BELIEFS ON LANGUAGES TEACHING-LEARNING: RELEVANT ASPECTS TO RESEARCH DURING INITIAL TEACHER EDUCATION

CRENÇAS SOBRE ENSINO-APRENDIZAGEM DE IDIOMAS: ASPECTOS PERTINENTES À PESQUISA DURANTE A FORMAÇÃO DOCENTE INICIAL

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Abstract. This study deals with people's beliefs in the foreign language teaching-learning process during the initial teacher education of foreign language teachers. We produced a substantiated integrative review from references related to foreign languages with an emphasis on English. The objective is to expose relevant considerations for the investigation of beliefs in the aforementioned context so that (future) students, teachers, and/or researchers who wish to examine the subject have an initial guide to use. To this effect, we conducted a bibliographical study about beliefs using the publications of Fives and Gill (2014), Kalaja (2015), Kinoshita (2018), and Majchrzak (2018), among others. The results indicate that the study of beliefs is necessary for understanding the language teaching-learning process in more diverse contexts, not only in initial teacher education.

Keywords: Beliefs; Foreign Language Teaching-Learning; Initial Teacher Education.

Resumo. O estudo trata a respeito das crenças no processo de ensino-aprendizagem de língua estrangeira durante a formação docente inicial de professores de língua estrangeira. Produzimos uma revisão integrativa consubstanciada a partir de referenciais direcionados a línguas estrangeiras com ênfase no inglês. O objetivo é expor considerações pertinentes à investigação de crenças no contexto referido para que (futuros) alunos, professores e/ou pesquisadores que desejem examinar o tema tenham um guia inicial para utilizar. Para tanto, desenvolvemos uma pesquisa bibliográfica acerca das crenças utilizando autores como Fives e Gill (2014), Kalaja (2015), Kinoshita (2018) e Majchrzak (2018), entre outros. Os resultados apontam que o estudo das crenças é pertinente para a compreensão do processo de ensino-aprendizagem de idiomas nos mais diversos contextos, não somente na formação docente inicial.

Palavras-chave: Crenças; Ensino-Aprendizagem de Língua Estrangeira; Formação Docente Inicial.

FIRST CONSIDERATIONS

Over the course of our lives, we develop different beliefs about varied activities; it is no different when we need to learn a new language to teach it. Therefore, student teachers develop certain beliefs regarding the process of teaching-learning the language of their major during their initial education.

It was previously found that most entrants in a Bachelor of Education program with a major in a foreign language (FL) begin their studies with little or no proficiency in the language of their major (Kinoshita, 2018). Therefore, for most of these student teachers, learning a new language takes place during the initial stages of their undergraduate education, which, in Brazil, corresponds to the Bachelor of Education undergraduate program. The students arrive at the university with several beliefs about the process of learning a new language, which can influence their learning positively or negatively. Therefore, it is essential to understand these beliefs and their influence on the initial education of future FL teachers.

The study of beliefs has been introduced previously. Here, we propose the need to direct research toward examining the beliefs developed by language student teachers during their initial education; research in this area is sparse in Brazil. We aimed to reveal considerations relevant to the investigation of beliefs in the initial teacher education of FL student teachers so that (future) students, teachers, and/or researchers have a foundation to start with. To this effect, we sought to answer the following research questions:

- What concept can be attributed to the beliefs in language teaching-learning of student teachers during their initial education?
- What types/categories of beliefs exist in language teaching-learning for student teachers during their initial
- How do beliefs influence language teaching and learning in student teachers during their initial education?

In this paper, we make some theoretical considerations about student teachers' beliefs by dividing it into five parts. First, an introductory section, where we deal with the general aspects of the investigation. Second, we discuss different definitions of beliefs. Third, we explore their various categorizations. Fourth, we explain how they are involved in the FL teaching-learning process. Finally, we summarize our findings in a concluding section.

THE DEFINITION OF BELIEFS

This section is dedicated to some of the different concepts ascribed to beliefs over the years. It is assumed that the concept of beliefs is not specific to Applied Linguistics. The concept of belief is well-established in other disciplines such as Anthropology, Sociology, Psychology, Law, Political Science, Economics, Education, And Philosophy, which is concerned with understanding the meaning of what is true or false (Barcelos, 2004; Pajares, 1992). Table 1 presents some of these concepts.

