

# TEXT PRODUCTION IN HIGHER EDUCATION: REDISCUSSING TEACHING-LEARNING PERSPECTIVES AND PROCEDURES

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- **ABSTRACT:** This study aims to present and discuss the results of an interpretive qualitative study of the teaching-learning procedures used in a discipline exclusively focused on reading and production of academic texts under the *Programa de Formação Interdisciplinar Superior* (Profis) of State University of Campinas (Unicamp), from 2013 to 2016. As its theoretical basis, this study uses Vygotsky's sociocultural perspective (2000, 2003) and, particularly, his concept of Zone of Proximal Development (ZPD), together with the concepts of Mastery Learning (BLOOM, 1971), recursive feedback (COPE; KALANTZIS, 2016) and Scaffolding (BRUNER; ROSS; WOOD, 1976). The results show that if text production is submitted to a formative evaluation process of prospective and constructive character, with continuous feedback to students, there may be new ways to build knowledge which, developed with the help of more experienced people or through their own peers, can transform their potential development level, the one related to the abilities and achievements to be obtained by the students, into an actual development level, which concerns the achievements they have already accomplished.
- **KEYWORDS:** Text production. Higher education. ZPD. Scaffolding. Mastery learning. Recursive feedback.

## Introduction

In the 19th century, a graphocentric culture was consolidated and promoted global access to writing, transforming it into an element of social hierarchization (CERTEAU, 1984). Writing became an essential requirement not only to different professions, but also to individuals' social and political insertion in many societies, a precondition to be ultimately defined as citizens.

While writing has been increasingly important and widespread in broader social life, it has become an indispensable condition in higher education institutions, both for those who want to be part of this context or remain there<sup>1</sup>. However, the power

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The *Exame Nacional do Ensino Médio* (High School National Exam) and many other higher education admission exams value the writing test in public university selection processes in Brazil.

of writing, which should be used to drive social inclusion, plays the opposite role to hierarchize and favor, from the perspective of meritocracy, the individualistic learning of writing, which, in turn, becomes an increasingly valuable product that determines success and failure, prestige and social discrimination of students. For instance, higher education institutions, especially public universities, are still places of social and cultural exclusion.

Therefore, in an attempt to use writing, more particularly text production, as a possibility of student inclusion in higher education, this study aims to analyze and discuss teaching-learning procedures used in a discipline exclusively focused on reading and production of academic texts under the *Programa de Formação Interdisciplinar Superior*<sup>1</sup> (Profis) of State University of Campinas (Unicamp), from 2013 to 2016. To do so, this article is based on Vygotsky's sociocultural perspective (2000, 2003) and particularly on his concept of Zone of Proximal Development (ZPD), combined with the concepts of Mastery Learning (BLOOM, 1971), recursive feedback (COPE; KALANTZIS, 2016) and Scaffolding (BRUNER; ROSS; WOOD, 1976).

### **Vygotsky's sociocultural perspective of learning**

Vygotsky's sociocultural perspective takes into consideration that human learning does not happen through direct processes with the environment, but through mediation between the subjects and the environment where they live, as the psychological functioning is based on social relations between individuals and the world (VYGOTSKY, 2003). For Vygotsky, intrapersonal development – the ability to think about oneself and the reality, and act on it – occurs from interpersonal relationships as well as from relationships with the social world (VYGOTSKY, 2003). In this respect, Wells (1999) says that subjects acquire knowledge available in the world from relationships with others. Consequently, these subjects are considered active in their development. In this sense, internalized characteristics that become individual (values, knowledge, worldviews, actions, etc.) are therefore result of one's interaction with the social environment in which one is inserted.

It should be noted, however, that the Vygotsky's assumption that social environment drives learning and consequently development in historical and cultural processes does not imply a social determinism. On the contrary, from Vygotsky's perspective, the relationship between subjects and the social world is a dialectical process in which individuals are shaped by social relations from interactions in different historical and cultural contexts, as well as they shape and transform these relations, thus contributing to an ever-changing process.

For Vygotsky, knowledge is not understood as a direct product of the subject over reality, but a result of different relationships between subjects, objects and the

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<sup>1</sup> In English, the Interdisciplinary Higher Education Program.

environment where they live. Hence, mediation, which is someone's intervention so that another one can incorporate the socially and historically constituted culture, is required in the entire process of knowledge construction and apprehension, enabled mainly through learning.

From this perspective, Vygotsky also understands the mediation process changes throughout the development of the subject, because the experience with the objective world and the contact with socially and historically constructed forms allow subjects to build their own system of signs, through which they understand the world around them (BLANK, 1996). In this sense, language is essential for Vygotsky, as it is a fundamental symbolic system that organizes signs into increasingly complex structures, by allowing subjects to develop their human ability of social interaction, reflection, practice, socialization, social transformation. Therefore, if the learning process is constituted through the interaction between people and sociocultural instruments, then subjects can develop their potentialities from the process of interaction with more experienced people and their historical and cultural context. This in turn refers to a core Vygotskian concept in the learning process: the Zone of Proximal Development (ZPD).

