make up the content of the next topics of this writing.

2 About the ideas that underpin the PAPI

The Adopt a Beginning Researcher Project (PAPI) was conceived and has been developed based on some basic ideas, namely: research-mediated teaching; reflective-oriented formative practice; articulation of theory and practice; and collaborative peer learning. These ideas, woven throughout our professional development as teachers, are the guiding principles that have anchored the formulation and development of the PAPI.

Rev.Pemo - Revista do PEMO



It is also important to note that such ideas are embedded in the "culture of collaboration" (HARGREAVES, 1999; FARIAS, 2002) that has coined the development of research in Education at UECE (CAVALCANTE; NUNES, FARIAS, 2002), in particular in the research line "Formação e Desenvolvimento Profissional Docente" (Teacher Training and Professional Development) of the Graduate Program in Education (PPGE) since its emergence in the 2000s, as well as in the actions of the research group Education, School Culture and Society (EDUCAS), to which the authors of this text are linked. Partnership whose power is noted in the writing "Notes on teacher education in the studies and productions of the research group EDUCAS/UECE: paths and perspectives":

[...] in relation to the production of knowledge, Educas prioritized a form of organization and development of the research work that would favor the dialogue, production and exchange between researchers and institutions; the performance of the team members as a collective, participating, from the theoretical and methodological decisions fundamental to its development to the more operational routings around the object of study; and that would also contribute to the training of its beginners and more experienced researchers. (FARIAS; RAMOS; SILVA, 2018, p. 15).

This practice of research training, as well as the productions that resulted from it, wove the theoretical substrate that gradually generated the necessary basis for the formulation of the PAPI as a support action among peers at different moments of their research training in the context of undergraduate education, briefly detailed below.

Research-mediated teaching

The Northeastern educator Paulo Freire (1996, p. 32), in one of his classics - Pedagogy of the Oppressed, warns that "There is no teaching without research and research without teaching. These what-ifs meet in each other's bodies. The principle of teaching mediated by research is based on this premise when recognizing these two elements as inseparable dimensions of learning, especially learning in higher education, since the latter is mainly focused on "the incorporation of an epistemic process rather than the appropriation of cultural products, in large quantities" (SEVERINO, 2009, p. 116).

Rev.Pemo, Fortaleza, v.4, e49281, 2022 DOI:https://doi.org/10.47149/pemo.v4.49281 https://revistas.uece.br/index.php/revpemo



Rev.Pemo - Revista do PEMO



The relationship between teaching and research has long been highlighted as an object of attention of researchers in the field of education, and therefore, the defense of research as a necessary component of teacher training is not new. It has been postulated by national and international authors for several decades (DEMO, 1999, 2000; BEILLEROT, 2001; ANDRÉ, 2001, 2016; LÜDKE, 2001), although belatedly incorporated into the Brazilian legal framework, precisely after the promulgation of the 2001 National Education Plan (Law no. 10.172). In this document, in different passages, there is mention of the importance of research and of the university as a place for teacher training, a recognition clearly signaled in the objectives and goals set for Higher Education in the following terms: "to encourage the generalization of the practice of research as an integral and modernizing element of the teaching-learning processes in all higher education [...]" (BRASIL, 2001, p. 91).

In effect, the teacher is being called upon to review his role in the process of human formation. We assume that the act of training reinforces the ability to create, compose, conceive; it focuses not only on the transmission of knowledge. Under this sieve, we understand that the educational work undertaken by the teacher consists of a dense and deep intervention, in an inter-relational and simultaneous process in which teachers and students reproduce and produce knowledge in favorable conditions for all to educate and train themselves (FARIAS; SILVA, 2009, p. 9). Considering Higher Education, marked by the tripod research, teaching and extension, its pedagogical culture imposes to teaching the challenge of sustaining learning through a permanent activity of knowledge construction (SEVERINO, 2009), in other words, a teaching mediated by research.

Teaching assuming research as a didactic-methodological alternative aims to establish breaks with transmissive teaching practices, enabling dialogue, problematization, construction of arguments and a propositional attitude towards knowledge.



