DEVELOPMENT OF ACADEMIC COMPETENCES IN HIGHER EDUCATION: THE TEACHING PRACTICE IN FOCUS

ANA DA COSTA POLONIA 1;*
ORCID: https://orcid.org/0000-0002-5089-0254

MARIA DE FÁTIMA SOUZA SANTOS 2;**
ORCID: https://orcid.org/0000-0001-5213-9491

ABSTRACT: The article characterizes the social representations of the academic competence development in higher education and its reflection in pedagogical practices. Twelve teachers from a college of the Federal District were interviewed. Data were analyzed using IRaMuTeQ software and generated three classes: (a) focus on the task (technologist); (b) the formative role of the educator (education) and (c) practices aimed at the development of the student (baccalaureate). Results show that these professors develop their practices considering their professional habitat, respectively representing (a) actions related to student’s future work activity, focusing on tasks operationalization and accomplishment; (b) articulation between knowledge, values and ethical action in a humanized formative process; (c) and construction of knowledge by the students, involving professional performance. Social representations highlight the diversity of practices based on the professor area of teaching, revealing nearby worlds connected with the student’s future labor activity.

Keywords: competences, social representations, pedagogical practices, training.

O DESENVOLVIMENTO DE COMPETÊNCIAS ACADÊMICAS NO ENSINO SUPERIOR: A PRÁTICA DOCENTE EM FOCO

RESUMO: O artigo caracteriza as representações sociais sobre o desenvolvimento de competências acadêmicas, no ensino superior, e os reflexos nas práticas pedagógicas. Foram entrevistados 12 professores de uma instituição do Distrito Federal, as análises realizadas pelo software IRaMuTeQ geraram três classes: (a) enfoque na realização da tarefa (tecnólogo); (b) papel formativo do educador (licenciatura) e (c) práticas direcionadas ao desenvolvimento do aluno (bacharelado). Os resultados apontam que os docentes desenvolvem suas práticas considerando o seu habitat profissional, retratando ações ligadas à futura atividade laboral quanto à realização e à operacionalização das tarefas (tecnólogo); na licenciatura, a articulação entre conhecimentos, valores e atuação ética em uma perspectiva humanista no processo formativo; e no bacharelado, a construção de saberes pelos estudantes, no domínio conhecimentos e atuação profissional. As representações sociais ressaltam a diversidade de práticas.

1. Centro Universitário Euro-Americano (Unieuro-DF). Brasília, DF, Brazil
* PhD in Psychology <ana.polonia@unieuro.com.br>
2. Universidade Federal de Pernambuco. Recife, PE, Brazil
** PhD in Psychology. <mfsantos@ufpe.br>
The set of references and concepts surrounding the notion of competence (Perrenoud, 2002; Le Boterf, 2002) is permeated by the conceptions of professional/teaching knowledge (Tardif, 2007; Tardif & Lessard, 2013), reflexive education (Dewey, 2010; Shön, 2000; Alarcão, 2001), teacher profession (Nóvoa, 1999), and work and educational practices (Charlot, 2014). So, these investigations are eminently related to the teacher actions and beliefs, encompassing the development of strategies and the teaching-learning process organization. They are closely related to teachers’ perception of students learning strategies and the ways their competencies emerge during the activities proposed in the classroom and during the extracurricular ones.

Certainly, the definition of competence goes beyond the academic scope. It also includes the work, professionalization and interpersonal relationships scenario and even the experience of the world. As a result, Silva, Silva and Souza (2013), from different approaches on competences, postulate that they involve knowledge, skills, and attitudes, as a reflection of the KSA set of human capacities: knowledge (information), skills (know-how) and attitudes (being) (Ruas, 2005 as quoted by Silva, Silva & Souza, 2013). They clarify that, in England, competence is the set of skills and knowledge is used to do a job, that is, to answer demands that emerge from work activities. Therefore, these authors warn that different theories articulated but also polarize discussions about competences.

On a further discussion, Rios (2006) postulates that competences constitute a set of situations that involve technical, political and ethical contributions provided by teaching practice along the work trajectory, in a historical and cultural context, which is permeated by praxis. Thus, competence cannot be understood without bringing up knowledge as the ability to do something. In a study based on Theory of Social Representations (TRS), Sales and Machado (2016) describe five categories related to competencies that are essential to teaching activity, mainly to undergraduate students in education studying areas: (a) commitment to and love for the profession; (b) knowledge and good training; (c) ability to interact with students; (d) capacity to deal with the contents; and (e) evaluation from an educational perspective. These categories focus on knowledge of professional practice conditions, that is, the teacher organizes the pedagogical process promoting a perspective that is based on social practices, not only on content and disciplines.

Tardif (2007) and Tardif and Lessard (2013) recognize that teaching presents a range of essential conditions to promote development and learning in the educational space. Thus, they refer to the various fields of knowledge: professional, which comes from the disciplines related to teaching; and contents, both curricular and practical ones. In this sense, Trian, Magalhães Júnior and Novikoff (2017), in their research on social representations on teacher training of physical education students, focused on the category of values proposed by Novikoff in 2006. The socio-affective dimension of knowledge was associated with socio-professional values, norms imbricated in teacher education, gnoseological values emerging in teacher characterization, and socio-relational values involving teaching activities and the typical identities of that professional context. In this sense, it becomes evident that practices articulate and exchanges consensual and reified universes, that is, the common sense and the scientific knowledge build social representations (Moscovici, 2012).
Perrenoud (2002) discusses the conception of competence articulating learning and development. He reiterates that it is a condition that mobilizes a wide range of cognitive resources to deal with several situations in life, whether personal or professional. In the academic context of higher education, Perrenoud (2000) describes essential skills and competences for professors, namely: knowing the course curriculum; systematizing conceptions; elaborating conceptual and cross-cutting content questions linked to the discipline and to the current context; and proposing problem situations so that students can mobilize skills and competences to solve them. Especially, they must know how to use the planned problem situations to make students develop hypotheses, systematize strategies and select aspects for problem-solving. So, the professors must be able to trace the paths and postulate solutions. These aspects are linked to the constructivist / interactionist perspective that presents dynamic factors involving cognition, affectivity, motor skills and the reading of world experience.