Table 1. Different definitions of beliefs.

YEAR	AUTHOR(S)	AREA/LINE	CONCEPT
1910	Dewey	Philosophy of Education	"[] some kind of evidence or testimony." (Dewey, 1910, p. 1)
1985	Horwitz	Applied Linguistics	"[] preconceived ideas about how languages are learned and how they should be taught." (Horwitz, 1985, p. 333)
1991	Davidson	Mythology and Archaeology	Synonymous with myths, legends, and traditions (religious or not), etc. (Davidson, 1991)
2010	Almeida Filho	Applied Linguistics	"[] The approach (or culture) of learning is characterized by the ways of studying, preparing for use, and the actual use of the target language that the student has as "normal." [] The teaching approach, in turn, is made up of the set of dispositions that the teacher has to guide all the actions of the global operation of teaching a foreign language." (Almeida Filho, 2010, p. 13, our translation)
1996	Richardson	Teacher Education	"[] psychologically-held understandings, premises or propositions about the world that are felt to be true." (Richardson, 1996, p. 104-5)
2000	Frijda, Manstead and Bem	Cognition	"[] major antecedents of emotions." (Frijda, Manstead & Bem, 2000, p. 1)
2006	Kalaja and Barcelos	Applied Linguistics	The best way to conceptualize beliefs is through their characteristics: (i) dynamic and emerging, (ii) socially constructed and contextually situated, (iii) experiential, (iv) mediated, (v) paradoxical and contradictory. (Kalaja & Barcelos, 2006)
2006	Schafer and Walker	Politics	"[] subjective representations of reality." (Schafer & Walker, 2006 p. 4)
2010	Van den Steen	Economics	"[] "assumptions"." (Van den Steen, 2010, p. 620)
2014	Fives and Gill	Psychology of Education	"[] part of a complex multidimensional system with potential clusters of contrasting beliefs that are or are not enacted in given moments of practice due to a variety of factors that are situated within the teacher and social context." (Fives & Gill, 2014, p. 7)

Source: The author

In Table 1, the understandings of belief are presented in chronological order to illustrate they have changed over time. Next, we discussed them in more detail so that, based on the contribution of each area/line of research, our understanding of beliefs is enhanced.

One of the oldest notions of belief was given by the philosopher of education, John Dewey. He described thinking, more precisely the way we think. In his explanation, he introduces the concept of belief as something that can be induced by thinking in two possible ways: accepting or rejecting it as reasonably probable or unlikely.

The next definition shown in the table is, according to Barcelos (2004), the first reference to the term concerning language teaching and learning. In this concept, it can be seen that the very word chosen by Horwitz (1985) to describe beliefs is "preconceived" which carries the meaning of opinion formed before there is evidence of its truth or usefulness. This idea was maintained in the area of Applied Linguistics, for some time to come since the author, a pioneer in Applied Linguistics studies, continued to include in her research the following: "[...] preconceived

¹ Original text: [...] A abordagem (ou cultura) de aprender é caracterizada pelas maneiras de estudar, de se preparar para o uso, e pelo uso real da língua-alvo que o aluno tem como 'normais'. [...] A abordagem de ensinar, por sua vez, se compõe do conjunto de disposições de que o professor dispõe para orientar todas as ações da operação global de ensinar uma língua estrangeira (Almeida Filho, 2010, p. 13).

notions about language learning would likely influence a learner's effectiveness in the classroom" (idem, 1988, p. 283). However, in her most recent works (Horwitz, 2016a, 2016b, 2010), beliefs have been losing ground, and more attention is being given to investigating the relationship between anxiety and language learning.

We also have a definition from Mythology and Archaeology, which is further removed from our area of inquiry, equally understands that "beliefs and practices change according to the changing needs of those familiar with them" (Davidson, 1991, p. 144). Davidson (idem) recalls that the concerns with beliefs go back to the work of Jakob and Wilhelm Grimm. These authors, in 1812, sought to stand out from traditional storytellers, by making their tales go beyond entertainment by loading them with traces of ancient myths that reflected past beliefs and customs.

