

Interfaces between Evaluation and History Curriculum at High School

Alex de Oliveira Fernandes

Suzana dos Santos Gomes

'Universidade Federal de Minas Gerais (UFMG), Belo Horizonte/MG – Brazil

ABSTRACT – Interfaces between Evaluation and History Curriculum at High School. In this article, it is presented the results of a research that investigated the bases of the *Programa de Avaliação da Aprendizagem Escolar* (PAAE - Program for the Evaluation of School Learning), in the State of Minas Gerais, identifying the way the adopted test items fulfill the announced pedagogical objectives, and the implications of this program in the History curriculum at High School. The methodology used was the analysis of PAAE documents, between 2005 and 2015, of the content of curricular grids, and of test items in the tests created by the program, besides a bibliographical research. The results have indicated a contradiction between the announcement of the innovative character of the items used as pedagogical resources to evaluate the skills and abilities and the hegemonic presence of traditional matters in the tests designed for the program to the detriment of the announced formation modality.

Keywords: Educational Evaluation. Curriculum. History. High School.

RESUMO – Interfaces entre Avaliação e Currículo de História no Ensino Médio. Apresenta-se nesse artigo os resultados de uma pesquisa que investigou as bases do Programa de Avaliação da Aprendizagem Escolar (PAAE), em Minas Gerais, identificando o modo pelo qual os itens de teste adotados atendem aos objetivos pedagógicos anunciados, e as implicações desse programa no currículo escolar da disciplina de História do Ensino Médio. A metodologia utilizada foi a análise dos documentos do PAAE, entre os anos de 2005 e 2015, de conteúdo de matrizes curriculares e de itens de teste das provas geradas pelo programa, além da pesquisa bibliográfica. Os resultados indicaram contradição entre o anúncio do caráter inovador dos itens utilizados como recurso pedagógico para avaliar habilidades e competências e a presença hegemônica de questões tradicionais nas provas elaboradas para o programa em detrimento da modalidade formativa anunciada. Palavras-chave: Avaliação Educacional. Currículo. História. Ensino Médio.

Introduction

Within the context of valorization and expansion of programs for external and internal evaluation of educational institutions, it is important to discuss the knowledge approach under which concepts that are intrinsic to evaluation processes are connected. For Sacristán (2011), to use concepts in the educational discourse, be it in the evaluation, curriculum or abilities, is to choose a discourse, a way of understanding the problems, of sorting them, of conditioning what is done, and also of serving as a tool against other discourses, an option to conceal certain problems and disqualify other pedagogical and political notions that are neglected (Sacristán, 2011).

Specifically in the evaluation, Gatti (2009) has observed that, in favor of the advantages of the comparability announced by the programs and evaluation systems, one abandons the problematization of grids generically defined by specialists outside the school environment, in which concepts that are important for the Education field are precariously defined and understood in relation to the approaches supporting them. The reliability given to standardized tests is imposed over necessary investigations, in the sense of verifying the limitations of these instruments in the evaluation formation perspective (Gatti, 2009; Fernandes, 2013; 2015).

Besides problematizing the role of evaluation in these programs, it is necessary to investigate the pedagogical notion under on which such programs are based. About this matter, researchers defend discussing issues in the evaluation field related to the curriculum, since they are intertwined, be it in a traditional educational view, or behaviorist, humanist, cognitivist or socio-cultural ones (Mizukami, 2003; Bittencout, 2009).

The analysis of the main curricular documents, created by the context of organization of the High School offer, between 1996 and 2015 nationwide, evinces that, as the evaluation policies were gaining prominence in the Brazilian educational system, the search for a reference grid for designing items for learning tests was intensified, with a strong influence of the notion of *skills education* (Bittencourt, 2009). This notion is in the *Parâmetros Curriculares Nacionais* – PCNs – National Curricular Parameters (Brazil, 2000; 2002), and in the Curricular Guidelines for High School (Brazil, 2006). These documents have influenced the curricular proposals in the Federation States. However, although they are increasingly more present in the curricular proposals, most documents do not problematize the adoption of the skill education approach, which contributes for it to become natural.

Considering the lack of consensus on the meaning of this language adopted in education, international reports of the United Nations for Education, Science and Culture Organisation - UNESCO, and the Organisation for Economic Co-operation and Development - OECD, through the results of the Programme for International Student Assessment - PISA, aim to unify the skills concept, defined as measurable learning in tests (Sacristán, 2011, p. 38).

The skill approach aims to developing a modern language, in order to highlight the innovative character of the curricular reforms and of the evaluation tools (Méndez, 2011). This tendency of valuing the skill discourse and the formative evaluation, observed internationally since the 1980s, is visible in the curricular reforms and evaluation programs developed in Brazil after the following decade.

Regarding these reforms, Bonamino and Sousa (2012) observed a tendency to use centralized evaluations to measure the students' school performance, under the same curricular parameters to which all students considerably should have access. This movement would be leading the States to define their curricular proposals based on the reference grids used in external evaluations, such as the *Prova Brasil* (Brazilian Test) or the *Exame Nacional do Ensino Médio* – ENEM (National High School Exam) and, in some cases, at risk of teaching for the test, which happens when the teachers gather their efforts preferably in the items that will be evaluated and disregard other important aspects in the curriculum (Bonmino; Sousa, 2012; Sousa, 2013; Bauer et al., 2015; Bauer; Sousa, 2015; Oliveira, 2016; Melo; Cirilo; Pinto, 2016).

Given this context, we aimed to analyze the Program for the Evaluation of School Learning – PAAE, a constitutive part of the standardized system in Minas Gerais between 2005 and 2015. In this sense, we considered significant to know: which education conception bases the program? Which are this evaluation program's implications for the History curriculum at High School?

Concerning the methodology, the study has involved a bibliography and document research, the content analysis of the curricular grids and the test items of the tests created by the evaluation program instituted by the State Education Secretary of Minas Gerais – SEE-MG, and the application of a questionnaire (Bardin, 2011).

The contributions by Afonso (2009) to the field of educational evaluation policies were considered. For the author, the evaluation is not a subject, but an investigation object open to different discipline and interdisciplinary approaches (Afonso, 2009, p. 15), which justified the adoption of a specific field of study. The explicit evaluation sociology constitutes the result of many theoretical and empirical resources, intentionally structured around the evaluation as an investigation object (Afonso, 2009, p. 16).

