EDUR • Educação em Revista. 2025;41;e40212 DOI: http://dx.doi.org/10.1590/0102-469840212T Preprint: https://doi.org/10.1590/SciELOPreprints.4282

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ARTICLE

POTENTIALITIES AND LIMITS OF FEDERAL PROGRAMS PIBID AND PEDAGOGICAL RESIDENCY: A STATE OF KNOWLEDGE¹

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ABSTRACT: This study presents a mapping of theses and dissertations related to federal programs focused on teaching initiation, Pibid, and Pedagogical Residency (PR), in the Capes Digital Catalogue of Theses and Dissertations and the Digital Library of Theses and Dissertations – BDTD –, from 2010 to 2020. It aims to understand, through already conducted research, how Pibid and RP impact experiences in the teacher training process. A descriptive and interpretative analysis, of the state-of-knowledge type, was carried out on studies related to initial teacher training in the Pibid and PR programs, highlighting as main limitations: the restriction on the number of scholarships offered and weaknesses within IES curriculums, internships, and teaching initiation programs. As potentialities, the studies pointed out: insertion in the school's daily life, paid scholarship, methodologies adopted, and the approximation of universities with Basic Education. The results point to possible contributions in constructing the teacher's identity during initial education, as they collaborate in the qualification of the future teacher, towards an authorial and emancipatory training based on research, bringing university and school closer together, articulating theory and practice.

Keywords: Pibid, pedagogical residency, initial education, state-of-knowledge.

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¹ Article published with funding from the *Conselho Nacional de Desenvolvimento Científico e Tecnológico* - CNPq/Brazil for editing, layout and XML conversion services. The translation of this article into English was funded by Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - CAPES/Brasil.

POTENCIALIDADES E LIMITES DOS PROGRAMAS FEDERAIS PIBID E RESIDÊNCIA PEDAGÓGICA: UM ESTADO DO CONHECIMENTO

RESUMO: Este estudo apresenta um mapeamento de teses e dissertações relacionadas aos programas federais voltados à iniciação à docência, Pibid e Residência Pedagógica (RP), no Catálogo Digital de Teses e Dissertações da Capes e na Biblioteca Digital de Teses e Dissertações – BDTD –, no período de 2010 a 2020. Tem como objetivo compreender, por meio de pesquisas já realizadas, como o Pibid e o RP impactam as experiências no processo formativo docente. Realizou-se uma análise-descritiva e interpretativa, do tipo de estado do conhecimento, dos estudos relacionados à formação inicial docente nos programas Pibid e RP, sinalizando como principais limites: a restrição no número de bolsas ofertadas e fragilidades entre o currículo das IES, o estágio e os programas de iniciação à docência. Como potencialidades, os estudos apontaram: a inserção no cotidiano da escola, a bolsa remunerada, as metodologias adotadas e a aproximação das universidades com a Educação Básica. Os resultados apontam possíveis contribuições na construção da identidade docente durante a formação inicial, uma vez que colaboram na qualificação do(a) futuro(a) professor(a), no sentido de uma formação autoral e emancipatória baseada na pesquisa, aproximando universidade e escola, articulando teoria e prática.

Palavras-chave: Pibid, residência pedagógica, formação inicial, estado do conhecimento.

POTENCIALIDADES Y LÍMITES DE LOS PROGRAMAS FEDERALES PIBID Y RESIDENCIA PEDAGÓGICA: UN ESTADO DEL CONOCIMIENTO

RESUMEN: Este estudio presenta un mapeo de tesis y disertaciones relacionadas con los programas federales enfocados en la iniciación docente, Pibid y Residencia Pedagógica (PR), en el Catálogo Digital de Tesis y Disertaciones de la Capes y en la Biblioteca Digital de Tesis y Disertaciones – BDTD –, en el período de 2010 a 2020. Su objetivo es comprender, a través de investigaciones ya realizadas, cómo el Pibid y el RP impactan en las experiencias en el proceso de formación docente. Se realizó un análisis descriptivo e interpretativo, del tipo estado de conocimiento, de los estudios relacionados con la formación inicial docente en los programas Pibid y PR, señalando como principales límites: la restricción en el número de becas ofrecidas y las debilidades entre el currículo de la IES, programas de pasantías y iniciación a la enseñanza. Como potencialidades, señalaron los estudios: la inserción en la vida cotidiana de la escuela, la beca remunerada, las metodologías adoptadas y el acercamiento entre las universidades y la Educación Básica. Los resultados apuntan a posibles aportes en la construcción de la identidad docente durante la educación inicial, ya que colaboran en la calificación del futuro docente, en el sentido de una formación autoral y emancipadora basada en la investigación, acercando universidad y escuela, articulando teoría y práctica.

Palabras clave: Pibid, residencia pedagógica, formación inicial, estado del conocimiento.

INTRODUCTION

The discussion on teacher training in Brazil is both current and necessary. It has been the subject of investigation by researchers in the field of education (Almeida, 2020; Silva, 2019; Souza, 2018), constituting a founding element for the development of a socially referenced quality education. It is relevant to investigate the context of teacher training, since "[...] the training of those who will train becomes central to formal educational processes" (Gatti, 2017, p. 163).

From this contemporary perspective, in which society expects a lot from teachers, this study aims to present and reflectively discuss the training processes in undergraduate courses from the perspective of thesis and dissertation work prepared in Postgraduate Programs in Brazil on the Institutional Program for Teaching Initiation Grants (PIBID- Programa Institucional de Bolsa de Iniciação à Docência) and the Pedagogical Residency Program (RP- Programa de Residência Pedagógica). In this article, our basis is authors such as André (2010, 2012), García (1999), Gatti (2010, 2017), Nóvoa (2009, 2013), and Pimenta (1999), with the objective of understanding, through research already carried out, how PIBID and the RP Program impact experiences in the teacher training process.

The actions developed in both programs, listed here, meet the provocations and propositions of Nóvoa (1995), when he states that the period of teacher training needs to be built in the professional environment, with the exchange of experiences between more and less experienced professionals since learning to be a teacher involves a dynamic process of training among peers. From this perspective, this study is developed in an analytical-descriptive and interpretative manner on the theme, of the state of knowledge type (Morosini; Kohls-Santos; Bittencourt, 2021), more specifically in theses and dissertations produced between 2010 and 2020, collected in the digital databases of the Capes Theses and Dissertations Catalog and the Digital Library of Theses and Dissertations (BDTD- Biblioteca Digital de Teses e Dissertações). The study is justified by enabling the analysis of academic production on Pibid and the RP Program, aiming to understand how these programs impact experiences in the teacher training process.

Such experiences presented through the works analyzed in this research are focused on pedagogical experiences within the context of the Teaching Initiation Programs (ID-*Programas de Iniciação à Docência*), since the activities developed value teaching knowledge during initial training, and everything that is experienced during this period can impact each teacher training. For Serres (1993), this exposure provokes experience, considering that "[...] nothing human exists without experience, without this exposure that advances to the explosion, nothing human can exist without these expansions" (Serres, 1993, p. 44).

Thus, the focus of the reflection falls on the impacts of these experiences on initial training to observe the possible contributions in the process of constructing a teaching identity focused on autonomy and authorship (Demo, 2005), as well as from the possibility of putting teaching knowledge into practice during the training processes. The concept of constructing a teaching identity is related to what Nóvoa (2013, p. 6) discusses about teacher training, since the "[...] need to return teacher training to teachers is relevant because reinforcing research-based training processes only makes sense if they are built within the profession". In this sense, the moment of initial teacher training can be thought of and organized in this articulation between the university and the school by the formative principle of research (Demo, 2005), in this process of professional induction through the Pibid and RP Programs.

