

APPROACHES ON FINANCIAL EDUCATION IN HIGH SCHOOL: INTERFACES WITH RESEARCH IN THE AREA

ABORDAGENS SOBRE A EDUCAÇÃO FINANCEIRA NO ENSINO MÉDIO: INTERFACES COM PESQUISAS NA ÁREA

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ABSTRACT

It is of fundamental importance that Brazilian school institutions are concerned with financial education in people's daily lives, since this is indispensable in everyday decision-making, both school and family, because much of what is learned in the school context, is practiced at home. In this sense, the basic question raised for this work is: how to propose a financial education that favors discussions about the family budget of high school students in Brazilian schools? One of the aspects that needs to be pointed out is the problem related to the quality of students' decision-making, with regard to financial education, whether in the formal or non-formal context of teaching. The current situation points to a very significant number of people who have financial defaults, failing to meet their monetary commitments. Thus, in order to maximize studies on this theme, the work sought to collect information and trends on this theme on the national scene, through a bibliographic article, focusing on academic productions related to financial education and aimed at high school. The aim of this study was to show the importance of working on this topic with high school students, the habit since adolescence of having a healthy financial life, which later in adulthood will be put with more practice and experience.

Keywords: Financial education. High school. Family budget.

RESUMO

É de fundamental importância que as instituições escolares brasileiras se preocupem com a educação financeira no cotidiano das pessoas, uma vez que isso é indispensável nas tomadas de decisões do cotidiano, tanto escolar quanto familiar, pois muito do que se aprende no contexto escolar, se pratica em casa. Neste sentido, a questão básica trazida para este trabalho é: como propor uma educação financeira que favoreça discussões sobre o orçamento familiar dos alunos do ensino médio nas escolas brasileiras? Um dos aspectos que necessita ser apontado é o problema relacionado à qualidade da tomada de decisões dos estudantes, no que diz respeito a educação financeira, seja no contexto formal ou não formal de ensino. A situação atual aponta um quantitativo muito significativo de pessoas que possuem inadimplência financeira, deixando de cumprir com seus compromissos monetários. Assim, visando maximizar os estudos nesta temática, buscou-se no trabalho coletar informações e tendências dessa temática no cenário nacional, por meio de um artigo de cunho bibliográfico, com enfoque nas produções acadêmicas relacionadas a educação financeira e voltadas para o ensino médio. O intuito deste estudo foi mostrar a importância que se tem em trabalhar este tema com os estudantes alunos do ensino médio, o hábito desde a adolescência de ter uma vida financeira saudável, que posteriormente na fase adulta será posto com mais prática e experiência.

Palavras-chave: Educação financeira. Ensino médio. Orçamento familiar.

INTRODUCTION

Currently, educational institutions have been concerned with financial education in people's daily lives, because, due to the range of factors that this area influences, it is

indispensable in routine decision-making, both at school and within the family. It should be noted that improvement in the school context may positively impact students in later life, since they will either have subsidies to manage their finances.

Several surveys point to a high level of defaulting persons, who for some reason failed to comply with their monetary commitments, and thus were included in the list of the Central Credit Protection Service (SPC) and Serasa. It is estimated that 27% of the population in Mato Grosso do Sul is in default. In the state capital, Campo Grande alone, there are 304,000 defaulters, according to data provided by Serasa's operations manager, Renato Cicarelli (with. Pers.) The amount due was not disclosed in any disclosure channel.

The numbers are significant, despite the fact that when researching financial education and the family budget, one can see as a result many files with tips and steps on making a budget and good financial planning. Financial banks such as the Central Bank and Caixa Econômica Federal provide booklets on the subject, including some city halls.

Financial Education is the process by which consumers / investors improve their understanding of financial products and concepts and, through objective information, instruction and advice, develop skills and confidence to become more aware of financial risks and opportunities, to make decisions based on information, to know where to get help and to take other effective actions to improve your financial well-being (OECD, 2005).

According to Mundy (2008, p.74), the objective of financial education is for people to know how to manage their financial resources well, throughout their lives. Thus, financial education must cover attitudes and behaviors, as well as knowledge and skills. This is because, unless those who receive the knowledge about financial education and make good use of the knowledge later, financial education may not have been able to achieve its purpose for that individual. The government stank, by decree no. 7,397, of December 22, 2010, institutes the ENEF (National Strategy for Financial Education), which according to its article 1:

The National Strategy for Financial Education - ENEF is hereby established with the purpose of promoting financial and social security education and contributing to the strengthening of citizenship, the efficiency and soundness of the national financial system and conscious decision making by consumers BRASIL (2010, p. 1).