For Vygotsky, ideal learning should promote development: teaching does not inject new psychological functions in the subject, but creates conditions for the student to construct them (VYGOTSKY, 2003). Consequently, one's potentialities should be considered during the teaching-learning process. From the contact with more experienced people and with the historical-cultural context, these potentialities can be transformed into new actual development, in a continuous dialectical process of creation and re-creation of knowledge, concepts, beliefs and values of the world where one lives. According to the author, this dialectical process consists of two levels of development: the actual development, which refers to the achievements already obtained by the individual (corresponds to what the subjects can achieve by themselves); and the potential development, related to the abilities and achievements to be built (development related to the ability to do something, dependent on the help of a more experienced subject).

In this sense, the concept of learning process constituted through the ability of subjects to solve problems and perform actions that are beyond their level of development with the help of more capable peers leads to the creation of ZPD. According to Vygotsky (1978, p. 86), ZPD can be defined as "[...] the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peer." Thus, the concept of ZPD assumes that interpersonal relationships become core elements in the development and learning processes, because a more capable peer identifies and acts on the student's ZPD, then s/he can reach a higher level of reflection on the activity in question.

Vygotsky also highlights that the "[...] development, as often happens, proceeds here not in a circle but in a spiral, passing through the same point at each new revolution while advancing to a higher level [...]" (VYGOTSKY, 1978, p. 56). It means that the

ZPD should not be considered simply as a transfer of skills and knowledge from those who know more to those who know less. It should be seen as a spiral movement in which relations between learning and development emerging from interactions in the most diverse spheres of the social environment are extremely complex and, therefore, cannot be reduced to a single and unchanged form.

Although the concept of ZPD brings a basic conceptual contribution to understand knowledge construction in the teaching-learning process, it is noted, however, that the theory does not present elements that can indeed make ZPD feasible, namely, there is no specific theoretical-analytical devices to make it applicable to teaching-learning practices. In an attempt to make Vygotsky's perspective and ZPD concept practicable, this study aims to combine them with the concepts of Mastery Learning (BLOOM, 1971), recursive feedback (COPE; KALANTZIS, 2016) and Scaffolding (BRUNER; ROSS; WOOD, 1976).

### **Mastery learning, recursive feedback and Scaffolding: concepts combined with Vygotsky's sociocultural perspective**

It may seem strange to try to combine in this study two perspectives that are, in principle, divergent: Vygotsky's sociocultural perspective and the Benjamin Bloom's Mastery Learning behaviorist perspective. Indeed, when one observes them exclusively in their conceptual essence, such perspectives may, at first, show no association because while Mastery Learning seeks to develop means and techniques to control and predict behaviors and results that are measurable and observable, Vygotsky's perspective, on the other hand, constitutes something more dialogic, fluid and therefore less controllable and predictable in terms of behaviors and results related to the teaching-learning process.

Nonetheless, although treated with different focuses, a common core to both perspectives is the centrality of contextual factors, in which the learning subject is seen in their individuality. Then, based on this key characteristic, this study seeks to show that it is possible to think of presumably clear and objective teaching goals – which is a characteristic of Mastery Learning – to act on the students' ZPD and then use some concepts related to these perspectives as theoretical-analytical devices in a teaching and learning context of text production.

The concept of Mastery Learning, developed in the 1960s by Benjamin Bloom, is based on the general idea that most students would be able to learn in the presence of proper teaching and learning conditions. For Bloom (1971, p. 49), “[...] the basic task in education is to find strategies which will take individual differences into consideration but which will do so in such a way as to promote the fullest development of the individual.”

According to the author, the fact that teachers teach all students the same way, what he referred to as ‘classic uniform instruction,’ and allow the same time for all students to learn originated disparate performance. Then, Bloom's main objective was

to find an instructional model<sup>2</sup> to eliminate or at least reduce these disparities among students. Bloom (1971) points out that, in order to have successful final performance of learners greater than what they initially demonstrate in their school activities, first it should be recognized that students are different from one another, which likewise implies different attention and methods used by the teacher, and different times to perform tasks. In other words, for the author, the time to learn and the conditions of teaching vary, which determines the academic success of students.