However, competencies cannot be used as the only means to an end but must be adopted as a resource, surpassing the conception of being a purely academic domain, revealing the role of didactic transposition in the classroom and the transdisciplinary perspective of knowledge (Perrenoud, 2000). Analysing and knowing pedagogical practices, learning diversity, contents, students’ and teachers’ reality, as well as a critical, reflective and collaborative posture with students and peers are imperatives. However, Perrenoud (2000) also points out the dangers of establishing competencies as a close and modulating conduct that may inhibit the teacher’s research, creativity, and pedagogical practice.

Another scholar, Le Boterf (2002) states that competence is not assured simply by knowing something or knowing how to do something. He stresses that people can have knowledge and capabilities but may not be able to mobilize them timely and properly in each moment or situation. Thus, it is essential to know how to mobilize and put into action different functions related to reasoning, knowledge, memory, relational capacities or behavioural schemes to trigger these functions. As the author emphasizes, ordering knowledge about how to mobilize knowledge. So, it is a dynamic process that is reconstructed and updated at each peculiar situation, which can be transferable, even though it is not something finished or that will be repeated.

He adds that this is not restricted to the operative scope, but involves social construction, because it is guided by a system of beliefs, values, and meanings that are characterized and shared by a group. So, we can make an approximation between the notion of competence and the social representations, as they are kinds of knowledge shared by groups and inserted in a set of practices and experiences, values and ideas that embody a dual function. Thus, the former allows people to “orientate themselves in and control the social and material world”, and the latter maintains a flow of communication between the various groups, establishing not only a communication code but a conduct one, as postulated by Moscovici (2003, p. 21).

Jonnaert (2003, as quoted by Martins, 2009) identifies differences between qualification and competence. In his perspective, qualification is decontextualized and its references encompass knowledge and doings, endorsing qualities for professional development; while competence states, as a sine qua non condition, that protagonists of the process can adequately mobilize resources and knowledge in a systemic way to the contextualized and particularized complex situation. Conscious and interventionist organization for action differs from the previous one, due to its selection and coordination of cognitive, affective, social, and sensorimotor aspects to effectively deal with the situation. So, one should not analyse only its effectiveness, but also the systematic and socially acceptable adoption of a critical perspective on the process and the results regarding competence. According to Martins (2009), Jonnaert, Le Boterf, and Schön align themselves when they discuss the concept of competence on criticality and reflective perspective.

Competence concept is polysemic, especially when one gathers various paradigms that encompass it and the criticisms that follow these positions. The reasons why there is no unique understanding of it also become evident. In this sense, Espíndola (2013) points out two different definitions of competence: as a scientific concept, and as elements of common sense. On this perspective, this is a phenomenon that can be investigated by the TRS, as elaborated by Moscovici (2003), since it understands there is no rupture between common sense knowledge and scientific knowledge, even though they are of different natures. The former organizes the consensual universe encompassing everyday knowledge, such as practices, identities, people’s beliefs, experiences and perspectives on a
phenomenon or experience. The latter systematizes reified knowledge, represented by the scientific knowledge, in our situation of interest, competences originated in the orientations, documents and public policies for higher education. Certainly, these two universes interpenetrate themselves and produce social representations.

SOCIAL REPRESENTATIONS: THEORETICAL, METHODOLOGICAL AND PRACTICAL CONTRIBUTIONS

We used the Social Representation Theory to support our analyses and discussions. This approach, from the perspective of Jodelet (2001), makes it possible to understand, infer and rescue the trajectory of knowledge production and socially produced understandings, that change due to positions, practices, and discourses revealed by conditions of production and symbolic diversity. Moscovici (2012) inaugurated this theory with the seed sown in the study *La psychanalyse: son image et son public* (Psychoanalysis, its image and its public), published in 1961 (Marková, 2017), retaking the way Psychoanalysis had been appropriated by the media French at that time.

Moscovici (2012, p. 39) defines social representations as “almost tangible entities; they continuously circulate, intersect and crystallize through speech, gesture, and encounters in the everyday universe”. He also points out the existence of a “symbolic substance” that permeates their constructions and the practice that is a result of this elaboration. In his perception, it is not possible to separate the outer universe from the subject or group. After all, they are not completely heterogeneous. In his study on Psychoanalysis, this researcher has found different relations between psychoanalysis, sexuality, divan, dreams, history and life narratives, etc. in the analysed discourses. The author expands the conception of representation, revealing that it is not just an unfolding, a mere repetition or reproduction, although it evokes a reconstitution, a retouching, a modification producing specific meanings in its context.

Jodelet (2001) asserts that social representation can be conceptualized as practical knowledge that presupposes an interrelation between a subject and an object. The following questions may elucidate important elements about this knowledge: Who does know? Where does this knowledge come from? – indicating the study of production and circulation; What and how does one know? – elucidating processes and states; and finally, *What does one know about?* and *What is the effect of this knowledge?* For this author, social representations are translated as complex phenomena, which are originated from social life, encompassing informative, cognitive, ideological, and normative elements, as well as beliefs, values, attitudes, opinions, images, etc. They are characterized by always being organized as knowledge, as an explanation of a given reality.

According to Moscovici (2003, 2012), social representations let the unfamiliar to become familiar, through two main processes: objectification and anchoring. In anchoring, it predominates classification, categorization, and attribution of judgment value in an existing system of thought, which is associated with the repertoire, beliefs, and values of a given group. On the other hand, in objectification, it happens the concretization, through an image or a figurative representation. Then emerges concreteness characteristic of a concept, a conception. Thus, an idea becomes an image, a simulacrum of meanings (Trindade, Santos & Almeida, 2011). It could be said that it is like a coin, the two sides coexist and yet complement each other and, just as the figure-fund relationship, one is meaningless without the other (Moscovici, 2012). For example, competence could be objectified as a catalyst for skills, experiences, knowledge, and instruments used to deal with problems, phenomena, and demands of the immediate context, which seems to be anchored in the conception of continuous learning.