Based on the aspects previously highlighted in this section, we divided this article into five sections, considering this introduction. In the second section, we present the discussion on the topic of initial teacher training based on the theoretical framework of the education field. In the third section, we describe the methodological aspects of this research. In the fourth section, we present the analyses and discussions of the research related to the Pibid Program and the RP Program. Finally, in the fifth section, we consider the understanding of the analyses pertaining to the studies raised in the databases.

TEACHER TRAINING AND ITS RELATIONSHIP WITH TEACHING INITIATION PROGRAMS

Since 1990, the theme "teacher training" has been treated with more expressiveness and began to be discussed and analyzed with more interest by researchers who support this study, such as

André, Simões, Carvalho and Brzezinski (1999), Cunha (1994), Demo (2005, 2006, 2015), Gatti (2010, 2017), Gatti, André, Gimenes and Ferragut (2014), Gatti and Barreto (2009), Gatti, Barreto and André (2011), Nóvoa (1995, 1999, 2013), Pimenta (2012) and Tardif (2012). Thus, it was possible to observe, in the selected research, that the theme "initial teacher training" has gained strength in studies over the last decade, and there is a concern in detailing and demonstrating how the Federal Government's teacher training programs impact the training process and contribute to it.

The Pibid (Brazil, 2018a) and RP (Brazil, 2018b) programs made people reflect on the constitution of teaching linked to the processes of initial and continuing education and on how the experiences of knowing, understanding, analyzing, and evaluating the school environment and the context of public education contribute to teacher training and the construction of teaching knowledge (Tardif, 2012). When addressing experiential knowledge, Tardif (2012, p. 156) defines it as the knowledge acquired in the experiences exercised in daily teaching, developing skills of "knowing how to be a teacher". From this perspective, we understand the construction of teacher identity from the perspective of Pimenta (2009), who states that it is necessary to resignify the training processes based on the knowledge necessary for teaching, bringing the pedagogical practices experienced in the daily school routine closer to the scientific knowledge of the future profession. This is because "[...] identity is not an immutable or external fact that can be acquired, but it is a process of construction of the historically situated subject" (Pimenta, 2009, p. 6). In this sense, authors such as Demo (2005), Pimenta (2009), and Tardif (2012) demonstrate that the construction of teacher identity must be constituted from processes that lead to authorship, emancipation, construction of knowledge, possibility of critical-reflective exercise and articulation between theory and practice in the initial training of teachers.

Studies such as those by Gatti, André, Gimenes, and Ferragut (2014), Nóvoa (1995, 2009), Pimenta (1999), and Tardif (2012) reveal the urgency of bringing the theory developed at the university closer to the practical activities of teaching, so that future teachers can revisit the theories they study and, at the same time, invent and rework the context of their practice. In this sense, research by Gatti, André, Gimenes, and Ferragut (2014) and Pimenta (2012) has shown that initial training trajectories within ID Programs promote successful actions confirmed in the studies described here, such as articulation of the relationship between theory and practice, approximation with the school routine, and teaching experiences still in the initial training process. These actions enable to develop of innovative practices, and scientific and pedagogical advances in the area of education to understand that the processes of initial teacher training need to become socially recognized, as well as within the scope of Basic Education and Higher Education. In this sense, we will present the methodological path developed in this study.

METHODOLOGICAL PATH

The study is close to the assumptions of qualitative research described by Bogdan and Biklen (1994). According to these authors, the qualitative approach has rich details of the data obtained, as they describe the phenomenon studied in its detail, since "[...] the goal of qualitative researchers is to better understand human behavior and experience [...], the process through which people construct meanings" (Bogdan; Biklen, 1994, p. 70).

This "state of knowledge" is important because it enables the understanding and analysis of what has already been produced in a given time on the researched theme, by revealing studies that have Pibid and the RP Program as their scope and understanding of how these programs impact experiences in the teacher training process. When mapping and discussing academic productions, based on the term "state of knowledge", we consider this type of study to be the

[...] identification, registration, categorization that leads to reflection and synthesis on the scientific production of a given area, in a given space of time, bringing together periodicals, theses, dissertations, and books on a specific theme (Morosini; Kohls-Santos; Bittencourt, 2021, p. 23).

To structure this article, we delimited and defined the following descriptors in the Capes and BDTD databases: "Pibid", "initial training", "theory and practice" and "being a teacher" – for Pibid; "pedagogical residency" and "initial training" – for the RP Program. The databases mentioned were chosen because they are considered repositories for storing primary sources of theses and dissertations, and in this case, we established the time frame from 2010 to 2020.

For André, Simões, Carvalho, and Brzezinski (1999, p. 309), "[...] the various sources show an excess of discourse on the topic of teacher training and a scarcity of empirical data to reference educational practices and policies". From this perspective, there was a need to seek studies on the topic to analyze, describe, and interpret these studies, demonstrating what was investigated in the context of federal teacher training programs, and the impacts of these productions on the training processes, aspects that we will discuss in the next sections.

WHAT DO RESEARCH SHOW ABOUT THE PIBID AND PEDAGOGICAL RESIDENCY PROGRAMS IN INITIAL TRAINING: PRESENTATION AND DISCUSSION OF DATA

We first address the studies related to Pibid and then the RP Program for the concepts of initial teacher training. It is important to highlight that the research developed in this "state of knowledge" (Morosini; Kohls-Santos; Bittencourt, 2021) was carried out separately in the two programs, as they are teaching initiation activities aimed at audiences at different stages in the university.

Studies on Pibid

To map the research, we used the following descriptors in the Capes and BDTD databases: Pibid; Initial training; Being a teacher; Theory and Practice. After this initial survey, we read the title, abstract, introduction, and final considerations of the works, from which we selected 37 researches, 25 dissertations, and 12 theses that contemplated the descriptors related to the Pibid theme. After the initial selection of the works for analysis, we performed a detailed reading of the following items: title; abstract; introduction; research objectives, methodological aspects, main results; final considerations, which were a basis for the descriptive and interpretative analysis, resulting in 13 researches, four theses and nine dissertations, which were directly related to the Pibid theme, as represented in Table 1.

Table 1 – Descriptors and database – Pibid

Descriptors	Capes	BDTD
Pibid	639	368
Pibid; Initial training	173	166
Pibid; Initial training; Being a teacher	16	160
Pibid; Initial training; Being a teacher; Theory and practice	4	33
Total	37	
Research analyzed	13	

Source: Created by the authors.

To analyze the selected studies, we decided to create four categories based on the approaches related to the objects of study, which would undergo an analytical-descriptive and interpretative treatment according to the following categories: a) Initial training: experiences in Pibid; b) Construction of the training process and teaching knowledge: reflections on being/feeling like a teacher; c) Articulation between theory, practice and research in Pibid; and d) Relationship between Pibid and Internship. In this way, we present the categories of analysis based on the selected theses and dissertations.

