

Educative processes and the formation of individuals today

It is a current topic in the discussions about the social role of the university the comments regarding its formative nature, intended for the production of science and the culture on behalf of Society, as a response to the principles that are historically the fundamentals of its apparition; and, in contrast, the university's organizational aspects, positioned – thanks to the institutional model developed since the second half of the 20th century, when neoliberal policies were intensified – for the production of applied knowledge that would contribute to add competitiveness to the companies in the market and for the training of skilled workforce (SANTOS, 2004; SILVA, 2006).

Between one and other matter, the practices taking place within the university and in the relations towards its social surroundings develop under tension, amidst the diversity of the forces that come into play. Along this process, in which the production of knowledge and the formative actions respond to the forces that are settled in the university, uniformization through control does not prevail, instead heterogeneity is enhanced, in movements of consonance, contradiction, denial, ambiguity etc., as result of the work carried out by the individuals in their confrontations with the social, political, and ideological forces.

The articles included in this issue clearly reveal the heterogeneity in the field of educational research in regard of how knowledge is constructed and the processes of thinking or criticism that are associated with it, both in basic schooling and in higher education. The attention to teaching processes that allow knowledge to be constructed – rather than to be transmitted – and the attention to promoting reading skills (namely, through the emphasis on critical abilities) contrast with the educational projects that determine the formation of individuals for the productive means (FREITAS, 2014).

From the first set of articles gathered in this issue, different modes of relationship emerge between the individual and knowledge to be produced, known or distributed, more specifically focused on the professor's prominence in such process. This questioning resumes the discussions about teacher education that led to see the professor as “someone who produces knowledge, constructed in a context and based on reflection and on research about the practice, in the light of a theoretical framework” (MARQUES; PIMENTA, 2015, p. 136). The article share not only the concern with the pedagogical work regarding the teaching actions but also the unease about in which ways these actions respond to existing conceptions of teaching, learning, and schooling, and to the need of reconceptualize them as a result of the conditions arising in the present time.

In this issue, in “Diálogos em *delay*: especulações em torno de uma temporalidade outra do encontro pedagógico” (Dialogues in delay: speculations around another temporality of the pedagogical encounter), by Julio Groppa Aquino, the main theme is about the possibilities that are found in the writings by Foucault to think about the pedagogical encounter. The article highlights the different characteristics that are historically ascribed to the pedagogical relations, which are similar because they are fundamented on the principle that pedagogy is done by the transmission of knowledge from the one who possesses it to the one who (still) lacks it. What underlies this conception is the idea of continuity, progress, update and accumulation, to which the article opposes the impossibility of making the past present with the purpose of getting to (ac)know(ledge) it. Hence the proposal of a pedagogical proposal supported by the problematization, the professor’s cognitive restlessness towards those who he or she addresses to. The outcome of this encounter is not the obedience to the truths to be known, but the other one is urged to question, to query what is consensual or taken for granted. Foucault did not write about the pedagogical encounter, which is the subject of the article, but sure enough he performed it in his position as a professor.

With the same intent of questioning the limits imposed by restrictive conceptions of teaching, Lisete Bampi and Gabriel Dummer Camargo, in the article “Didática do meio: o aprender e o exemplo” (Didactics of the *middle*: learning and the example), start by realizing how exhausted the processes of turning methodologies more didactic for teaching and learning as a result of the control over school times and spaces with the objectives of maximum efficiency and effectiveness. The authors note the consequences coming from the will of didactic objectivity which has historically oriented teaching in the quest for full clarity and accuracy, totalizing explanations, comprehensive planning of all the actions to be carried out and its expected results. As an option, it intends to make the new emerge from the very exhaustion, from the very lack of possibilities the professor finds him/herself imprisoned by the cages of the didactics oriented towards certain goals. The exhaustion would lead the individuals to look for what is not given to see clearly, to the search for what is found in the depths, to the imagination that becomes possible with the resources of art. What is taught in a conventional manner, in its surface, could then be re-created in works seeking to translate the signs to other meanings, in pursuing the unpredictable.