Rev.Pemo - Revista do PEMO



• Reflective-oriented formative practice

A formative practice oriented towards reflexivity presupposes a pedagogical action supported by the incorporation of an epistemic process (SEVERINO, 2009), that is, by the incorporation of the know-how that enables the construction of the object, which is the knowledge itself. An action in this direction demands a conception of learning that distances itself from memorization and the mere reproduction of existing knowledge, therefore, requires a break with conservative teaching practices fundamentally based on transmission.

Now, this is challenging, because it confronts, on a daily basis, the teacher in the exercise of the condition of educator and the repertoire of know-how that guides the understanding of his role and professional performance. In fact, we consider that to assume the condition of "trainer" requires the awareness of their responsibilities, of the constant need to search "to become a trainer" (SILVA, 2008). It is, therefore, during the formation of people that the constitution and deconstitution of a set of knowledge that configure the teaching profession is consolidated. The exercise of self-reflection is inherent to the trainer's own work. Living with different ideologies and worldviews allows the human thought to filter, expel, or assimilate them and, in this movement, to show the rationality that moves its action as a person and as a professional. Rationality here understood as "the way each subject articulates his understanding and knowledge about a phenomenon" (FARIAS et al., 2014a).

In the context of teaching, this implies educational practices oriented to reflexivity, practices that prioritize the act of thinking about the action, its social determinations and possibilities of transformation (FARIAS et al., 2014). Reflexivity is presented, as Sacristán (1999) points out, as a way to achieve higher levels of rationality of practice. Research as a mediating activity of knowledge production can greatly contribute to the development of the teacher's pedagogical rationality, configuring in teacher education a quality/skill to be developed.

Rev.Pemo, Fortaleza, v.4, e49281, 2022 DOI:https://doi.org/10.47149/pemo.v4.49281 https://revistas.uece.br/index.php/revpemo



Rev.Pemo - Revista do PEMO



Articulation of theory and practice

Research is an action sustained from the theoretical and practical point of view, a unity that opposes the dichotomous perspective that has marked the understanding of these dimensions (CANDAU; LELIS, 2002), especially in the field of teacher training (GATTI, 2009, 2010).

We corroborate with Vázquez (1977) the argument that theory and practice are not opposite poles, since every practical activity is also theoretical and vice versa.

Based on this assumption, the PAPI proposal emphasizes the articulation between theory and practice in the process of teaching and learning how to do research, a relationship understood as empowering learning, since it promotes contextualized, meaningful and comprehensive learning in the process of appropriation and production of knowledge. Potential because, as Costa (2021, p. 58) points out, on the way to unity, "what to teach" and "how to teach" must be articulated to "for what" and "for whom".

Under this sieve, two premises stand out: a) the pedagogical function of articulating theory and practice in research training since graduation (CALAZANS, 2002); b) the intention is not to train researchers, but "to endow the future teacher with a solid background in the scientific, cultural, contextual, psycho-pedagogical, and personal fields" (ANDRÉ, 2006, p. 222). In other words, and still based on the author mentioned above, we seek with the PAPI proposal to adopt, in the context of initial training, a "methodology presided over by research that leads to the learning of educational reflection and that constantly links theory and practice" (IDEM).

We understand that research, and especially teaching with research, enables the undergraduate student, a future teacher of Basic Education, to access and understand, from a theoretical and practical point of view, the educational phenomenon and, in particular, their future field of work. André (2016, p. 28) corroborates this perspective when addressing the research in the professional development of the teacher who works at school, emphasizing that learning to research serves to "analyze the situations of everyday school life and work in order to understand them in their complexity, their and its context, that is, that it understands what it does, how it does it, and why it does it".

Rev.Pemo, Fortaleza, v.4, e49281, 2022 DOI:https://doi.org/10.47149/pemo.v4.49281

https://revistas.uece.br/index.php/revpemo



Rev.Pemo - Revista do PEMO



Collaborative peer-to-peer learning

The principle of collaborative peer learning is anchored in the recognition of man as a social being, a condition that marks his learning process in all dimensions of his life. Indeed, the concepts of "collaboration" and "peers" are at the core of this guiding principle of the PAPI proposal. The first refers to an action that presupposes cooperation, mutual help from a relationship established, by common agreement, between two or more people; the second refers to people who identify with each other or present, to some extent, similarities and, precisely because of this, are able to establish partnership relationships.