Category 1 – Initial training: experiences in Pibid

This analysis will begin with Dantas' (2013) research, entitled Teaching initiation at UFMT: PIBID contributions to the training of Chemistry teachers (*Iniciação à docência na UFMT: contribuições do PIBID na formação de professores de Química*). The objective of the study was to "[...] analyze in which aspects the PIBID/UFMT project contributed to the initial training and teaching initiation of the participants of the Chemistry subproject – 2007 Call for Proposals" (Dantas, 2013, p. 31). The methodology applied was a qualitative case study approach, using a questionnaire, semi-structured interview, and document analysis as data collection tools. The subjects were 11 former scholarship students, two supervisors, and one area coordinator, both from the Chemistry subproject. As this is a case study, Dantas (2013) used, as an analysis technique, the methodological triangulation of data collected in dialogue with authors in the field of education, such as García (1999), Mello, Persona and Nunes (2012) and Tardif (2002), and based on the testimonies of former scholarship holders, supervising teachers and coordinators.

The author believes that the program has become an important public policy in the valorization of teaching, and the methodological experiments carried out in the program are innovative. In her results, Dantas (2013) shows that Pibid is still considered a promoter of opportunities to break with the current training models and it is revealed as a program that provides an improvement in the initial training of teachers through the integration of university and school. The study by Dantas (2013) presented the fragmented curriculum as one of the difficulties of initial training, also highlighting the limitation of the internship since the university does not deepen the interaction between theory and practice, which hinders the scientific and social quality of initial training.

Thus, Dantas's research (2013) points out that the influence of the formative process on teacher training occurs throughout the academic path of the subjects, but in the initial training, this is evidenced through the teaching experiences that Pibid provides. This notion of initial training corroborates the perspective of Nóvoa (2009), understanding that teacher training needs to be constructed within the profession, that is, in contact with the teaching environment and in socialization among peers.

We then move on to the interpretation of Silva's study (2015), which sought to "[...] investigate the limits and potential of the Teaching Initiation Grant Program and the training of pedagogues" (Silva, 2015, p. 33). The research, entitled The Institutional Teaching Initiation Grant Program and the Training of pedagogues: limits and potential (O Programa Institucional de Bolsa de Iniciação à Docência e a formação do pedagogo: limites e potencialidades), was a qualitative case study, using questionnaires, focus groups and semi-structured interviews for data collection. The subjects selected were scholarship students, the supervising teacher of the basic school, and the area coordinator of the HEI of the Pibid-Pedagogy subproject. Academics who did not participate in the program also took part in the research to investigate the perceptions of the people about public policies for initial training, considered to be a comparative study. To analyze the data, the researcher used content analysis, based on Bardin (2011) and Franco (2008).

Silva's research (2015) considered that Pibid contributed to encouraging students to remain in the undergraduate course. It also demonstrated some weaknesses in the initial training process – such as society's discredit in the teaching profession and the role of the State in Education, whether financially or as a facilitator of equal opportunities –, which, over time, has shown changes, but is "[...] increasingly far from ensuring social well-being when it was the main provider of educational goods and services" (Silva, 2015, p. 129), now being much more concerned with the ranking system. The research also revealed some difficulties in the initial training process since it brings up the problem related to internships in the face of a disjointed curriculum, the lack of teacher appreciation, and those who did not participate in the program, they revealed that their only contact with the school was during the internship that occurred in a short period, which weakened the relationship between theory and practice in the teaching context. On the other hand, the perceptions of Pibid-Pedagogy scholarship students, regarding the interlocution between theory and practice demonstrated in the focus group, proved to be successful in the context of interaction in the school space, generating, in these students, greater security in the formative process.

We now go to Marques's thesis (2016), entitled The Construction of teaching work in the Articulation of theory and Practice: the PIBID Experience (A construção do trabalho docente na articulação teoria e prática: a experiência do PIBID), through which the author elaborates critiques and reflections on the processes of initial teacher training. As its main objective, the research sought to "[...] identify the contributions of PIBID in the initial training of teachers in a private, philanthropic, confessional Higher Education Institution (HEI) located in the city of Bauru/SP and the understanding of the concept of teaching work" (Marques, 2016, p. 20). The methodological process was based on a qualitative approach of a reflexive nature. For the investigation, bibliographical, documentary and field research were used, and the questionnaire was used as a data collection instrument. The participants investigated were the undergraduate students, the supervising teacher, the area coordinator, the management team, the teachers in charge of the field schools and the coordinators of undergraduate courses at the HEI.

The research revealed that Pibid is a positive and interesting proposal for the qualification of initial training, since, according to Marques' considerations (2016), the program

[...] contributes to the understanding of the concept of teaching work, in an articulated way with the theory-practice relationship in the conception of scholarship students, basic school teachers, and HEIs, allowing reflections on their practices, which results in a qualitative improvement in the initial training and continuing education of basic education teachers and HEIs (Marques, 2016, p. 149).

In addition to delving into Resolution CNE/CP number 1 of May 15, 2006 (Brazil, 2006) and Resolution number 2 of July 1, 2015 (Brazil, 2015) of the National Education Council (CNE), mainly on the processes of creation of Pibid, Marques's (2016) research had the questions about the importance of financial investments in teacher training as one of its relevant points, especially in the initial training phase. As a limiting point, the research indicated the lack of investments and the reduction of funds in the program, hindering the qualification of training processes in our country.

Souza's thesis (2018), entitled PIBID: meanings in the initial training of Mathematics Teachers (*PIBID: significados na formação inicial de professores de Matemática*), had the research objective of "[...] showing the meaning of PIBID for students, teachers in training in the Mathematics degree course at IFES campus – Cachoeira de Itapemirim" (Souza, 2018, p. 21). The approach used was qualitative, and the data were collected through questionnaires and semi-structured interviews with Pibid scholarship students (academics, teachers and coordinators) and Mathematics course students (who were not scholarship students). A documentary analysis was also carried out through the reports presented by Pibid scholarship students in which they described the workshops as a means of learning and professional experience.

The researcher addressed the construction of teaching identity and highlighted the importance of ID programs to legitimize it, stating that teaching identity "[...] does not arise automatically, but is constructed and designed through a process that is not only individual, but collective" (Souza, 2018, p. 45). From this perspective of reasoning, it is possible to perceive the dimension of the teaching experience in the works of Gatti and Barreto (2009), Nóvoa (2013), and Pimenta (2012) when they address the possibilities of "being a teacher" in the context of initial training. Another relevant fact found in Souza's (2018) research was the dimension of Pibid enabling students to remain in their undergraduate course through paid scholarships, which was considered an important aspect for the continuity of the initial training process. Furthermore, the research demonstrated that the scholarship students' proximity to the school context produced greater familiarity with teaching, strengthening their ties with their future workplace, since the student was able to experience, from their initial training, the construction of teaching knowledge.

Given this scenario, the studies by Dantas (2013), Marques (2016), Silva (2015) and Souza (2018) made important reflections so that we can understand the impacts of Pibid on teacher training, especially in pedagogical practices through social interactions in the context of teaching work. From this perspective, Nóvoa (1999, p. 119) states that "[...] when a beginning teacher overcomes the shock with reality, even if through learning by trial and error, the initial tensions tend to reduce, verifying a

progressive acceptance on the part of students, parents, and colleagues". Therefore, these studies contributed to the visibility of the studies carried out on Pibid and its relationship with initial training.