Marcela Gaete Vergara and Johanna Camacho González, in “Vivencias de practicantes de pedagogías en ciencias: prácticas de conocimiento científico y pedagógico” (Life experiences of pre-service teachers undertaking a bachelor of sciences and education program), also point to the limitations arising from the attachment to the traditional teaching approaches. Such researchers have investigated, in the Chilean context, the ways science teachers under basic training take a stand in the disciplines of teaching practice regarding the demands of how a teacher must act in relation to the classroom experiences as a teacher and the modes of education they have been offered throughout their academic routes. The authors analyze the types of organization of the courses intended for science teacher training in

Chile in regard of the different associations in the curriculum between discipline of scientific contents and the pedagogical ones. In relation to each type of curriculum structure, they emphasize how the interns participating in the research consider their feelings towards the demands of working as a teacher. The results show tendencies to develop distress or tendency to adapt due to the expectations of fulfilling the task of transmitting the scientific contents in a teaching model that is characterized by traditionalism, that is, in which the very doing of science is not taken in a reflexive manner nor the effect of the social, environmental and cultural conditions are questioned for the teaching and learning of science.

Questioning the conditions in which a teacher's work and education develop is also the subject of "*Arrastão ou lagarteador? Dinâmicas em torno da prática docente na Fundação CASA*" (Dragnet or crawling? Dynamics of teaching at Fundação CASA), by Mauricio Bacic Olic, now in the educative context of the institutions of social control. The author broaches the different positions a teacher can take in the dynamics of relations occurring among the individuals that are part of the functioning of these institutions. Consequences are always tense, contradictory, resulting from one or other way the teacher interacts with his/her students and the staff in charge of organizing the activities. Drawing near or taking a distance from the teenagers is a decision that may imply in effects that cannot be predicted as positive or negative, as they respond to intricate plays of forces, in which the teacher may become submissive to the will of the students who control part of the institutional order, and therefore he or she contributes to weaken the institution; or to be in a situation of confronting such will, which tightens the teacher-student relationship and upsets the educative potential of the schooling process. A way to respond to such complex context, where the standpoints are defined in power relations that need to be understood in their dynamics, from within, would be the use of ethnographic practices that provide the teacher with resources of not being submissive to the normative forces from one or another group in confront in the institutional processes. It is an article that brings support to the pedagogical work developed not only in institutions of social control but in educative contexts in general.

The second set of articles taking part in this edition gathers productions intended to discuss educative practices in the context of basic schooling. They question the existing models of teaching, generally anchored in practices of one-way transmission of contents and vertical power relations; the articles then propose new options for the teaching and learning in the school context.

In "*La didáctica de la literatura: hacia la consolidación del campo*" (the teaching of literature: towards a consolidation of the field), Felipe Munita presents the progress of the teaching of literature in basic education, since its orientation by elements of historicizing nature, focusing literary periods and schools; the criticism to that approach by perspectives that were dedicated to the structural or functional analysis of the texts, in a sense, or in the reception of these texts by the reader; the most recent propositions which consider the conditions of how a literary text is produced and the reading skills that must be developed so that a literary text

can be read in an increasingly complex way. This path is observed in its early approaches and to its gradual estrangements in relation to the general didactics, towards the consolidation of a specific field of the didactics of the language, that is, the *didactics of literature*. By the end of the article, the author gathers the contributions that have been offered for the teaching in this field and then sets a comparative frame where the objectives of literary education are intertwined – the literary corpus, the spaces and didactic devices, the preferential posture of reading and the mediating activity –, considering the two programmatic axes that organize the actions proposed: the development of the communicative skill and the formation of the reading habit. Finally, disciplinary genres from the field of the didactics of literature are presented as they may contribute to the formation of readers in the school context.

Also dealing with the subject of literacy, Íris Susana Pires Pereira investigates the effects produced in pedagogical actions for the learning of the uses of writing by students in basic education, based on a governmental program implemented in Portugal with the purpose of improving the levels of literacy. In “O princípio de prática situada na aprendizagem da literacia: a perspectiva dos alunos” (The principle of situated practice in literacy learning: students’ perspectives), the researcher, who coordinated the program actions in one of the areas of the country, attempted to know the reasons why a great deal of students said they were satisfied to participate in the activities conducted. A methodological procedure was carried out to collect the children’s view of the program. Data analysis showed that the positive effect in the student’s opinions had resulted, according to the author, from the playfulness in the actions that were carried out even if these elements had not been clearly planned in the program’s guidelines.