Based on these defining elements, we sought theoretical support in Cochran-Smith's (2012) formulations, who defends peer work as a way to break professional isolation, stimulate the sharing of teaching practices and learning demands by teachers in relation to their students, bringing experienced teachers closer to new or future colleagues, such as undergraduate students.

Collaborative peer learning presupposes the "de-privatization" of practice (COCHRAN-SMITH, 2012) as an effort that favors the development of teachers' professional knowledge, which is realized through the investigation and problematization of knowledge and actions in a collaborative system with others who are also engaged in the effort to strengthen their knowledge and make their work as teachers public and open to criticism. It also presupposes empathy and trust in the other; a co-responsibility for their learning; and, a belief in the possibility of producing knowledge about and with teachers. Work among peers moves toward an encounter with the other, professional culture, an investigative stance, and an appreciation for the construction of teachers' identities within a new institutional place for training.

In the context of initial training, collaborative learning among peers, especially among peers at different stages of development of their training and professional learning, can create a unique situation in the course of development of the subjects involved. We consider, in the case of the undergraduate, a subject in a phase of professional initiation in all areas, the opportunity to do, redo, learn and unlearn are vital

Rev.Pemo, Fortaleza, v.4, e49281, 2022 DOI:https://doi.org/10.47149/pemo.v4.49281

https://revistas.uece.br/index.php/revpemo



Rev.Pemo - Revista do PEMO



to deal with the realization of academic-scientific work and, therefore, for a conception of learning as a process of knowledge construction (SEVERINO, 2009). This perspective of learning happens by creating "situations" that enable students to learn (ANDRÉ, 2006). In the case of PAPI, the planned and systematic support of mentor researchers to undergraduates who begin their contact with this activity in the context of initial training, as they have to formulate a research project, configures this situation.

In this Project, the expression researcher mentor finds support in the idea of mentoring postulated by Marcelo Garcia (1999) and, more precisely, of teacher mentor, defined as an experienced teacher. In this sense, the mentor researcher is the one who assumes the task of mediating with the research beginner; who presents previous experience with the scientific practice of knowledge production; he or she is someone with the capacity of listening and sensitivity to the wishes of the other. The task of the mentor researcher is to be a bridge to guide and support the undergraduate student in his or her first steps in research, from the delineation of the object of study to the planning of the entire process to be developed, which in the case of PAPI is the elaboration of the Research Project.

3 The support of beginners in research: what do undergraduates reveal?

In this topic we explain the perspective of undergraduates who experienced, in the context of initial training, extracurricular support action to their first approach to the practice of scientific research through the Adopt a Researcher Initiator Project. It presents, therefore, data generated with 24 students who participated in this experience within the discipline Educational Research offered in the Pedagogy course of UECE, in the semester 2022.1, day shift, as previously recorded.

3.1 The beginners in research

The universe of these respondents is mostly female, with only 2 men and 2 respondents who did not manifest themselves. As for the age bracket, this is a group

Rev.Pemo - Revista do PEMO



from young adults, since twenty (20) declared they were "19 to 25 years old", two (2) declared they were "26 to 30 years old", one (1) declared he was "36 to 40 years old", and one (1) said he was "41 to 45 years old". Regarding color, 12 declared to be "brown", five declared to be "black", three declared to be "white", one declared to be "yellow", one declared to be of "indigenous race/ethnicity", and two chose not to indicate.

They are students from six cities in Ceará: Fortaleza (18), Maracanaú (2), Horizonte (1), Maranguape (1), Itaitinga (1) and Caucaia (1). Except for those living in the capital city, the others commute daily from their locations, located in the Metropolitan Region of Fortaleza. Students that are in different moments of their course of formation in the Course of Pedagogy, with the majority between the eighth and sixth semester (17), while in the third and fourth semester there is one student in each, besides other five that declared as "undefined" the semester in which they are because they are fulfilling credits of the original flow in a pulverized way.

3.2 What They Say About the PAPI

The 24 Pedagogy undergraduate students who went through the experience of the "Adopt a Beginning Researcher Project" (PAPI) in the semester 2022.1 considered it valid. Among the reasons for this assessment were references to the importance of the mentor researcher's help in outlining a direction for the research to be designed, as can be seen in the detailed summary below.

