

What does the Education Area disclose about Quality and Innovation related to Distance Education?

O que a Área de Educação Divulga sobre Qualidade e Inovação na Educação a Distância?

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Abstract

The article explains research results that deal with distance education from the perspective of the educational field, focusing on the concepts of quality and innovation. This triangulation is built by the centrality that these themes assume in the educational context, based on current educational policies. This is a systematic literature review research, using the Scielo database as a research source, considering all its sixteen international and the one national collections. Twenty-six articles were found between 2007 and 2017, of these twenty are about quality and six discuss innovation, showing a greater concern of the field with the theme of quality over inovation. This study also showed up that among the analyzed collections, the Brazilian educational field presented the highest production, followed by South Africa, Costa Rica, Mexico, Portugal and Cuba. The papers analyzed indicate aspects that must be attended to offer quality courses. These are indicators that involve three aspects: i) initial educational inputs, such as: learning environment, infrastructure, teaching material, communication systems, internet, computers, instructional design of the course; ii) process indicators: academic management; formation of a multidisciplinary team; forms of interaction: student-teacher and tutor interaction / and student to student interaction; and iii) assessment processes: innovative assessment instruments; performance evaluation, dropout rates, ways of diagnosing student satisfaction. In this way, it was observed the necessity of more research with an empirical focus, in a longitudinal character and the formation of a network of researchers as a suggestion for the field of education to expand its potential to contribute to the theme.

Keywords: Distance education. Quality. Innovation.



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Resumo

O artigo explicita resultados de pesquisas que tratam da educação a distância pelo viés do campo educacional, tendo como foco os conceitos de qualidade e de inovação. Essa triangulação é construída pela centralidade que estes temas assumem no contexto educacional, a partir das políticas educacionais em curso. Trata-se de pesquisa do tipo revisão sistemática de literatura, tendo como fonte de pesquisa a base Scielo, considerada a partir de suas dezesseis coleções internacionais e a nacional. Foram encontrados vinte e seis artigos entre 2007 e 2017, sendo vinte sobre qualidade e seis sobre inovação, o que explicita uma preocupação maior do campo com a temática da qualidade. Também ficou evidenciado que dentre as coleções analisadas, o campo educacional brasileiro apresentou maior produção, seguido de África do Sul, Costa Rica, México, Portugal e Cuba. Os trabalhos analisados indicam aspectos que devem ser atendidos para a oferta de cursos com qualidade. Trata-se de indicadores que envolvem três aspectos: i) os insumos educativos iniciais, como: ambiente de aprendizagem, infraestrutura, material didático, sistemas de comunicação, internet, computadores, desenho instrucional do curso; ii) indicadores de processo: gestão acadêmica; formação de equipe multidisciplinar; formas de interação aluno-professor-tutor e aluno-aluno; e iii) processos de avaliação: instrumentos inovadores de avaliação; avaliação do rendimento, taxas de evasão, formas de diagnosticar a satisfação dos alunos. Observa-se a necessidade de pesquisas com foco empírico, em caráter longitudinal e com formação de rede de pesquisadores, como sugestão para que o campo da educação possa ampliar o seu potencial em contribuir com o tema.

Palavras-chave: Educação a distância. Qualidade. Inovação.

1. Introduction

This article seeks to explain the results of research that deal with distance education from the perspective of the educational field, focusing on quality and innovation. In this sense, we seek to build a triangulation between distance education, quality and innovation from the possible centrality that these issues acquire in the contemporary educational scenario, made possible, above all, by the globalization process and the increase in demand for education. Education, in this globalized context, is conceived by public managers for its potential to promote economic development and, on the other hand, for being considered as a mechanism for consolidating the democratizing aspect for contemporary societies.

Distance education, therefore, is understood from its potential to enable access to education for all, when there is also an expansion of demands for education, including for people who, historically, had this restricted access. Distance education presents growth rates higher than the current expansion percentages of face-to-face education, which highlights its relevance in this context. By way of illustration, it is mentioned that face-to-face education in Brazil grew by 39.49% in the period from 2000 to 2005 and in the period from 2005 to 2017, this growth was 31.8%. Distance education, in these same periods, grew by 98.53% and 93.47%, respectively. However, when seeking to expand access to education, the presence of discourses that deal with a false polarization between quality and quantity already revealed in the literature is evident (ALONSO, 2010; REAL, 2008), since expansion (quantity) of access contributes to the improvement of the social quality of education.

Innovation also presents possibilities for a relationship with distance education, insofar as its contribution occurs in parallel with the development of communication and information technologies, inducing more possibilities for interactivity and advances to the models in progress.

Therefore, it is important in this work to reveal how the field of education, when it presents results of studies and research on distance education, conceptualizes quality and innovation, considering that these are polysemic concepts. This work focus is related to the partial objectives of the network research entitled Policies for the Expansion of Distance Education (DE) in Brazil: Regulation, Quality and Innovation in Question, which aims to analyze the conceptions, dimensions, quality mechanisms and innovation present in the offer and expansion of distance education, considering its changes in trajectory, regulation, presence and action strategies of actors who work and deal with the modality.