In the same year, in Philosophy, Levi (1991) deepened the debate on the change of beliefs, arguing that "[...] inquiring agents modify their evolving doctrines, they come to believe where they were initially doubtful. Conjectures or hypotheses are thereby converted into settled assumptions free from serious doubt and, therefore, counted as certainly true" (ibidem, 1991, p. 1). Thus, we see the need for the presence of doubt in provoking change, which, according to the author, can happen through two processes: (i) expansion and/or (ii) contraction. In expansion, the subject would take on new beliefs, while in contraction, the person would stop believing in something.

The first initiative within Brazilian Applied Linguistics to approach the subject came from Almeida Filho (2010), who stated that beliefs, together with assumptions and principles, are part of what he called the approach or culture of learning or teaching. At the time, he warned about the possibility of incompatibility(s) between the teacher's approach/culture of teaching and the approach/culture of learning of the student(s), which could trigger difficulties in the process of language teaching-learning.

Richardson (1996) associated beliefs with teacher education and was concerned with distinguishing them from two types of knowledge: propositional and practical. For her, "propositional knowledge has epistemic standing; that is, there is some evidence to back up the claim. Beliefs, on the other hand, do not require a truth condition" (ibidem, p. 105). Moreover, "practical knowledge is gained through experience, is often tacit, and is contextual. This form of knowledge, however, is not synonymous with beliefs because it is thought of as embodied within the whole person, not just the mind" (ibidem, p. 106). For Richardson, teacher education should involve multiple types of knowledge and different stages of experience: personal, school, and instructional, with formal knowledge.

The definition by Frijda, Manstead, and Bem (2000) is closely linked to emotions, among others. They believe that "beliefs fueled by emotions stimulate people to action or allow them to approve of the actions of others" (ibidem, p. 1). Thus, for studies related to Cognition, this is a concept whose understanding involves the idea of action and is associated with knowledge since "not every mental state exercises the same influence on action. We suggest that the link with action is stronger in the case of emotions than it is in the case of beliefs; and that it is stronger in beliefs than it is in knowledge" (ibidem, 2000, p. 4).

The interrelationship between beliefs and knowledge is strongly emphasized in the concepts discussed so far; this is the same in the area of Education. For example, Hativa and Goodyear (2002), raised the issue again looking specifically at Higher Education. They listed some domains of knowledge that, according to them, are necessary for effective teaching:

- Knowledge of the subject of the discipline the one he proposes to teach;
- General pedagogical knowledge knowledge of, and- the ability to use teaching methods and pedagogical strategies that are unrelated to the specific subject;
- Knowledge of the pedagogical content specifics of how to teach the subject and its contents. This includes representations that the teacher has of the content of their subject, examples and valuable teaching analogies, as well as knowledge of common misconceptions/errors.
- Students' knowledge familiarity with the students in the classroom, their problems, and learning needs;
- Learning knowledge learning theories and students' physical, social, psychological, and cognitive development, motivational theory, and practice;
- Knowledge of educational objectives educational purposes and values;
- Self-knowledge awareness of their own values, dispositions, strengths, weaknesses, educational philosophy, and purposes for teaching.

Kalaja and Barcelos (2006) prefer to characterize the term "beliefs" instead of defining it but leave aside the idea of beliefs as an internal trait of the individual, to relate them to the contexts and objectives of students and teachers. The features listed include:

Dynamic → They change over time or during a situation;

- Emerging → They change and evolve as we experience the world, interact with it, change it, and are changed by it;
- Socially constructed → They have multiple voices and incorporate social perspectives;
- Contextually situated → Created in contexts of social groups and relationships;
- Experiential → They arise from experiences, result from the individual's interactions with the world, constructed, and reconstructed for specific, situated, and contextualized purposes;
- Mediated → They serve as tools that are available to be used or not, depending on the situation, task, or with whom we interact;
- Paradoxical and contradictory → Social and individual, unique and shared, rational and emotional, diverse and uniform, empowerment and limitation, etc.