Social Representation Theory, due to its contributions, is consolidated in academic environments in which the interrelationship between symbolic dimensions has stood out in the country. Especially, symbolic dimensions that are based on sociocultural meanings and supported by the search for select research methods, which contributes significantly to the expansion of the field, and, mainly, enhances *praxis* as an element of educational transformation.
In an analysis of the research scenario on social representations in Brazil, Santos has found that investigations are focused on the dimension that explains the ‘psychosocial logic’, which is visualized in professional practices. Silva, Assis, and Barros (2013) reinforce this statement and asserts that STR demonstrates its effective contribution in studies that use applied linguistics, highlighting the labour practices that reveal the teaching-learning processes.

In this sense, in their investigation, Silva, Dias, and Pimenta (2014) point out that social representations of teacher education reveal a nucleus regarding the pedagogical, academic and professional dynamics. Melo and Oliveira (2017) reinforce this condition in their study on social representations, when they highlight the pair teaching and practice, but also teach and learn, as well as theory and practice in the testimonials of the undergraduates. They also indicate school memories and experience as components that structure both practical actions and common-sense discourses.

These conditions become visible in the study on teaching social representations of teaching that was conducted by Sales (2012) with groups of undergraduate students. In this study, he identified words that compose the Central Nucleus (CN), such as 'competence and knowledge'. The research reveals that these words are associated with the professional dimension, as well as 'learning, respect, and ethics', highlighting its peculiar social nature. Besides these, they add 'commitment, dedication, and responsibility', which are related to personal and affective dimensions, as well as to personal and socio-professional investments. Conclusions allude to the multifaceted condition of the teaching profession that is permeated by teaching, learning, human and professional development situations, as well as by the project of humanized and citizen education.

This research revitalizes the contributions and discussions of SRT in the educational field. The objective is to characterize social representations of the academic competence development in higher education in the discourse of professors working at bachelor, education, and technologist courses. We also aimed to characterize the reflection of these social representations on their pedagogical practices.

This research was approved by the Ethics and Research Committee under the rules established by the National Health Council (Resolution 466/12, Ministry of Health) regarding research involving human subjects. All participants have given their consent through the Informed Consent Form, after knowing the objectives and what should be their involvement in the research stages. They were also aware of their rights to interrupt their participation and leaving the research.

METHOD

Research on social representations has innumerable combinations and selected research instruments, like traditional questionnaires, scales, and interviews (Sá, 2002; Oliveira, 2005; Camargo, 2005; Manetta, Urdapilleta & Salès-Wuillemin, 2009; Santos, 2013). This is descriptive and exploratory research combines quantitative and qualitative data, because we understand this as a productive intersection for phenomenon analyses, as emphasized by Oliveira (2005) and Santos. Data were collected using a semi-structured interview conducted with professors.

PARTICIPANTS

Initially, questionnaires were applied using the Free Word Association Technique (TALP abbreviation in Portuguese) to 154 teachers from three private higher education institutions in the Federal District: Apogeu College, Juscelino Kubitschek (JK) College, and Centro Universitário Euro-Americano (Euro-American University Centre - Unieuro). All the professors have agreed to participate in the investigation. After analysing the results, 12 teachers from the same college (Unieuro) were interviewed, because they were immediately available. The interviews were conducted individually, in a private room of the institution – this has ensured confidentiality about the information provided. Four teachers work...
at licentiate graduation courses in the educational area; four at the Baccalaureate; and four at technologist courses. This has assured that each group composition corresponds to the areas of the courses in which they work. We highlight that only the results of the interviews are discussed here.

Box 1 shows the profiles of the interviewed professors. There are five female and seven male professors. Their teaching experience varies from 03 to 24 years, an average of 13.67 years. Among the twelve respondents, four have experience both in basic and higher education, and eight only have experience in higher education.

**Box 1. Interviewed teacher's profile by area**

<table>
<thead>
<tr>
<th>Area</th>
<th>Sex</th>
<th>Teaching Experience</th>
<th>Regular School Experience</th>
<th>Higher Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baccalaureate</td>
<td>Male</td>
<td>8 years</td>
<td>No</td>
<td>International Relation</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>15 years</td>
<td>No</td>
<td>Language and Literature Studies, Accounting and Environmental Engineering</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>10 years</td>
<td>No</td>
<td>Computer Sciences</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>15 years</td>
<td>No</td>
<td>Physical Education - Bachelor</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>15 years</td>
<td>Yes</td>
<td>Business Management</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>24 years</td>
<td>Yes</td>
<td>Language and Literature Studies: Portuguese/English</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>10 years</td>
<td>No</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Licentiate</td>
<td>Female</td>
<td>15 years</td>
<td>No</td>
<td>Political Science, focusing on Human Rights, Citizenship and Violence (n = 2); Educational Sciences (n = 1)</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>22 years</td>
<td>Yes</td>
<td>Mathematics, Pedagogy, Business Management, Gastronomy, Food Engineering</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>22 years</td>
<td>Yes</td>
<td>Geography</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>3 years</td>
<td>No</td>
<td>Psychology</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>15 years</td>
<td>Yes</td>
<td>Business Management</td>
</tr>
<tr>
<td>Technologist</td>
<td>Male</td>
<td>22 years</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

Source: Research data.

Two of them are graduated in the educational area (Language e Literature: Portuguese and English; and Mathematics and Pedagogy. The others are graduated in baccalaureate. There is Ph.D. in Health Sciences, three specialists and eight masters, with the following backgrounds: Political Science, focusing on Human Rights, Citizenship and Violence (n = 2); Educational Sciences (n = 1); Education (n = 1); Motricity Science (n = 1); Master in Environmental Planning and Management (n = 1); Professional Master in Knowledge and Information Technology Management.

**INSTRUMENTS**

We used a semi-structured interview that was recorded. The interview was composed by the following issues: (a) presentation of the Free Word Association Test central core, while we have requested the professor’s position regarding data (at this moment they could add or remove words or terms); (b) definition of academic skills; (c) strategies used to develop skills in the classroom; (d) description of this strategies performance; (e) examples of experiences using these strategies.