The research on screen is characterized as a bibliographic type, identified as state of the art or systematic literature review, on which a survey was carried out with the Scientific Electronic Library Online (Scielo) database, as it is considered the largest provider of journals indexed by the Directory of Open Access Journals (PACKER; MANEGHINI, 2014). Still, it was taken into account that this database has scientific articles as its source, considered as the main instruments for publishing the products generated by researchers and graduate students in the area of education, a characteristic that indicates the synthesis of the thinking of the scientific field in the area of education.

Through Scielo, it is possible to access collections of periodicals from 16 (sixteen) countries, namely: South Africa, Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, Spain, Mexico, Paraguay, Peru, Portugal, Uruguay and Venezuela, which makes it possible to establish comparative analyzes with a more comprehensive character, considering the international scenario.

To present the results obtained, this article was divided into two sections, in addition to the final considerations. The first section will present the composition of the bibliographic corpus found on the topics of innovation and quality. The second section will explain the concepts evidenced by the analyzed studies.

It is believed that this article will contribute to a better understanding of the conceptual frameworks about quality and innovation that are being built by researchers in the field of education, who take distance education as the object of their studies.

2. Innovation and quality: the composition of the corpus

According to Ramos, Faria and Faria (2014), the systematic literature review proposes a defined protocol for operationalization of the research, which can vary with more or less steps. For this research, the steps of the protocol presented by the authors were used, namely: objectives, research equations by the definition of Boolean operators; scope; Inclusion criteria; exclusion criteria; methodological validity criteria; results and data processing.

In view of the objective of this research, which is to reveal how the field of education, when presenting results of studies and research on distance education, conceptualizes quality and innovation, and also, considering that these are polysemic concepts, were defined as descriptors from the research the terms distance education, quality and innovation.

In defining the Boolean operators, the three combined descriptors ("distance education" AND "quality" AND "innovation") were initially used. As the results were null, two more distinct combinations were established: "distance education" AND "innovation" and "distance education" AND "quality".

Considering that the Scielo database brings together collections from different countries, the option was made to use the terms in the official language of the country of reference for the research and, for this reason, terms in English, Portuguese and Spanish were adopted.

The combinations were initially used associated with the search fields: title and abstract words, since the Scielo database does not have the title and keywords search fields. However, no results were found, which motivated the definition by the field entitled "all indexes".

Data collection in the Scielo database was carried out from March 21 to April 6, 2019. To define the research corpus, the period and area of publication of the articles were used as exclusion criteria. Thus, articles published that did not cover the period between 2007 and 2017 and publications in journals in areas other than education were excluded. Or even, that did not have evaluations with indication of Qualis in this area. These criteria were verified by at least two of the researchers, validating the adopted methodology.

Through the processes described, 59 different articles were found. Of these, using the exclusion criteria presented, a total of 26 articles were selected to compose the research corpus, which are summarized in Chart 1.

Chart 1: List of articles that make up the research corpus, Scielo database, 2007-2017

Year	Author	Q	ı	Qel
2009	SEGENREICH, S. C. D.	Х		
2009	TODOROV, J. C.; MOREIRA, M. B.; MARTONE, R. C.	X		
2010	ALONSO, K. M.	Х		
2010	BERTOLIN, J. C. G.; MARCHI, A. C. B. de.	X		
2010	GIOLO, J.	Х		
2010	LÓPEZ CAMPOS, M. A.; CANNELLA, S.; CIANCIMINO, E.	Х		
2011	NEVES-JUNIOR, W. F. P.; HADDAD, C. M. K.; SOUSA, F. S. e PISA, I. T.	Х		
2012	BRENNAND, E. G. de G.; BRENNAND, E. de G.		Х	
2012	PEÑALOSA CASTRO, E.; CASTAÑEDA FIGUERAS, S.	Х		
2012	RODRIGUES, L. M. B. da C.; CAPELLINI, V. L. M. F.	X		
2013	FIUZA, P. J.; SARRIERA, J. C.	Х		
2013	ISHIDA, J. S.; STEFANO, S. R.; ANDRADE, S. M. de.	X		
2013	LLORÉNS BÁEZ, L.; ESPINOSA DÍAZ, Y.; CASTRO MURILLO, M. L.	Х	Х	Х
2014	VIDAL MARTÍNEZ, A. A.; AGUILAR VALENZUELA, F. A.	Х		
2015	DU TOIT-BRITS, C.	Х		
2015	RANGEL, F. de O.; COSTA, H. A.; DE-ANGELIS, C. C. M.; MARTINS, R. L.	Х		
2015	RUIZ BOLÍVAR, C.		Х	
2016	ACUNA SOSSA, M.; GIL RENDON, M. E.; SANDOVAL POVEDA, A. M.		Х	
2016	AMAYA, A. A.; CUÉLLAR, A. C.	Х		
2016	JUCA MALDONADO, F. X.	Х		
2016	PEREIRA, D. R. M.; CESAR, D. R.		Х	
2017	ESCUDERO NAHON, A.		Х	
2017	JIMENEZ, C. A.		Х	

Year	Author		ı	Qel
2017	MARCINIAK, R.	Χ		
2017	RODRÍGUEZ-ESPINOZA, A.	Χ	Χ	Х
2017	VILLAFUERTE HOLGUÍN, J. S.; INTRIAGO PALACIOS, E.; ROMERO ANDONEGI, A.	Χ	Χ	Х

Caption: Q: Quality, I: Innovation **Source**: Prepared by the authors (2019).

