Educação em Perspectiva / *Education in Perspective*
DOI: 10.22294/eduper/ppge/ufv.v10i0.7170

ARTICLE

The importance of the institutional program of teaching initiation scholarship (PIBID) in the trainning of the academics of the biological sciences course

Importância do programa institucional de bolsas de iniciação à docência (PIBID) na formação dos acadêmicos do curso de ciências biológicas

Importancia del programa institucional de bolsas de iniciación a la docencia (PIBID) en la formación de los académicos del curso de ciencias biológicas

Junielson Soares da Silva[2]
Stephanne Marques Araújo Fernandes[3]
Romildo Ribeiro Soares[4]

Abstract: The creation of public policies to encourage teaching, as is the case of Pibid, has sought to improve initial teacher training and encourage graduates to pursue a teaching career. The objective of this work was to analyze the importance of the Pibid in the initial formation of the graduates of the biology course of the Federal University of Piauí (UFPI), in the Petrônio Portela, Teresina campus. To that end, a questionnaire containing six questions was applied to 36 scholars from Pibid, and the analysis of the results showed that this Program has awakened in these students a greater interest in teaching, in addition, they feel more prepared to act in teaching. It is concluded that the Pibid/Biology subproject of the UFPI has provided scholarship recipients with experiences in the basic education school, encouraging the graduates to become more interested in teaching and making them more prepared for the adversities of the profession.

Keywords: Pibid. Initial teacher training. Biology.

Resumo: *A criação de políticas públicas de incentivo à docência, como é o caso do Pibid, tem buscado melhorar a formação inicial de professores e incentivar os licenciandos a seguir a carreira docente. Este trabalho teve como objetivo analisar a importância do Pibid na formação inicial dos licenciandos do curso de Biologia da Universidade Federal do Piauí (UFPI), campus Ministro Petrônio Portela, Teresina. Para isso, foi aplicado um questionário contendo seis perguntas, para 36 bolsistas do Pibid, e a análise dos resultados mostrou que este Programa tem despertado nesses estudantes maior interesse pela docência, além disso, sentem-se mais preparados para atuar no ensino. Conclui-se que o subprojeto Pibid/Biologia da UFPI tem propiciado aos bolsistas, experiências no âmbito da escola de educação básica, despertando nos licenciados, maior interesse pela docência e os tornando mais preparados para as adversidades da profissão.*

Palavras-chave: *Pibid. Formação inicial de professores. Biologia.*

Resumen: *La creación de políticas públicas de incentivo a la docencia, como es el caso de Pibid, ha intentado mejorar la formación inicial de profesores y animar a los licenciandos a seguir la carrera docente. Este trabajo tuvo como objetivo, analizar la importancia del Pibid en la formación inicial de los licenciandos del curso de Biología de la Universidad Federal de Piauí (UFPI), campus Ministro Petronio Portela, Teresina. Para ello, se aplicó un cuestionario que contenía seis preguntas, para 36 becarios del Pibid, y el análisis de los resultados mostraron que este Programa ha despertado en esos estudiantes mayor interés por la docencia, además, se sienten más preparados para actuar en la enseñanza. Se concluye que el subproyecto Pibid/Biología de la UFPI ha propiciado a los becarios, experiencias en el ámbito de la escuela de educación básica, despertando*

[1] **Submitted:** 29 Jan. 2019 - **Accepted:** 01 July 2019 - **Published:** 19 Dec. 2019
[2] Piauí State Department of Education (Seduc-PI)/National Institute for Amazonian Research (INPA) - Email: junielsonbio10@gmail.com
[3] Federal University of Piauí (UFPI) – Email: stephanne.marques@hotmail.com
[4] Federal University of Piauí (UFPI) – Email: romildochristine@hotmail.com

en los licenciados, mayor interés por la docencia y haciéndolos más preparados para las adversidades de la profesión.

Palabras clave: *Pibid. Formación inicial de profesores. Biología.*

Introduction

The initial formation of teachers in Brazil is being discussed in recent times and it is characterized as a challenge for higher education institutions (HEIs) that train teachers, as well as for educational policies, which should train teachers capable of valuing the students as subject of the construction of their knowledge, making them the protagonist of their learning, as well as the beings able to reflect on their teaching activity, work in an interdisciplinary and integrated way to the Political Pedagogical School Project, as well as the official documents that rule education, such as Law of Directives and Bases of National Education (Lei de Diretrizes e Bases da Educação - LDB), Child and Adolescent Estatute (Estatuto da Criança e do Adolescente - ECA) and National Curricular Base (Base Nacional Comum Curricular - BNCC) (MASETTO; GAETA, 2015).