Regarding the presentation of the Free Word Association Test central core results, we asked each professor to analyse four quadrants (cognitive, operational or functional, evaluative, and affective-behavioural aspects) and the words in each one. After this reading, the professor could remove or add words that he evaluated as important for defining the ‘development of academic competences in higher education’.

Below, it is a central zone structure of a Free Word Association Test that was presented to professors.

---

5 In Brazil, the Master is in Education. However, outside the country, it is usually used the denomination Educational Sciences.
Box 2. Results form Free Word Association Test main aspects

<table>
<thead>
<tr>
<th>Cognitive Aspects</th>
<th>Operational or Functional Aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>- reflection</td>
<td>- practices</td>
</tr>
<tr>
<td>- study</td>
<td>- organization</td>
</tr>
<tr>
<td>- criticality</td>
<td>- methodology</td>
</tr>
<tr>
<td>- research</td>
<td>- communication</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Valuation aspects</th>
<th>Behavioural-affective Aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>- fundamental</td>
<td>- motivation</td>
</tr>
<tr>
<td>- important</td>
<td>- innovation</td>
</tr>
<tr>
<td></td>
<td>- attitudes</td>
</tr>
</tbody>
</table>

Source: Research data.

DATA ANALYSIS PROCEDURE

All interviews were recorded on an LG mobile phone (Model K10). The interviews were conducted individually in an isolated room, length ranging from 20 to 30 minutes. Each one was completely transcribed. Then, the text was adjusted to be analysed by the IRaMuTeQ software – *Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires*. This software was initially developed by Pierre Ratinaud in French and then updated to Portuguese (Carmargo & cols., 2014; Mendes & cols., 2016).

This is free and open-source software, that is used for statistical work with textual corpora. It is also used to analyse tables of individuals or/and words. For the present investigation, we have used the 0.7 apha2 version (Kami & cols., 2016; Sarrica & cols., 2016). The organized material provided three analysis perspectives: the content of social representations and the professors’ attitude regarding the object of analysis and the professional habitat and practices.

CONTENT OF SOCIAL REPRESENTATIONS

From the analysis of the interviews, the IRaMuTeQ software (Sarrica et al., 2016) has generated the descending hierarchical classification dendrogram (HCD). According to Mendes et al (2016), reading a dendrogram should follow this logic: from left to right, observing the generated classes from the main ones to the subclasses. Moreover, according to these researchers, there is an analysis possibility that considers the participants’ point of view through the words they use, considering their attitudes and professional habitat.
In this sense, the corpus composed by the transcribed interviews was divided into two groups, with one subdivision (Figure 1). The first one, Class 3, corresponds to 20.5% of the texts. On the other hand, together, Class 2 (36.5%) and Class 1 (43%) represent 79.5% of the corpus. It is worth noticing that their contents are closer than those of Class 3.

In Class 3, the perspective of competence development is linked to the 'focus on task accomplishment'. This can be associated with the four pillars of Education (Delors’ et al., 2010), among which there is the learning to do, in which the focus is practice, the capacity to carry out the activity aimed at the world of work. Thus, teachers emphasize the importance of procedures and stages students must follow to perform well their activities, which represent the demand of practical activity, such as making a spreadsheet of an institution.

... we try to put these specific principles and align the practice and theory issue because they can't be apart… (Professor, technologist, 22 years of experience)

Thus, to guide the performance of a proposed activity, the professor needs to scrutinize its stages, propose arrangements and, at the same time, supervise its analysis in a specific situation. It can be inferred that the focus is the task accomplishment and the skills inherent to it. So, professors must invest and foster them in his/her students, guided by the teaching or class plan.

... what to do and when, what to generate and such, which ends up being too much, it is [...] an organization of a teaching plan. (Professor, Baccalaureate, 10 years of experience)

So, the planning must be structured, grounded and substantiated in selected strategies for its achievement, because it is important to organize learning situations that lead to a successful activity accomplishment. Simultaneously, the professor identifies the competences, skills, and attitudes inherent to the proposed activities that are explained in the planning. So, although the focus in this approach is on tasks accomplishment, we can observe that students’ success is an essential condition for teacher planning. Therefore, professors organize tasks and describe their development based on the reality of the student future professional life.

... the things we are going to do that day, I start reviewing the previous class, every day, and correcting the research activity, and I always, I always, I have the practice, also continuously, every class, I choose two students to bring a story on the subject on the next class. (Professor, Technologist, 22 years of experience)
Practices evidenced in the discourse of this group of professors are like those proposed by Ruas (2005, as mentioned by Silva, Silva & Souza, 2013), that articulate the set of interchangeable human capacities, such as knowledge (information), skills (know-how) and attitudes (being).

Class 2, which holds 36.5% of the corpus, highlights the 'formative role of the educator'. So, the teacher-student relationship is one of the principles that guide this class through a humanized and citizen process. So, from the speeches emerge meanings representing professional values, ethics (teaching ethics) as human action and the difficulties faced during the educational process of the students and the teaching activity itself. All of them mobilize concerns and, in turn, generate interventions in the learning process.

You know how to mobilize all your knowledge when that intervention is needed, you will solve something, so it is not separating knowledge from practice. (Professor, Licentiate, 15 years of experience)

In this sense, vocational training is understood in its complex, interdisciplinary and multifaceted set, which involves preparing for the academic, professional, personal and collective worlds. Individual-society interplay, feelings, perceptions, and preparation to face the diversity and multiplicity of the social universe are notions that transverse the teaching discourse.

... even if the reality sometimes shows something discrepant, but they see a point, there, sometimes, it comes a new category of analysis ... (Professor, Licentiate, 15 years of experience)

Another highlight, in this class, illustrates the professors' concern with the learning process of the student, especially regarding the theoretical-practical articulation that must organize contents in consonance to the demands of professional practice. The reflexive and critical capacity of the professor is the basis for triggering the proposed activities, because let him/her rethink his/her practice and influence on the student's learning process. This way, professors can perceive the teacher-student relationship in a two-way perspective.