In the use of its aforementioned tasks, ENEF subsequently created a government educational program: “Financial education in schools”, with the “objective of offering young students the necessary training so that they can make conscious and sustainable financial decisions for both personal life and for the country ” (CONEF, 2013, p. 8).

Regarding the global financial situation, the Central Bank of Brazil mentions that:

If we think about it, we are subject to a much more complex financial world than that of previous generations. However, the population's level of financial education has not kept pace with this increase in complexity. The absence of financial education, combined with easy access to credit, has led many people to excessive debt, depriving them of part of their income due to the payment of monthly installments that reduce their ability to consume products that would bring them satisfaction (BANCO CENTRAL DO BRASIL, 2013, p.12).

And, in relation to this complex financial world, society can improve with financial education, because according to ENEF, financial education is:

Process by which individuals and societies improve their understanding of financial concepts and products, so that, with information, training and guidance, they can develop the values and skills necessary to become more aware of the opportunities and risks in it involved and then be able to make informed choices, know where to look for help, take other actions that improve their well-being. Thus, they can contribute more consciously to the formation of responsible individuals and societies, committed to the future (BRASIL, 2010, p. 57-58).

For the Central Bank, financial education “can bring several benefits, among which, to enable the balance of personal finances, to prepare for facing financial unforeseen circumstances and for retirement, to qualify for the good use of the financial system” (BANCO CENTRAL DO BRASIL , 2013, p.12). While the family budget is a tool that allows to predict and control financial life and to plan the future by showing the inflows and outflows., Mobills (2019) recommends that the budget is configured in a tool in which the income and expenses of a particular family. Salaries, commissions, overtime, premiums, income from financial investments, as well as other resource gains for all members will form the family's income; food, rent, condominium, cable TV, internet, landline / cell phone bills, fuel and other expenses of family members will make up the expenses. The combination of both, income and expenses, will form the family budget.

The family budget can also be considered as a household budget. According to CONEF (2018, p.19) the domestic budget “allows you to predict what may happen to your financial future for the next few months (short term). It also helps to plan your financial future in the medium and long term ”.

For Caixa Econômica Federal (2009), the preparation of the domestic budget is essential for financial success. Defining needs and planning expenditures, considering disposable income, is a smart way to start saving.

Given the above, the objective of this article is to show the importance of the approach to financial education for high school, through a wide bibliographic study, of the State of the Art type.

STATE-OF-THE-ART RESEARCH

The research in the methodological scope of the State of the Art aims to carry out a bibliographic review of academic and scientific production about a specific specific area of knowledge (SILVA AND CARVALHO, 2014). In this type of research, a careful analysis of production is carried out within a certain time frame, with a view to conducting a mapping of productions in a certain theme, and as a consequence, these findings may contribute greatly in several aspects, due to the dissemination of what is being produced in academia.

For Ferreira (2002), the context of State of the Art research has the

challenge to map and discuss a certain academic production in different fields of knowledge, trying to answer what aspects and dimensions have been highlighted and privileged in different times and places, in what ways and under what conditions certain master's dissertations, doctoral theses have been produced , publications in journals and communications in the annals of congresses and seminars (FERREIRA, 2002, p.257).

The author also states that the data sources for this type of research are, to a large extent, research repositories, libraries from different universities, associations or bodies that promote research.

Therefore, the state of the art is configured in an important research study of research that has already been or is being carried out in the country and that can subsidize themes and lines of research linked to financial education in interface with high school contexts, as well as their subunits.

For Vinholi Junior et al (2020), the data generated through research in this classification allows pointing out a series of reflections and countless considerations, depending on the focus of the reader's interest. Anyway, the presentation of this information contributes to broaden the understanding about the development of this research subarea.

METHODOLOGY

The adopted methodology is characterized in a bibliographic survey that involves qualitative aspects, of the "state of the art" type.

This type of research takes stock of the respective areas of knowledge, in order to diagnose relevant, emerging and recurring themes, indicate the types of research, organize the existing information as well as locate the existing gaps (ROMANOWSKI and ENS, 2006, p.41).