Bloom and his team of researchers had already observed in the 1950s that, in identical teaching conditions, not considering variables outside the educational environment, everyone would learn, but with different levels of knowledge depth (BLOOM; HASTIN; MADAUS, 1971). For the authors, the difference in learning could be characterized by the strategies used and the way of organizing the learning processes to encourage cognitive development.<sup>3</sup>

Based on the concept that, in appropriate teaching-learning conditions, learners would be able to learn, but with different levels of learning depth, Bloom (1971), then, developed his Mastery Learning proposal, which is constituted by three fundamental elements: feedback, remediation and enrichment activities<sup>4</sup>, and formative assessment. In general, feedback is the activity following the task a student should perform, moving on to the next task, which will provide the student with another feedback, and so on. As the student advances, the tasks become more and more complex; however, with the continuous and individualized feedback that respects students' times and abilities, they would feel motivated to continue developing. According to Bloom (1971), through feedback, the teacher can point out weaknesses and answer questions from the students in a continuous way, constantly supervising them and obtaining improved results.

Feedback, however, becomes even more effective if it is articulated with remediation and enrichment activities, which are practical activities (tutorials or group work, more complex exercises, and/or internet searches, for example) whose purpose is to provide students with learning experiences that allow them to expand their potential and explore learned content adaptable to their singularities.

Feedback, remediation and enrichment activities would in turn be more successful if they were linked with formative assessment. In this sense, when highlighting the importance of formative assessment to reduce the discrepancies among students' results,

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<sup>2</sup> The idea of an 'instructional model,' at first, is not associated with Vygotsky's sociocultural perspective. However, as mentioned above, this study is not interested in the conceptual framework of the Mastery Learning model, which is used here only to refer to Bloom's original text. This study explores the elements of the model, which can be rethought in the light of a sociocultural perspective of learning.

<sup>3</sup> When thinking of the learning processes to encourage cognitive development, Bloom, along with scholars from several universities in the United States, developed in the 1950s a taxonomy of educational objectives, something like a categorization of cognitive domains, into a hierarchical structure, which is divided into the following cognitive categories: evaluation, synthesis, analysis, application, comprehension and knowledge.

<sup>4</sup> Although 'remediation' has a negative semantic idea that refers to 'correcting an error,' which in many cases in the teaching-learning context would not be applied or justified, the term 'remediation and enrichment activities' will be used as an analytical element in this study with a positive value, that is, as activities that, combined with feedback and formative assessment, promote a beneficial effect on the student learning process.

Bloom (1971, p. 7) states that formative tests may also “[...] provide feedback for the teacher since they can be used to identify particular points in the instruction that are in need of modification. The formative evaluation tests also can serve as a means of quality control in future cycles of the discipline.”

Thus, a formative assessment does not ‘measure’ what students already know and then attribute them a grade. In principle, it allows teachers to detect students’ learning difficulties and review teaching strategies. Then, through various remediation activities, and with the teacher’s help or through alternative learning methods, such as the internet, it is possible to help teachers act on students’ learning, thus assuming a fundamentally formative and regulatory dimension.

Therefore, formative assessment is a kind of process evaluation that has three steps in the Mastery Learning model: pre-instructional assessment, post-instructional assessment, and diagnostic assessment. Pre-instructional assessment determines the initial levels of students and helps design the most appropriate instructional mechanism. Post-assessment determines whether or not a student has reached his/her assigned goals. It may also evaluate one’s own instruction and refine goals. The third method of evaluation, diagnostic assessment, is a formative assessment technique that measures the effectiveness of the instructions in progress to improve the instructional process.

A concept that expands and improves the idea of formative assessment from the Mastery Learning model is that of recursive feedback (COPE; KALANTZIS, 2016). For the authors, unlike the evaluative dimension of Didactic Pedagogy<sup>5</sup>, which adopts summative evaluation – an assessment model that has a retrospective and punctual judgment character and is performed at the end of an educational process –, recursive feedback is involved in a prospective and constructive assessment, which provides feedback to students and their teachers during the learning process itself. In this sense, Cope and Kalantzis (2016, pp. 34-35) propose five aspects to be considered in the future of evaluation:

1. Assessment can increasingly be embedded in instruction, allowing us to realize long-held ambitions to offer richer formative assessment.
2. We may now have so much interim learning or progress data, why do we even need these strange artifacts, summative assessments? With the help of data mashups and visualizations, the data points need only be those located within the learning process. The test is dead; long live assessment!
3. Now that we can assess everything, and there is no learning without reflexive, recursive, machine feedback, peer and teacher feedback, and structured self-reflection, do we even need a distinction between

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<sup>5</sup> The authors point to a comparative table between what they call Didactic Pedagogy, the traditional teaching model adopted in the last 200 years, which uses summative evaluation as the main method of evaluation, and Reflexive Pedagogy, whose perspective is based on what they call recursive feedback and formative assessment.

instruction and assessment? There should be no instruction without embedded recursive feedback, and no feedback that does not directly and incrementally contribute to learning. Reflexive pedagogy ends the assessment/instruction distinction.