Origins, Implementation and Influences of the PAAE in the School Scope: some implications

Following the tendency of valuing external evaluations observed nationwide (Barreto, 2013; Sousa, 2013; Oliveira and Jorge, 2015; Bauer and Sousa, 2015; Oliveira, 2016) and internationally (Ball, 2002; Afonso, 2009), it can be observed in Minas Gerais, since the end of the 1990s, the importance given by the administrators to evaluation policies. This importance receives special connotations with the implementation of

the *Sistema Mineiro de Avaliação da Educação Pública* – SIMAVE (Minas Gerais System for Evaluation Public Education, Minas Gerais, 2000).

Since its creation, the SIMAVE aimed at performing diagnoses in order to improve the dimensions of the State's education system. Among its functions, it is highlighted the development of integrated evaluation programs, with results that can be converted into improvements in education and in the performance of students in school (Minas Gerais, 2000).

Between 2005 and 2016, the PAAE has integrated the SIMAVE along with the *Programa de Avaliação da Educação Básica* – PROEB (Program for the Evaluation of Basic Education), and the *Programa de Avaliação de Alfabetização* – PROALFA (Program for the Evaluation of Literacy). However, differing from both these programs, which are constituted as external evaluation programs, the PAAE is constituted as a mixed program: external, since the items and the system are planned by the SEE-MG along with the *Instituto Avaliar*, but with an internal handling by the school professionals.

We have observed that the PAAE has undergone modifications since its creation in 2005², being implemented gradually in the 1st high school year until 2009. After 2010, the program was institutionalized in the whole network with a significant adoption of schools until 2016.

In 2014 elections, the State of Minas Gerais saw the interruption of the PSDB hegemony, with the election of the candidate by PT, Fernando Pimentel, who took on the State government. At the time, the PAAE continued to integrate SIMAVE as one of the educational priorities. The permanence of evaluation programs in governments with distinct political orientations reveals that the SIMAVE was constituted as a State policy.

Documents by the SEE-MG confirm that, in 2013, the PAAE achieved more than 4.9 million students evaluated in all subjects (Minas Gerais, 2013a). The program counted on then with an Items Database, a comprehensive archive of objective questions that aimed to cover the topics and skills of the *Currículo Básico Comum* (CBC – Common Basic Curriculum) of the High School disciplines (Arts, Biology, Physical Education, Physics, Philosophy, Geography, History, English, Portuguese, Mathematics, Chemistry, and Sociology).

According to PAAE guidelines, each discipline should apply at least five tests, a diagnostic one, three throughout the school year and one at the end of the year. We highlight that applying five tests, multiplied by the 12 disciplines offered in the 1st high school year, corresponds to a total sum of 60 yearly tests, without including other tests given by teachers throughout the year in this number.

These data evince an evaluation engineering characterized by the amount of tests applied at school, involving the student and the specialized teacher, among other professionals. The evaluation system implemented in Minas Gerais has interfered in the organization of the school

work and caused reflections on the coordination among curriculum, teaching, and evaluation.

The Value Given to Test Items: what do they show?

The analysis of PAAE documents from 2005 to 2015 evinces the pioneering State policy in the creation of the evaluation system, an essential condition to achieve the effectiveness of any measure in the education field (Minas Gerais, 2013b, p. 7).

In this study, we considered significant the pedagogical analysis of the test items, in order to verify if the program was meeting the expectations, given that, in its design, PAAE would have a diagnosing-formative approach, identifying the student's development stage, thus enabling punctual and longitudinal diagnoses on individual performance (Minas Gerais, 2013b, p. 9). It is composed by three evaluations, namely: Diagnostic Evaluation, Yearly Learning, and Continuous Evaluation, the PAAE is considered, by its creators, an efficient educational technology for the verification of the learning consolidated by the student during the year (Minas Gerais, 2013b, p. 13).

It was observed that the Guide for the Elaboration and Revision of Multiple Choice Questions of PAAE presents the basic guidelines for the formulation of objective multiple choice questions, affirming, as a justification for using tests, that learning is an internal and subjective cognitive process, so, to evaluate it, the teacher must create situations in which the students can show their knowledge, skills, and attitudes (Minas Gerais, 2015b, p. 8).

To achieve the announced objectives, the guidelines present some criteria for building a quality test: creativity, originality, efficient communication, alignment to the education, educability (creating new learning), didactics, linguistic correction (Minas Gerais, 2015b, p. 8).

We highlight that the PAAE allows the use of many kinds of questions, with distinct complexity levels, aiming at promoting the student's reasoning and comprehension, besides allowing the verification of learning levels. According to the guidelines, the test item must be capable of creating a contextualized, clear and objective problem" (Minas Gerais, 2015b, p. 11).

The analysis of the guidelines allows us to affirm that problematizing is the main announced didactic action of the test items, and it can be understood as a contextualized, logical and objective situation, created by using a reference support with the function of stimulating the students' reflection. Supports are visual, graphic and textual didactic resources, such as maps, drawings, tables, photographs, figures, texts, among others. By being integrated to the lead and formulation of the item, they mobilize the students' cognition. It is hoped that, by reading, interpreting, and analyzing the item's question, lead and support, the students are able to find, among the possible alternatives, the solution for the proposed problem.

With the intent of analyzing the problematization envisaged by the PAAE, we investigated the concept of the *problem-situations* adopted by this evaluation program. For that, we deemed necessary to know: which are the theoretical bases supporting the adoption of test items as a learning pedagogical resource? In the analysis of the PAAE documents, however, there is no indication of theoretical references supporting an evaluation approach through problem-situations.

Based on the data gathering preformed, it is possible to affirm that the PAAE Guidelines and the Guide for the Elaboration and Revision of Multiple Choice Questions are focused on technical information. They use the *problematization* concept without connecting it to the epistemological field. This procedure contributed to making the evaluation culture, through the use of objective tests, natural in schools. Understanding this required us to perform another gathering to verify possible knowledge areas on which the evaluation through problem-situations can be based.

Pedagogical Analysis of the PAAE Items: to assess skills or content domain?

Macedo (2002) has explored the problematization concept adopted in test items of objective questions. For the author, learning resources allow one to understand the problematization concept used in test items. Although the PAAE avoids theorizing on the concept, it is present, with cognitivism marks. According to Macedo (2002), the evaluation through problem-situations is an important didactic resource in the skill learning approach, specially for those who intend to work with a complex, relational, constructivist perspective (Macedo, 2002, p. 114).