In this way, we seek to know scientific works that address financial education aimed at high school. In the first half of 2020, a broad search for scientific works was carried out in two databases chosen for this research: Google Scholar and Scientific Electronic Library Online

(SciELO), using the following descriptors "Financial Education High School" and "Financial Education in Schools".

In the first moment, 41 documents were found. Subsequently, a selection of the works found was made, making a total of 21 selected documents, using as an inclusion criterion the scientific works that address financial education in high school, and as exclusion criteria those that were not effectively focused on high school. After this investigation, data were tabulated for the studies found, shown in Table 1, initially organized by the title of the work and institution in which it was developed.

Below is the table with the list of the 21 scientific papers that were selected.

Table 1. List of scientific papers used in the research

ORDER	THEMES	INSTITUTION
1	THE IMPORTANCE OF FINANCIAL MATHEMATICS IN HIGH SCHOOL AND ITS CONTRIBUTION TO THE CONSTRUCTION OF FINANCIAL EDUCATION IN THE CITIZEN	State University of Ponta Grossa - UEPG
2	THE RELEVANCE OF FINANCIAL EDUCATION IN THE FORMATION OF YOUNG PEOPLE	Pontifical Catholic University of Rio Grande do Sul - PUCRS
3	DEMANDS FOR PERSONAL FINANCIAL EDUCATION IN PUBLIC AND PRIVATE HIGH SCHOOLS IN THE FEDERAL DISTRICT	University of Brasilia -UNB
4	ECONOMIC-FINANCIAL EDUCATION: A NEW PERSPECTIVE FOR HIGH SCHOOL	Federal University of Rio de Janeiro - UFRJ
5	FINANCIAL EDUCATION AND THE MATHEMATICS CLASSROOM: CONNECTIONS BETWEEN ACADEMIC RESEARCH AND PRACTICE TEACHER	Federal University of Rio de Janeiro - UFRJ
6	FINANCIAL EDUCATION IN SCHOOLS: A STUDY IN PUBLIC SCHOOLS IN THE HIGH SCHOOL OF THE MUNICIPALITY OF JURANDA / PR	State College of Sciences and Letters of Campo Mourão - Fecilcam
7	FINANCIAL EDUCATION IN HIGH SCHOOL: RELATIONS WITH FINANCIAL MATHEMATICS IN TEACHING PRACTICE	Others
8	FINANCIAL EDUCATION IN HIGH SCHOOL: AN APPROACH THROUGH THE ANALYSIS OF FINANCIAL PRODUCTS WITH AN EMPHASIS ON CONSORTIUMS (Federal Technological University of Paraná - UTFPR
9	FINANCIAL EDUCATION, FAMILY PLANNING AND HOUSEHOLD BUDGET: A CASE STUDY	Central Unit of Education Faem Faculdade - UCEFF
10	FINANCIAL EDUCATION: WHAT STUDENTS AND TEACHERS THINK	Others
11	FINANCIAL EDUCATION: A PROPOSAL FOR APPROACH AND OF ACTIVITIES	Federal University of Ouro Preto - UFOP
12	FINANCIAL EDUCATION IN THE MATHEMATICS CURRICULUM OF HIGH SCHOOL	Lutheran University of Brazil - ULBRA
13	FINANCES IN HIGH SCHOOL: ACTIVITIES FROM THE ECONOMIC-FINANCIAL EDUCATION PERSPECTIVE	Federal University of Rio de Janeiro - UFRJ