The concern about the teachers training and their working conditions are not recent. The degree courses remain without significant changes in their training model, requiring urgent changes that provide a more comprehensive training, allowing practical experiences on the school reality (SILVA; SCHNETZLER, 2011; GATTI, 2016). Gatti (2016) emphasizes the importance of the teacher training, since they are intermediaries who share knowledge with their students, since education involves people with different levels of knowledge. Therefore, it is important to discuss and understand not only the training, but also the career and working conditions of this professional, which will provide educational improvements.

Facing the current scenario of teacher training for basic education, several studies have tried to understand this problem. It is common for the student to enter in a degree course without having defined his professional choice, leading him to worries about having to practice teaching. The teacher training ought to stimulate and encourage the student to become a teacher, a situation that can happen in different aspects. One of them is learning to be a teacher by the teacher model, another is understanding their formation as a process that is in permanent construction (GALIAZZI, 2003).

According to Gatti (2014), there is a lack of interest of the high school students in the teaching career, especially in areas such as mathematics, physics, chemistry and biology. To prove this fact, it only takes to analyze the number of enrolled in these courses and, it is observed that it has been decreasing year after year. Another huge problem is the avoidance of students in the cited courses, which reaches around 70%.

According to Marafelli, Rodrigues and Brandão (2017), a large number of students who choose to study for a teaching degree do not intend to act as teachers. This can be explained by the lowering of wages, the social devaluation of this professional, by their increasingly precarious work conditions, and by the increasing demands over teaching.

Although it has grown to the demands over the teachers, their training remains basically the same from years ago, which does not prepare them to face the conflicts and challenges of schools.

This situation demands actions aimed at undergraduate degree courses, in their offer conditions, in order to valorize them, reinforcing their specific characteristics and rescuing their values (APARÍCIO, 2011; GATTI, 2013). Some researches show that programs aimed qualification in the initial teachers training, such as the Institutional Scholarship Program for Initiation to Teach (Programa Institucional de Bolsas de Iniciação à Docência – Pibid), promoted by the Ministry of Education, promoted by Coordination for the Improvement of Higher Education Personnel (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - CAPES), contributing to an improvement of the degree courses in the institutions that offer them, in addition to attracting students from the partner basic education schools to these undergraduate courses (APARÍCIO, 2011; GATTI, 2013).

Other studies have verified the contribution of this Project to the initial formation of teachers, since the involvement with the reality of the school during the undergraduation cooperates so that the academics can decide if, in fact, they wish to follow the teaching career (TORRES *et al.*, 2013; SANTOS; SOARES; SCHEID, 2015, FRISON; VEIGA; CIGALES, 2017).

The Pibid is formed by scholarship holders, the "pibidianos'', responsible for developing activities linked to teaching in partner public schools; supervisors, acting in the public school, where they guide and supervise the undergraduates; area coordinators, who are professors of degree course at HEIs, whose role is leadership, planning of theoretical and practical activities within the university; institutional and management coordinators, teachers of the institution of higher education, monitor the execution of the program in the institution and are responsible for passing on the information to CAPES. All those involved receive a remunerated scholarship for the development of the activities happened within the school (BRASIL, 2010).

At Federal University of Piauí (UFPI), Pibid was established by the Ministerial Order of the Ministry of Education (MEC) nº 38, 2007 and CEPEX Resolution nº 223 of 2008, with the objective of inserting the graduates in initial formation inside school environment, seeking the appreciation of teachers, awakening in them the interest to perform in basic education and, consequently, the improvement of the quality of teaching in the agreed schools and in those where the future professionals are goint to act through the practices of them (BRASIL, 2007).

Within the scope of UFPI, the program established a partnership with the Education Department of the State of Piauí, and in 2009, began activities with academics in the areas of physics, mathematics, biology, chemistry, Portuguese letters and geography, which started to develop activities in two state schools in Teresina-PI. In 2014, the Pibid/UFPI subproject expanded, and since then it has been active in 49 public schools in the capital, with a total of 1,560 scholarship holders, of all degrees offered by HEIs, and 260 supervisors.

The undergraduate course in biology at UFPI started to integrate the actions of Pibid since the first public announcement in 2009. Initially it had eight "pibidianos", a supervising

teacher and an area coordinator teacher, working in a school in the capital. In 2012, it began to attend two schools, each with nine scholarship holders and one supervising teacher. From 2014 on, the subproject comprised 60 scholarship holders, six supervisors and three area coordinators, developing work in six state schools.

Thus, considering that the CAPES Program aims to encourage teaching, especially for action in basic education, the present work had as objective to analyze the importance of the Pibid in the training of the scholarship biology subproject - UFPI, Teresina.

Methodology

The research focused on qualitative and quantitative aspects, and was carried out on the Ministro Petrônio Portela campus of the Federal University of Piauí, in Teresina. The criterion for inclusion of the participants in the research is that they should be students from the third period and have at least four months of experience as scholarship holders in Pibid.