As a didactic resource, the problematization aims at prioritizing the general thinking processes, surpassing the mere content memorization. In the skill and abilities thinking, the discourse present in the educational reforms, the procedures, the know-how, is prioritized. The PAAE announces this emphasis shift from the traditional content evaluation to the skill evaluation. While traditional exams and tests applied by teachers were based on evaluating contents that were memorized by students, PAAE items propose to evaluate their skills and abilities in face of a problem-situation.

With the intent of investigating if the items created by the PAAE bring innovations in relation to the traditional questions in exams and test, which prioritize content memorization, 85 History question applied to high school students were selected. We aimed to verify if the problematization announced by the PAAE, as a didactic resource oriented towards assessing the students' skills, was present in the items.

To perform the item analysis, six History tests were selected. They were applied in four schools, from 2011 and 2015, having 73 items been applied to $1^{\rm st}$ graders and 12 to $3^{\rm rd}$ graders, as seen in Chart 1.

Chart 1 - Selection of items for the Pedagogical Analysis

School	Application year	Application period	Phase in High School	Evaluation type	No. of items
1	2011	March	1st Year	Diagnostic	17
2	2012	Undated	1st Year	Year Learning	17
1	2013	March	1st Year	Diagnostic	17
3	2015	July	1st Year	Continuous	10
4	2015	November	1st Year	Year Learning	12
3	2015	July	3 rd Year	Continuous	12

Source: Research Data (2016).

Chart 1 presents the schools that participated in the investigation. Of the total 32 teachers who answered the questionnaire applied during the research, four have made copies of the tests available. Two tests were collected in Schools 1 and 3 and another one in Schools 2 and 4.

In this article, we chose to present analyses for each modality defined by the PÀAE, namely: Diagnostic Evaluation, Year Learning, and Continuous Evaluation. In the pedagogical analysis of the items, PAAE criteria were considered to verify if the items created by the program have promoted the announced problematization. For each question, we aimed to analyze the instruction, the support and the question of the problem-situation, the answer lead, the correct alternative, and the distractors³. These item data have enabled the creation of two analysis categories: problematizing item and traditional item.

Regarding the criteria adopted to create these categories, a problematizing item was considered as the one in which the support and lead created a problem-situation guiding the student to choose the option. As defined in the Guide for the Elaboration and Revision of Multiple Choice Questions of PAAE, texts, figures, and other support types, if relevant, must be presented smartly to guide the students' thinking, without, however, offering clues of the answer. In these items, the students' answer depends on skills beyond the memorization of contents. While the traditional item is focused only on the ability of memorizing and does not explore other skills. Traditional items were defined as the ones used in exams, public calls, and traditional tests. Chart 2 presents items extracted from PAAE tests and it allows us to see the different between them.

Chart 2 - Types of Items Applied in High School

Problematizing Item	Traditional Item
QUESTION 2 (School 4, 1st year, 2015) The text excerpt is a description of the Spanish conqueror Bernal Diaz Del Castillo about Tenochtitlán, an Aztec city. In this great city, the houses rose up separated from each other, being connected only by small drawbridges and canoes. We observed, furthermore, the temples and adoration sites of neighbor cities, built as towers and strongholds. When we arrived there, we were astonished by the crowd and the order that prevailed, as well as the large among of goods. The artifacts consisted on gold, silver, jewelry, plumes, mantles, chocolate, tanned or not tanned hides, sandals, and other manufactured goods. (Castillo, 1519 apud Pinsky et al., 2007, adapted). In the description, the fact that the conqueror was astonished was explained by the	Brazil caused great changes, however, among them, it is possible to see as a negative aspect the A) opening of harbors and the permission to open textile manufactures. B) creation of high education schools, of the National Library and the Botanical Garden. C) rise of Brazil to the category of vicekingdom and signing new commerce treaties. D) existence of a supervised press with the intention of preventing critiques to the government.

Source: Research Data (2016).

By analyzing the items in Chart 2, one can affirm that Question 2 is an example of a problematizing item. According to the History CBC, it enables the assessment of the ability of *Analyzing sources on Aztec, Incan and Mayan social structure, production and culture,* referring to the topic *The conquest of America*. Besides, it allows the student to explore information referring to the topic of History content. As it may be observed, the item presents a problem-situation through the coordination among the support, lead, and correct alternative (B) and the distractors A, C and D.

According to the formative evaluation modality of the PAAE, the test item, besides being a tool for evaluating learning, is constituted as pedagogical procedure that prioritizes general thinking processes over content memorization. Thus, through a problem-situation, the item enables the reflection based on History concepts. Moreover, one can affirm that the item demands knowledge, comprehension and critical analysis of recent historiographic currents. The text shows information on the organization of Aztec peoples: constructions, commerce, and artifact production. In the report, the Spanish conqueror is surprised by organization capacity of the Aztecs. As it can be seen, the item enables

the students' interaction with a text that counteracts the false idea that civilized Europeans have dominated primitive peoples in the civilization process in America. As defined in the PAAE, this item prioritizes the skills of interpretation, inference, comparison, and analysis, thus surpassing the mere content memorization.

Unlike the previous example, Question 8 represents a traditional item that focuses on content memorization. The item does not present a context, the student will have to indicate only the negative aspect of the changes caused by the presence of the royal family in Brazil. The analysis of the question enables us to affirm that each distractor is an isolated information that demands the student only to have domain over the content to confirm its accuracy.

As it can be seen, there are differences between the items presented in Chart 2: while the traditional item requires only the memorization of contents and it will demand the student to assimilate information, without questioning its origin and consequences; the problematizing item, on the other hand, creates a context through a problem-situation and encourages the development of mental process, makes it easier to develop critical and creative attitude and, thus, mobilizes the development of skills and abilities.

In agreement to this perspective, the 85 History items selected in this study were analyzed and classified into the categories of problematizing and traditional items, as described in Chart 3.

Chart 3 - Classification of History Items of PAEE

School	Application year	Test Items	Problematizing Item	Traditional Item
01	2011	17	01, 06, 09, 13, 14, 16, 17	02, 03, 04, 05, 07, 08, 10, 11, 12, 15
02	2012	17	03, 05, 8, 9, 13, 14, 15, 17	01, 02, 04, 6, 7, 10, 11, 12, 16,
01	2013	17	01, 02, 09, 15, 17	03, 04, 05, 06, 07, 08, 10, 11, 12, 13, 14, 16
03	2015	10	02, 06, 07, 08	01, 03, 04, 05, 09, 10
04	2015	12	01, 02 03, 04, 05, 07, 10, 11, 12	06, 08, 09
03	2015	12	08, 10, 11	01, 02, 03, 04, 05, 06, 07, 09, 12
Total %	_	85 items 100%	36 items 42%	49 items 58%

Source: Research Data (2016).