4. The focus of what is assessable now shifts from individual cognition, to the artifacts of knowledge representation and their social provenance. It's not what you can remember, but the knowledge artifact you can create, recognizing its sources in collective memory via links and citations, and tracing the collaborative construction process via the feedback offered by peers and teachers, and the revisions made in response.

5. The focus of what is assessable moves from the repetition of facts and the correct application of theorems to what we call complex epistemic performance, or the kinds of analytical thinking that characterize disciplinary practices—being scientist, or a writer, or to apply mathematics to a problem.

The proposal of recursive feedback, which is based on a continuous and prospective process of (formative) assessment and is not focused on individual cognition, but on the artifacts of knowledge representation and its social origin (COPE; KALANTZIS, 2016), is associated with another concept: Scaffolding. It is a metaphor that refers to assistance or support – verbal or nonverbal – that a more experienced member of one culture (a more capable peer) can provide to another person. The term was first coined by Bruner, Ross and Wood (1976), whose purpose was to explain the means by which an adult could help a child in a teaching-learning relationship.

The concept, according to the authors, refers to the development of skills that become more and more 'complex,' with proper ability to handle new and more difficult demands of a certain task, namely, it is the ability to handle novelty and increasing difficulty of the task. In this sense, the intervention of a teacher, for example, can cause the learner to solve a problem, perform a task or achieve an objective that is beyond his capacity, acting as a 'scaffold' for the learner in building his ZPD.

In an attempt to establish this 'scaffolding' relationship between a student and a 'tutor,'<sup>6</sup> Bruner, Ross and Wood (1976, p.98) present six specific functions in scaffold construction:

1. Recruitment. The tutor's first and obvious task is to enlist the problem solver's interest in and adherence to the requirements of the task. In the present case, this often involved getting the children not only interested, but weaned from initial imaginative play with the blocks.

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<sup>6</sup> 'Tutor' is specifically used by Bruner, Ross and Wood (1976) to refer to the person who supports a student with the scaffold; it is intentionally used here in this part of the study that discusses the work developed by the authors.

2. Reduction in degrees of freedom. This involves simplifying the task by reducing the number of constituent acts required to reach solution. [...] In the present instances it involved reducing the size of the task to the level where the learner could recognize whether or not he had achieved a “fit” with task requirements. In effect, the “scaffolding” tutor fills in the rest and lets the learner perfect the component sub-routines that he can manage.

3. Direction maintenance. Learners lag and regress to other aims, given limits in their interests and capacities. The tutor has the role of keeping them in pursuit of a particular objective. Partly it involves keeping the child “in the field” and partly a deployment of zest and sympathy to keep him motivated. The children often made their constructions in order to show them to the tutor. In time, the activity itself became the goal—but even then, the older children often checked back.

4. Marking critical features. A tutor by a variety of means marks or accentuates certain features of the task that are relevant. His marking provides information about the discrepancy between what the child has produced and what he would recognize as a correct production. His task is to interpret discrepancies.

5. Frustration control. There should be some such maxim as “Problem solving should be less dangerous or stressful with a tutor than without”. Whether this is accomplished by “face saving” for errors or by exploiting the learner’s “wish to please” or by other means, is of only minor importance. The major risk is in creating too much dependency on the tutor.

6. Demonstration. Demonstrating or “modeling” solutions to a task, when closely observed, involves considerably more than simply performing in the presence of the tutee. It often involves an “idealization” of the act to be performed and it may involve completion or even explication of a solution already partially executed by the tutee himself.

Although the authors do not make any explicit reference to the concept of ZPD, an interrelationship between both concepts is observed. In this respect, Wells (1999) argues that the concept of scaffolding would help operationalize Vygotsky’s concept of ZPD, because the later underlies the concept of scaffolding. In this sense, the author (WELLS, 1999, p. 127) identifies three fundamental characteristics of scaffolding in relation to the ZPD:

- 1) The *essentially dialogic nature of discourse* in which knowledge is co-constructed;
- 2) The significance of the authentic and cognitively challenging tasks in which knowing is embedded;
- 3) The role of social mediation and the establishment of inter-subjectivity as shared understandings between learners and teachers.

Therefore, this study uses the concepts of ZPD (VYGOTSKY, 1978), Mastery Learning (BLOOM, 1971), recursive feedback/formative evaluation (COPE; KALANTZIS, 2016) and scaffolding (BRUNER; ROSS; WOOD, 1976) to discuss

the students' development process, in interactions with tutor(s) and among themselves. These concepts will be used as theoretical-analytical devices in a specific teaching-learning context: a discipline in the Profis Program exclusively dedicated to academic text reading and production.