In the same year, in Politics, Schafer and Walker (2006) presented a concept that they stated is cognitive and necessary to explain the political world. For them, beliefs have effects such as mirroring, guiding, and learning. In this way:

Beliefs can represent (mirror) information from the external context that influences the decisions of states to take actions that maintain or change strategies of conflict management, initiate trade disputes or economic sanctions, adopt or obstruct institutional reforms, support or change international exchange rates. Beliefs can exercise steering effects wherein old information from preexisting beliefs competes with new information from the external environment to influence decisions by introducing motivated or cognitive biases. Beliefs may also change over time to more accurately represent the environment and reverse the steering effects of biases, thereby exhibiting learning effects as a change in behavior that follows a change in beliefs (Ibidem, 2006, p. 239).

The relationship that the above-mentioned authors build between learning, behavior, and change is quite interesting. According to the model they proposed, during the learning process, behavior change precedes the modification in beliefs. According to Barcelos (2007), this alteration can happen in two ways:

- Become aware of the action → Re-signify or reaffirm the belief and practice;
- Accommodate the belief → Change the behavior or action.

As reported by the author, both paths involve a continuous process of change, where reflection on action is essential to achieve a different practice.

In the area of Economics, the study by Van den Steen (2010) also discusses change, but in the sense of sharing beliefs and values. However, the author limits himself to presenting only a synonym 'assumptions' to explain the connotation with which the term is used in the corporate world. He describes how organizations have an innate tendency to develop homogeneity, which they achieve when those involved share similar beliefs and values, resulting in successful, strong companies with more time to act in the market. These companies tend to be the ones whose employees make the most important decisions and where the managers have the strongest beliefs. It is possible to associate the description with learning, especially regarding the need for autonomy and motivation of those involved in the process.

Fives and Gill's (2014) concept is not about general beliefs but about teachers' beliefs. We included it in the table because it contains aspects that do not appear in the previous definitions, such as complexity, the possibility of performance, and social context. Their work includes studies about teachers' beliefs concerning learners, learning, and teaching. They use Educational Psychology to examine how classroom rules, teacher/student relationships, and an affective climate may or may not influence the success of the teaching-learning process.

In this section, we presented several concepts by authors who sought, each in their area and time, to delimit what beliefs would be. However, we agree with Zheng (2015), who believes that there are numerous attempts to define the term "beliefs". For Fives and Gill (2014), the biggest challenge would not be to conceptualize the term itself (although it is also challenging) but to find a consistency among all these definitions.

Faced with the difficult task that we set ourselves; to develop a conception that is more suited to the case of student teachers in training. We determine that beliefs are representations of those involved in language teaching-learning regarding the teaching-learning process of a new language or about other factors (identities, stereotypes, social context, culture, etc.) that may influence it, positively or negatively. Representations that can be shared, maintained, constructed, and reconstructed among/by individuals, throughout their lives, even before the beginning of formal education and/or after its end.

This is a notion we constructed to meet our need to determine what to consider a belief in the context of our proposed investigation. We do not state that our idea is better than any other. Instead, we believe it is adequate to understand and study the beliefs of the subjects in question.

DIFFERENT TYPES/CATEGORIES OF BELIEFS

This section is concerned with the various ways in which beliefs have been categorized over the years. Table 2 presents some of the types proposed in different areas and lines of research:

Table 2. Different types/categories of beliefs.