... they go to the field based on what we've read, researched. They go to the field to get this information, to create their lesson plan. They again explain their lesson plan to the groups and on the sequence. (Professor, Baccalaureate, 22 years of experience)

It is interesting to note that the attitudes identified above are similar to those characterized by Perrenoud (2000) because they evidence the knowledge of the course’s curriculum, learning, and teaching conceptions and transversal and specific contents of the disciplines. So, in the educational process, they ally the conditions of systematizing conceptions, problematizing, planning interventions, and selecting teaching and learning strategies to the recognition of factors such as affectivity, motor skills, and world experience.

Class 1 corresponds to 43% of the corpus and focuses on ‘practices aimed at student development’. In general, the concern is to implement pedagogical activities that enable students to trigger their knowledge and understandings. Here, the focus of the teaching activity is the student, who is the centre of the teaching-learning process.

... I am talking about the student, it is, in terms, about results for him to apply the knowledge he has acquired during his training (Professor, Baccalaureate, 8 years of experience)

The hypothesis is that teachers coordinate their educational practices to elaborate activities aimed at knowledge application, especially those that mobilize knowledge, experiences, and contents, and articulate them with the needs and characteristics of the profession.
... in this reorganization, that I have done in the Structuring Professoriate Group, we plotted just that, we must generate cascading classroom skills, as full knowledge. (Professor, Baccalaureate, 15 years of experience)

Interestingly, in actions aimed at student learning, the professor turns himself to the activity or task that provides and catalyses competences, resources, skills, and experience to help students to learn and solve problems or the proposed pedagogical situations. In general, professors mention moments when their concern focuses on the student’s action on content, especially on the activities and knowledge promoted by the task and its pedagogical organization. In these circumstances, emerge new resolutions and creative ways to solve everyday problems and to unforeseen situations concerning the profession.

... I organize groups and give an activity: “Let's research on the subject” […]. It is a new theme, of course, within the contents of the discipline, just as an example. (Professor, Baccalaureate, 8 years of experience).

Thus, these professors perceive competence as a catalyst and mobilizer of knowledge, especially regarding functions that are relevant for reasoning, knowledge, memory, relational skills or behavioural schemes. They see it as a product of a dynamic process that is continuously updated and can be used in new academic or work situations, revealing its innovative and creative aspect.

Despite differentiations on professional’s attitudes, the three classes organized from the analyses of the interviews focus on learning. From their discourse has emerged the following dynamics: competences mobilized to perform the task (focus on the task); educative formative role (focus on the teacher-student relationship); and practices aimed to student development (focus on the student). All of these converge to the process of academic-professional development, in this case, based on the professors’ practices.

In short, the attitudes pointed out by the professors involve a differentiated range of pedagogical practices and actions that, as stated by Trian, Magalhães Júnior & Novikoff (2017), are built by socio-professional, disciplinary, teacher training, gnosiological, socio-relational values, and typical identities of their context of action. So, we are based Le Boterf’s (2002) contributions to understand practices and postures of professionals, when he argues that competence is not restricted to the operative domain, but involves a social construction that encompasses idiosyncratic beliefs, values, judgments and meanings of a group.

**DIFFERENT POSITIONS OF THE GROUPS**

Another way to explore information from interviews, as stated by Mendes et al (2016), refers to the use of Correspondence Factor Analysis (CFA). The generated factorial plane identifies the oppositions resulting from the HCD, organized in quadrants. Each quadrant reveals specific semantic contexts, composed of the classes. The semantic roots of the words that cover the class are visible, and it is also possible to visually characterize their attributes.

Moreover, there is a possibility to characterize the interface, proximity, and distance between the classes, taking advantage of the contribution of Kalampalikis (2003), who emphasizes that 'lexical worlds' can only be understood through the relationships that are established with other ‘worlds’, configuring situations of contrasts or complementarities that CFA provides.
Figure 2 presents the Correspondence Factor Analysis (CFA), reproducing the distribution of the three classes previously discussed on the topic about the dendrogram results (HCD, see Figure 1). It shows Class 3, already identified as 'focus on the task accomplishment', emphasizing the words: aspect, training, motivation, organization and cognitive; Class 2, 'educator's training role', highlighting need, intervention, professional, situation and education; and Class 1, 'student development practices', emphasizing group, content, achievement, work, and reaching.

In Figure 2, we can observe that the classes are independent and do not mix themselves in the quadrants. Specifically, Class 1 (student development practices) is characterized mainly in one quadrant. We can infer that textual data are restricted to their quadrants, demonstrating attitudes and discourses that are distinct from the ones found in the two other groups - this when we explore the issue of academic competence development in higher education. Due to this differentiation, marked by the CFA, it is essential to identify the professors' locus of practice, in our case, the analysed discourse is typical to professors who work in Baccalaureate graduations. Thus, the professors focus the learning process on competence to act in the area. They configure content and articulate what is necessary for student's development in the discipline, as well as the profession demands that become major axes of pedagogical action.

In Class 2, (educator's formative role), emerges the discourses focused on the professor role (individual and collective dimension). It shows the professor influence on the student’s education: ethical...
and aesthetic aspects; content and knowledge; and concerns about the structural conditions to overcome the difficulties in the process. So, both didactic and psycho-pedagogical strategies are fundamental. Words such as “reflection”, “training” and “development” are visible in this quadrant and reveal the concern with the development of essential competencies to be a teacher. It can be inferred that reflection becomes a fundamental aspect, as the pedagogical practice needs to revisit the content and to be related to the changing world in the complexity of the teaching and learning process.

Class 3 (focus on task accomplishment) envisions the tasks operationalization, depending on the orientations and structure of the activity planned by the teacher. It can be observed that there is an intersection between the task aimed to a domain or facing a goal with the concern for understanding the work process, in which the dynamics of practice is the exponential factor. The pedagogical actions and the way they work with the contents and knowledge can be a product of their teaching activity in the area of technologist.