## **Contextualization and analysis of the teaching-learning procedures of the discipline of academic text reading and production from Profis**

### **Profis and the discipline of academic text reading and production**

Profis is a Unicamp interdisciplinary pilot program for students who attended public high schools in Campinas, SP. Unlike the traditional selection process of the Unicamp admission exam, Profis selects students (120 seats in total), according to the student's score in the National High School Examination (Enem). This procedure ensures a seat for each public high school student in the municipality of Campinas.

The program has a curriculum that includes disciplines from different areas of knowledge (human, biological, exact and technological sciences) that are taught during the program that lasts two years. The disciplines offered by Profis include **LA084 (academic text reading and production II)**. This discipline, a prerequisite of LA083 (academic text reading and production I), includes "reading and production of prestigious academic genres, in its different areas." (UNICAMP, 2014).

The teacher in charge of the discipline developed in 2013 a program to promote reading, writing and rewriting criteria of scholarly works, involving cohesion mechanisms for the construction of textuality and syntactic-semantic articulation (use of argumentative operators), paragraph structuring (phrasal topics) and elements of nominal and verbal agreement for the development of two academic genres: abstract and critical review.<sup>7</sup>

Due to its average number of 100 students,<sup>8</sup> LA084 has four groups (A, B, C and D) that offers theoretical and practical classes.<sup>9</sup> In order to serve all four groups, the teacher in charge had every year the help of two PhD students and three undergraduate students<sup>10</sup>. During the period analyzed and evaluated in this study (2013 to 2016), eight PhD and twelve undergraduate students participated in this study.

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<sup>7</sup> A genre teaching perspective of directed to genres from schooling and academic spheres is developed by Joaquim Dolz, Michèle Noverraz and Bernard Schneuwly (2004), whose procedures, from a practical perspective, are similar to those adopted in this study, but with a different theoretical bias.

<sup>8</sup> As LA084 requires fulfilling LA083 first, students who are not approved in LA083 cannot study LA084. Then, the number of students in the discipline may vary from year to year.

<sup>9</sup> All practical classes are taught in four computer rooms containing 35 computers each, all of them with internet connection.

<sup>10</sup> All the PhD and the undergraduate students who attended received doctoral scholarships and undergraduate scholarships from two Unicamp programs, respectively: the Professor Internship Program and the Professor Support Program. I am grateful to all the students for their support: PhD students: Cláudia Gomes Silva Guimarães, Emiliano

## Analysis and discussion of teaching procedures and evaluation of discipline classes

Unlike what one might expect from academic studies on text production in higher education,<sup>11</sup> whose focus is usually on texts analyzed by university students, this study addresses the analysis and discussion of teaching-learning procedures used in a Profis discipline exclusively focused on academic text reading and production (discipline LA084), from 2013 to 2016. In this analysis, these procedures are based on the key concepts for the teaching-learning process, such as the ZPD (VYGOTSKY, 1978), Mastery Learning (BLOOM, 1971), recursive feedback/formative evaluation (COPE; KALANTZIS, 2016) and scaffolding (BRUNER; ROSS; WOOD, 1976), acting on the students' development process, in the interaction with tutors and between one another.

First, the procedures adopted are consistent with the characteristics of LA084 discipline, which offers four hours a week (two for theoretical classes and two for practical classes) to four groups (an average of 35 students on each group). To serve all four groups, the teacher in charge had to develop a joint work with the PhD and undergraduate students involved in the discipline. As the PhD students were also teachers<sup>12</sup>, they could take over the classes, and then be responsible for conducting the practical classes. The students with undergraduate scholarships supported the teacher in theoretical classes, as well as the PhD students in the practical classes. They also helped discipline students with the activities to be posted on an online learning platform.<sup>13</sup>

Besides the classes, the teacher in charge and the five students met once a week. At these meetings, the PhD and undergraduate students were involved in class planning and provided insights, questions and challenges that they and the discipline students had during the process, and where all decisions regarding the progress of the classes were made together. At the first meeting of the group, the content and methods of the discipline were discussed and outlined. Based on the discipline syllabus, they decided to focus on two academic genres in particular: abstract and critical review. Then, the objective of the discipline was to develop a number of procedures, contents and activities that mainly addressed reading and production of abstracts, extending until the end of the first half of the six-month period. In the second half, the same would be done for critical review of academic texts.

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Cesar de Almeida, Fernanda Felix Litron, Ária Marjori Schubalski Reisdorfer, Mirielly Ferraça, Rosivaldo Gomes, Roziane Keila Grando and Thalita Cristina Souza Cruz; undergraduate students: Alan Victor Pereira de Arruda, Amanda Bastos Souza, Ana Luiza Barretto Bittar, Bruno Cuter Albanese, Gabriel Dainesi, Julia Dias, Lucas Lins Oliveira, Lucas Manca Dal Ava, Marília Veronese Matheus Felipe Xavier Bueno, Luisa Ianhes Moyses and Rafaela Marques Guimarães Lima.