Initially, a screening of the "pibidianos" that fit the criteria was done, it was clarified the nature of the research, justification, objectives, methods, potential benefits and risks, as recommended in art. 2 of Resolution No. 510, dated April 7, 2016 (BRASIL, 2016), and asked to those who agreed to participate in the study (n=35) to sign the Informed Consent Term (Termo de Consentimento Livre e Esclarecido - TCLE).

A questionnaire containing four multiple choice (closed) and two (open) questions, as shown in Frame 1, was applied to participants. They were named "pibidianos" and assigned number 1 to 35, to ensure the anonymity of the survey subjects. According to Gil (1999, p. 128), the questionnaire can be defined "as the investigative technique composed of a greater or lesser number of questions presented in writing to people, aiming knowledge of opinions, beliefs, feelings, interests, expectations, situations experienced etc".

Frame 1. Questionnaire applied to Pibid/biology-UFPI scholars.

1. What prompted you to participate in Pibid? a) Win the schollarship to keep me on course. b) Interest in teaching. c) Test to be sure you want to teach.
2. Before entering Pibid, were you interested in teaching? a) Yes, I have always had an interest in teaching. b) No, but I'm developing. c) Yes, but I'm not interested.
3. Do you intend to pursue a teaching career after you graduate? a) Yes. b) No. c) Perhaps.
4. Is Pibid contributing to your teacher training as a student of a degree course? a) Yes. b) No. c) Reasonably.

5.	In what aspects did Pibid help you to teach as a student in training?
6.	In the future as a teacher, do you think you will be more prepared for the teaching practice? Why?

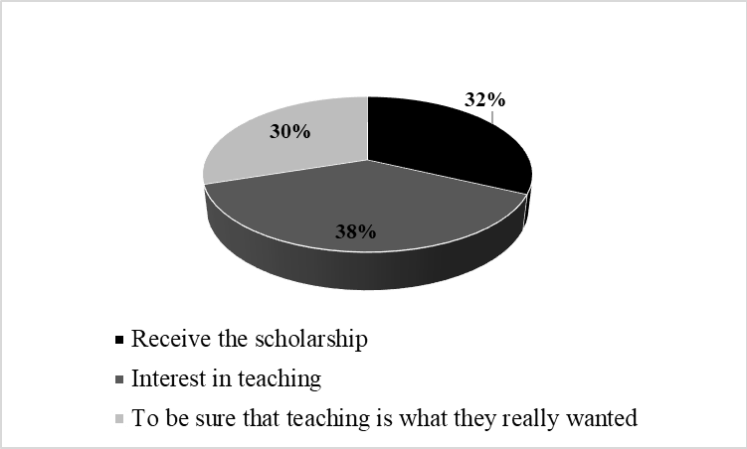
Source: Prepared by the authors.

After this, the answers were analyzed, based on the systematization method of Minayo (2000) and Bardin (1979). Excel 2010 software was used as a tool for data tabulation and graphing.

Results and discussion

By questioning the "pibidianos" about what led them to participate of Pibid, 38% said that it was because of their interest in teaching, 32% stated that it was to receive the scholarship and stay on course, and 30% said they had an interest in testing the experience to be sure if they want to pursue a teaching career (Image 1).

Image 1. What made you enroll in Pibid?



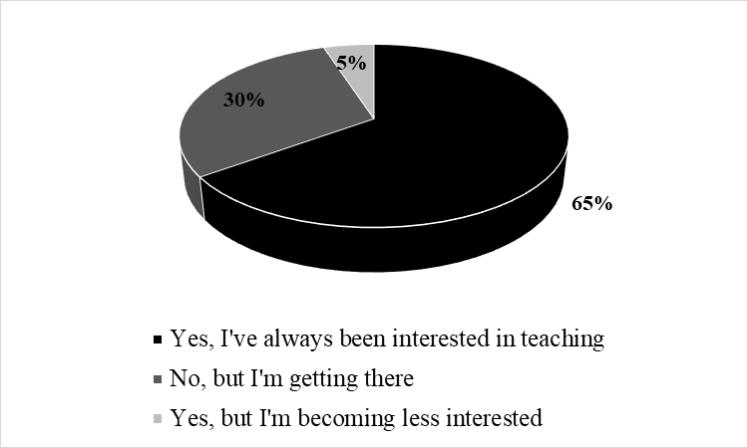
Source: Prepared by the authors.

The data show that, even though most of the students entered Pibid as a program to encourage teaching, some participated not because of the possibility of experiencing teaching, but because of doubts about the choice with the degree course, and that Pibid would help them to be sure if they wanted to follow the teaching career. Others have been attracted to the payment, which can be a source of income to keep them with the course expenses.