AREA/LINE	AUTHOR(S)	YEAR	TYPES/CATEGORIES	DESCRIPTION
			Epistemic	About learning and knowledge.
E1 .:	Deng, Chai, Tsai,	2014	Pedagogical	Traditional (behaviorism, teacher- centered), constructivist, or eclectic.
Education	and Lee		Self (of the teachers)	About using information and communication technology in the classroom.
			Occurring	About events currently happening.
Philosophy	Schwitzgebel	2015	Dispositional	About events/ conditions/ skills/ situations in general.
Applied	Valaia	2015	FL teaching in the past	FL teaching-learning that occurred i the past.
Linguistics	Kalaja		FL teaching in the future	FL teaching-learning envisioned fo the future.
Applied	Moreira and	2010	About learning English	The best way to learn. The good apprentice.
Linguistics	Monteiro		About teaching English	The best way to teach. The good teacher.
Marketing	Hernandez, Wang,	2008	Proactive	Involves rituals performed to keep away negative energies and bring in positive ones.
	Minor, and Liu		Passive	Events are predetermined to happe by unseen forces.
		2015	Testable	Activates the dorsolateral prefronta cortex and posterior cingulate.
Medicine	Howlett and Paulus		Not testable	Activates the inferior frontal gyrus the superior temporal, and an anteri region of the superior frontal gyrus
		2017	Religious belief	Learned from others.
Psychology	Heiphetz, Gelman, and Young		Factual belief	Facts related to topics on which knowledge is lacking.
	and Tourig		Opinion	Reveals information about individuals.
		r 1972	General	About the environment and other people.
Psychology	Kreitler and Kreitler		About yourself	About yourself.
			About norms	About norms, rules, and standards
			About goals	About someone's goals/objectives
		2014	True positive	An event/situation is correctly believed.
Health	Kovács, Kühn, Gergely, Csibra, and		True negative	An event/situation is mistakenly believed.
	Brass		False positive	An event/situation is not correctly believed.
			False negative	An event/situation is not mistaken believed.

Source: The author

In Table 2 it can be seen that the grouping of beliefs into different types has been happening for several years, with different areas and lines of research having proposed the most differentiated categorizations over time. In this section, these categorizations are discussed along with justifications about why we consider them more or less suitable for use in the study of the beliefs of FL student teachers in their initial education.

The classification by Deng et al. (2014) is interesting because it is also used in a study in the field of Education. However, we think it is controversial, as it separates teachers' personal beliefs into a third category. From our understanding, such a division within the study of beliefs would be contradictory since the two other types (epistemological and pedagogical) equally belong to teachers, as they were created/constructed by them. Assuming that beliefs are personal constructs, every one of them would fit into the third group. Therefore, due to the issues presented here, we understand that it is inappropriate to use this classification.

Schwitzgebel (2015) demonstrates, in a duality relationship, an opposition between two types of beliefs: current vs. dispositional. For this author, the distinction between both depends on the difference between disposition and occurrences. The latter could only be true under certain circumstances, while, in the former, the connection with something happening at the time is not necessarily mandatory. However, circumstances may lead to a propensity for the event. In Philosophy, duality and truth conditions are expected. While studying beliefs regarding language teaching-learning, it is quite complicated to establish what is true and not true, or even to specify which aspect of the process is opposed to any other.

Moreira and Monteiro (2010) propose grouping the beliefs produced by their subjects into two major categories — learning and teaching, which are subdivided into two further categories, "the best way to learn English" and "the good English language learner," and "the best way to teach English" and "the good English language teacher," respectively. We agree with them when they state that "[...] it is possible to detect other types of beliefs with the same instruments and procedures, simply by directing the questions present in them to another subject, for example, specific beliefs about evaluation" (ibidem, p. 211, our translation). However, we think it is inappropriate to separate learning from teaching as they are two interrelated processes, in this case, the teaching-learning process of an FL. That being said, it would be challenging to classify beliefs as belonging to one category or the other, given that it is common for both to occur simultaneously.

The categorization proposed by Hernandez et al. (2008) is related to a particular type of belief: superstitious beliefs, which is researched in their study in the field of Marketing, whose sample population (Chinese consumers in search of new products) had superstitions as a characteristic trait that influenced the construction of their beliefs. This does not happen with our subjects. In studies with FL student teachers (Kinoshita, 2018; Barcelos, 2015 and 1995), it is quite rare to find beliefs that can be classified as superstitious. In this sense, there is no need to categorize them as passive or proactive.

Howlett and Paulus (2015) characterized beliefs unconventionally, detailing the brain functioning that takes place during each type of belief they propose to work on. However, to make the necessary observations for classifying the groups, a functional magnetic resonance imaging test was required, which makes the standardization presented by them difficult to replicate outside of the Medical area.