Some limitations have also been pointed out by the authors, such as Silva (2015), who draws attention to the need to reflect on demanding more from the State for public educational policies aimed at teacher qualification, as well as on the weaknesses of curricular internships. Souza (2018) also highlights the need for scholarships to be distributed equally, in other words, to universalize Pibid scholarships.

Category 2 – Construction of the training process and teaching knowledge: reflections on being/feeling like a teacher.

Santos' research (2013), entitled Training of teachers who teach Mathematics in the early years: contributions from the Institutional Teaching Initiation Grant Program (PIBID) at UFSCar (Formação de professores que ensinam Matemática nos anos iniciais: contribuições do Programa Institucional de Bolsa de Iniciação à Docência (PIBID) na UFSCar), had as its main objective

[...] to identify and analyze the contributions of the teacher training process, especially in mathematics, revealed in oral narratives and written productions of undergraduates of the pedagogy course who participated in the institutional scholarship program for initiation [into] teaching (PIBID), of the Federal University of São Carlos (UFSCAR) (Santos, 2013, p. 17).

Foi utilizada a abordagem qualitativa e, para coletar os dados, fez-se uso da análise documental e da entrevista semiestruturada. Os sujeitos investigados foram os bolsistas, as professoras supervisoras e a coordenadora de área.

A qualitative approach was used, and document analysis and semi-structured interviews were used to collect data. The subjects investigated were the scholarship students, the supervising teachers, and the area coordinator. The study by Santos (2013) is relevant because it states, through data analysis, that Pibid contributes to being/feeling like a teacher in the daily life of the school, by working directly with the students and facing, from the scholarship students' point of view, one of the most difficult situations in the life of a teacher: the "indiscipline" of the students in Basic Education. The research considers the posture (being a teacher) as something that Pibid can articulate when it brings the undergraduate student closer to the educational environment, making the scholarship student already have contact with the routines of the future profession, such as the elaboration of lesson plans or the concern with the student's teaching and learning processes.

According to Nóvoa (2013, p. 115), "[...] no one graduates in a vacuum. Graduation presupposes exchange, experience, social interactions, learning, an endless number of relationships". Thus, teaching initiation programs provide students with the opportunity to experience everyday school situations, and how to plan, execute and deal with the frustration caused by certain situations, which favors action-reflection-action.

In Silva's (2014) research, entitled Process of Initiation into teaching of Mathematics Teachers: perspectives of PIBID/UFSCar graduates (*Processo de iniciação à docência de professores de Matemática: olhares de egressos do PIBID/UFSCar*), the objective was "[...] to understand the process of initiation into teaching of undergraduates of the Pibid – Mathematics subproject Program of the Federal University of São Carlos" (Silva, 2014, p. 25). The study, of a qualitative nature, used document analysis (portfolios), the application of a questionnaire and interviews as data collection instruments. The participating subjects were four former scholarship students, and graduates of the program. The research sought to analyze the difficulties at the beginning of their careers and how the former scholarship students observed the contributions of Pibid in their teacher training.

Silva (2014) based her work on Tardif's studies (2012) to address teaching work. The author claims that she cannot carry out this work without relating it to teaching knowledge and its context (Silva, 2014). According to the results of Silva's research (2014), Pibid has shown to overcome some difficulties encountered at the beginning of teaching, such as dealing with daily school activities, and has also revealed that participation in the program has contributed positively to the professional integration of graduates

who pursued teaching careers. The researcher also identified that Pibid has enabled the articulation between theory and practice, attempting to overcome the dichotomy between school mathematics and academic mathematics.

Izá's research (2015) addresses relevant aspects of the theory-practice dichotomy and the approach to the school environment based on the experiences of participants in the Pibid. The objective of his dissertation, entitled Teaching learning: a look at the formative practices developed in the context of the PIBID – Mathematics/UFLA (Aprendizagem da docência: um olhar para as práticas formativas desenvolvidas no contexto do PIBID – Matemática/UFLA), was

[...] to understand the work dynamics of the PIBID subproject group in the Mathematics area of UFLA to identify how teaching is learned in the observed context, and to analyze the reflections produced by undergraduate students on the experience of becoming professionals in the PIBID – Mathematics/UFLA context (Izá, 2015, p. 17).

The research approach was qualitative and classified as a case study. The data collection instruments were an online questionnaire and two discussion groups. The participating subjects were 24 undergraduate Mathematics scholarship students from the Federal University of Lavras (UFLA). The author used content analysis as a data analysis procedure.

The research revealed that the process of becoming a teacher occurs in the daily relationships that Pibid provides between scholarship students and more experienced teachers in the school environment. It also demonstrated that the subjects' perceptions regarding the program's contributions to their initial training are largely related to their proximity to the school environment and all the training dynamics that Pibid provides. In this way, it is considered a program that favors dynamics such as studies, research and reflections on actions, as well as moments of reflection on the current university curriculum structure, which is still so disjointed.

The study by Izá (2015) contributed to presenting the perspective of scholarship holders regarding the opportunity to perceive the importance of the inseparability between theory and practice in teaching activities in the school environment while still in the training period, providing practical experiences in teaching. The research demonstrated that Pibid, in addition to articulating theory appropriated at the university with teaching practices, provides moments of reflection and criticism of the practices carried out in the program. However, Izá (2015) warns that Pibid is a space for learning and does not faithfully reproduce teaching work.

Gehring's (2016) research, entitled Initial training of Portuguese Language Teachers: portraits and Reflections of PIBID (Formação inicial de professores de Língua Portuguesa: retratos e reflexos do PIBID), addressed the impacts that Pibid can have on initial training. The author reveals some setbacks in the teaching career and points out that the beginning of a career can sometimes be a conflicting and challenging path.

The objective of the research was to "[...] seek to reflect on the possible impacts of PIBID on the initial training of scholarship students who graduated in Portuguese Language at Unoeste" (Gehring, 2016, p. 117). The subjects selected were 11 scholarship holders who graduated from the Pibid subproject. The methodology used was qualitative in nature, and semi-structured interviews were used as data collection instruments, in addition to documentary analysis of the final Pibid reports. For data analysis, after transcribing the interviews and analyzing the reports, an interpretative analysis was performed, which allowed reflections on the analyzed theme.

The highlight of Gehring's (2016) research was the approach to research as a formative principle. Based on Demo (2005), the author highlighted the importance of providing scholarship students with the opportunity to become "research teachers". In this context, it is important to replace memorization with research, so that in schools and universities, teachers become "authors" and not just transmitters of content. Based on this conception of training, Marques (2006) states that this movement of becoming authors and researchers is associated with writing and reading, since "[...] it is important to write to search for what to read; it is important to read to rewrite what has been written and what has

been read. First, writing, then reading to rewrite it. This is searching; it is learning: acts in which man continually recreates himself, without repeating himself. This is research" (Marques, 2006, p. 92).

Based on this reflection on the principle of research, as the main considerations, Gehring (2016) reported the impacts on teacher training that, in the view of the scholarship students, are positive, especially when there is interaction between the teacher in training and the Basic Education student and the approximation between theory and practice, in the articulation of the university with the daily life of the public school that the program revealed to provide, as well as the incentive to research. Even considering that "research" is still a dimension little explored in initial training courses, Pibid, as a public policy, enables practices and experiences of authorship and production of knowledge, which may positively impact the training processes of students in undergraduate courses that belong to the program.