<sup>11</sup> About this issue, see Motta-Roth and Hendges (2010).

<sup>12</sup> According to the rules of Unicamp Internship Program, students with doctoral scholarships can teach classes in any undergraduate discipline at Unicamp.

<sup>13</sup> The online teaching platform was TelEduc, available for undergraduate disciplines of Unicamp until 2017. Available in: <<https://www.ggte.unicamp.br/ea/>>. Access on: 27 Jan. 2017.

The abstract genre was chosen because it is the most frequent academic genre in the context of university students (MOTA-ROTH; HENDGES, 2010), and particularly of students from the discipline in question. Some students had already experienced abstract production in other Profis disciplines. Critical review was chosen because it is an academic genre of argumentative character, which, besides exposing essential and referential elements of a text with detailed and concise description, presents the reviewer's judgment or appreciation, an opinion in the comments. It involves elements of communicative persuasion, often decisive, that influence the selection of a particular text for reading, showing its communicative intention and the point of view of the reviewer regarding the study analyzed.

In the four years during which the discipline was offered (2013 to 2016), it started with a theoretical presentation about academic abstracts (concepts, uses, purposes, audiences, examples). The purpose of the first class was to show students the abstract production context and make them realize the importance of learning that academic genre. By exposing students to a genre they had already experienced or would experience in real teaching-learning contexts where they act, it can be considered as a 'recruitment' function (BRUNER; ROSS; WOOD, 1976), since it is the first teaching task to obtain the students' interest and adhesion, seeking to involve students in the activities related to learning of the genre in question.

In the subsequent practical class, students should read an academic empirical study, followed by the production of an abstract of the study.<sup>14</sup> All texts produced by the students were read and evaluated (graded) by the group (responsible teacher and PhD and undergraduate students). However, for the students, the production of the first abstract did not have an evaluation character, since they did not receive the grades attributed to their texts, because the text production activity was not considered as a test. Grading followed by comments on the students' texts was a diagnostic assessment (BLOOM, 1971) of the students' prior knowledge of abstract, which acted as a starting point for the group to follow and guide the students through a number of activities to master that genre.

From the perspective of didactic practice, the initial text production activity 'reduced the degrees of freedom' (BRUNER; ROSS; WOOD, 1976), to simplify the task of students based on a single scaffold (theory presentation from the previous class). The idea, in this case, was that, by simplifying the size of the task, it could be recognized and performed by the students.

From a pedagogical-evaluative point of view, the proposal of an initial text production is associated with the idea of formative evaluation from Mastery Learning (BLOOM, 1971), as it is, in the process evaluation, a pre-instructional assessment that determines the initial levels of students and helps design the most appropriate instructional mechanism. This pre-instructional assessment enabled the group, through

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<sup>14</sup> All text production activities were performed by students in computer labs, where students had access to online dictionaries and could conduct internet searches. At each edition of the discipline, the basic texts for the production of academic genres (articles, abstracts and reviews) were re-evaluated and changed.

mediation, namely, through the various means available to define ways to act on the ZPD of students, as it allowed, through such initial production, to identify the levels of actual development of the students, or what they already knew and were able to express about abstract production, and their potential development, or what they still needed to learn about that genre, with the help of teacher, the PhD and undergraduate students and their peers.

Based on the initial production, a number of procedures and activities for the students' ZPD was then developed with regards to the content of a more general program formulated for the discipline (see previous section). For each program content, three procedures were developed: theoretical class, practical class and individual attention to students. The practical classes presented a detailed aspect for discussion, based on more general examples that acted as a parameter for the students to clarify their questions regarding the macrostructure of the genres in question and issues related to their internal composition structure.

In practical classes, it was possible to observe the students' development. In fact, the practical classes were organized as workshops connected with the theoretical classes and the group' weekly meetings, through a systematically planned work to make students produce the two academic genres. In this sense, different activities were performed, ranging from the broader project of planning the text to be produced (text macrostructure), to activities of text observation and analysis (reading), writing and rewriting of excerpts to organize their internal structure, involving, for example, different mechanisms of cohesion and coherence to develop the abstract and critical review textuality.

The activities involved a collective discussion between the students and the group about several linguistic-discursive characteristics and their relationship with the production of genres. As the classes were held in the computer labs, the students participated in discussions and conducted internet searches about the class content. Besides the discussions, the students engaged in rewriting activities, in duos, which were shared on the online learning platform.

Finally, each member of the group dedicated one hour a week to students' attention. Although they were not required to make appointments with the members of the group, students were encouraged to do so, especially if they still had specific doubts after the end of practical classes. In these moments dedicated to one to five students at the same time, the students brought their rewritten texts for analysis and comments of the group members.