Kovács et al. (2014) presented four types of beliefs whose separation was determined more on the relation to the condition of the content or event/situation in which the subject believes than on the characteristics of the belief itself. This is a study from the field of Health and it states, "when this content is about the occurrence of an object at a certain location, a positive content is attributed, while potential beliefs with negative content are ignored" (ibidem, p. 4), and "[...] restricts the system to tracking false beliefs that may allow fast and efficient predictions about others' actions" (ibidem, p. 5). Despite the interesting findings of the study, this investigation also requires the use of magnetic resonance imaging for data production, making it impossible to apply the same classification in our field.

Regarding the next proposal, "[...] religious beliefs are an important, yet understudied, aspect of identity" (Heiphetz, Gelman & Young, 2017, p. 84). However, when we study teacher education, it is not common to include the religious aspect, as religion is not a feature that would commonly significantly influence the beliefs of FL student teachers. Another detail that draws attention in the grouping with the field of Psychology is the contrast between "[...] religious beliefs (e.g., "God can do miracles") with opinions (e.g., "Green is the prettiest color")" (ibidem, p. 85), treating them as separate groups, which goes against our thinking that opinions and beliefs are synonymous.

The work of Kreitler and Kreitler (1972) shows that attempting to differentiate and group beliefs is not new in Psychology. They have shown that different types of beliefs predicted different types of behavior. Ten years later,

² Original text: [...] é possível detectar outros tipos de crenças com os mesmos instrumentos e procedimentos bastando, para isso, direcionar os questionamentos neles presentes a outro assunto, por exemplo, crenças específicas sobre avaliação (Morcira & Monteiro, 2010, p. 211).

Lobel (1982) developed a new study using equal categorization and reiterated the idea that "[...] the relative weights of different types of beliefs vary from behavior to behavior and that different behaviors are predicted from different types of beliefs" (ibidem, p. 222), such as:

- Beliefs about norms: order;
- Beliefs about oneself: punctuality;
- General beliefs: assertiveness, pain tolerance, and conformity.

In Kalaja's (2015) research, beliefs are categorized into two groups: FL teaching in the past and FL teaching in the future. Although, in the nomenclature, only teaching is mentioned, when explaining each of the types, she clarifies that she is referring to the teaching-learning process as a whole, where, "one discourse is used for recollecting foreign language teaching and learning as experienced in the past, the other for foreign language teaching as envisioned in the near future [...]" (ibidem, p. 142). Therefore, due to the flexibility of the proposal and the proximity of her investigation to ours, we initially chose to try to group our data in the same way with some adaptations. The first was to adjust the terminology of our investigation to:

- Teaching-learning in the past;
- Teaching-learning in the future.

The second was to add one more category:

Teaching-learning in the present.

BELIEFS IN LANGUAGE TEACHING AND LEARNING

The association between beliefs and teaching-learning has been receiving academic attention for a while. Therefore, a significant amount of publications exist on the subject. For example:

[...] Subject specific beliefs, such as beliefs about reading, mathematics, or the nature of science, are key to researchers' attempting to understand the intricacies of how children learn. The information processing approach focuses on the characteristics of learners, including not only self-beliefs, such as self-concept and self-efficacy, but also beliefs about the nature of intelligence, of knowledge, and of motivation (Pajares, 1992, p. 308).

We recognize that "[...] beliefs are interrelated with the environment in which the teacher lives and are part of his/her experience" (Perine, 2012, p. 371, our translation). Regarding the process of teaching-learning languages, according to Barcelos (2004), at the national level, from the 1990s onwards, studies have gained more traction, with Leffa (1991), Almeida Filho (2010), and Barcelos (1995) laying the initial theoretical foundations. The aforementioned work by Almeida Filho was originally released in 1993, we were able to access its 6th edition, which was released in 2010.

The first study (Leffa, 1991) presented beliefs that a group of public school students had before starting to learn an FL for the first time:

- Language = set of words;
- Learning a language = learning new words, memorizing a list of words, and using a dictionary, among other strategies;
- Knowing a language = ability to speak the language;
- English = a curriculum subject;
- Purpose of learning English = to be an English teacher;
- Authentic use of English = only for people who have the opportunity to travel abroad.