The studies by Gehring (2016), Izá (2015), Santos (2013) and Silva (2014), presented in this subsection, help us understand Pibid as a promoter of teaching practice based on praxis and reflective experiences within the school environment. The program provides opportunities for scholarship students to follow the day-to-day teaching life and contribute to teachers in field schools. As Pimenta (1999, p. 10) states, "[...] the future professional cannot build his/her know-how, if not from his/her own doing".

The studies analyzed here presented results that shed light on reflections on Pibid and teacher training policies, since these policies favor the approximation with the knowledge necessary for pedagogical practices in school reality during initial training, providing opportunities for being/feeling like a teacher, as well as enabling ethical, civic, critical and contextualized teacher training. Pibid demonstrates that the curricula of undergraduate courses need to be revised and consider the school as an important training locus focused on the construction of innovative knowledge (Demo, 2005).

Some limitations have been pointed out by researchers. Gehring (2016), for example, reflects on the lack of incentives in the initial training of research professors, given that ID programs alone would not fill these gaps. However, Pibid has been contributing to comprehensive and quality training. Izá (2015) cites the lack of articulation between theory and practice and the need for changes in how the internship is presented. Furthermore, Izá (2015) understands that the program does not faithfully reproduce teaching work, since, in most cases, it is solitary work; therefore, scholarship students, after graduating, will be alone with their classes, without the support of colleagues.

Category 3 – Articulation between theory, practice, and research in Pibid

Studies such as those by Gatti, André, Gimenes and Ferragut (2014), Nóvoa (1995, 2009), Pimenta (1999) and Tardif (2012) reveal the urgency of bringing together the theory developed at the university with the practical activities of teaching, so that future teachers can revisit the theories they study and, at the same time, invent and rework the context of their practice. The possibility of articulating theory and practice in teaching means training and becoming an author through research as an educational principle (Demo, 2005; Vanzuita, 2021) based on complex thinking (Morin, 2018).

In this sense, in his dissertation, entitled The contribution of PIBID in the training of Biology teachers: a reflection on practice (A contribuição do PIBID na formação de professores de Biologia: uma reflexão sobre a prática), Canabarro (2015) presents the following objective:

[...] to investigate the relevance attributed to PIBID-Biologia/UnB by students of the undergraduate course in Biological Sciences at the University of Brasília, scholarship students of the program, as a locus of experience and approximation between theoretical and practical aspects in their teaching training and as a facilitator for the development of the posture of teacher-researcher (Canabarro, 2015, p. 25).

The study investigated whether Pibid provided participants with experiences that contributed to the training of teacher researchers. The methodology was qualitative in nature, using the action research method, using interviews for data collection. The research subjects were the author (a former Pibid scholarship student), who acted as an observer and participant, and the undergraduate Biological Sciences students participating in the subproject.

Canabarro (2015) shows that Pibid provided research practices to promote the training of "research teachers" through participation in scientific events and the articulation between theory and practice, activities that took place through reflection on teaching action. Participation in scientific events provided the opportunity to construct autobiographical works on the actions developed in Pibid, helping future teachers to be/feel like teachers through research.

Canabarro's (2015) research pointed to the importance of Pibid in the initial training process and to the role of the teacher researcher. Demo (2006) states that there is no emancipation without research, as this needs to be observed as a social and emancipatory process. In this way, Canabarro (2015) perceived the implications of the act of researching within Pibid, as it favored critical-reflective thinking and the elaboration of innovative knowledge in the training processes of future teachers.

Anderi's (2017) study, entitled The constitution of teaching professionalism from the perspective of PIBID students (*A constituição da profissionalidade docente na perspectiva dos estudantes do PIBID*), aimed to "[...] identify what contributions as an insertion in the school made possible by PIBID adds to the constitution of professionalism with reference to praxis" (Anderi, 2017, p. 27). The methodology used in this work was qualitative in nature, and interviews, focus groups and documentary analysis were used as data collection instruments. The participants involved were scholarship students from undergraduate courses at three different institutions: Pontifical Catholic University of Goiás (PUC-Goiás), State University of Goiás (UEG) and Federal University of Goiás (UFG).

Anderi's (2017) research enabled to recognize Pibid's efforts to achieve one of its objectives – the attempt to bring universities closer to public schools, since the relationship between theory and practice is highlighted in his analyses as a highly important component for higher-quality initial teacher training. After analyzing the interviews and focus groups, Anderi (2017) concluded that Pibid is based on educational principles for training teachers, reinforcing the preparation for pedagogical practices that seek an emancipatory education rather than just a transmissive one. The research pointed out an important limitation of the program: the lack of opportunities for all undergraduate students to participate in Pibid, which does not allow for experiences of being/feeling like a teacher in initial training from the first phases of the course(s).

Regarding the study by Barros (2018), entitled Contributions of PIBID for the initial training of future Biology teachers – the case of the Federal Institute of Piauí (IFPI) (Contribuições do PIBID para a formação inicial de futuros professores de Biologia – o caso do Instituto Federal do Piauí (IFPI), the author's objective was "[...] to analyze the implications of the articulation of theory and practice and of interdisciplinarity in the training process for teaching, according to the perception of the subjects involved in the Program" (Barros, 2018, p. 20). In her methodological approach, the researcher used documentary research as a data collection technique, in addition to the analysis of field diaries and semi-structured interviews. The participants of the research were five Biological Sciences scholarship students participating in the Pibid of the Federal Institute of Education, Science and Technology of Piauí (IFPI), in addition to the supervising teacher and the area coordinator. Her approach was qualitative, given that observations of meetings and subproject meetings were carried out, and, shortly after, the interview process was carried out. Barros (2018), in his research, analyzed the data collected related to documents, observation of pedagogical actions and interpretation of the interview through discourse analysis, based on Gaskell (2015).

In the data collected in Barros's (2018) research, three important axes in teacher training were observed and analyzed, which were present in the subjects' statements: "[...] teacher appreciation; articulation of theory and practice; and interdisciplinarity" (Barros, 2018, p. 189). The researcher states that all professional practice needs to be experienced in order to be learned.

The contributions of Barros's (2018) research show that Pibid impacted scholarship students in the initial teacher training process and also reveal some limitations of the program, such as the non-adherence of all students, allowing experiences only for some because it is a paid scholarship offer. However, the potentialities pointed out by the scholarship holders were positive after the analysis of the axes investigated, one of which is the certainty of the qualification of the training process through the practical experiences carried out in the insertion in schools. This differs only from the transmission of

knowledge in teaching activities and brings into play the chance of being authors or co-authors, or rather, of being protagonists of actions and developing autonomy in the training process.

In her thesis, entitled PIBID and the relationship between theory and practice in initial teacher training – UEG (Quirinópolis) (O PIBID e a relação teoria e prática na formação inicial de professores – UEG (Quirinópolis), Silva (2019) described a perspective on the conflicting relationship between theory and practice in different theoretical perspectives, showing that there may be a major error in the predominance of one over the other. The author used documentary research and the application of a questionnaire and semi-structured interviews as her methodology. The subjects investigated were students from six undergraduate courses involved in Pibid, supervising teachers and area coordinators of the program.

In her analyses, Silva (2019) found that the actions developed in the program have contributed to the recognition of the teaching profession. In addition, she analyzed the activities and dimensions of teaching initiation that characterize the Pibid training process, cited as: research and planning of practical activities; theoretical studies; studies on teaching; evaluation and exchange of experiences; and scientific production with participation in scientific events. The researcher verified the presence of research, teaching, and extension actions articulated with the program.