It can be seen, in Chart 3, the prevalence of traditional items in relation to problematizing ones. Of the 85 items, 42% were classified as problematizing and 58% were traditional. Except for the test applied at School 4, in 2015, the number of traditional items was higher than the

problematizing ones. At School 1, in 2013, traditional items covered 70% of the test and at School 3, in 2015, this percentage reached 75%, which reveals a contradiction between what is defined at the PAAE and what is seen in the tests. Thus, the data analysis showed the limitations of the program's prediction, since traditional questions reached 58% and, therefore, as a whole, prevailed in the tests.

The data showed a contradiction between the quality of PAAE questions and the discourse disseminated by the program. As it can be observed, a value is given to the item, that is, through it, it is possible to verify History skills incorporated or not by the students, however, traditional items do not allow one to assess these skills that should be verified by solving the problems presented by these items. As a tool considered as useful for verifying skills, surpassing mere memorization, most of the items were limited, reaffirm the tests' emphasis over a contextualized and formative evaluation practice (Gomes, 2014; 2015; Fernandes, 2013; 2015).

The results obtained in this study have raised questions on the quality of the test item as an evaluation tool capable of verifying the evolution of student learning during the school year. In this sense, it is relevant to analyze how a student's answer to an objective item, for example, about changes in the colony after the arrival of the Portuguese Court, in 1808, applied in the Diagnostic Evaluation, and another item about the same topic applied in the Year Learning Evaluation, can indicate the evolution of the skills achieved by the student. What is the relevance and the value of the objective item? What can the student's performance in the closed test indicate? Can the item be seen as an indicator of the quality of the teaching methodology adopted by the teacher? According to the PAAE Guidelines, it is the teachers' responsibility to use the results of the program evaluations to assess themselves and verify if the methodology adopted by them has contributed to add knowledge in relation to the ones presented in the beginning of the school year, un the Diagnostic Evaluation (Minas Gerais, 2013b). However, how can one know if the students' errors or right answers in an objective test is related to the teaching methodology adopted by the teacher or if it was a random result?

With the intention discussing the relevance of PAAE items, as tools for formative evaluation, in this article, we chose to analyze two traditional items. Chart 4, below, presents the items used in School 1 in the PAAE Diagnostic Evaluation, applied at the beginning of the school year. They were generated 60 days after the classes had begun and, thus, did not exerted the function defined in the program, to offer the teacher a diagnosis to plan teaching activities. This example allows us to question the limits of the program's diagnosing function, since the traditional items that prevail in the tests do not assess what 1st year students know regarding the CBC's themes, topics, and skills, but only if they have memorized the contents need to answer the questions.

Chart 4 - Analysis of PAAE traditional items - School 1

Diagnostic Evaluation - 2011

Question 2

During the period in which Brazil was under Portuguese domain, there were many rebellions: some were nativist, and others, separatist ones. Examples of these movements are, respectively,

- A) Minas Conspiracy, Beckman Revolt
- B) Emboabas War, Pernambuco Insurrection.
- C) Emboabas War, Mascates War.
- D) Beckman Revolt, Bahia Conspiracy.

Diagnostic Evaluation - 2013

Question 14

The slave Revolt that happened in Bahia in 1835, with an essentially racial character and without the support of other population groups, with the intention of freeing black people and massacre white people, is historically known as

- A) Cabanagem
- B) Farroupilha
- C) Farroupilha (sic)
- D) Sabinada

Source: Research Data (2016).

It can be seen that questions 2 and 14 assess if 1st year students have memorized or not contents present in the 7th grade textbook (Question 2) or in the 8th grade one (Question 14). Despite the PAAE having announced the innovative character of test items, as a didactic resource that problematizes History skills, it was observed that the question in Chart 4 do not present innovations in relation to the ones used in traditional tests, used to measure the ability of memorizing the contents, being far, most of all, from the problematization criteria announced by the PAAE.

Question 2 demands the students to know the difference between nativist and separatist rebellions and to identify, among the distractors, the item that corresponds to this difference. The item does not present a problematizing situation, and thus favors an evaluation approach present in the traditional model, also called *bank education* (Freire, 2006), restricted to teaching contents dissociated from social practices.

In question 14, besides the limitations highlighted for Question 2, there are technical issues, since distractors B and C are repeated. Besides, there is a mistake in the item, because the correct option for the question, the Malês Revolt, is not among the distractors. Given that, the relevance of a tool that aims to diagnose in the 1st year of high school the memorization of 8th grade contents is once again questioned. As it is known, what is memorized is forgotten, and thus, the item looses its purpose and does not contribute to the students' critical-reflexive formation (Luckesi, 2011).

The selected questions have problems similar to the traditional items that prevail in PAAE tests: Lack of problematization, emphasis on memorization, proving, thus, the limitations of this tool as a formative resource. Besides these issues, the distractors are restricted to historical information that brings little contribution to the students' formation.

In conclusion, the analysis of 85 items identified the limitations of traditional items present in PAAE tests which, unlike what has been announced, prevailed in the program. It is highlighted that the sample,

in this study, was restricted to the six tests provided by the teachers who participated in the research. Given that, we raise the hypothesis of the prevalence of traditional items in most test created by PAAE. This means to question, thus, its real contribution to assessing a comprehensive and critical learning about a developed skill or ability.

PAAE's pedagogical implications on the History curriculum

To analyze the implications of the PAAE on the curriculum of History, we used as a methodological procedure, as aforementioned, the document analysis, bibliography gathering and the analysis of the contents of test items. The results have shown two pedagogical implications of the evaluation program on the curriculum of History, which will be analyzed below.

Matching between PAAE Items and the Common Basic Curriculum (CBC) Grid

A first pedagogical implication is related to the coordination between the evaluation and the History curriculum promoted by the program. According to the curricular guidelines, it is the teacher's responsibility to teach and evaluate based on the CBC. The proposal of integrating evaluation and curriculum was present in the PAAE origins, in 2005, and it was intensified in 2011, with the proposal for Reorganizing the CBC Topics, promoted by SEE-MG (Minas Gerais, 2011).