In a similar study, Ribeiro (2013) identified that initially the students were attracted to the scholarship, but the insertion in the school provided a different view about the purpose of the program. Likewise, Ambrosetti *et al.* (2013) found that the scholarship value was attractive to undergraduates entering Pibid, but highlights itself as essential, the close contact with the school and with daily situations of the teacher. This show that, policies to keep teacher training courses with paid scholarships are decisive in attracting students and reducing dropout in undergraduate courses, in view of the devaluation of the profession, which stands out as an unfavorable factor for teacher training courses.

When asked whether before they entered Pibid they had an interest in the teaching career, 65% stated that they already had an interest, 30% stated that they did not have an interest, but that this has been gradually developed, and 5% said yes, but they are not getting interested (Image 2).

Image 2. Even before entering in Pibid, have you been interested about teaching?

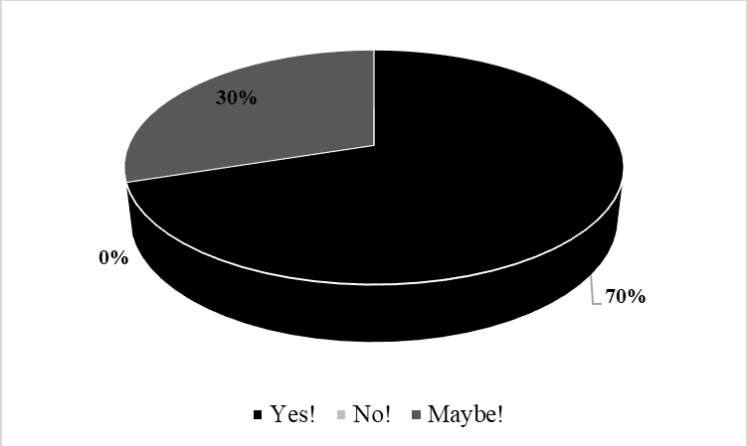


Source: Prepared by the authors.

Therefore, it is perceived that the program has an important role, as it provides a taste to scholarship holders who are attracted by the career. Likewise, Moryama, Passos and Arruda (2013), in an investigation regarding the teaching learning of "pibidianos" of a degree course in Biological Sciences, found that those involved in the research showed an increasing interest in teaching. Thus, it is believed that the program has achieved its goal which is to encourage teaching.

By questioning students if they plan to follow a teaching career after graduation, 70% said yes, 30% said that they might pursue their careers, and that no participant stated that they did not want to exercise the teaching practice when they graduated (Image 3).

Image 03. Do you think of following the teaching carrer after graduate?

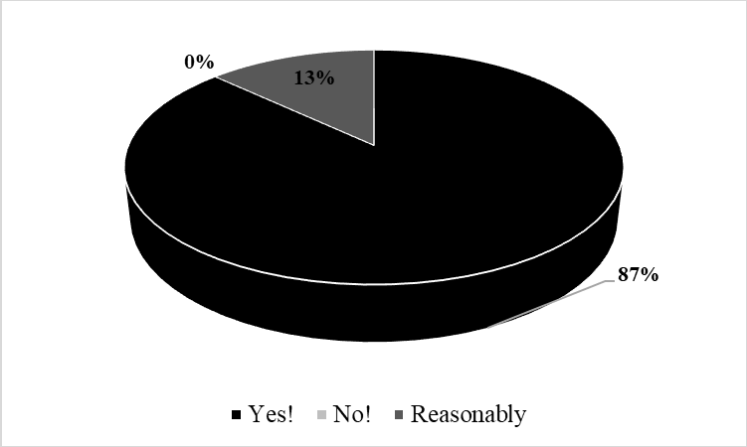


Source: Prepared by the authors.

The data show that Pibid gives graduates experience with the classroom, which makes them feel more motivated and attracted to teaching. This information corroborates the findings of Amorim and Araújo (2017), in a study with "pibidianos", where they identified that the majority of the research participants expressed the desire to teach in public schools, based on the experiences provided by the Program. Contradicting the objectives of the program, Felício (2014) observed that Higher Education is the level desired by the "pibidianos" to practice teaching when professionals, probably due to the better wages.

Interviewees were asked if Pibid contributes to the academic training of them, 87% believe so, while 13% think that it contributes reasonably, and no one disagreed with the contribution of the Program (Image 4).

Image 4. Has Pibid been helpful for your formation as student of a degree course?



Source: Prepared by the authors.

Thus, it is believed that students who already show an interest in teaching when they enter the Pibid to experience experiences provided by the program within the classroom of a school of basic education, seek to develop a greater perception of "being a teacher". The partnership promoted by Pibid, between university and school of basic education allows rich interactions in learning, such as between teacher and student, "pibidianos" and titular teacher, "pibidianos" and pedagogical practice (FRISON; VEIGA; CIGALES, 2017), as well as the sharing of experience between teachers of basic education and graduates in formation, being pointed out by Santos, Soares and Scheid (2015), as a motivational factor of the scholarship students of the Pibid.