Silva (2019) brought reflections on how Pibid can contribute to problematizing training practices and university curricula, enabling discussions that overcome decontextualized practices and criticisms focused on alienated work (Antunes, 2005). Enabling this discussion means understanding that professional knowledge is not limited to curricular knowledge, since teaching knowledge involves practical experience. Thus, articulating pedagogical knowledge in a contextualized manner with the reality of everyday school life (Mizukami, 2002; Pimenta, 2005).

The research pointed out some limitations of the program observed by the scholarship students such as theory being required only to guide practical actions. Thus, in Silva's analysis (2019), for a minority, practice, at times, still prevails over theory, which weakens the initial training process from an epistemological point of view.

In view of the above, the research by Anderi (2017), Barros (2018), Canabarro (2015) and Silva (2019) have points in common in their analyses since they show potentialities and limitations on the importance of the dialogue between theory and practice. In this sense, it becomes necessary to rethink an integrated curriculum, making undergraduate students more present in the daily life of public schools and closer to the teaching reality. Therefore, inserting undergraduate students in the context of teaching work from the beginning of the course can provide an initial training with "[...] spaces for the student to exercise authorship, creativity, innovative practical intervention, the search for knowledge, critical thinking [...]" (Vanzuita, 2021, p. 66-67), with possibilities for high and socially renewed professional, formal and political qualification.

Category 4 – Relationship between Pibid and internship

In some previously analyzed studies, such as those by Gehring (2015), Izá (2015) and Santos (2013), we found a common theme: the role of internships and their relationship with Pibid. The theme arises in a comparative way or to observe some similarities and differences. The research presented below has a more direct focus on the relationship between internships and initial training, corroborating the main survey: the impacts of federal programs on initial and continuing training processes.

Rodrigues' (2015) research, entitled Teacher training: PIBID and supervised internship (A formação docente: PIBID e o estágio supervisionado) aimed to verify whether Pibid could replace the teaching internship. The qualitative study used documentary research and bibliographic review as its methodology, considering the theoretical and political aspects on the subject. The locus of the work was the Pibid subproject of Pedagogy, developed by the Pontifical Catholic University of São Paulo (PUC-SP). The analyses considered that Pibid and supervised internship have some similarities regarding the structuring principles, such as: "[...] connection between theory and practice, research as a strategy for reflection in and on action and the rapprochement of HEIs with public schools, increasing quality" (Rodrigues, 2015, p. 118).

The study provided information on some differences between Pibid and supervised internships and showed that internships involve less time spent in public schools and fewer experiences with teachers. Furthermore, internships are mainly based on observation and do not include a sufficient number of hours of intervention. Pibid, in the researcher's observation, is based on collective and collaborative work, in addition to providing scholarship holders with the opportunity to develop teaching and learning materials, practical interventions, develop pedagogical knowledge, and participate in research and extension seminars. However, according to Rodrigues' (2015) analysis, since it is a scholarship program that does not include everyone, Pibid has a limitation, since it is necessary to go through a selection process via a public notice. Therefore, it becomes a program for some, and not for everyone.

Rodrigues' (2015) research became relevant because its theoretical contribution was based on authors such as Gatti, André, Gimenes and Ferragut (2014), Nóvoa (2009, 2013), Pimenta (2012) and Tardif (2012) and in the documents, history and legal bases of the emergence of the program, as well as in the analysis of documents to justify the importance of Pibid beyond the supervised internship and its legacy to date.

The exercise of describing the studies cited helps us understand the impacts of the investigated programs aimed at teacher training and the weaknesses still observed in initial teacher training. In this context, it was possible to learn about what has already been produced, the approaches, methodologies, data analysis procedures and the main results, which expands our understanding of Pibid and the various training strategies developed in different contexts and undergraduate courses.

Pibid, as an institutionalized program, is not yet universalized in terms of its scope for all undergraduate courses. The process in the public notice implies possible social exclusion and may influence the initial training processes of those who participate and those who do not participate, as pointed out in the study by Anderi (2017). The author reflected on the possible inequalities developed regarding the issue of the program covering a small portion of undergraduate students in Brazil.

In this scenario, the Ministry of Education (MEC- Ministério da Educação), supervised by Capes, created the Pedagogical Residency Program in 2018 as a way to reduce the unfamiliarity of undergraduate students with their future work environment in the first years of teaching (Brasil, 2018a). In the following subsection, in an analytical-descriptive and interpretative way, we present the studies related to the RP Program.

Studies on the Pedagogical Residency Program

The program was created by the Federal Government with Capes so that, together with Pibid, it could reduce some gaps still found in initial training, as well as improve the internship, with the help of a paid scholarship. The announcement for the Pedagogical Residency Program (RP), supervised by Capes, with national scope, was created in 2018 (Brazil, 2018a). Because it is a recent program, there are only a few studies (in the form of articles) on the topic. Therefore, only one search was found in the digital databases of Capes and BDTD regarding the 2018 Announcement for the RP Program at the time of the research.

Proposals for implementing programs focused on teacher residency are not new issues, given that the first proposals were made in 2007 under the name "Educational Residency", in the form of Senate Bill (PLS) number 227 of 2007 (Brazil, 2007), but it was shelved. In 2012, they returned as PLS number 284 of 2012 (Brasil, 2012), rescuing the previous project, but with some adaptations, such as changing the name from "Educational Residency" to "Pedagogical Residency"; in addition, Law number 9,394 of December 20, 1996 (Brasil, 1996), which establishes the guidelines and bases of national education, was amended to establish the Pedagogical Residency for Basic Education teachers (Brazil, 2012).

Thus, some pilot projects of the PR Program were located in isolated cities in Brazil starting in 2009. All programs were linked to a university, such as the Federal University of Rio de Janeiro (UFRJ), the Federal University of Minas Gerais (UFMG) and the Federal University of São Paulo (Unifesp). These programs had links with Capes and the scholarship system, but at that time, they were not offered

nationwide. Therefore, we show below four studies on these pilot programs implemented before 2018 and only one study of the 2018 Capes Call for Proposals, carried out in 2020.

The descriptors used for this state of knowledge were: "Pedagogical Residency" AND "initial training". In this search, four studies were found in BDTD and eight studies in Capes. Of these eight, one study was repeated in the BDTD digital database and another was not available for reading, leaving six studies, totaling ten. After a detailed reading of the selected studies, we defined the same criteria used for Pibid in this work. Therefore, we considered the following aspects for the descriptive and interpretative analysis of the studies: title; abstract; introduction; research objectives, method/methodology, main results; and final considerations.

After reading the aspects mentioned, we selected four studies between 2009 and 2019 and one study in 2020. For the current state of knowledge about the RP Program, we raised a total of five studies (Table 2), in which they were described, analyzed, and interpreted in just one category entitled "Studies on the Pedagogical Residency Program".

Table 2 - Descriptors and Database - Pedagogical Residency Program

Descriptor	Capes	BDTD
Pedagogical residency AND initial training	6	4
Total	10	
Research analyzed	5	

Source: Created by the authors.