For the PAAE objectives to be achieved, it was necessary to match the guidelines of the CBC Curricular Proposal to teachers' planning. SEE-MG sent to schools, in 2011, the Reorganization document, for it to become a reference for the planning of high school teachers.

The analysis of the Reorganization process revealed a priority given to skills in the Curricular Proposal over a curriculum notion that could integrate procedures, methodologies, and evaluation in teaching History. To understand the changes and its limitations, it is necessary to understand the differences between the documents.

The CBC was implemented by the Resolution SEE-MG no. 666/2005 (Minas Gerais, 2005), but it was the Resolution SEE-MG no. 833/2006 that made the document official for schools of the Public State Teaching Network of Minas Gerais. For high school, the document stablished the notion of History teaching, the guidelines, and curricular proposal. This proposal was divided into Basic Contents for $1^{\rm st}$ year students and Complementary Contents for $2^{\rm nd}$ and $3^{\rm rd}$ years, in schools where the students could choose the Human Sciences area.

In this sense, it was deemed important to analyze the notion of History teaching for high school present in the CBC. The proposal for History learning process in the document covers the objectives present in the 1988 Brazilian Constitution, in the Law of Guidelines and Bases for National Education – LDB 9394/1996 and in the National Curricular Parameters – PCNs (Brazil, 1999; 2002). Within the context of soci-

ety transformations that happened in the end of the 20th century and beginning of the 21st century, these documents were already affirming that high school education should promote the construction of citizenship, besides covering universal rights and formal equality, a new understanding of social identities and national identity and of the individual ways of insertion in social life and in the labor world (Minas Gerais, 2007, p. 34).

Besides the challenges arising with the changes in society, the History CBC is a result of changes in this subject. The document aims to break with the positivist conception, that had strongly influenced the teaching of History in Brazil up to the end of the 1970s. According to Fonseca (2004), the French influence of the *Annales* School and of the English social history have affected curricular reforms and the production of books and textbooks organized by teachers in the 1980s and 1990s.

Therefore, it was intended to encourage teachers to develop changes in curricular practices and make the students engage in the process of learning History, which could result on the development of a critical thinking. For that, the CBC proposed, as a strategy, the use of the notion of *problem-history*, which emphasizes the concern in studying and understanding the relations between the present and the past, and also the knowledge constructions done by the students.

This pedagogical proposal required a new teaching posture in the classroom, which could break with the traditional model, focused on teacher exposition of contents and student memorization. In the notion incorporated by the CBC, History demands teaching through procedures of production of the historical knowledge, since this action increases the chances of developing a historical thinking, understood as the ability of identifying continuities and changes in the present/past/future, the ability of relating events and their long and medium-termed structuring elements, the ability of identifying the simultaneity of events in time, the ability of relating different social life dimensions and their different change rhythms, the ability of designing contexts that confer meaning to facts (Minas Gerais, 2007, p. 44).

This teaching notion encourages changes in the classroom, which becomes a singular space-time to problematize sources, pose questions, use concepts, take ownership of accumulated knowledge, and interact to sources of historical information (Minas Gerais, 2007).

Therefore, it can be seen that the CBC has widened the possibility field for the work of teachers, in the intention of enabling the students to have a critical and autonomous formation, without which, according to the document, it is not possible to educate participative citizens who are essential for strengthening Brazilian democracy. It is possible to affirm its designers' efforts in promoting the dialogue and appropriation of the notion of History teaching present in the researches and authors taught in the academia, with emphasis to the *Annales* School, the English Social History and the Cultural History, in order to enable the stu-

dents to develop skills related to concepts and procedures defended by authors connected to these historiographic currents.

However, it was observed that, although the CBC stablishes, in its teaching conception, a relation to recent historiographic currents, there are still numerous conceptual issues in the definition of thematic axis, topics and abilities, which is aggravated by the transformation of CBC as a curriculum into a reference grid for designing evaluation test items in the PAAE.

We reaffirm the efforts by the designers of CBC in coordinating the conception of History teaching, evinced in the methodologies and teaching objectives, with recent historiographic currents. That is, we consider that the authors have designed the CBC more influenced by the researches in the History Teaching field and by reference historians in the document, than by external evaluation policies (Minas Gerais, 2007). However, the demand for an objective grid for the implementation of a result educational policy, using the evaluation, made the document of Reorganization of History CBC Topics remain subordinated to the PAAE objectives (Minas Gerais, 2011).

Given that change, we chose to analyze the Curricular Proposal prioritized in the Reorganization of the CBC Topics in order to highlight the limitations imposed by the curricular narrowing caused by the valorization of a policy based on tests. In the mentioned document, the SEE-MG redefined the History CBC for high school. It was identified an effort in prioritizing the topics and skills defined in the PAAE to design the learning test items.

It was also verified that the SEE-MG sent the new version of CBC to all schools and started to guide education directors and specialists to follow teachers' plans in order to verify if they were meeting the demands defined by the document. It was also observed the intention of promoting a better coordination between what is taught and what is evaluated. Besides narrowing the notion of curriculum, it was observed a conceptual distortion in the notion of skills used as descriptors for the design of test items for the PAAE. These points will be analyzed below with studies in the curriculum field.

The concept of Skills and Abilities in the PAAE Grid

Researchers in the field of education consider skills and abilities as polysemic terms (Perrenoud, 2001; Perrenoud et al., 2002; Demo, 2010; Sacristán, 2011). Thus, being able to relate the content with the skills the student is expected to acquire at the end of a phase is an ability that the teacher should acquire during teaching practice. A significant concern is how to teach and evaluate considering abilities and skills. This matter is being more and more discussed, in an effort so that the learning process can be less focused on content and more on the development and preparation of students for the challenges in the current world.

Besides the polysemic character of the skills and abilities, there is a difficulty in distinguishing these concepts. Some authors accredit

this difficulty to a *theoretical poverty* or *epistemological poverty* in the notion of skill education (Sacristán, 2011). Favorable to the skill education, Perrenoud et al. (2002) define the concept as the ability of acting effectively in a certain kind of situation, supported by the knowledge, but not restricted to it. While the concept of abilities is related to the principle of action, of knowing how to do something. In practice, each skill is composed by a set of abilities that are mobilized for the execution of an action in a specific knowledge area (Perrenoud et al., 2002).