We sought to know the contribution of Pibid in the training of graduates, through the question: In what aspects did Pibid help you to teach as a student in training? Through the answers, we find that the graduates consider Pibid positive, because the contact with the classroom provides to live experiences, as can be seen in their statements:

> Acquiring experience, contact with students, develop activities in the classroom, being punctual, responsible and impartial (Pibidiano 06).

> It put me in contact with the school, with the students and through this I have obtained experiences in the teaching area (Pibidiano 14).

> The program showed me a new possibility of teaching, with a less traditional methodology, in which creativity is used for the development of knowledge. And this is being fundamental to complement my academic training (Pibidiano 23).

Therefore, it was verified that the proximity to the school, propitiating the execution of the teaching practice is highly valued by the degree student, because they believe that this experience will make them more experienced. Future teachers point out that Pibid has contributed to becoming more responsible and hardworking, important qualities for a good teacher, committed to their social role of training human resources.

In addition to the improvement on attitudes in the classroom, emotional control (reduction of insecurity, ease of communication), especially at presentation times, both at school and at university, were pointed out as contributions of the Pibid:

> Being responsible, hardworking, getting experience and developing hands-on activities with students, and helping me deal with insecurity when I'm in the classroom (Pibidiano 19).

> Pibid helped me in relation to the communication at the time of the work and in the posture before the classroom (Pibidiano 28).

These characteristics are fundamental in a teacher to deal with the most diverse situations in the classroom. Gonçalves and Magnabosco (2006, p. 622) consider it “important for the teacher to learn how to control his or her emotions so won’t become the greatest victim of unpredictable situations that occur in the classroom”.

It was also pointed out that the Pibid contributes to the use of alternative methodologies that complement the theoretical classes, such as educational games developed by the Pibid/biology scholarship holders of the UFPI and other universities, widely used in the classroom and with great acceptance, as well as the sensitivity in diagnosing the problems faced in the teaching career so that they can be healed.

> It contributes in a certain way to the fact that it always aligns the theoretical expositive classes to other teaching methodologies, and evaluates them as their contribution to teaching learning (Pibidiano 31).

> In the sense of experiencing the school environment (classroom), realizing how to act and perceive the possible problems encountered during teaching. In addition to showing me tools that aid in the teaching-learning of students (Pibidiano 35).

In this perspective, Freitas (2002) states that the degree student’s contact with the school allows them to learn values, beliefs and ways of conception of the world. For the sociologist Soczek (2011), by allowing the contact of the future teachers with the school, where they immerse themselves in the school activities, the Pibid extends and makes more critical the conception of teaching, providing an improvement of the academic formation.

The practical activities developed within the scope of the Pibid, allow the degree student to construct methodological proposals and to elaborate didactic models to use in the classes of biology. In this way, “Pibid participants have produced an enormous amount of didactic material like games, books, blogs, videos, among others, and encouraged the more

intense use of the available school structure to the laboratories and libraries" (SOCZEK, 2011, p. 65).

According to Brito, Mello and Araújo (2012, p. 10), the Pibid motivates the struggle for the improvement of the quality of basic education and for the valorization of the teaching profession, the degree students believe that it contributes to teaching action, providing "in the classroom, especially in speeches; the improvement of teaching techniques; improvement of academic writing; improvement of the curriculum; and the deepening of specific knowledge". Martins, Leite and Cavalcante (2018), emphasize that the pedagogical practice of former Pibid biology scholarship holders from the Federal University of Ceará, revealed that the learning built during the Program was essential to better understand the profession and the public school, think about the challenges of being a teacher, especially in the teacher-student relationship, in the selection and elaboration of innovative teaching methodologies, as well as in thinking and reflecting on their own practice.

In the question, in future as a teacher, do you think you will be better prepared for teaching practice? Why? It was found that the interviewees believe that they will be better prepared to be teachers based on Pibid, as observed in their statements:

> Yes, because within the degree course I am acquiring knowledge, assigned and obtaining tools that will influence the teaching career, along with Pibid (Pibidiano 7).
>
> Yes, because with Pibid we are living with students in the classroom, which will be the place where we will work every day. That is why it is very important for us as student (Pibidiano 12).
>
> Yes, because the Pibid allows the student to practice teaching, in addition to the conviviality with the students, makes possible the knowledge of the school reality (Pibidiano 20).