The first study was by Poladian (2014), entitled Study on the Pedagogical Residency Program at UNIFESP: an approximation between University and School in Teacher Training (Estudo sobre o Programa de Residência Pedagógica da UNIFESP: uma aproximação entre universidade e escola na formação de professores), which aimed to "[...] analyze how the relationship between university and school is conceived and implemented in the Pedagogical Residency Program at UNIFESP" (Poladian, 2014, p. 18), using a qualitative approach methodology and two instruments for data collection: documentary analysis and semi-structured interviews. The interviewees were four teachers who were part of the RP Program at Unifesp. The documentary analysis carried out by the researcher was significant for contextualizing the history of education, as it analyzed the gap in the appreciation of teacher training in Brazil in recent times. The author made important connections between the pedagogical project at Unifesp and the RP Program, applied to students of the Pedagogy course. In his analyses, Poladian (2014) shows that, in addition to encouraging the university to come closer to public education networks, pedagogical practices encouraged research as a formative principle of teaching actions through participation in scientific events.

Thus, according to Poladian's (2014) analyses, the pedagogical practices, as well as the theoretical practices valued in the PR Program, foster continued education (for teachers) and initial education (for scholarship students), demonstrating how Basic Education teachers can produce knowledge in a qualified manner, enabling reflection on their practices. The PR Program brought scholarship students closer to the university, creating a sense of belonging to the course and the institution. The research highlighted other potentialities of the Unifesp PR Program, in the sense of presenting a good organizational and pedagogical structure, that is, a "model experience" (Poladian, 2014, p. 122), carried out by an agreement between the Department of Education (SE- Secretaria de Educação) of the city of Guarulhos and Unifesp.

Poladian's (2014) research became relevant because, on the one hand, it legitimizes and strengthens the partnership between SE and HEI, since the university's rapprochement with public schools can allow for more significant initial and continuing education from the point of view of learning to be a teacher (Freire, 1997). On the other hand, some limiting points of the RP Program were considered, such as not respecting the teacher's autonomy in some impositions, for example: mandatory participation in the program or the predetermined number of scholarship students for each supervisor. However, most of the testimonies highlight the predominance of aspects relevant to the professional development of teachers (Poladian, 2014), as it was possible to verify when reporting the privilege of

future teachers being trained in the context of Basic Education, in addition to the valorization of the public school teacher as a trainer, assigning him/her the role of supervisor and advisor.

Pires' (2017) research, entitled Professional Development of teachers participating in the UNIFESP Pedagogical Residency Program (*Desenvolvimento profissional de docentes participantes do Programa de Residência Pedagógica da UNIFESP*), addressed the university's rapprochement with public schools. The objective of the study was to "[...] analyze the consequences of the Pedagogical Residency Program's actions on the professional development of teachers at a municipal public school in Guarulhos, included in this initiative" (Pires, 2017, p. 17). The approach was qualitative, based on human phenomena (Minayo, 1988 apud Pires, 2017), and observation and oral narrative were used as methodological procedures. The subjects were seven elementary school teachers who participated in the RP Program over four years and the management team (principal, vice-principal, and pedagogical coordinator).

Pires (2017) showed fundamental points about the connection between the theory and practice of PR Program, presenting its importance for professional development, since taking the student to the school environment and making him/her experience the school routine more closely provides an opportunity to review initial training.

The study by Pires (2017) reported the perspective of the program's preceptor teachers in which they supervised the residents. It also addressed how the PR Program was able to develop reflective teaching practices, such as the continuing education action, which resulted in the improvement of the quality of Basic Education, or rather, met one of the program's objectives. Therefore, we understand that educational praxis is a fundamental component of a qualified training process, from a formal and political point of view. For Pimenta (2012, p. 107), "[...] theory and practice are inseparable as praxis".

The study carried out by Conceição (2018), called The Professional Insertion of graduates of the Pedagogical Residency Program of the Federal University of São Paulo (UNIFESP) (A inserção profissional do egresso do Programa Residência Pedagógica da Universidade Federal de São Paulo (UNIFESP), aimed to "[....] analyze the pedagogical practice and the challenges encountered by graduates of the PRP in the first years of teaching, [...] as well as the contributions of this Program to professional insertion" (Conceição, 2018, p. 61). The subjects participating in the research were a graduates of the Pedagogy course, former scholarship students of the program, and the pedagogical coordinator of the school where this graduate taught. The methodology was a qualitative approach, and the case study technique was used.

Conceição (2018, p. 111) states that "[...] initial training and participation in the PRP positively contributed to professional integration, especially in classroom management, planning and evaluation skills". It was possible to verify that the activities resulting from the RP Program favored the approach to the teaching profession, making the program an opportunity that aims to provoke significant learning.

A limiting point raised in Conceição's (2018) research was the need for more studies on the RP Program and, also, the researcher's concern with the new teacher training policy, launched in 2017 by the MEC. Conceição's (2018) research allows us to reflect on the process of professional integration, which also begins in initial training. Furthermore, it revealed that the program can be a differentiator, as well as other situations that can reduce the "reality shock" in the first years of teaching.

According to Cordeiro (2002) and Vanzuita (2021), the process of professional integration is not limited to the moment when individuals enter the formal world of work after completing their education/training process. The authors consider that professional integration can be understood from internship experiences or participation in programs, such as PR, in the role of teachers, and even with the possibility of developing research practice as an educational and training principle. It is a contemporary problem in which the entire context – from initial training and the first years of work – needs to be considered.

Roncon's (2018) research, entitled Implications of teaching initiation programs in the initial training of pedagogues (*Implicações de programas de iniciação à docência na formação inicial de pedagogos*), was the only one found, at this state of knowledge, that articulates the universe of Pibid and the RP Program, objects of this study. The author focused on the perceptions of graduates about the contributions of these two public policies in the process of their professional insertion. The study aimed to "[...] understand the implications of two Teaching Initiation Programs, the Institutional Teaching Initiation

Grant Program and the Pedagogical Residency Program, an internship proposal of the Pedagogy Course at the Federal University of São Paulo – UNIFESP" (Roncon, 2018, p. 15). The participants involved were undergraduates of the Pedagogy course at Unifesp – participants of Pibid and the RP Program. The methodology applied was a qualitative approach, and the data collection instruments were online questionnaires and semi-structured interviews to understand the period of professional insertion of these teachers.

Roncon (2018) used elements from the classroom, school, and career contexts to discuss the professional integration of teachers. In his considerations, Roncon (2018, p. 65) made some relevant points, such as: "[...] the Pedagogical Residency Program and PIBID are influencers that, contrary to the initial hypothesis, accentuate the reality shock and the difficulties located at the beginning of the career".

At times during data analysis, it was not possible to distinguish which contributions came from one program or another, as well as from the course as a whole, since we understand that multiple factors influence training and that the process of constructing a teacher identity is plural. Roncon's (2018) research showed how participants in Pibid and the RP Program understand the contributions of these programs to their professional insertion in the teaching career, a process by which entry into teaching is determined with less insecurity. The study showed that those who participate in Pibid and the RP Program have greater confidence and more affinity with teaching, due to their experiences in daily school life since their initial training.

The study by Almeida (2020), entitled Pedagogical Residency: the teaching representations of undergraduate students in History Based on music (Residência Pedagógica: as representações docentes dos licenciandos em História a partir da música), was carried out within the proposal of Notice number 06/2018 Capes (Brazil, 2018a) and has as its general objective "[...] to problematize the representations of music in historical knowledge in Initial Training in History through digital technologies, with the use of mobile devices, with the residents of the History course at UEPB" (Almeida, 2020, p. 34). The participating subjects were a coordinator and three preceptors, in addition to the Basic Education students directly involved with the proposals of the PR Program of the History subproject. The historiographical field in which the study was situated was that of New Cultural History, based on bibliographic and documentary research. The locus of the research was the Integrated Classroom Center (Central de Aulas Integradas) of the State University of Paraíba (UEPB), campus I.