The analysis of the Reorganization of the CBC Topics identified the use of the skills and abilities concepts as test-measurable learning (Sacristán, 2011). The objectives of History teaching were reduced to the development of students' abilities, which were previously defined by the curricular proposal. According to the guidelines, it is expected that, in History classes, teachers can contribute to developing students' abilities and verify, through the test items created by PAAE, if those abilities were indeed consolidated by the students. If the items show that the learning process was not effective, according to the guidelines, the teacher should restart the planning, in order to guarantee that these abilities were developed.

It was observed an approach distortion in the way the Document of Reorganization of the CBC presented History abilities. For example, an item designed to assess the students' ability in Mapping the triangular trade in the Thirteen British Colonies (Minas Gerais, 2011, p. 2) is not capable to inform much more than if the student knows or not the content of the triangular trade in the Thirteen Colonies. If the students answer the item correctly, is it possible to affirm that they have such ability? Or otherwise, if they make a mistake, is it possible to affirm that they do not have such ability? The concept presented by authors like Perrenoud or Sacristán relates the ability to the capacity or disposition for something, an intellectual ability capable of being applied to diverse activities and situations (Sacristán, 2011, p. 37). However, in the CBC, most abilities were conferred a different meaning, of memorizing, mastering contents, making it difficult to perceive the student's capacity in transposing the ability assessed in the item to another situation, beyond the content which the ability was restrictedly related to. We present yet another example: the students may have the ability of interpreting texts about certain historical events, but if they have not studied the Guarani War, they may not answer correctly a traditional item designed to measure the ability in Interpreting the events of the Guarani War (Minas Gerais, 2011, p. 2), which does not necessarily mean that those students are not able to interpret texts.

Data in this study have shown that the work proposal guided by the abilities defined in the descriptors of the Document of Reorganization of the CBC Topics was unable to surpass the notion of traditional contents present in History teaching, which represents a contradiction, once the CBC was presented as a curricular proposal based on skill education. As it can be seen, it the SEE-MG proposal, the limitations and challenges of breaking with the traditional model have remained, by

listing a set of contents to be taught, which is not considered relevant for the abilities and skills referred to by Perrenoud et al. (2002) and Sacristán (2011).

The Priority Given to Evaluating According to the Curriculum

PAAE documents announce the defense of a formative evaluation modality. In contradiction, it was observed in the PAAE a distortion of the formative function announced by the program. According to Méndez (2011), the use of standardized tests on a large scale distorts the meaning of a formative evaluation, be it in the traditional school or the skill thinking, since in formative evaluation norms and evaluation criteria are not designed outside the learning context (Méndez, 2011). In this sense, it is possible to affirm that a formative evaluation proposal presupposes that the teaching rhythm depends on the ability of understanding the subject who is learning. Only by talking to them or giving them the opportunity to show their own processes can we deeply perceive the path run, at the same time that we can help them in what they are still doing (Méndez, 2011, p. 254).

It can be observed, in the author's thinking, the complexity inherent to the formative function of the evaluation that demands attention to each student's specificities, given that the learning rhythms are different.

The critique by Méndez (2011) and Sacristán (2011) to the standardized test allow us to identify the limitations of PAAE. In their studies, the authors enquire if the objective questions, as evaluation tools, are capable of guaranteeing that the development of skills and abilities is proven: we cannot ensure that, for different tasks in distinct and unknown circumstances, in unstable and unpredictable contexts, the answer the subject may give is the right, indicated or desired one. The subject will lack the pattern, the control, which are always external, alien to the decision-making process carried out by him or her. What comes to question is the predicable transferability of knowledge and, most of all, the subject's ability in creating new answers in the face of unknown cases or situations, a substantial characteristic of the skill (Méndez, 2011, p. 235).

According to the author, there is no reliability in tests that aim to verify certain abilities based on problem-situations, since the fact that the students gave the right or wrong answer in a test does not guarantee that they have such cognitive abilities or not. Thus, the author's questions are important to understand the program's limitations.

According to this perspective, how can the students test the critical and autonomous thinking if there is no change in the ways of understanding teaching and learning processes, going beyond the methodology? How can they do it if, to show the skill, they need to undergo a standardized test? How to assess and, above all, qualify a diverging, critical, different answer? How to test the creative competence given a reproducing, unilateral, standardizing discourse? (Méndez, 2011, p. 242-244).

The author reaffirms that the skill discourse, related to the use of tests in education, shifts the necessary epistemological debate on the curriculum and evaluation, on the *principle* and *conceptual milestone* to methodological and technical matters. To evaluate becomes a matter of technique, of designing good items to test abilities (Méndez, 2011, p. 235).

The lack of conceptual bases about the knowledge was a characteristic observed in the PAAE documents, which many times was restricted to affirming that the program adopted a formative evaluation approach. According to Méndez (2011), there is no evaluation system using the skills and abilities language that does not adopt this discourse. However, the lack of theoretical bases gives the PAAE a pragmatic and programmatic characteristic, which tends to make the use of test items natural.

The contradictions in PAAE, as the prevalence of traditional items over problematizing ones, the used of Classical Test Theory to compare results over the time, the way of approaching skills and abilities, and the permanence of traditional contents in the grid used for designing the items, all reveal a lack of clarity, gaps hidden by an efficiency discourse.

It is verified, thus, that this shift from epistemology to the technical field, present in the reforms inspired by the skill rationale, was identified in the PAAE. The emphasis on efficiency, an operationalist tendency, reaffirms the technical aspect of the evaluation programs, a strategy used to confer legitimacy to the administrative authorities proposing it (Méndez, 2011).

As it is possible to see, for the author, what this "new language" of skills followed by the use of standardized tests on large scales promotes is the return of technicism as an attempt to control the learning process. In this "new" technicism, there is a strong relation between evaluation in the skill conception and the positivism in its psychological version: the pedagogy by objectives (Méndez, 2011, p. 244).

In conclusion, the evaluation policy implemented by the SEE-MG through SIMAVE reaffirms positivist assumptions in the psychological version. Despite the program having announced the evaluation formative function as its mark, the prevalence of traditional items, the choice for the Classical Test Theory and the excessive use of tests bring the program closer to a technical approach and, consequently, make it distant from a formative modality. Given that, it is suitable the affirmation by Méndez (2011) that test reaffirm the pragmatic rational thinking, which is fragmented, shared, binary, considering what is right or wrong, present in the traditional ways of evaluating in schools, in which the final product is valued over the process. It is highlighted that a formative evaluation enables critical thinking, the respect for the students' rhythm and production, multiple possibilities, creative and diverging thinking, complex, mutant and unstable situations (Méndez, 2011) and, because of that, it promotes learning.