14	INVESTIGATION OF THE THEMATIC FINANCIAL EDUCATION IN CONSTANT HIGH SCHOOL IN BRAZILIAN LEGISLATION	Lutheran University of Brazil - ULBRA
15	INVESTIGATING HOW CRITICAL FINANCIAL EDUCATION CAN CONTRIBUTE TO MAKING YOUTH-INDIVIDUAL-CONSUMER CONSUMPTION DECISIONS (JIC'S)	Federal University of Juiz de Fora - UFJF
16	MATHEMATICS AND FINANCIAL EDUCATION: AN EXPERIENCE WITH HIGH SCHOOL	Anhanguera College of Taubaté - FAC
17	THE BEHAVIOR OF HIGH SCHOOL STUDENTS IN THE TAQUARI VALLEY IN RELATION TO PERSONAL FINANCE	University of Vale do Taquari - UNIVATES
18	FINANCIAL EDUCATION PROGRAM IN SCHOOLS - HIGH SCHOOL: AN ANALYSIS OF THE GUIDELINES CONTAINED IN THE TEACHER'S BOOKS AND THEIR RELATIONSHIPS WITH MATHEMATICS	Federal University of Pernambuco - UFPE
19	PROBLEM SOLVING IN FINANCIAL MATHEMATICS TO TREAT EDUCATION ISSUES FINANCIAL IN HIGH SCHOOL	Others
20	AN APPROACH TO FINANCIAL MATHEMATICS AND FINANCIAL EDUCATION IN HIGH SCHOOL	State University of Ponta Grossa - UEPG
21	A REFLECTION ON THE IMPORTANCE OF INCLUSION OF FINANCIAL EDUCATION IN THE PUBLIC SCHOOL	University of Vale do Taquari - UNIVATES

Source: own elaboration (2020).

These productions made it possible to identify the period and the amount of work carried out, which permeated between the years 2009 to 2018, shown in table 2.

Table 2. Number of scientific papers published between 2009 to 2018

Year	Number of published works	Percentage
2009	2	9,52%
2010	1	4,76%
2011	3	14,29%
2012	1	4,76%
2013	4	19,05%
2014	1	4,76%
2015	3	14,29%
2016	1	4,76%
2017	1	4,76%
2018	4	19,05%
Total	21	100%

Source: own elaboration (2020).

The data show that the years 2010, 2012, 2014, 2016 and 2017 included only 1 (one), being a period regularly spaced in the cutout established for this work. Two productions were found in 2009 and, for 2011 and 2015, three works. The years 2013 and 2018 were the

productions found that established interfaces between financial education and high school (four jobs each year).

Coincidentally, the year 2018 marked the beginning of the discussion about the insertion of financial education in the Common National Curricular Base. According to Assis and Giordano (2019),

the implementation of the National Common Curricular Base - BNCC (BRASIL, 2017, 2018) can become a very important factor, capable of driving the expansion of educational actions aimed at promoting Brazilian Financial Education, considering both its curricular presence within the institution itself Mathematics discipline, as well as articulating it with other knowledge, because Financial Education appears in BNCC as a transversal theme, and, like others, it is related to several subjects of the basic education school curriculum, involving subjects such as Geography, Philosophy, Sociology It is history. Whether at primary or secondary levels, favoring an interdisciplinary approach (ASSIS and GIORDANO, 2019, p. 3)

For a better visualization about the periodicity of the findings in the state of art, below is a graph demonstrating the number of works per year, between 2009 to 2018 (graph 1).

Graph 1. Number of scientific papers per year.



Source: own elaboration (2020).

A very elementary type of factor in State of the Art research is the systematization and presentation of the regional data in which the documents were published (and / or made). Thus, Table 3 shows the number of scientific papers published by region, state and institution. It is noticed, as well as the context of periodicity, regular fluctuation in the publication of documents on the subject.

Table 3. Number of scientific papers published by region

Region	UF	Institution	Number of works published	Porcentagem
Northeast	PE	UFPE	1	4,76%
	BA	Others	1	4,76%
Midwest	DF	UNB	1	4,76%
Southeast	MG	UFOP	1	4,76%
		UFJF	1	4,76%
		Others	1	4,76%
	RJ	UFRJ	3	14,29%
	SP	FAC	1	4,76%
South	PR	Fecilcam	1	4,76%
		UEPG	2	9,52%
		UTFPR	1	4,76%
	RS	ULBRA	2	9,52%
		UNIVATES	2	9,52%
		PUC RS	1	4,76%
		Others	1	4,76%
	SC	UCEFF	1	4,76%