BOX 1: Reasons for considering PAPI a valid experience

BACKGROUND	Frequency
The mentor researcher was very knowledgeable about the area	1
The mentor researcher knew 'how' and 'what' to help	1
The mentoring process was more intimate, frequent and informal than with	6
the teacher responsible for the Educational Research subject	
The eye of the mentor researcher was very thorough	3
Stimulated and contributed to research training	8
The assistance of the mentor researcher was important and guiding for his	8
research initiation process	

Source: Prepared by the authors based on the questionnaire data.

The validity of the PAPI is attributed, above all, to the mentoring process it provides. The records made by the undergraduates reinforce the contribution of the

Rev.Pemo, Fortaleza, v.4, e49281, 2022 DOI:https://doi.org/10.47149/pemo.v4.49281 https://revistas.uece.br/index.php/revpemo



Rev.Pemo - Revista do PEMO



researcher mentor in the process of the beginner's understanding of the intricacies of research, who could follow more closely the students' concerns, clarify doubts, discuss ideas. The reasons also highlight the professional quality of these collaborators by emphasizing that they were "very knowledgeable about the area" and knew "how and what to help".

The aspects indicated as responsible for the success of the PAPI, that is, that contributed to the success of this project, are consistent with and even reinforce the reasons listed by its participants to characterize this extracurricular action to support the initiation of research as positive and relevant in their initial training.

It is worth mentioning that, due to the large number of undergraduate classes, it is very difficult to perform individualized monitoring, since only one teacher has to deal with all the demands of the group. The collaboration of researcher mentors helps to make this more personalized service possible, as the students indicate that the mentoring process has favored a closer, more frequent and informal relationship with the researcher mentor. This is a real need in the Educational Research course, as it is taught: balancing the study of theoretical aspects with the development of practical activities focused on the preparation of each student's research project, marked by continuous and successive corrections and feedback aimed at rewriting and refining the text. Certainly a didactic way of teaching that requires more time and dedication from all involved, teaching staff and students.

Furthermore, the adoption of mentoring in the process of initiation to research in the context of undergraduate teaching contributed to welcome also more shy students, especially those who do not feel comfortable to socialize their doubts orally, keeping them to themselves, which tends to cause uncertainties later on. Thus, we interpret that throughout the semester, the meetings between research mentors and undergraduates enabled a more targeted, objective and precise contact, providing knowledge about the universe of those involved, as well as being more comfortable with considerably fewer people around you to socialize your writing and possible questioning.

https://revistas.uece.br/index.php/revpemo



Rev.Pemo - Revista do PEMO



The emphasis on the "thorough" look of the mentor teacher expresses the recognition of their contributions to the development of student learning, especially denotes a didactic action that converges with the needs of the undergraduate. Indeed, the mentoring process enabled "stimuli" and "contributions" from the undergraduates to research training; it allowed them to know the new, to immerse themselves in safe sources to carry out their textual searches, to develop academic writing, to delve into theorists that they could use as references to base their research proposal, among other approaches that established a supportive link to the undergraduate. These traces of the support action performed by the mentor researcher with the undergraduates confirm Marcelo Garcia's (1999, p.125) assertion that this process involves "[...] support, help and guidance".

Table 2 shows the aspects identified by the 24 undergraduates as responsible for the success of the "Adopt a Beginner Researcher Project" (PAPI).

TABLE 2: Aspects that contributed to the success of the PAPI from the perspective of its participants - Pedagogy undergraduate students.

Aspecto	Frequência
Frequent corrections and suggestions from the researcher mentor	9
Availability and goodwill of the researcher mentor	8
Empathetic, encouraging, safe and patient mentor researcher	6
Suggested further reading	4
Easy access to the researcher mentor	3
Proximity of the mentor researcher to the student's topic of interest	2
Suggested bibliographic references	2
Guidance from an experienced person	2
Suggestions to avoid plagiarism	1
Help with the material (slides, etc.)	1
Mentor researcher has knowledge about the topic	1

Source: Prepared by the authors based on the questionnaire data.