Considering the professors’ positions, reiterated by the statements permeating the teaching perspectives, we evidence apparent distinctions between classes. Different knowledge and anchorages are sometimes limited to one class, but in others, they merge themselves. This happens in Class 3, in which the discourse of professors, who work in the technologist graduations, is predominantly based on a concern with a pedagogical practice aimed at the job market, that is, directed to the domain of the labour activity. Pedagogical activities and situations are characterized by applied demands, such as making a spreadsheet or proposing an intervention or an adjustment in an accounting firm, actions that would be expected of a professional in that area.

In Class 2, surrounded by pedagogical actions based on the professors’ formative perspective, the educational project is centred on the teacher-student relationship for the development of competences. In Class 1, the theoretical-practical articulation is based on the student’s academic-professional development. However, an integrated rather than a simplistic reading of the quadrants should be taken, since the grouping of classes at opposite poles cannot be interpreted solely as a result of contrasting relations, once there is an interrelationship between them, revealing alterity, contradiction, and complementarity (Kampalikis, 2003; Nascimento & Menandro, 2006). This can be seen in Figure 3.

Figure 3 characterizes the axes generated in the interviews and their respective classes. In the scheme proposed above, the X-axis in the first quadrant (Class 2), it is highlighted the issue of training...
In the second (Class 1, teachers who work in the baccalaureate), the focus is the training aimed at the student, who is positioned as the centre of the learning process. These two classes are linked by words and practices adopted by their professors.

Class 2 (teachers who work in the licentiate graduation courses) focus on the issue of teacher education interfering in the relationship with the student, and, in turn, influencing the proposed pedagogical activities. Above all, crossed by the notion that the teacher's attitude contributes to the student's professional identity, both professional and personal. However, the two-way perspective adopted by professors reveals their conception about what happens in the relationship that also affects their conduct, attitudes and pedagogical practices. Thus, the way the student behaves, learns and demonstrates his/her skills and abilities interfere in the professor's role and educational posture.

In the Y-axis, the differential is a result of the practical function (Class 3, professors who work in the technologist graduation courses), that is the centre of the activity. However, it also focuses on the academic-professional training, in the opposite pole. It is a systematized mediation aiming the mastery of the skills to improvement and creativity at work. Therefore, it addresses the task and its successful execution. It is an instrumental perspective, but that cannot be interpreted only as a mechanical aspect, but, singularly, as a tool for work and successful employment.

Amara (2016), regarding the teacher's role in the pedagogical practice, enriches the discussion postulating that teachers are the helmsmen of the educational process. In doing so, he recognizes the social practice as one of the drivers of methodologies, didactics, and content, and not otherwise. Therefore, the theoretical-practical articulation is a dimension that permeates the discourse of all the researched professors, when they analyse their role in the development of critical knowledge, based and incorporated in the academic-professional context.

This becomes evident when the teacher reports that “… he guides students to develop a research project, choosing an institution or organization when he can apply the knowledge and content of the discipline, and thus undertake an intervention project” (Professor, baccalaureate graduation course, 15 years of experience). The student should structure the activity in a concrete situation and propose mediation strategies, changes, and improvement for the researched organization. We can notice the professor’s concern in centralizing his/her pedagogical action in the activity practice and execution, so his/her action is linked to the world of work and the capacities demanded by the market.

It is important to analyse that, although the nucleus differs at first, it is directed towards the same construction: the student’s education. This brings specificities regarding the academic-professional aspect and provides an understanding of the role of social representations ‘lenses’ that permeate the teaching universe. So it is important to rescue diversity as a source of teacher education in their undergraduate areas, as well as the practices linked to the courses in which they operate, which are recorded by the pedagogical situations that are part of the universe of work, providing clues to ‘preparation for action’ (Moscovici, 2012). Finally, professors are articulated and aware of the demands of the courses in which they are teaching. They know the guidelines and legislations, as well as about the expectations of the graduated professional.

PROFESSIONAL HABITAT

To characterize the profile of the interviewed professors, we have included some variables: graduation (locus of professional activity), gender (male and female), teaching experience (length) and experience in basic education (yes or no), promoting interactions among the three identified classes. Mainly, we aimed to understand the interrelationships between the classes, as well as the interdependence in their grouping constitution.
Box 3. Interactions between classes, profile and professional habitat

<table>
<thead>
<tr>
<th>Graduation</th>
<th>Class 1</th>
<th>Class 2</th>
<th>Class 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baccalaureate</td>
<td>Positive</td>
<td>Negative</td>
<td>Neutral</td>
</tr>
<tr>
<td>Licentiate</td>
<td>Neutral</td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>Technologist</td>
<td>Neutral</td>
<td>Neutral</td>
<td>Neutral</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Class 1</th>
<th>Class 2</th>
<th>Class 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Neutral</td>
<td>Neutral</td>
<td>Neutral</td>
</tr>
<tr>
<td>Female</td>
<td>Neutral</td>
<td>Neutral</td>
<td>Neutral</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Experience in Higher Education</th>
<th>Class 1</th>
<th>Class 2</th>
<th>Class 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 years or less</td>
<td>Negative</td>
<td>Negative</td>
<td>Positive</td>
</tr>
<tr>
<td>From 5.1 to 10 years</td>
<td>Positive</td>
<td>Negative</td>
<td>Positive</td>
</tr>
<tr>
<td>From 10.1 to 15 years</td>
<td>Neutral</td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>More than 15.1 years</td>
<td>Neutral</td>
<td>Positive</td>
<td>Negative</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Experience in High School</th>
<th>Class 1</th>
<th>Class 2</th>
<th>Class 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Positive</td>
<td>Negative</td>
<td>Positive</td>
</tr>
<tr>
<td>Yes</td>
<td>Negative</td>
<td>Positive</td>
<td>Negative</td>
</tr>
</tbody>
</table>

Source: Research Data.
Neutral. There is no significant influence on class construction.
Positive. Great significant contribution to the construction of the class.
Negative. Minor significant contribution to class construction.
Significant $\text{Qui}^2 p < 0.05$

Combinations between variables and classes ask a differentiated reading to understand the emergency of conditions and peculiarities of the investigated groups (Chart 3). Regarding Class 1, it is evidenced experience in Baccalaureate; and experience teaching in higher education ranges from 5.1 to 10 years, without experience in High School. Class 2 includes professors who teach in Licentiate Graduation Courses. These professors have experience in higher education, ranging from 10.1 to 15 years. They also have experience in basic education, more specifically in High School. This characterization is restricted to this group. Finally, Class 3 includes those professors who teach in Technologist Graduation Courses, who have 3 to 10 years of experience in Higher Education, but no experience in other levels of education. Interestingly, the gender variable is neutral in all classes.