Final Remarks

This article has analyzed the PAAE in the context of valuation of standardized test in Minas Gerais from 2005 to 2015. It was observed that, despite the innovative skills and abilities discourse announced in the program, the traditional approach has prevailed, in a technical, cognitivist evaluation of objectives (Bittencourt, 2009; Méndez, 2009), based on the rationality of the learning process.

It can be affirmed that the discourse of advantages and benefits promoted by the evaluation systems and programs based on the skill approach tends to hide the complexity inherent to evaluation, a constitutive part of the learning process, in favor of reductionist notions, which disregard the plurality of concepts related to the curriculum, evaluation and Didactics. This notion distorts the real meaning of the formative evaluation announced by the program.

Specifically regarding the PAAE, it was observed a contradiction between the announcement of the innovative character of the tests used as pedagogical resources and the hegemonic presence of traditional items in History tests, which, consequently, narrowed the notion of curriculum. The questions used are, thus, focused on content memorization by the students.

Lastly, it was considered as a mistake the excessive use of tests as privileged guides of the teaching process within the schools. The inherent complexity of the learning process, in the dialectic knowledge perspective, cannot be understood simply by the engineering of standardized tests that has been instituted in schools. It is necessary to look for a better coordination among curriculum, teaching, and evaluation.

Based on the contributions by Gomes (2014), we defend the appropriation of the results of external evaluations by teachers, which, if well used, can help them in teaching and evaluation practices in the school, providing diagnoses on the skills and abilities achieved by the students. Besides, the evaluations of the Public Education Policies, in various levels, allow one to verify the proposed actions, educational results and impacts, making it possible to decide on the maintenance of effective actions and the reformulation of restrictive aspects for the development of the proposed programs. We remind that the evaluation, within or out of school, and the discussions of it are not exhausted in the school environment but are the starting point for a school project under construction.

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Notes

1 The *Instituto Avaliar* is a civil society organization specialized in research and evaluation processes, which acts in partnership with the SEE-MG for developing the PAAE.

- 2 The PAEE was implemented between 2003 and 2014, when the State of Minas Gerais was governed by Aécio Neves and Antônio Anastasia, both member of the *Partido da Social Democracia Brasileira* PSDB (Bauer; Gatti, 2013).
- 3 Answer alternatives are presented in five options, with only one being the correct one, which is the answer. The alternatives that do not have the answer are called distractors.

References

AFONSO, Almerindo Janela. **Avaliação Educacional**: Regulação e Emancipação: para uma sociologia das políticas avaliativas contemporâneas. São Paulo: Cortez, 2009.

BALL, Stephen. Reformar Escolas/Reformar Professores e os Territórios da Performatividade. **Revista Portuguesa de Educação**, Braga, Portugal, Universidade do Minho, v. 15, n. 2, 2002.

BARDIN, Laurence. Análise de Conteúdo. São Paulo: Edições 70, 2011.

BARRETO, Elba Siqueira de Sá. Políticas de Currículo e Avaliação e Políticas Docentes. In: BAUER, Adriana; GATTI, Bernadete (Org.). **Vinte e Cinco Anos de Avaliação de Sistemas Educacionais no Brasil**: implicações nas redes de ensino, no currículo e na formação de professores. Florianópolis: Insular, 2013. P. 101-116.

BAUER, Adriana; GATTI, Bernadete. **Ciclo de Debates**: Vinte e Cinco Anos de Avaliação de Sistemas Educacionais no Brasil. Florianópolis: Insular, 2013. P. 61-85.

BAUER, Adriana; PIMENTA, Cláudia Oliveira; HORTA NETO, João Luiz; SOUSA, Sandra Zákia. Avaliação em Larga Escala em Municípios Brasileiros: o que dizem os números? **Estudos em Avaliação Educacional**, São Paulo, v. 26, n. 62, p. 326-352, maio/ago. 2015. Disponível em: http://publicacoes.fcc.org.br/ojs/index.php/eae/article/view/3207/3073. Acesso em: 22 set. 2016.

BAUER, Adriana; SOUSA, Sandra Zákia. Indicadores para Avaliação de Programas Educacionais: desafios metodológicos. **Ensaio**, on-line, v. 23, n.86, p.259-284, 2015. Disponível em: http://dx.doi.org/10.1590/S0104-40362015000100010>. Acesso em: 10 out. 2016.

BITTENCOURT, Circe. Ensino de História: fundamentos e métodos. São Paulo: Cortez, 2009.

BONOMINO, Alícia; SOUSA, Sandra Zákia. Três Gerações de Avaliação da Educação Básica no Brasil: interfaces com o currículo da/na escola. **Educação e Pesquisa**, São Paulo, v. 38, n. 2, p. 373-388, abr./jun. 2012.

BRASIL. **Parâmetros Curriculares Nacionais**: ciências humanas e suas tecnologias. Brasília, 2000. Disponível em: http://portaldoprofessor.mec.gov.br/link-sCursosMateriais.html?categoria=23. Acesso em: 09 de ago. 2014.

BRASIL. Parâmetros Curriculares Nacionais para o Ensino Médio PCNs Ensino Médio: Orientações Educacionais Complementares aos Parâmetros Curriculares Nacionais. Brasília: Ministério da Educação, 2002.

BRASIL. **Orientações Curriculares para o Ensino Médio**; vol. 3. Ciências Humanas e suas Tecnologias. Brasília: Ministério da Educação, 2006. Disponível em: http://portal.mec.gov.br/seb/arquivos/pdf/book_volume_03_internet.pdf >. Acesso em 15 ago. 2015.

DEMO, Pedro. Habilidades e Competências no Século XXI. Porto Alegre: Mediação, 2010.

FERNANDES, Domingos. Avaliação em Educação: uma discussão de algumas questões críticas e desafios a enfrentar nos próximos anos. **Ensaio**, Rio de Janeiro, v. 21, n. 78, p. 11-34, jan./mar. 2013

FERNANDES, Domingos. Práticas de Avaliação de Dois Professores Universitários: pesquisa utilizando observações e narrativas de atividades das aulas. **Educar em Revista**, Curitiba, Brasil, Edição Especial, n. 1, p. 109-135, 2015.

FONSECA, Thaís Nívia de Lima. **História & Ensino de História**. Belo Horizonte: Autêntica, 2004.

FREIRE Paulo. Pedagogia da Autonomia. São Paulo: Editora Paz e Terra, 2006.