Along with the "corrections and suggestions" of the mentor researchers, the "availability and good will" of these collaborators, as well as characteristics such as being empathic, encouraging, secure and patient, appear as decisive aspects for the recognition of the success of the Project. This emphasis highlights the appreciation and the need of the graduate student for a closer and continuous accompaniment as an element that favors his development and learning. It also reveals in tune with the

Rev.Pemo, Fortaleza, v.4, e49281, 2022 DOI:https://doi.org/10.47149/pemo.v4.49281

https://revistas.uece.br/index.php/revpemo



Rev.Pemo - Revista do PEMO



considerations of Marcelo Garcia (1999) when referring to the task of a mentor to a beginning teacher, who ponders:

Teachers who will work with beginning teachers should be people with certain characteristics (empathy, ease of communication, patience, diplomacy, flexibility and sensitivity) and professional qualities (demonstrated experience in their classes, class management skills, discipline and communication with colleagues, initiative to plan and organize). The qualities that the mentor teacher possesses will influence the relationships that are established with the beginning teacher. (MARCELO GARCIA, 1999, p. 127).

The initiative and the ability to plan and organize the mentoring action are qualities highlighted by the Spanish author, as they account for the 'tone' of the articulation to be generated with the initiate. In this sense, the PAPI participants also reported on the interaction strategies adopted by the researcher mentors.

On this aspect it was highlighted **that socialization** between the mentor researchers and the undergraduates had repercussions on the development of the research project, expanding both the understanding of the planning stage of the object construction process and qualifying the systematized text. Such recognition corroborates the analysis of Garcia (1999) when he asserts that the qualities and skills of the mentor researcher reverberate in the work done by the beginners.

Regarding the first contact, as recorded by the PAPI participants, most of them communicated via messaging application (WhatsApp), and later set up a meeting via *Google Meet*, occasion on which they proposed directions, such as suggestions for further reading on the theme. Besides these tools, *Google Drive* was also used as an interaction strategy, adopted to add information, guidelines, and constructive comments about the research that was being developed. The students also registered how they felt during the meetings with the mentor researchers, highlighting feelings of motivation and gratitude. They also emphasized that the support provided through PAPI was of paramount importance in the construction of the research project during the Educational Research course.

The data presented allow us to say that the condition of a beginner researcher demands, besides consistent support, the will to learn, because this is at a time of

Rev.Pemo - Revista do PEMO



continuous acquisition of new knowledge, which implies an intense movement of understanding to build the object of knowledge that moves the student's scientific curiosity, which, in the research project, takes intelligible form. Not without reason Minayo (2015), when referring to a good researcher, asserts that he brings questions, inquietudes, doubts and criticizes what has been read. Thus, it is clear that "the help of the mentor researcher was important and guiding" for the process of approach and immersion in the research, as noted by one of the respondents of the questionnaire.

4 Final considerations

In this paper, we will make a presentation about the "Adopt a Beginner Researcher Project - PAPI" that, as described, arose from the need to help students from the Pedagogy course in the elaboration of their first research project.

The PAPI proved to be relevant in the formation of the undergraduates, as it provided a smoother approach to the world of scientific research, offering new perspectives of academic writing and, with the support of mentor researchers, ensured a follow-up action in the development of the project. It is important to note that not only the undergraduates learned, but also the mentor researchers had the opportunity to experience situations of undergraduate orientation, a new experience for most of them, which enabled their development as teaching professionals.

Besides the many promising aspects in the development of the first edition of the PAPI in undergraduate Pedagogy course, some challenges also emerged. The time of those involved in the proposal, both the students and the collaborators who worked in the mentoring action, is one of these aspects, because the training competes with other commitments, such as work, internship, other academic obligations of the undergraduate and graduate courses, as well as the routine itself, which demanded attention to the family and to the performance of household chores.

The challenge of time requires, of course, a more accurate planning of the PAPI actions, so that the next replications of this experience can further enhance more, the

Rev.Pemo - Revista do PEMO



contributions that it brings to the improvement of training and initiation to research of undergraduate students.

We consider that the first edition of the PAPI, which occurred in the semester 2022.1, in a class of the discipline of Educational Research of the Pedagogy course of the UECE, presented more successes than challenges, reason why we consider as relevant the execution and continuity of this innovative proposal. A plus in the initial training of teachers, which makes us point to the importance of more undergraduates experiencing during graduation a support action that stimulates the awakening to the search for new knowledge through vivid approaches to research.