In summary, data reveals the existence of a profile that differentiates each class. Peculiarities regarding teaching experience, working area in higher education and experience in basic education characterize the professors’ practices and their vision of education. These specificities also indicate their teaching paradigms and ways of intervention. This ratifies representation as a contextualized system (Abric, 1994) because it allows the recovering of meanings that are closely related to the discursive or social context. Therefore, the conditions revealed by the discourses are imbricated by ideological and affective dimensions, belief and values system, and the place and role the subject occupies in the group. This promotes the understanding and characterization of the production of a representation.

The described situations let us glimpse the teaching practice is under the strong influence both from the characteristics of the course in which the professor works and the demands and expectations related to the graduated professional, allied time of experience, and in this case, experience in basic education. These idiosyncrasies are elements that provide understandings on professor’s profile, professional habitat and ways of intervention in the pedagogical scope. And, as Kampalikis (2003) points...
out, the discourses construct the lexical universes that represent behaviours and, in the present case, educational positions. So, we recognize that conceptions interpenetrate each other in these universes, sometimes approaching, but others distancing themselves.

**DISCUSSION**

Teaching practice is multifaceted action and it can be aligned with various objects that surround the pedagogical action, among them there are the training context inside and outside the educational institution and the curriculum guidelines for courses, which build the expected profiles of the graduated professional through the contents, skills, abilities and biopsychological resources that must be developed. So, reading it with the support of the social representations and the several pedagogical actions ratified by the theory is essential.

Tardif (2007) describes the various aspects of knowledge that are interconnected in teaching: professional, disciplinary, curricular, and those based on praxis. But we can add common sense, as endorsed by social representations, linked to group practices and experiences (Walchelke & Camargo, 2007; Jodelet, 2001). For example, professors who work in technologist graduation courses may sometimes perceive the activity accomplishment as the basis of training, but in other moments, the basis is the student himself/herself. Although all the reports focus on training for the world of work and the demands of the job market in modernity, they seem to contradict each other as examples of a critical-reflexive development that is well propagated and that professors have assumed as fundamental. It is also important to emphasize that social representations coexist with contradictions, but there is a stable core, which structures the discourses and delineates the practices of the groups. In the case of the professors who have participated in our research, the academic-professional education issue goes beyond simply fitting the market, it must adopt a critical, reflective, creative dimension focused on student autonomy.

As stated in the objective of this study, the development of academic competences in higher education indicates the concern about the academic-professional education crossed by the conceptions of learning and by the perception of the student as the protagonist, including the graduated professional profile, the pedagogical mediation and the humanization of relations. Thus, it reveals the subjective aspects (affective, contextual and of experience, for example) present in the construction of representations and it generates conceptions and pedagogical actions based on teaching practice.

These processes appear in the teachers’ statements when they talk about their pedagogical proposal and the educational paradigms present in their educational daily practice, which involves contents, practices, and students. As corroborated by Leite (2016), beliefs, values, and perceptions are aspects that consolidate teaching experiences. So, professors structure the images that sediment their pedagogical options by representing the practices that emerge during their academic and professional trajectory as a result of interactions.

The analyses of the interviews provided the possibility to distinguish three groups regarding action and pedagogical organization, which represent attitudes that arise from the professional context. The professors whose profile is linked to licentiate graduation courses emphasize dimensions associated with the ‘formative role of the teacher’, based on values, teacher-student relationship, ethical aspects, and empathy. In this sense, their work as a professor added to their experience in High School provides an education for citizenship and community. This experience also establishes his/her performance in high education courses. Linked to these conditions is the very position of professors who teach licentiate graduation courses, in which the psycho-pedagogical dimensions, contents, and paradigms outline their students’ professional practice. After all, these professionals to be will also play the educator role, in which the critical-reflexive, ethical and aesthetic aspects, as well as their knowledge, complete themselves connected to educational values and conceptions and, therefore, a larger project of society.

Another element that anchors the practice of this group is found in interventional educational proposals made by the professors for their classes, analysing the learning conditions, the teacher-student and student-student relationships and the learning process, mainly to deal with problems faced in the teaching process, as well as favourable or difficult conditions in knowledge acquisition, both in personal and professional development. This way, education is stated as a source of humanization and creativity and assumes its fundamental role in the critical-reflexive process development.
The group whose professional performance profile relates to the baccalaureate graduation course highlights the concern in organizing the learning process in accordance to practice aspects. In this context, enhancing learning conditions and helping students to acquire skills, abilities, and attitudes to use in pedagogical activities becomes the object of his/her pedagogical project, that is focused on the student. Thus, it is worth emphasizing that the baccalaureate graduation course encompasses human and social education based on paradigms and principles aimed at the students training for professional performance, that is one of the objectives.

These movements come closer and let us visualize the four essential functions of social representations, as discussed by Jodelet (2001), Moscovici (2012) and Sá (2002): knowing, that is explanatory of a given reality; identity, that singularizes groups and their position in relation to others; advisor, assuming a prescriptive profile of behaviour and practices; and justifying, adopting positions and choices. Sá (1998), then, emphasizes that it is essential to characterize the subject or even the social group that is positioned in front of the object when one is researching themes interconnected with representations.