The potential resources of the uses of language as fundament of learning is also the subject of the article “Argumentação na sala de aula e seu potencial metacognitivo como caminho para um enfoque CTS no ensino de química: uma proposta analítica” (Argumentation in classroom and its metacognitive potential as a way to an STS approach to teaching chemistry: an analytical proposal). In it, Sylvia De Chiaro and Kátia Aparecida da Silva Aquino discuss possible manners of teaching science, in response to the needs that have been presented of making it more sensitive to its relations with social issues. These possibilities may be the resource of uses of language that would expand the ways usually employed to teach chemistry, supported by technical language, based on symbols and formulas that characterize the specific notations of this science. Thus, the researchers studied the effects over the metacognitive capacities of the participating students of a teaching activity conducted by means of argumentation. The analyses were grounded on concepts arising from the language studies. In high-school classes there appeared contributions resulting from participation in argumentative practices that may provide the development of self-reflexive movements in the students, as well as the perception of the relations between scientific production and social development.

The last two articles of this set of works dedicated to discuss basic education deal with the use of digital resources and their Technologies and how they affect teaching and learning.

In “O impacto sobre estudantes brasileiros de uma linguagem visual para aprender a aprender conjuntamente” (The impact of a visual language for learning to learn together on Brazilian), authors Deller James Ferreira, Kelly Ruas, Vivian Laís Barreto, Tatiane F. N. Melo, Mariana Soller Ramada and Rupert Wegerif observe, in the school context, the use of a digital tool for the planning of actions, which would enable students to set modes of organizing group activities without the need of the teacher’s watch. Resources provided by the system would contribute to define functions and distribute tasks under supervision, as this would allow the development of metacognitive capacities to regulate the cooperative work. Authors emphasize the emotional and motivational processes that take place together with collaborative activities here investigated in the relations between the research participants. The results revealed the importance of the digital tool utilized in the development of learning resources and self-regulation of the cooperative actions by the students.

In the article “Reflexiones en comunidad de práctica sobre Triángulos imposibles en clase de matemáticas” (Reflections in a community of practice on impossible triangles in mathematics classes), Luis Alexander Conde Solano, Sandra Evely Parada Rico and Jorge Enrique Fiallo Leal discuss the relations between teaching mathematics the use of technologies in a practice community of teachers in Colombia. The authors highlight the potential of developing the pedagogical work when supported upon planning, implementation and assessment of the results of their actions in the classroom. Reflections based on digital resources enable teachers to perceive the positive and negative aspects of what was proposed and carried out, as it also allows new types of interaction between the students and the objects of learning: both teachers and students have access to new materiality that draw attention to problems that were not perceived when they utilized analogical resources. Problems give rise to unforeseen events when activities are being carried out in the classroom and they require responses and revisions by the teacher and the students; such responses and revisions are the object of the discussions in the practice community, providing material to design new strategies for planning, implementing and assessing future pedagogical actions.

The articles in the third set focus on the higher-education professor, emphasizing especially didactics and the conditions that would enable the acquisition of competences and the collective construction of knowledge. Even though they are looking at the new demands, these articles try and respond critically to the old prejudice – something deep-seated in the academia – that it is enough for the professor to know well the contents of the subject to be taught, with no need to master the pedagogical knowledge and the didactic arts of teaching. As pointed by Castro (1992, p. 235), one used to believe that “also, some ‘tricks’ transmitted from the older to the new

professors would be enough to resolve their maximum problem: to maintain discipline in order to be able to teach, that is, to deliver a speech.”

André Luiz Molisani shows, in “Evolução do perfil didático-pedagógico do professor-engenheiro” (Evolution of the didactic and educational profile of the engineering professors), how such profile remained substantially unchanged throughout the history of the courses of engineering in Brazil. He says that the traditionalism of the teaching-and-learning methods employed, invariably consisting of lectures and laboratory activities are well aligned with the characteristics of the Brazilian industry, resistant to technological innovation and focused on the reproduction of manufactured products. Such didactic practices and their formative effects, while they indicate the lack of interest by professors and institutions in the didactic-pedagogical aspects of their work, they also oppose the competencies associated with technological innovation and problem-solving, acknowledged in professionals trained in countries whose higher education prioritizes the international mobility of students and professors. The author argues that, with the purpose of improving the engineering student’s professional training dedicated to promoting technological advancement – understood as a key element towards economic development –, a professor must absorb teaching-learning methods that will allow them to construct knowledge instead of simply reproducing it.