References

ALVES-MAZZOTI, Alda Judith. Revisão da Bibliografia. In: ALVES MAZZOTI, Alda Judith, GEWANDSZNAJDER, Fernando. **O método nas Ciências Naturais e Sociais**: pesquisa quantitativa e qualitativa. São Paulo: Pioneira, 1998. p. 179-188.

ANDRÉ, Marli Eliza Dalmazo (Org.). **Práticas inovadoras na formação de professores**. Campinas, SP: Papirus, 2016.

ANDRÉ, Marli Eliza Dalmazo. **O papel da pesquisa na formação e na prática dos professores**. Campinas, São Paulo: Papirus, 2001.

BEILLEROT, J. A "pesquisa": esboço de uma análise. In: ANDRÉ, M.E. D. A. de. **O** papel da pesquisa na formação e na prática dos professores. Campinas: Papirus, 2001. p. 71-90. BELL, 2008.

BRASIL. Plano Nacional de Educação. Brasília: Senado Federal: UNESCO, 2001.

CALAZANS, Julieta (Org.). **Iniciação científica**: construindo o pensamento crítico. 2ª edição. São Paulo: Cortez, 2002.

CANDAU, Vera Maria; LELIS, Isabel Alice. A Relação Teoria-Prática na Formação do educador. In: CANDAU, Vera Maria (Org.). **Rumo a uma Nova Didática**. 10 ed. Petrópolis: Vozes, 2002, p.56-72.

COCHRAN-SMITH, Marilyn. A tale of two teachers: learning to teach over time. **Kappa Delta**Pi Record, 48, p.108-122, jul/set, 2012.

Rev.Pemo - Revista do PEMO



COSTA, Sandy Lima. **Concepções sobre teoria e prática:** implicações para a profissionalidade e a aprendizagem docente de professoras iniciantes na educação infantil. 2021. 217f. Dissertação (Mestrado em Educação) - Programa de Pós-Graduação em Educação. Fortaleza: UECE, 2021.

DEMO, P. Educar pela pesquisa. 4.ed. Campinas: Autores Associados, 2000.

DEMO, P. Pesquisa: princípio científico e educativo. São Paulo: Cortez. 1999.

FARIAS, Isabel Maria Sabino de. **Pesquisa Educacional**. Programa de disciplina do semestre 2022.1 do curso de Pedagogia. Fortaleza: UECE/CED/EDUCAS, 2022, 02p. (mímeo).

FARIAS, Isabel Maria Sabino de. **Projeto Adote um Pesquisador Iniciante (PAPI)**. Projeto de apoio a iniciação à pesquisa no contexto da disciplina Pesquisa Educacional do curso de Pedagogia. Fortaleza: UECE/CED/EDUCAS, 2021, 10p. (mímeo).

FARIAS, Isabel Maria Sabino de; SILVA, Silvina Pimentel. **Pesquisa e Prática Pedagógica**. Fortaleza: RDS, 2009.

FARIAS, Isabel Maria Sabino de; THERRIEN, J.; NÓBREGA-THERRIEN, S. M.; SILVA, S. P. **A Docência Universitária sob o prisma da integração ensino e pesquisa**. Teresina: EDUFPI, 2014a. FARIAS; RAMOS; SILVA, 2018.

GATTI, Bernadete Angelina. Formação de professores no Brasil: características e problemas. **Educ. Soc.** Campinas, Campinas, v. 31, n. 113, p. 1355-1379, out./dez. 2010. Disponível em: https://www.scielo.br/scielo.php?pid=s0101-73302010000400016&script=sci_abstract&tlng=pt. Acesso em: 24 set. 2019.

GATTI, Bernadete Angelina; BARRETO, Elba Siqueira de Sá (Orgs.). **Professores do Brasil**: impasses e desafios. Brasília: UNESCO, 2009.

LÜDKE, Menga. (Coord.). O professor e a pesquisa. Campinas: Papirus, 2001.

MARCELO GARCIA, Carlos. **Formação de professores:** para uma mudança educativa. Tradução Isabel Narciso. Portugal: Porto Editora, 1999.