These beliefs represent a group of children's vision about teaching and learning English almost three decades ago. Currently, research on beliefs continues to constitute a relevant part of investigations into language teaching and learning, given that, according to Majchrzak (2018, p. 41), it "[...] provides insight into the mechanisms which stand behind an individual's actions." The ongoing research yields indispensable knowledge to better understand how this process happens and, therefore, to be able to improve it. However, in the current decade, even after so

³ Original text: [...] as crenças estão inter-relacionadas com o meio em que o professor vive e fazem parte de sua experiência (Perine, 2012, p. 371).

many years of exploration, children's beliefs are similar to those held by freshman Bachelor of Education students with a major in FL:

[...] most language student teachers in Brazil, firstly, choose to do pedagogical studies not because they want to become teachers but only as complementary studies, or to learn the language. Secondly, they do not see any prestige in teaching English in public schools. 1 Thirdly, they do not believe they can learn enough of the language in their BA programme. [...]. Finally, it has been found that they do not connect the image of a teacher to a successful professional (Barcelos, 2015, p. 74).

In view of the description of this scenario, we agree with Kalaja, Barcelos, Aro, and Ruohotie-Lyhty (2015, p. 13), for whom "[...] the true importance of learner and teacher beliefs has only gradually been acknowledged in the field of language learning and teaching." Therefore, it is still necessary to continue taking:

[...] for ourselves the responsibility of the world we live in with others, and the consequences of our actions for ourselves and those who live with us. Students, when realizing their learning experiences, and the reason for them, can ask themselves: do I want to continue like this? Do I want to continue acting according to this story that I brought to hand? Do I know the consequences of this story, and do I want them? If I do not want them, am I willing to build another story? If so, what should I do to build an alternative path that suits my interests and desires?⁴ (Aragão, 2008, p. 315, our translation).

The ability, attributed to beliefs, in influencing reflection and, consequently, the transformation of conduct or practice in teaching and/or learning languages makes them tend "[...] to have a priority over knowledge in understanding and predicting the mechanisms behind students' and teachers' decisions" (Majchrzak, 2018, p. 41). This understanding is also corroborated by Barcelos (2015, p. 71), who believes that "[...] they are now seen as one of the most influential factors behind teachers' decisions and actions in the classroom."

In our concept, beliefs are representations that can be shared, maintained, constructed, and reconstructed between/by individuals throughout their lives. The dynamics of sharing, maintaining, building, and rebuilding imply change. Beliefs can then be modified, and according to Richards, Gallo, and Renandya (2001), this transformation should be considered a primary dimension in the professional life of teachers, whose education needs to be based on the need to provide changes in themselves. However, changing one's belief does not always entail changing the practice. Therefore, as suggested by Barcelos (2007, p. 129, our translation), this can happen in two ways:

(a) an awareness of what one does, followed by reframing or reaffirmation of current belief and practice. In this case, change does not necessarily mean always doing something new or different, but engaging in reflection and awareness of how we understand what we do; and (b) accommodation of belief and change in behavior or action. In fact, I believe we have a continuous process of change that goes from the assumption of what we are and what we believe (what some call awareness or contemplation) to the actual change of practice, where reflection in action is important.⁵

Changing one's beliefs needs to be part of both initial and continuing education. However, in general, this is not a process that the trainer and/or researcher is able to observe, monitor, or control. The issue is that learning (as well as teacher education) is not restricted to the school environment. Thus, "[...] classroom and out-of-class learning are equally important" (Benson, 2011, p. 7). Nonetheless: "as classroom teachers, we become accustomed to the idea that classrooms are the 'natural' place for learning to take place. Out-of-class learning processes are also often 'invisible' to classroom teachers, or at least less easily accessed than classroom processes" (Ibidem, p. 8).

⁴ Original text: [...] para nós mesmos a responsabilidade do mundo em que vivemos com os outros e da conseqüência de nossas ações para nós mesmos e para os que conosco convivem. Os alunos, ao se darem conta de suas experiências de aprendizagem, e do porquê delas, podem se perguntar: quero continuar assim? Quero seguir agindo de acordo com esta história que trouxe às mãos? Conheço as conseqüências desta história e as desejo? Se não as desejo, estou disposto a construir outra história? Estando disposto, o que devo fazer para construir um caminho alternativo que seja apropriado aos meus interesses e desejos? (Aragão, 2008, p. 315).