The study presented the context of initial training and the positive experiences that the participants of the PR Program had, mainly in the articulation between history-music-technology, promoting practical actions focused on interdisciplinarity, research, and technology. Almeida (2020, p. 292) considers the PR Program "[...] as a basis for the promotion of a significant teacher training process, as it allows the immersion of the undergraduate student in his/her field of activity, in the school context".

By viewing the PR Program as a space for exchanging experiences, the author considers the relationship between the program and Basic Education as "[...] social educational spaces [...] that came to be understood as methodological instruments that facilitate the educational and formative process" (Almeida, 2020, p. 9). The research contributed by highlighting how the PR Program was able to articulate different conceptions: the traditional, such as that of a history class, and innovation, through research and technological resources; that is, from these experiences, those involved created extremely rich material. The proposal for self-development, addressed by Demo (2005), was developed when the PR Program sought to provoke problem-solving in participants, contributing to the development of reconstructive knowledge, and assisting in the autonomous, authorial, and creative formative process.

Although the studies on initial training and the relationship with the PR Program were not very expressive in numerical terms, there was an attempt to dialogue with the context of Pibid and the PR Program. The lack of studies on the PR Program related to the 2018 Capes Call for Proposals (Brasil, 2018a), at the time of the research, is probably due to it being relatively new. However, it was already taking place as a pilot project in some cities and universities, as it was possible to observe this state of knowledge. The Unifesp PR Program, despite having some differences with the Capes program (Brasil, 2018a), attributed some similarities in its methodology and justified the permanence of these studies in this research.

FINAL CONSIDERATIONS

Considering the models of public educational policies to encourage teacher training in Brazil, the mandatory curricular internships, and the practices that make up the current curriculum, they demonstrate that they do not fully meet, according to the studies presented, the needs of practical teaching experiences that occur throughout the course in undergraduate courses, neither in the sense of improving critical and reflective pedagogical practices nor in bringing the university closer to public schools.

Regarding the analyses of the studies investigated, all of them had a qualitative approach, which highlights the importance of studies related to education and social issues. The participants in the research were mostly residents, public school teachers (preceptors), and coordinators (professors from HEIs), in addition to groups with graduates from the subprojects. However, we saw that the studies were carried out in a restricted portion of reality since the research was largely developed in only one subproject. Only Anderi's (2017) study on Pibid was carried out in three subprojects, which may represent the entirety of that context since the analysis was carried out in a more comprehensive manner.

Regarding data collection techniques, we found that document analysis and interviews were the instruments most used by the authors. In this sense, we understand that, in qualitative research, the use of more than one technique can contribute to the investigative process. By analyzing the reports of ID scholarship students/residents and graduates of the programs, the studies sought to show how this participation can provide a theoretical and practical framework for the initial phase and the first years of teaching. The professional insertion phase is perceived as a time of confrontations, because, according to Dubar (2001), it is, at the same time, personal, professional, and sociocultural, and needs to be analyzed and related to other factors of the social context. This makes us reflect that going through initial teacher training of social and political quality enhances the approximation of the university with the school space, because it values reflection on action in teaching practices, as well as develops authorship and the creation of methods and methodologies based on (research) carried out in the programs (Vanzuita, 2018). In this way, these practices can allow future teachers to face the phase of insertion into the world of work with greater confidence.

Regarding the impacts of ID programs on initial teacher training, the studies indicated that important aspects include insertion into the school routine, the experience of the relationship between theory and practice promoted by Pibid and the RP Program, being/feeling like a teacher through experiences, and the relationship between these programs and internships, as fundamental processes and guides for the construction of the social quality referenced in initial teacher training. As positive aspects, the studies demonstrated the power relationship inserted into the daily routine of the school, the paid scholarship, the methodologies adopted in pedagogical practices, and the approximation of universities with Basic Education. As Gatti, André, Gimenes, and Ferragut (2014) pointed out in their report, the importance of insertion into the school context during initial training is a way of reducing the reality shock of the teaching profession. The experiences of planning, researching, creating, and executing activities in the teaching initiation programs enable being/feeling like a teacher, since these are positive aspects confirmed by the participants investigated.

Regarding the relationship between theory and practice in the construction of teacher identity during initial training, we observed that it was provided by the programs, since it contributed to the qualification of future teachers, in the sense of authorial and emancipatory training, through research and the rapprochement between university and school. Regarding being/feeling like a teacher, we noticed that ID scholarship students/residents, when planning and carrying out pedagogical practices at school, experience their future profession. Regarding the internship, we observed that the programs provide greater interaction between undergraduate students and their future work environment since they allow a more realistic view of teaching work and greater confidence in facing their future profession. Thus, the studies confirm that learning through experiences that the Pibid and RP programs offer make an important contribution to the impacts on/for teacher training, since they enable the experience of the

relationship between theory and teaching practice, provoking the exercise of reconstructive questioning in the context of initial training (Demo, 2005).

Based on the state of knowledge presented and discussed in this paper, we highlight the importance of further research on the topic of initial teacher training. When analyzing the research, we noticed some limitations pointed out by the authors regarding the Pibid and Pedagogical Residency programs, such as the criteria for selecting scholarship recipients are restrictive and do not cover all students; the limitation on the number of scholarships offered by Capes does not allow all interested students to have access to the programs, causing a disparity in the quality of training between those who participate and those who do not participate; in addition, we observed in the studies that the reduction in the offer of scholarships at some points in the history of Pibid hindered the development of pedagogical activities in this program. Through the analysis of the studies, we realized that there are weaknesses in the structuring of the university curricula of undergraduate courses, since they are organized in a fragmented way, and the practice of internships hinders training future teachers in a comprehensive and interdisciplinary way.

In this context, ID programs are presented as public policies that minimize the structural weaknesses of initial teacher training; however, we realize that there is still much to be done to enhance the value of teaching. Research on these public educational policies can identify possible gaps and potentialities, aiming to contribute to the construction of favorable conditions for improving the social quality of initial teacher training in Brazil. We corroborate Gatti's perspective (2013, 2014) in understanding that teachers develop their teaching skills both through their basic training in undergraduate courses and through their experiences with teaching practice, which allows us to demonstrate the importance of the programs analyzed here.

Considering that the reflections present in this state of knowledge focus on research carried out on two ID programs aimed at teacher training, we understand that this study contributes with important elements for a more careful analysis of initial teacher training and its impacts presented here, to serve as a foundation or starting point for future research. In addition, we found that, based on the databases researched, this investigation became relevant in the sense of seeking to analyze and interpret data from research on ID programs (Pibid and RP), carrying out a critical-reflexive dialogue between these two programs of teaching valorization.

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Submitted: 06/21/2022 **Preprint:** 06/21/2022 **Approved:** 01/31/2024

AUTHORS' CONTRIBUTIONS

Author 1 - Active participation in data collection and analysis, as well as in the review of the final text.

Author 2 - Data collection and analysis, as well as participation in the writing and review of the final text.

DECLARATION OF CONFLICT OF INTEREST

The authors declare that there is no conflict of interest with this article.