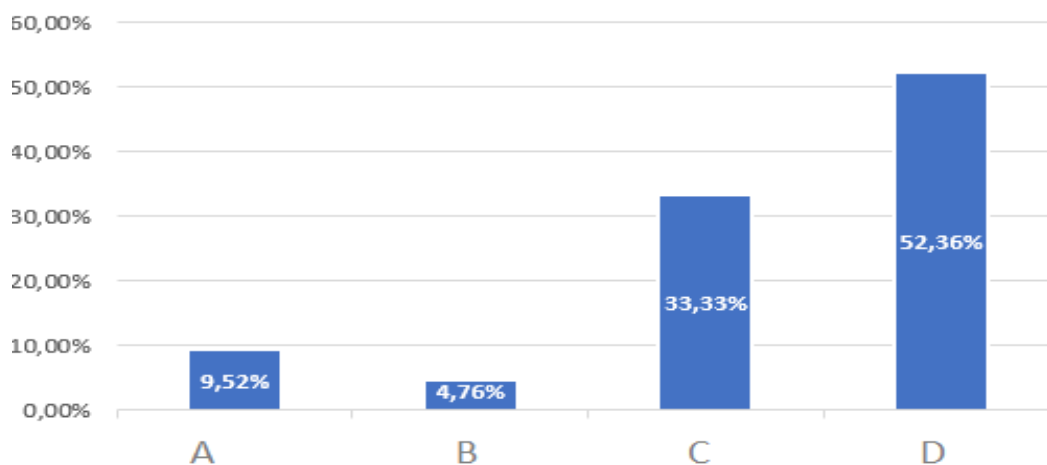
Source: own elaboration (2020).

The determination of the regional approach in a given area of study is important for presenting some approaches: greater academic production, greater number of research groups, professors / scientists of reference in the specific field, among others.

In the findings of this work, it is observed that the institution that most published works related to financial education in the context of high school was the Federal University of Rio de Janeiro (UFRJ), with 14.29% of the publications, followed by the University State of Ponta Grossa (UEPG), Lutheran University of Brazil (ULBRA) and University of Vale do Taquari (UNIVATES), which accounted for 9.52% of publications. All the others, with a reference work in the area, made up 4.76% each of representativeness.

Thus, in all works by Brazilian region, the exposure of the data, with their respective percentages, is shown in Graph 2.

Graph 2. Percentage of scientific papers published by region.



Subtitle: A – Northeast; B – Midwest; C – Southeast; D – South

Source: own elaboration (2020).

It is observed that the South region was the most representative, as it obtained 52.36% - more than half of all documents; followed by the Southeast region, with 33.33%. It is worth mentioning the absence of works in the North region, that is, for this theme there was no work from this region, taking into account the search methodology stipulated for this work.

In this sense, compared to a research work of the State of the Art type for the teaching of biology, with regard to the concentration of academic production in the South-Southeast axis, a characteristic historically present for the set of research in Education, Megid Neto (1999, p. 16) argues that “the low concentration of graduate programs in the North, Midwest and Northeast regions restricts the development of educational research in these three regions”. This situation requires that many universities, located in the aforementioned regions, refer professors from their staff to carry out postgraduate studies predominantly in institutions in the South and Southeast, at the risk of losing part of these professionals, who may not return to the institutions of origin. after graduation, thus hindering the future opening of graduate programs in these locations and reinforcing the dependence on the South - Southeast axis.

Another relevant aspect, object of search in this study, was the search for keywords with the most representative descriptions in the search object. For the 21 selected studies, the frequency with which the respective words appeared is described in Table 4.

Table 4. Keywords in the works found

Order	Keywords	Frequency
1	Financial education	20
2	High school	6
3	Financial math	8

Source: own elaboration (2020).

When analyzing the summary of scientific papers, check if papers 1, 2, 3, 14 and 21 (according to table 1), reinforce the idea of the importance of financial education in a very specific way in the classroom. Works 4, 13, 15 and 20 deal with the forms and proposals of financial education approaches in a more interdisciplinary way. The latter make more mention of the teaching and discrepant view of financial education.

All scientific works that have been selected complement each other in some way. While some gave greater emphasis to the importance of financial education in the pedagogical context, others demonstrated methods and demonstrated methods and approaches in working with the theme, contextualizing with the theme of those involved.

FINAL CONSIDERATIONS

Through this study, methodologically of the state-of-the-art type, it is observed that the interest in the school context in addressing aspects of financial education in high school is not of today. Through the works presented, since 2009 the academy has been showing, at least annually, at least one study that makes reference to financial education themes, until the year 2018.

Thinking about these data, the purpose of this article was to show the importance of working with financial education in high school students. This proposal can be taken to various educational institutions, seeking to foster in high school students the habit since adolescence of having a healthy financial life, which later in adulthood will be put with more practice and experience.