The future teachers consider the interaction with the students in the classroom important, since they see as a way of preparation for the teaching practice, and the Pibid besides inserting the degree student in the school scope, provides real experience with the classroom. In the Pibid/biology subproject, activities developed by the "pibidianos", such as monitoring to solve students' doubts, application of educational games, presentation of lectures on transversal themes, constituents of National Curricular Parameters (Parâmetros Curriculares Nacionais - PCN's), participation in biology classes supervised by the titular professor , among others, provides better preparation for their performance, starting with the supervised stage, where the degree students of the course of biology need to plan and to execute classes in classes of the final years of the and junior high and high school education.

The use of differentiated didactic resources was well evidenced by scholars as an important tool to make their future classes more attractive, guaranteeing learning. The knowledge of the reality of the school was seen as a possibility of reflection and action to solve the difficulties of the classroom, as we observed in the statements:

> Yes, because in Pibid I had contact with experience that will help me a lot, as innovative methodologies (Pibidiano 25).

> I will be feeling a bit more prepared for teaching, because in the program we experience the school environment a little, with educational practices in the school. And we learn practices that we will adopt in our future teaching profession (Pibidiano 31).

> I believe so. Because once I participate in the process of formation of the students (of the school) as a pibidiana, I know a little the reality of the classroom and the difficulties of teaching learning. This allows me reflection and action, since through pedagogical practices we try to solve such difficulties (Pibidiano 35).

It is noticed that on various situations experienced in practice by the "pibidianos" helps them to develop emotional intelligence and security, making them more prepared to deal with the day to day adversities of the profession. It is of great value that the teacher is innovative in his classes to ensure interest and provide learning to his students, and Pibid has helped in this regard. Barbosa and Soares (2012) emphasize that Pibid has contributed to all involved in the project, perceive the school as a space of formation and construction of knowledge, besides fomenting several pedagogical practices, as teaching methodologies.

From this perspective, Soczek (2011, p. 62) considers that:

> Pibid's innovation lies in the possibility, in addition to the internship disciplines, to provide a time of reflection and pedagogical practice, contributing to the improvement of professional praxis through reflections and practical experiences, from a collective perspective, to exchange experiences.

Diniz *et al.* (2010) believes that public teacher education policies are capable of transforming the country's education and improving education at all levels, providing experiences that generate effective learning, while at the same time training teachers capable of developing innovative resources and methodologies in the classroom of class, awakens in the student of the school a greater interest in knowledge, learning and the production of knowledge.

According to Pimenta (2011), it is necessary to know and have the necessary tools to learn to do what you want and, in this sense, to experiment and practice are ways to gain knowledge. It is important that the future teacher knows the school reality, where he will act in the future, how to deal with the difficulties of the classroom and alternative conceptions of the students. On this, Santos, Soares and Scheid (2015, p. 11) believe that "the degree student who, during his initial formation, is integrated to the reality of the schools of basic education, can have a good pedagogical base to act as professional of education".

Faced with the need to train more reflective teachers for the present, Tardif (2007, p. 230) points out that:

> A teacher of profession is not only someone who applies knowledge produced by others, it is not only an agent determined by social mechanisms: it is an actor in the strong sense of the term, that is, a subject who assumes his practice from the meanings that he himself gives him, a subject who has knowledge and know-how from his own activity and from which he structures and guides it. The practice can be seen as a process of learning whereby teachers retranslate their training and adapt it to the profession, eliminating what seems to them futilely abstract or unrelated to the lived reality and retaining what can serve them in a way or another.

For Freire (1987), the process of social transformation takes place from the moment in which the individual gives himself entirely to know his own self, being necessary the minimum of initial knowledge base. Therefore, this is a dialectical movement, because at the same time that the individual knows why practice, he must know to practice. In this way, the Pibid requires the degree student the minimum of knowledge and preparation to be able to give the support to the students who seek their help.

As pointed out by Borges *et al.* (2010, p. 165):

> It is common disinterest for the teaching profession, the avoidance of teacher training courses, or doubts after the conclusion of the course; it is also common for graduates to explain attitudes of uncertainty and insecurity through teaching practice [...]. This reality requires changes in the teacher training process.

Thus, the experience provided by the Pibid to future teachers during initial formation is of great importance and can reduce the lack of interest in the teaching profession, meeting the proposal of the Ministry of Education (BRASIL, 2008) in creating the program, aiming at promote the insertion of students in the context of public schools from the beginning of their academic formation to develop didactic-pedagogical activities under the guidance of a teacher of the degree and a teacher of the school.

Final considerations

The Pibid/biology subproject of the UFPI has been achieving the objectives proposed by the CAPES Program. Because it has provided the insertion of future teachers in the school environment, offering experiences with experienced teachers, for the development of didactic-pedagogic activities, encouraging them to practice teaching.