MINAYO, Maria Cecília de Souza. **Pesquisa social:** Teoria, método e criatividade. DESLANDES, Suely Ferreira; GOMES, Romeu; MINAYO, Maria Cecília de Souza (Orgs.). 34. ed. Petrópolis, RJ. Vozes, 2015.

SEVERINO, Antônio Joaquim. Ensino e Pesquisa na docência universitária: caminhos para a integração. In: PIMENTA, Selma Garrido; ALMEIDA, Maria Isabel de. (Orgs.).

Rev.Pemo, Fortaleza, v.4, e49281, 2022 DOI:https://doi.org/10.47149/pemo.v4.49281 https://revistas.uece.br/index.php/revpemo



Rev.Pemo - Revista do PEMO



Pedagogia Universitária. São Paulo: Editora Universidade de São Paulo, 2009, p. 129-146.

SILVA, Silvina Pimentel. **Histórias de Formação em Pesquisa**: trajetórias da UECE e da UFC (1985 a 2005). Tese (Doutorado em Educação). Fortaleza: UFC, 2008.

STAKE, Robert. Pesquisa qualitativa: estudando como as coisas funcionam. Porto Alegre: Penso, 2011.

VÁZQUEZ, Adolfo Sanchez. **Filosofia da Práxis**. Tradução de Luiz Fernando Cardoso. Rio de Janeiro: Paz e Terra, 1977.

Isabel Maria Sabino de Farias, ORCID: https://orcid.org/0000-0003-1799-0963

Universidade Estadual do Ceará; Centro de Educação; Programa de Pós-Graduação em Educação. Professora Associada da Universidade Estadual do Ceará - UECE, vinculada ao Centro de Educação e ao Programa de Pós-Graduação em Educação. Líder do grupo de pesquisa Educação, Cultura Escolar e Sociedade - EDUCAS/CNPq. Bolsista de Produtividade em Pesquisa do CNPq – Nível 2. Contribuição de autoria: Sistematização e articulação das ideias do texto; Redação do artigo.

Lattes: http://lattes.cnpq.br/4537311001790225

E-mail:isabel.sabino@gmail.com

"Lyanna Lourdes Lima Leal, ORCID: https://orcid.org/0000-0002-6168-2784 Universidade Estadual do Ceará; Pós-Graduação em Educação Graduada em Pedagogia pela Universidade Estadual do Ceará - UECE. É membro do grupo de pesquisa Educação, Cultura Escolar e Sociedade – EDUCAS/CNPq. Mestranda no Programa de Pós-

Contribuição de autoria: Interpretação dos dados; Contribuições no decorrer do texto.

Graduação em Educação - PPGE da Universidade Estadual do Ceará.

Lattes: http://lattes.cnpq.br/8356822406098908

E-mail:lyanna.leal@aluno.uece.br

"Samily Oliveira Maia, ORCID: https://orcid.org/0000-0002-0184-2301

Universidade Estadual do Ceará; Centro de Educação

Graduanda em Pedagogia pela Universidade Estadual do Ceará - UECE. É membro do grupo de pesquisa Educação, Cultura Escolar e Sociedade – EDUCAS/CNPq. Bolsista de iniciação científica PIBIC/CNPq.

Contribuição de autoria: Análise e coleta dos dados da pesquisa.

Lattes: http://lattes.cnpg.br/7677558654088301

E-mail:samily.oliveira@aluno.uece.br

Responsible Publisher: Cristine Brandenburg

Ad-hoc expert: Hugo Heredia Ponce

Rev.Pemo, Fortaleza, v.4, e49281, 2022 DOI:https://doi.org/10.47149/pemo.v4.49281 https://revistas.uece.br/index.php/revpemo



Rev.Pemo - Revista do PEMO



How to cite this article (ABNT):

FARIAS, Isabel Maria Sabino. LEAL, Lyanna Lourdes Lima; MAIA, Samily Oliveira. Iniciação à pesquisa em contexto de formação inicial de professores: apontamentos sobre uma experiência. **Rev. Pemo**, Fortaleza, v. 4, e49281, 2022. Disponível em: https://doi.org/10.47149/pemo.v4.9281

Received September 25, 2022. Accepted on November 22, 2022. Published on November 22, 2022.