In general, the three procedures adopted are an interconnected learning process in Vygotsky's sociocultural perspective, as students apprehend the knowledge available in the world (their own knowledge, of the classroom) from the relationship with the other (WELLS, 1999) to develop their intrapersonal knowledge (VYGOTSKY, 1978). Through the interaction between students and the group (more capable peers) and among themselves, in a specific socio-cultural context, the students can progressively develop their knowledge about the genres in question.

The practical classes and the individual attention allowed the construction of scaffolds for the students through four functions pointed out by Bruner, Ross and Wood (1976), which, in turn, are associated with the concepts of feedback and enrichment (BLOOM, 1971): 1) maintaining the focus: it was possible to keep the students focused and motivated in relation to the proposed objective; 2) emphasis on critical traits: with various enrichment activities (BLOOM, 1971) ranging from linguistic to structural questions of the texts (macrostructure), it was possible to emphasize certain characteristics that are relevant to text production of the abstract and the critical review. These characteristics helped provide information about the discrepancy between what the students produced and what they should recognize for the production of their texts; 3) control of frustration: it allowed reduced stress and frustration of students when they had general or specific doubts, or when they were anxious. In these cases, both in practical classes and in individual attention, the group interfered in the students' tasks to calm them down and work with them. In other words, continuous and individualized feedback was employed (BLOOM, 1971), respecting the times and abilities of the students, making them feel motivated to continue developing themselves; and 4) demonstration: the group sought to create templates of the most adequate procedures to help students perform the tasks more efficiently, involving explanations of tasks performed or not yet performed by the students, such as rewriting excerpts from texts written by themselves (already developed segments and paragraphs).

The students' production process involved a number of procedures that included activities of text observation and analysis, excerpt writing and rewriting activities to practice text macrostructure and its internal structure, and rewriting of the entire initial text (summary and critical review) to detect learning difficulties, and allow adjustments to discipline objectives. To complement this teaching-learning process, the students conducted a **self-evaluation**, which involved reflective questions about the production of the two genres studied. The table below shows the students' self-evaluation questions regarding the critical review:

**Table 1** – Self-evaluation questions – critical review

SELF-EVALUATION QUESTIONS – CRITICAL REVIEW
1. Does your review have the macrostructure of an academic review?
2. Is your review adequate to the audience(s)?
3. Do you think you properly understood the original text and had a critical view of the text?
4. Have you addressed in your critical review the information pointed out by the author of the original text as the most relevant?

<b>SELF-EVALUATION QUESTIONS – CRITICAL REVIEW</b>
5. In addition to the content itself, have you addressed:
<ul style="list-style-type: none"> <li>• data related to the text author?</li> </ul>
<ul style="list-style-type: none"> <li>• the author’s knowledge about the subject?</li> </ul>
<ul style="list-style-type: none"> <li>• the language adequacy used in the text to the targeted audience?</li> </ul>
<ul style="list-style-type: none"> <li>• the overall text organization?</li> </ul>
6. Have you chosen the most appropriate text organizers to emphasize the relationship between the main ideas?
7. Have you chosen the right language mechanisms to build your arguments? Would you make any changes? Which one(s)?
8. Have you tried to be polite in your criticism? Did you use any adjectives?
9. Have you found any problems with punctuation, spelling, consistency, cohesion, incomplete sentences, grammatical mistakes, etc.? (Circle them.)
10. Is there another aspect you rated and would you like to mention? Which one?

**Source:** Author’s elaboration.

These procedures promoted considerable improvement in the students’ learning process. Unlike content-based education, which ends up with a summative, retrospective and punctual assessment at the end of a given cycle (two, three or six months), this study attempted to develop in discipline LA084, from 2013 to 2016, something like a process evaluation (while the classes were held, not at the end), through constant recursive feedbacks, based on the perspective of Cope and Kalantzis (2016), in the form of a formative assessment (prospective and constructive assessment), providing continuous feedback to students and the group itself during the program classes.

Finally, a longitudinal evaluation was conducted, comparing the students’ initial texts to their final productions. This evaluation showed improvements in the learning process, as the students presented progress. The table below compares the general average score of the four groups (A, B, C and D) in the initial abstract (IA) and the initial critical review (ICR) to their scores in the final abstract (FA) and in the final critical review (FCR), from 2013 to 2016:

**Table 2** – Comparison of mean scores of groups A, B, C and D in initial abstract (IA) and initial critical review (ICR) to final abstract (FA) and final critical review (FCR), from 2013 to 2016

2013				2014				2015				2016			
IA	ICR	FA	FCR												
6.1	7.6	6.5	7.9	6.0	7.7	6.7	7.8	6.2	8.0	6.3	8.1	5.9	7.8	6.4	8.0

**Source:** Author's elaboration.

## Final considerations

This study aimed to show a move from practice to theory; a move that clearly shows how theory-practice relations constitute an investigation process, not inflexible categories. It can be explained by the fact that empirical analysis and discussion of teaching procedures used in a discipline exclusively focused on academic text reading and production allowed the construction of a new study object, since it inevitably led to the review and innovation of theoretical pathways, by promoting a dialogue between the concept of ZPD from Vygotsky's sociocultural perspective and the concepts of Mastery Learning (BLOOM, 1971), recursive feedback (COPE; KALANTZIS, 2016) and Scaffolding (BRUNER; ROSS; WOOD, 1976).