Converging to the idea that teaching is not limited to one-way transmission of contents and a professor’s education must always aim for the fundamentals of their practice, Giseli Barreto da Cruz and Priscila Andrade Magalhães present in “O ensino de didática e a atuação do professor formador na visão de licenciandos de educação artística” The Teaching of Didactics and the Teacher Trainer’s Role from the Perspective of Visual Arts Teaching Students (The teaching of didactics and the teacher trainer’s role from the perspective of visual arts teaching students), the results of a study conducted with students of Art Education, with the purpose of analyzing how learning to teach had been constructed in the disciplines of didactics. Having identified as “technicist” the curriculum structure of the college being investigated, the authors applied a questionnaire and led students in a group discussion; conclusion based on the analysis was that didactics is seen by the students and essential in teaching, even if they cannot identify the differences between the didactic disciplines and the other disciplines; that the internship is acknowledged as an indispensable step in teacher education and that the involvement and practice of the professors of the didactic disciplines are landmarks so that they reflect upon their process of professional training.

In the article “Contribuições de Georges Snyders para a pedagogia universitária” (The contributions of Georges Snyders for university pedagogy), Renata de Almeida Vieira and Maria Isabel de Almeida, seeking for better pedagogical training in formative actions on the higher teaching level, present the contributions made by the French educator to university pedagogy, highlighting his theoretical approach towards the *knowledge* that is taught and the *joy* of learning. In addition, they about the potential of such pedagogical thinking to foster contributive discussions in the field of university

pedagogy with an impact onto practices of basic and continued training of college professors. The questions asked to Snyder's pedagogy emerge from the challenges put by the massification and heterogeneity of students in today's universities, questioning the effectiveness and the meaning of its usual method of teaching, based on the transmission of knowledge and in the one-way relationship between professors and learners. Snyder's pedagogy, the authors argue, focuses on the students' participation, and the professor has to urge students to rationally analyze what the academic *knowledge* provides them with, the success they may obtain and the *joys* resulting from learning.

The development of comprehensive reading, another aspect of the training of higher-education professionals, appears in the article “¿Qué textos leen en primer año los estudiantes de psicología?” (what texts do first-year Psychology students read?), by María Micaela Villalonga Penna and Constanza Padilla. Inquiring about the organization and the characteristics of what students are given to read, the authors analyze a bibliographical collection of 320 texts, prescribed for the subjects of the first year of the Psychology degree in public university of Argentina. Utilizing descriptive statistics and content analysis, they find a widespread use of handouts consisting of summaries of classes and chapters of books which seldom contain notes to make the difference between scientific and academic texts. Concerning the discursive types, the materials are prevalingly expository, supported by the argumentative genre. The authors conclude that learning and teaching to read different categories of texts and discursive types is a challenge in order to promote the inclusion of students into the discipline communities, since the appropriation of the academic culture depends on the careful preparation of the Reading materials provided.

With similar concerns regarding the reading skills of professor-to-be, Márcia Gorette Lima da Silva, Conxita Marquez Bargalló and Begonya Oliveras Prat, examine in “Análisis de las dificultades de futuros profesores de química al leer críticamente un artículo de prensa” (Analysis of the difficulties of preservice teachers of chemistry when critically reading a press article), the difficulties faced by 18 chemistry professors while being trained in a Brazilian university to critically analyze a press article of scientific content. The article was selected because it held doubtful or superficial information about chemistry concepts and knowledge. Through the answers to a questionnaire and transcriptions of a debate conducted after the reading, the authors noted that participants, divided into freshman and senior Chemistry students, had difficulty to take a stand and analyze the information of a newspaper story with a critical view. Although difficulties to identify the main ideas of the text were not found, the authors observed that most students had a naïf view about the trustworthiness and alleged impartiality by the article's author and the reading skill varied according to the stage the student was in the course, so that seniors showed higher critical capacity even if with limited argumentation. Based on the assumption that knowing the difficulties of critically reading scientific contents is the first step to overcome them, the authors recommend that such obstacles be taken into consideration in basic training program by encouraging activities that will lead to critical thinking.

The last range of texts deals with the crucial problem of university management, governance and higher-education policies, whose impact onto teaching practices and production of knowledge are sometimes straightforward.