⁵ Original text: (a) uma consciência do que se faz, seguida de uma ressignificação ou reafirmação da crença e da prática atual. Nesse caso, a mudança não necessariamente significa sempre fazer algo novo ou diferente, mas envolver-se na reflexão e conscientização de como compreendemos o que fazemos; e (b) acomodação da crença e mudança de comportamento ou da ação. Na verdade, creio que temos um processo contínuo de mudança que vai desde a assunção do que somos e acreditamos (o que alguns chamam de consciência ou contemplação) até a mudança efetiva da prática, em que a reflexão na ação é importante (Barcelos, 2007, p. 129).

As we propose to investigate the education of FL teachers during the undergraduate degree, our study does not include the out-of-class environment as a research context. Although, we recognize that part of teacher education also happens outside the university at times when the student teacher teaches-learns in other contexts. We can relate the question raised by Benson, narrowing it further by exposing the possible differentiation between two types of teachers:

[...] the content teachers perceived themselves as only content teachers and the EFL teachers perceived themselves as only language teachers. The belief that one is either a content teacher or a language teacher has been noted across a wide spectrum of CBLT⁶ contexts. [...] These beliefs, however, run counter to the educational axiom that all teachers are language teachers, which is a core tenet of CBLT (Lyster, 2017, p. 91).

Lyster (idem) differentiates two distinct categories of professors who work in Higher Education based on the CBLT approach. Therefore, he makes explicit the rooted belief that there are teachers who dedicate themselves specifically and only to teaching the language. At the same time, others deal with the instruction of content or theory. Thus, there would be language classes and content classes that do not mix or interconnect. They take place at different times and are taught by different professionals.

We cannot forget that the way teachers see and identify themselves is visible and permeates the teaching-learning process, consequently influencing the construction of their belief(s) that student teachers build about numerous things, such as: the courses, professors who integrate it, learning strategies, and themselves as future language teachers.

Much more could still be said about the relationship between beliefs and teaching-learning a language. This is a complex topic, which has already been observed theoretically in previous studies, making it impossible to gather all aspects relevant to the subject in a single section.

FINAL CONSIDERATIONS

In this paper, we exposed considerations pertinent to the investigation of beliefs in initial teacher education of FL student teachers so that (future) students, teachers, and/or researchers who wish to develop research on the subject have a direction to take as a basis. We have answered the three research questions proposed at the beginning of the paper:

- What concept can be attributed to the beliefs in language teaching-learning of student teachers during their initial education?
 - Beliefs are representations that those involved in language teaching-learning have about the teaching-learning process of a new language or about other factors (identities, stereotypes, social context, culture, etc.) that may influence it positively or negatively. Representations that can be shared, maintained, constructed, and reconstructed among/by individuals throughout their lives, even before the beginning of their formal education and/or after it ends.
- What types/categories of beliefs exist in language teaching-learning for student teachers during their initial education?
 - We propose that the beliefs of FL student teachers during their initial education be categorized within a typology similar to that established by Kalaja (2015). Therefore, beliefs can refer to: a) teaching-learning in the past, b) teaching-learning in the present, or c) teaching-learning in the future.
- How do beliefs influence language teaching and learning in student teachers during their initial education? In this study, we argue that beliefs provide information about the mechanisms behind actions taken by FL student teachers during their initial education. Understanding these beliefs is essential to better understand the education process and, consequently, improve it. When we lead student teachers to reflect on their own beliefs, we allow them to observe and transform their behavior and act differently if necessary.

Finally, we argue that the study of beliefs is part of the initial and continuing education of (future) FL teachers since teacher education is permeated with changes in beliefs, a process that is impossible to control due to its characteristic complexity; without beliefs, there is no way to teach-learn to be a teacher. Therefore, the

⁶ Content-Based Language Teaching.

undergraduate degree can be a promising place to transform shared beliefs, maintained, constructed, and reconstructed throughout student teachers' trajectories at the university.

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