Both Classes 1 (baccalaureate) and 2 (licentiate) share the same grouping in the dendrogram because they dialogue. If there is an educative practice that puts the teacher-student relationship is the centre of the pedagogical unit, on the other hand, the student remains a potential to be worked on, as an investment. So, these groups adopt a pedagogical thought that understands the teacher a mediator of content, who fosters autonomy, knowledge self-management, as well as promotes theoretical and practical articulation.

In Class 3, constituted by professors working in technologist courses, due to a two-years-training period, the practices focus on the competencies, skills, and attitudes that are essential to perform the tasks, such as projects, case study, and research aimed at problem-solving. In short, successfully doing, performing and accomplishing the task is its focus. Criticality and ability to intervene and transform reality underly the pedagogical perspective of these professors. It is a differentiated approach, organized following the course guidelines and the job market expectation, as well as by the pedagogic proposal itself and the demands related to the graduated professional.

At first, one can think of the conception of competence development in higher education as an isolated factor; however, through a systemic analysis, it is possible to understand these discourses as a kaleidoscope, which reflect different combinations, encompassing movements involving academic-professional education and the student, fed by the teachers’ practices as a core element in the pedagogical processes. This emerging condition makes it possible to understand the ‘worldview’ of professionals, based on the social representation theory, indicating the social nature, the discourses, and identities that produce this vision and their implications on educational practices. This also points out the transformations on these educational practices, which generate new knowledge (Moscovici, 2003, 2012, Jodelet, 2011), integrated with educational paradigms and didactic-pedagogical actions.

THINKING ABOUT THE STUDY: CONTRIBUTIONS, CHALLENGES, AND PROPOSITIONS

It is essential to recap that the TRS gives bases to analyse, understand and provoke changes in social conceptions, perceptions, and practices, especially in a globalized world that faces continuous technological changes but still consider diversity as an instrument of educational and social inclusion and contradiction as a particular element of the human condition. So, this approach considers the complexity that is pertinent to groups and the educational field.

As pointed out by Lheureux, Lo Monaco and Guimelli (2011), when people from various groups represent an object and position themselves, they also reveal their beliefs, values, perspectives, and behaviours, which they share verbally and through their practices. In doing this, they identify the group they belong to. So, the researchers retake social representations as possibilities to predict group situations when facing an object. They also use them as guides for action, because they can define a priori the practices that best correspond to a situation.
These conditions underlie the concept of competence, translated into the pedagogical actions of professors teaching in licentiate, baccalaureate and technologist graduation courses. In short, a concept focused on the activity, on the potential of the student and the teacher-student interaction, aiming at academic-professional education. These are evidence found in the way the professors dynamize their academic activities, propose and select their methodologies, in the theoretical-practical articulation and in the conception that they share about their teaching in the course in which they work.

Jodelet (2011), based on the work of the Toulouse Group, stresses the dynamic present in vocational training and qualifies three types of social representations: (1) those shared socially, identified as ‘mental resources’, when one chooses education; (2) socio-professional representations that are structured in the course of the educational process; and (3) professional representations that are grounded and solidified in immediate and daily work activity. Interestingly, it is possible to project the professional career and mainly identify its references on the discourses and professional attitudes reported by the professors. This as their conceptions of competences in higher education arises from curriculum guidelines and their teaching experience that alter and colour everyday pedagogical activity.

The author (2011) also states that social representation reveals how the subject conceives, perceives and fits into the world. Moreover, they are models of action, which are allied to positioning and behavioural communicational processes. In doing so, his study contributes significantly to educational spaces because pedagogical action is intertwined with interpretative, contextual, and common-sense conditions, which are particular and relevant to the educational situation.

Regarding the contribution of studies on social representations in education, Sales and Machado (2016) conclude that it is urgent to invest in the continuing education of teachers because it contains the pedagogical knowledge and skills that are essential to teaching. Moreover, he states that these conditions cannot be just the responsibility of the teachers, because it needs to be an institutional investment and policy, ensuring the inseparability between teaching, research, and extension. Regarding research, it is essential to engage combined resources for analysis to reveal the peculiarities of the professional teaching activity and its influences on students, based on solid theoretical and methodological references.

In the present study, we identified that professors’ performance is based on the demands and pedagogical actions inherent to each course, especially regarding the professional habitat and the training aimed at the student. In baccalaureate graduation courses, we noticed a tendency to practices related to student development, coordinating and ensuring contents, activities, and experiences that foster aspects aimed to the profession. This was evidenced in the use of words such as group, content, achievement, and work in the professors’ interviews. The practices of teachers working in licentiate graduations are closely linked to the educative role of the educator, that is, the future educator who is not restricted to content, but encompasses ethical and aesthetic issues as well as interventions that let him/her deal with the complexity of the educational phenomenon. This was emphasized by words such as intervention, professional, situation, and education. Regarding the practice of the professors working in technologist courses, it is necessary to repeat that this is a two-year course and that the described pedagogical actions are consistent with the focus on tasks accomplishment. This is a mirror of praxis as an important element for the professional to be, which is represented in choices related to training, motivation, organization, and reasoning. These situations illustrate the peculiarity, the expected conditions for professional performance and the selection of pedagogical situations that are interrelated to the course in which the teacher works.

In summary, data reveal the targeting of the teaching activities, which focus on the academic-professional competences based on what is expected of the future professional in a specific field. The competence domains are not understood as isolated but related to social and work contexts. So, the tools are stimulated and developed to promote the necessary independence and knowledge for professional development. Thus, pedagogical actions are based on the demands of performance and qualification of each professional group, which are different, but also present spots of interconnection regarding the concern aimed at the academic-professional education quality.

The contribution of the SRT to the study in the educational area is invaluable. Particularly, when one associate the plots implied in the common-sense conceptions, from the reified universe, professional life histories and even from the experiences originating from the immediate professional
context. All this, considering the incorporation of the paradigms, concepts, and practices assumed by the professors and their meanings in the teaching-learning process as aspects that make it possible to understand the positioning, the choices, the resistances, as well as the conflicts, the transformations and the digressions present on a specific issue. This can be elucidated through approaches and didactic-methodological reference of social representations research.

REFERENCES


Submit: 06/11/2018
Approved: 18/05/2020