This qualitative and empirical study had its central point based on a number of teaching-learning procedures that take into account, above all, the collective construction of knowledge through constant interaction between teachers, scholarship tutors, scholarship supporters, and students. From this perspective, the work developed has evaluation assuming a different character from its traditional role; instead of a retrospective and punctual evaluation at the end of a given teaching-learning cycle, this study attempted to develop a formative assessment (a prospective and constructive evaluation), by providing continuous feedback to students and to the group itself during the classes. This evaluation started in the beginning of each program edition, in an attempt to understand and define the procedures the group could use and the paths the students had to take, allowing them to plan and develop activities to enable students to master two genres analyzed: abstract and critical review.

Nonetheless, this study recognizes that one of the challenges in applying a formative evaluation is its operationalization with large groups of students, which obviously requires more time of the teacher and more class time. In other words, as Bloom (1971) pointed out, learning time and teaching conditions need to vary to determine the students' success. Indeed, when considering the general context of Brazilian education, it is an obstacle. On the other hand, this obstacle cannot be seen as an obstruction, but as a challenge to be addressed if one intends to think of an evaluation process that goes beyond the famous traditional tripartite IRE (initiation – response – evaluation) model.

The present study, on the contrary, shows that the teaching-learning procedures adopted can show students new ways of thinking, categorizing, analyzing, and building knowledge. Through mediation and required scaffolds constructed with the help of more capable people and peers, the students are therefore able to transform their ZPD, that is, potential development that refers to the abilities and achievements to be obtained, into actual development, concerning the achievements they have accomplished.

From this perspective, educational institutions play a fundamental role, since they are responsible for this pedagogical intervention to trigger the teaching-learning process starting from the teacher, whose function would be to interfere in the students' ZPD, seeking to promote their development. However, this perspective only becomes valid, according to Vygotsky (1978), if learning is at the forefront of the development, in a social process of knowledge construction. Hence, everyone should ask if schools, and even universities, are in fact providing a teaching process that encourages new achievements in the students' potential development, whose focus approaches what Cope and Kalantzis (2016) call "complex epistemic performance", or, on the contrary, if they keep favoring, from the perspective of meritocracy, a teaching process focused on individual cognition, individual learning of writing, thus contributing to the reproduction of the *status quo* of the graphocentric culture which, as mentioned in the introduction, has predominated since the 19th century.

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SILVA, P. Produção textual em contexto de ensino superior: discutindo perspectivas e procedimentos de ensino-aprendizagem. *Alfa*, São Paulo, v.62, n.2, p.321-337, 2018.

- *RESUMO: O artigo tem como objetivo apresentar e discutir resultados de uma investigação de base qualitativo-interpretativista dos procedimentos de ensino-aprendizagem utilizados em uma disciplina voltada exclusivamente para leitura e produção de textos acadêmicos do Programa de Formação Interdisciplinar Superior (Profis) da Universidade Estadual de Campinas (Unicamp), no período de 2013 a 2016. Como aporte teórico, este estudo toma como base a perspectiva sociocultural de Vygotsky (2000, 2003) e, particularmente, seu conceito de Zona de Desenvolvimento Proximal (ZDP), aliado aos conceitos de Mastery Learning (BLOOM, 1971), feedback recursivo (COPE; KALANTZIS, 2016) e Scaffolding (BRUNER; ROSS; WOOD, 1976). Os resultados mostram que se a produção textual for trabalhada por meio de um processo de avaliação formativa, de caráter prospectivo e construtivo, fornecendo um contínuo feedback para os aprendizes, é possível levá-los a novas formas de conhecimento, em que os andaimes necessários, construídos tanto com a ajuda de pessoas mais experientes,*

*quanto por meio de seus próprios pares, podem, então, transformar seu desenvolvimento potencial, que se relaciona às capacidades e conquistas a serem obtidas pelos discentes, em desenvolvimento real, concernente às àquelas que já foram por eles atingidas.*

- *PALAVRAS-CHAVE: Produção textual. Ensino superior. ZDP. Scaffolding. Mastery learning. Feedback recursivo.*

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