The Pibid/biology has made it possible for the scholarship holders, among the many contributions, to experience in practice the reality of teaching in primary schools, where they will work in the future. This fact has cooperated to arouse interest in undergraduate students, including those students who had doubts about following the teaching career.

The experiences lived by the “pibidianos”, such as the interaction with the student of the school, the development of differentiated and traditional functional methodologies, make them more aware of their professional choice and of their social role of trainer and transformer of the students, subjects in formation.

Besides that, the Program enables the fellow to broaden his knowledge and provides him with a foundation to provide his students with knowledge. Thus, the Pibid/biology scholarship holders believe that the Project has contributed to their training and feel better prepared to “be a teacher”. Thus, the teacher who during his training passes the Pibid, can have theoretical and practical support and will be able to deal with the adversities of the day to day profession.

References

AMBROSETTI, Neusa Banhara *et al.* Contribuições do Pibid para a formação inicial de professores: o olhar dos estudantes. **Educação em Perspectiva.** Viçosa, v. 4, n. 1, p. 151-174, jan./jun. 2013.

AMORIM, Jasmin Guimarães dos Santos; ARAÚJO, Túlio Augusto Velho Barreto de. O Pibid e o lugar da docência na carreira dos licenciandos da UFPE e UPE. *In*. **V Encontro Nacional sobre o Ensino de Sociologia na Educação Básica – ENESEB.** Brasília: DF, 23 a 27 de julho de 2017.

APARÍCIO, Ana Sílvia Moço. Formação docente em questão: o que evidenciam os relatos reflexivos produzidos por alunos de pedagogia participantes do Programa Bolsa Alfabetização. **Relatório de Pesquisa:** Estágio Pós-Doutoral. São Paulo: Fundação Carlos Chagas, 2011.

BARBOSA, Silvia Maria Costa; SOARES, Júlio Ribeiro. A importância do PIBID no contexto da educação brasileira para a formação de professores no Brasil. *In*: **Anais do I Seminário e II Encontro PIBID/Unicamp**. Campinas: SP, 14 e 15 de maio de 2012.

BARDIN, Laurence. **Análise de conteúdo**. Lisboa: Edições 70, 1979.

BORGES, Maria Célia *et al.* A Formação de professores na UFTM: o Pibid como experiência desafiadora. **Revista Triângulo**. Uberaba: MG, v. 3. n. 2, p. 163-176, jul./dez. 2010.

BRASIL. Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – CAPES. **Pibid - Programa Institucional de Bolsa de Iniciação à Docência.** 03 set. 2008. Disponível em: http://www.capes.gov.br/educacao-basica/capespibid/pibid. Acesso em: 15 jun. 2017.

BRASIL. **Decreto nº 7.219, de 24 de junho de 2010**. Dispõe sobre o Programa Institucional de Bolsa de Iniciação à Docência – PIBID e dá outras providências. Diário Oficial da União, seção 1, n. 120, p. 4-5, jun. 2010.

BRASIL. **Portaria Normativa nº 38, de 12 de dezembro de 2007**. Dispõe sobre o Programa Institucional de Bolsa de Iniciação à Docência – PIBID. Diário Oficial da União, seção 1, n. 239, p. 39, dez. 2007.

BRASIL. **Resolução nº 510, de 7 de abril de 2016.** Ministério da Saúde. Conselho Nacional de Saúde. Diário Oficial [da] República Federativa do Brasil. Brasília: DF, seção 1, p. 44-46, 24 maio 2016.

BRITO, Luana Patrícia Silva de, MELLO, Rachel Costa de; ARAÚJO, Mônica Lopes Folena. Contribuições do programa institucional de bolsa de iniciação à docência (PIBID) à formação inicial de professores de biologia na universidade. *In*: **Anais do IV Encontro de Pesquisa Educacional em Pernambuco**. Caruaru: PE: FUNDAJ, 13 e 14 set. 2012.

DINIZ, Carlos Alberto Malveira *et al*. Reflexões sobre o processo de ensino aprendizagem da disciplina Geografia, no âmbito escolar. **Revista Geográfica de América Central**. Costa Rica, n. especial, p. 1-13, 2011.

FELÍCIO, Helena Maria dos Santos. O Pibid como "terceiro espaço" de formação inicial de professores. **Revista Diálogo Educacional.** Curitiba, v. 14, n. 42, p. 415-434, maio/ago. 2014.

FREIRE, Paulo. **Ação cultural para a liberdade e outros escritos**. 8. ed. São Paulo: Paz e Terra, 1987.

FREITAS, Maria Nivalda de Carvalho. Organização escolar e socialização profissional de professores iniciantes. **Cadernos de Pesquisa.** São Paulo, n. 115, p. 155-172, mar. 2002.