In “Análisis sincrónico de la gobernanza universitaria: una mirada teórica a los años sesenta y setenta” (A synchronic analysis of university governance: a theoretical view of the sixties and seventies), Francisco Ganga, Juan Quiroz and Paulo Fossatti take a review of papers dedicated to this topic, with the purpose of synchronically analyzing the concept of governance and the process of forming university governments. The authors see the study of perspectives in the field of university government as of great importance in today’s scenario, especially when considering the inexorable need to make such institutions progressively more efficient and responsive to society’s expectations. The study focuses on the 1960’s and 1970’s and touches on the roots of the concept of university governance, outlining the actors and the power relations that are established by the university governments. The authors conclude that throughout its development, the organizational complexity of the universities increased remarkably, which made it necessary to add new actors to the management systems, previously monopolized by the academic stratum. They also argue that two factors have been essential for the survival of the higher-education institutions: the legitimacy they are granted by society and their first steps in the making and implementation of strategies in the management area.

In “Indústria e universidade: a cooperação internacional e institucional e o protagonismo da mobilidade estudantil nos sistemas de inovação da Alemanha” (Industry and university: international and interinstitutional cooperation and the role of student mobility in the German innovation system), Joaquim Carlos Racy and Everton de Almeida Silva find in the German academic and scientific interchange policy the expectancy of this country to seize the technical-scientific potentials around the world on behalf of maintaining its industrial competitiveness. Through a coordinated data analysis concerning the circulation of students, the ubiquity of innovation-generating institutions and the role played by the State and the private sectors in fostering research and innovation, the authors assess the impact of such policy on competitiveness, which sheds light on the relationship between industry and university, production of knowledge and the generation of innovations. They then discuss the university’s role in producing and exchanging knowledge by highlighting the importance of international and interinstitutional cooperation for student mobility. Finally, they point out the German experience a viable model to generate innovation, to be reproduced by countries in relative economic and technological disadvantage.

Last, in the interview conducted by Teresa Cristina Rego and José Geraldo Vinci de Moraes, “Individualização e processos de construção identitária na contemporaneidade: a perspectiva de François de Singly” (Individualization and processes of identity construction today: the perspective of François de Singly), the French sociologist analyzes the individualization of family relations, seeing connections between the changes of modernity and its effects on the family. Singly thinks over the topic

of relational individualization of today's teenagers and emphasizes the issues associated with becoming an adult and the tensions between generational and inherited culture; he explores the relationship between youths and the school, the family, and the state and comments on the features that define it and the challenges that must be faced nowadays. With solid arguments, creativity and analytical consistency firmly anchored in extensive bibliographical references and persistent empirical research, the interview sets a fruitful dialogue with those who are interested in the complex processes of formation of the contemporary individual, living in hybrid context of multiple identity references.

In the whole, the articles in this edition of *Educação e Pesquisa* (education and research) expresses the mosaic of dimensions underlying the formation of the contemporary individual, namely on the level of the formative institutions and the teaching and learning processes. One observes in it the concern of the authors with the construction of knowledge, the formation of critical readers as well as setting up contexts leading to the emergence of significant practices of teaching and learning. These are aspects that converge to a relative consensus about the need to invest in developing pedagogical thinking to boost the subjects of the educative process towards emancipation.

By gathering these academic contributions, *Revista Educação e Pesquisa* expects to encourage new perspectives and debates that will foster the production and circulation of knowledge in the educational field, in dialogue with has been thought in other fields, a indispensable condition for reflexive action considering today's social complexity.

Bruno Bontempi Jr.
Emerson de Pietri

Editor of *Educação e Pesquisa*

References

- CASTRO, Amélia D. A memória do ensino de didática e prática de ensino no Brasil. **Revista da Faculdade de Educação**, São Paulo, v. 18, n. 2, p. 233-240, jul./dez. 1992.
- FREITAS, Luiz Carlos. Os reformadores empresariais da educação e a disputa pelo controle do processo pedagógico na escola. **Educação & Sociedade**, Campinas, v. 35, n. 129, p. 1085-1114, out./dez. 2014.
- MARQUES, Amanda C. T. L.; PIMENTA, Selma Garrido. É possível formar professores sem os saberes da pedagogia?: Uma reflexão sobre docência e saberes. **Revista Metalinguagens**, São Paulo, n. 3, p. 135-156, maio 2015.
- SANTOS, Boaventura de S. **A Universidade no Século XXI: para uma reforma democrática e emancipatória da universidade**. 2004. Disponível em: <<http://acervo.paulofreire.org:80/xmlui/handle/7891/3915>>. Acesso em: 27/03/2017.
- SILVA, Franklin L. Universidade: a ideia e a história. **Estudos Avançados**, São Paulo, v. 20, n. 56, p. 191-202, abr. 2006.