The study sought to provide subsidies to the importance and relevance of financial education in schools, with a view to the positive impact that knowledge of this discipline can offer, in the short, medium and long term in the lives of students after the inclusion of financial education. It is believed that, in the end, students may be able to organize their finances and family budget in a more conscious and planned manner.

REFERENCES

BANCO CENTRAL DO BRASIL. Caderno de Educação Financeira: Gestão de Finanças Pessoais. Brasília: BCB, 2013.

BRASIL. Estratégia Nacional de Educação Financeira – Plano Diretor da ENEF.

BRASIL. Decreto nº 7.397, de 22 de dezembro de 2010. Institui a Estratégia Nacional de

Educação Financeira - ENEF, dispõe sobre a sua gestão e dá outras providências.

BRASIL (2017) Ministério da Educação. **Base Nacional Comum Curricular - Educação é a Base: Ensino Fundamental**. Brasília: MEC.

BRASIL (2018). Ministério da Educação. **Base Nacional Comum Curricular - Educação é a Base: Ensino Médio**. Brasília: MEC.

CAIXA ECONOMICA FEDERAL. **Planejamento financeiro familiar / Caixa Econômica Federal**. - Brasília: CAIXA, 2009.

CONEF. **Educação financeira nas escolas: ensino médio: livro do professor** [elaborado pelo Comitê Nacional de Educação Financeira (CONEF) – Brasília: CONEF, 2013.

FERREIRA, N. S. A. As pesquisas denominadas “Estado da Arte”. **Educação e Sociedade**, v. 23, n. 79, p. 257-272, 2002. Available in: <https://www.scielo.br/pdf/es/v23n79/10857.pdf>

GERHARDT, T. E; SILVEIRA, D. T. **Métodos de pesquisa**. 1ª. Ed. Porto Alegre: Editora da UFRGS, 2009.

GIORDANO, C. C.; [ASSIS, M. R. S.](#); COUTINHO, C. Q. E. S. A Educação Financeira e a Base Nacional Comum Curricular. **EM TEIA - REVISTA DE EDUCAÇÃO MATEMÁTICA E TECNOLÓGICA IBEROAMERICANA**, v. 10, n. 3, p. 01-20, 2019. Available in: <https://periodicos.ufpe.br/revistas/emteia/article/view/241442>

MEGID NETO, J. Três décadas de pesquisas em Educação em Ciências: tendências de teses e dissertações (1972-2003). In: NARDI, R. (Org.). **A pesquisa em ensino de Ciências no Brasil: alguns recortes**. São Paulo: Escrituras, 2007, p. 341-355.

MINAYO, Marília Cecília de Souza (Org.). **Pesquisa Social: teoria, método e criatividade**. Petrópolis, RJ: Vozes, 2003.

MOBILLS. **Maneira mais simples de gerenciar suas finanças pessoais**. Available in: <https://glossario.mobills.com.br/glossario/o/orcamento-familiar>. Access in: 04 mai. 2020.

MUNDY, Shaun. **Financial Education Programmes in school: Analysis of selected current programmes and literature draft Recommendations for best practices**. OCDE journal: General papers, volume 2008/3. OCDE, 2008.

PEREIRA, V. S. V. **Orçamento familiar: uma ferramenta para gerir os recursos financeiros da esfera doméstica**. In: XII Encontro Internacional de Produção Científica. Anais... 2011.

ROMANOWSKI, J. P; ENS, R. T. As Pesquisas Denominadas do Tipo "Estado da Arte" em Educação. **Revista Diálogo Educacional**, v. 06, n. 19, p. 37-50, set./dez. 2006. Available in: <https://periodicos.pucpr.br/index.php/dialogoeducacional/article/view/24176>

SILVA, F.J.C.; CARVALHO, M. E. P. **O estado da arte das pesquisas educacionais sobre gênero e educação infantil**: uma introdução. In: 18. REDOR. Anais... 2014.

VINHOLI JÚNIOR, A. J., SILVA CABREIRA, J. E DIAS, DANIEL PEREIRA DO PRADO. Teoria de Ausubel e Ensino de Biologia: Uma análise a partir dos eventos de Aprendizagem Significativa. **Areté. Revista Digital del Doctorado en Educación de la Universidad Central de Venezuela**, v. 6, n. 11, p. 199-216. Available in: http://saber.ucv.ve/ojs/index.php/rev_arete/article/view/18518/144814484914

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