FRISON, Lourdes Maria Bragagnolo; SIMÃO, Ana Margarida Veiga; CIGALES, Juliana Ribeiro. Aprendizagens na docência: Pibid e a formação de professores. **Revista e-Curriculum.** São Paulo, v. 15, n. 1, p. 25-44, jan./mar. 2017.

GALIAZZI, Maria do Carmo**. Educar pela pesquisa:** ambiente de formação de professores de ciências. Ijuí: RS, Ed. Unijuí, 2003.

GATTI, Bernardete Angelina. **Avaliação qualitativa dos projetos Pibid implementados em instituições de Ensino Superior – IES localizadas nas regiões Sudeste e Sul.** Relatório Técnico. São Paulo: OEI/CAPES, 2013.

GATTI, Bernardete Angelina. Formação Inicial de Professores para a Educação Básica: pesquisas e políticas educacionais. **Estudos em Avaliação Educacional**. São Paulo, v. 25, n. 57, p. 24-55, jan./abr. 2014.

GATTI, Bernardete Angelina. Formação de professores: condições e problemas atuais. **Revista Internacional de Formação de Professores (RIFP).** Itapetininga, v. 1, n. 2, p. 161-171, 2016.

GIL, Antônio Carlos. **Métodos e técnicas de pesquisa social**. 5. ed. São Paulo: Atlas, 1999.

GONÇALVES, Josiane Peres; MAGNABOSCO, Fatima Luciana. O controle emocional em docentes do ensino fundamental e médio, segundo a perspectiva de professores e alunos. *In*: **Anais do VI EDUCERE – Congresso Nacional de Educação.** Curitiba - PR**,** p. 622-644, 2006.

MARAFELLI, Cecilia Maria; RODRIGUES, Priscila Andrade Magalhães; BRANDÃO, Zaia. A formação profissional dos professores: um velho problema sob outro ângulo. **Cadernos de pesquisa.** São Paulo, v. 47, n. 165, p. 982-997, set. 2017.

MARTINS, Maria Márcia Melo de Castro; LEITE, Raquel Crosara Maia; CAVALCANTE, Maria Marina Dias. Influência do Pibid na formação e na prática de professores de Biologia. **Educação em Foco.** Juiz de Fora, ano 21, n. 33, p. 75-97, jan./abr. 2018.

MASETTO, Marcos Tarciso; GAETA, Cecilia. Os desafios para a formação dos professores do ensino superior. **Revista Triângulo.** Uberaba, v. 8, n. 2, p. 04-13, jul./dez. 2015.

MINAYO, Maria Cecilia de Souza. **O desafio do conhecimento:** pesquisa qualitativa em saúde. 7. ed. São Paulo: Hucitec, 2000.

MORYAMA, Nayara; PASSOS, Marinez Meneghello; ARRUDA, Sergio de Mello. Aprendizagem da docência no PIBID-Biologia. **ALEXANDRIA: Revista de Educação em Ciência e Tecnologia.** Florianópolis, v. 6, n. 3, p. 191-210, nov. 2013.

PIMENTA, Selma Garrido. **O estágio na formação de professores:** unidade teoria e prática? 10. ed. São Paulo: Cortez, 2011.

RIBEIRO, Suzicássia Silva. **Percepção de licenciandos sobre as contribuições do PIBID - Matemática.** 2013. 212 f. Dissertação (Mestrado Profissional em Educação). Universidade Federal de Lavras, Lavras, MG, 2013.

SANTOS, Marcia Zschornack Marlow; SOARES, Briseidy Marchesan; SCHEID, Neusa Maria Jonh. O Pibid e a formação de professores de Ciências Biológicas da URI, Santo Ângelo, Brasil. **Interacções**. Portugal, v. 11, n. 39, p. 155-174, 2015.

SILVA, Rejane Maria Ghisolfi da; SCHNETZLER, Roseli Pacheco. Estágios curriculares supervisionados de ensino: partilhando experiências formativas**. EntreVer**. Florianópolis, v. 01, n. 1, p. 116-136, 2011.

SOCZEK, Daniel. PIBID como formação de professores: reflexões e considerações preliminares. **Formação Docente**. Belo Horizonte, v. 3, n. 5, p. 57-69, ago./dez. 2011.

TARDIF, Maurice. **Saberes docentes e formação profissional**. 8 edição. Petrópolis, RJ: Vozes, 2007.

TORRES, Cícero Magérbio Gomes *et al*. Formação do professor de biologia: uma análise a partir do programa institucional de Bolsa de Iniciação à Docência (PIBID). **Revista Interfaces: Saúde, Humanas e Tecnologia**, v. 1, n. 1, p. 17-33, mar. 2013.

Acknowledgments

We express our thanks to the Institutional Program for Teaching Initiation Scholarships-Pibid and the Federal University of Piauí-UFPI, for supporting and encouraging this work, as well as the research subjects.