GATTI, Bernadete. Avaliações de Sistemas Educacionais no Brasil. Sísifo. **Revista de Ciências da Educação**, Lisboa, n. 09. p. 07-18, maio/ago. 2009.

GOMES, Suzana dos Santos. Um Olhar sobre as Práticas de Avaliação na Escola. Belo Horizonte: Mazza Edições, 2014.

GOMES, Suzana dos Santos. Políticas de Avaliação Externa e Interna: Desafios e Perspectivas. In: GOMES, Suzana dos Santos; QUARESMA, Adilene. **Políticas e Práticas na Educação Básica e Superior**: Desafios da Contemporaneidade. Belo Horizonte: Fino Traço, 2015. P. 34-360.

LUCKESI, Cipriano Carlos. **Avaliação da Aprendizagem Escolar**: estudos e proposições. 22 ed. São Paulo: Cortez, 2011.

MACEDO, Lino de. Situação-Problema: forma e recurso de avaliação, desenvolvimento de competências e aprendizagem escolar. In: PERRENOUD, Philippe; THURLER, Monica; MACEDO, Lino de; MACHADO, Nilson. Junior; ALLESSANDRINI, Cristina. As Competências para Ensinar no Século XXI: a formação dos professores e o desafio da avaliação. Porto Alegre: Artmed Editora, 2002.

MELO, Savana; CIRILO, Pauliane; PINTO, Samilla. O Ensino Médio e o Trabalho Docente: características de Minas Gerais. **POIÉSIS**, Tubarão, Revista do Programa de Pós-Graduação em Educação, Universidade do Sul de Santa Catarina, v. 10, n. 17, p. 102-129, jan./jun. 2016.

MÉNDEZ, Juan. Avaliar a Aprendizagem em um Ensino Centrado nas Competências. In: SACRISTÁN, José Gimeno. **Educar por Competências**: o que há de novo? Porto Alegre: Artmed, 2011. P. 233-264.

MINAS GERAIS. Resolução SEE nº 14. Institui o Programa de Avaliação da Educação Básica. Belo Horizonte: Secretaria de Estado da Educação, 2000.

MINAS GERAIS. Resolução nº 666, de 07 de abril de 2005. Estabelece os Conteúdos Básicos Comuns (CBCs) a serem obrigatoriamente ensinados pelas unidades de ensino estaduais. Belo Horizonte: Secretaria de Estado de Educação, 2005. Disponível em: https://www.educacao. mg.gov.br/images/documentos/%7BA6FF8791-B1D3-4FBB-B4B5-6AFEE169185A% 7D_ resol0033. pdf>. Acesso em: 29 nov. 2017.

MINAS GERAIS. **Conteúdo Básico Comum de História no Ensino Médio**. Belo Horizonte: Secretaria de Estado de Educação, 2007.

MINAS GERAIS. Secretaria de Estado de Educação. Reordenação dos Tópicos dos CBCs. Readequação dos CBCs à Estrutura Curricular do Reinventando o Ensino Médio. 2011. Disponível em: http://crv.educacao.mg.gov.br/SISTEMA_CRV/banco_objetos_crv/701D60243C4E4710994A35AA2261231D14112012143506_ReordenacaoCBCdeHistoria.pdf>. Acesso 20 fev. 2015a.

MINAS GERAIS. Secretaria de Educação de Estado. SIMAVE/PROEB 2013. **Revista da Gestão Escolar**, Juiz de Fora, Universidade Federal de Juiz de Fora, v. 2, jan./dez. 2013a.

MINAS GERAIS. **Manual do PAAE**. Belo Horizonte: Secretaria de Estado de Educação, 2013b. Disponível em: . Acesso em: 10 dez. 2017.

MINAS GERAIS. **Programa de Avaliação da Aprendizagem Escolar (PAAE**). Belo Horizonte: Secretaria de Estado de Educação, 2015. Disponível em: . Acesso em: 17 jul. 2015b.

MIZUKAMI, Maria da Graça. **Ensino**: as abordagens do processo. São Paulo: EPU, 2003.

OLIVEIRA, Dalila Andrade; JORGE, Tiago. As Políticas de Avaliação, os Docentes, e a Justiça. **Currículo sem Fronteiras**, v. 15, n. 2, p. 346-364, maio/ago. 2015. OLIVEIRA, Dalila. A. As políticas para o Ensino Médio na Realidade Brasileira: Uma agenda em disputa. **POIÉSIS**, Tubarão, Revista do Programa de Pós-Graduação em Educação, Universidade do Sul de Santa Catarina, v. 10, n. 17, p. 187-198, jan./jun. 2016.

PERRENOUD, Philippe. Ensinar: agir na urgência, decidir na incerteza. Porto Alegre: Artmed Editora, 2001.

PERRENOUD, Philippe; THURLER, Mônica; MACEDO, Lino de; MACHADO, Nilson; ALLESSANDRINI, Cristina. **As Competências para Ensinar no Século XXI**: A formação dos professores e o desafio da avaliação. Porto Alegre: Artmed Editora, 2002.

PINKSY, Jaime et al. **História da América Através de Textos**. São Paulo: Contexto, 2007.

SACRISTÁN, José. Gimeno. Educar por Competências: o que há de novo? Porto Alegre: Artmed, 2011.

SOUSA, Sandra Zákia. Avaliação Externa e em Larga Escala no Âmbito do Estado Brasileiro: interface de experiências estaduais e municipais de avaliação da Educação Básica com iniciativas do governo federal. In: BAUER, Adriana; GATTI, Bernadete (Org.). **Vinte e Cinco Anos de Avaliação de Sistemas Educacionais no Brasil**: implicações nas redes de ensino, no currículo e na formação de professores. Florianópolis: Insular, 2013. P. 61-85.

Alex de Oliveira Fernandes is a PhD student and Master in Education by the Universidade Federal de Minas Gerais (UFMG), he is graduated in History by UFMG and specialized in African and Afro-Brazilian Studies by the Pontificia Universidade Católica de Minas Gerais (PUC Minas). E-mail: alexofernandes@yahoo.com.br

Suzana dos Santos Gomes is a post-doctorate student in the Universidade de Lisboa (U.L) and the Universidade de São Paulo (USP), she is PhD and Master in Education by the Universidade Federal de Minas Gerais (UFMG). Associated Professor at UFMG and professor at the Post-Graduate Program in Education: Knowledge and Social Inclusion.

E-mail: suzanasgomes@fae.ufmg.br

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