Of the selected articles, 76.92% (N = 20) result from the combination of the descriptors "distance education" and "quality". The combination of "distance education" and "innovation" resulted in 34.62% (N = 9) of the articles and "distance education" and "quality" and "innovation" represent 11.54% (N = 3) of the articles. selected corpus. However, there is a repetition of titles in the last two combinations.

Among the collections of the consulted countries, it was observed that Brazil concentrates a greater number of publications on distance education in the educational area, with eleven (11) articles found. While in the collections of the countries of Mexico 8 (eight) were registered, Costa Rica with 4 (four) and South Africa, Cuba and Portugal with 1 (one) article each and 0 (zero) articles in the collections of Argentina, Bolivia, Chile, Colombia, Ecuador, Spain, Paraguay, Peru, Uruguay and Venezuela

In the survey of the most recurrent and least recurrent terms in the selected articles, when observing the keywords described by the authors, it was identified that there is a considerable variety of terms that are associated with distance education (Chart 2), which allows us to infer that there is no expressive trend in terms associated with studies in the area of distance education. Therefore, distance education is articulated with a diversity of themes, tending to be associated with higher education.

Chart 2: Recurrence of keywords in selected articles

Number of times the term appeared as a keyword	Percentage that the term was used as a keyword (%)	Keywords described by the authors	
25	96,15	Educación a distancia. Educação a distância. E-learning	
3	11,54	Ensino superior. Educación superior	
2	7,69	Avaliação. Educação Superior. Distance education. Diseño instruccional. Educación masiva. Educación virtual. Massive Open Online Course (MOOC). Expansão do ensino superior	

Number of times the term appeared as a keyword	Percentage that the term was used as a keyword (%)	Keywords described by the authors		
1	3,85	Avaliação de disciplina semipresencial. Democratização do ensino superior. Discurso. Educação. Educação continuada. Educação especial. Ensino de língua portuguesa. Estudantes universitários. Física Médica. Formação de professores. Formação inicial. Inclusão. Inovação tecnológica. Letramentos múltiplos. Mediação on-line. Motivação. PNAP. Política educacional. Práticas pedagógicas. ProUni. Qualidade. Rendimento. Satisfação. Sistema personalizado de ensino. UAB. Adult learning. Distance learning. Formation of professionals. Information and Communication Technologies. Innovative teacher. Open learning. Quality. Student support. Teacher training. Technology. ICT. Aprendizaje. Aprendizaje adaptativo. Aprendizaje autorregulado. Calidad de la educación. Círculo literario. Competencias docentes. Conocimientos previos. Estilos de aprendizaje. Evaluación formativa. Evaluación sumativa. Gestión de proyectos. Inglés como lengua extranjera. Innovación educativa. Innovación pedagógica. Interactividad. Método de evaluación. Motivación. Producción alimentaria. Recursos educativos abiertos (REA). Rúbricas de evaluación. Tecnología. de la información y comunicación (TIC). Tecnología educativa. Tecnologías. Transversalización. Videoconferencia. Virtualización		

Fonte: Elaborado pelas autoras (2019).

Still seeking to observe the present trends, the look was directed to the issue of the temporality of the publications, on which it was found that, between the years 2007 and 2009, there were no records of articles published in the collections of the Scielo database. However, from 2009 to 2017, publications were constant, with emphasis on the area of distance education and quality, with Brazil having an important role in this production.

In the area of distance education and innovation, the record of productions is recent, dating from 2015 to 2017, with emphasis on publications in Costa Rica. However, the absolute quantitative data are not very expressive, as can be seen in the following table (Chart 3).

Chart 3: Number of articles published per year and by combination of descriptors

Year of publication	Distance education and quality	Distance education and innovation	Distance education and quality and innovation
2009	2 (Brazil)		
2010	3 (Brazil) 1 (Mexico)		
2011	1 (Brazil)		
2012	2 (Brazil) 1 (Mexico)	1 (Portugal)	
2013	1 (Brazil)		2 (Mexico)
2014	1 (Costa Rica)		
2015	1 (Brazil) 1 (South Africa)	1 (Mexico)	
2016	1 (Cuba) 1 (Mexico)	1 (Brazil) 1 (Costa Rica)	

Year of publication	Distance education and quality	Distance education and innovation	Distance education and quality and innovation
2017	1 (Mexico)	1 (Costa Rica) 1 (Mexico)	1 (Costa Rica)

Source: Prepared by the authors (2019).

Another analysis criterion used was the authors' affiliation to their countries of origin or higher education institution. In the case of articles by national authors, the higher education institutions linked to them were identified and quantified. In the case of articles by foreign authors, the authors' countries of origin were identified and quantified. It can be observed that there are no authors or study centers specialized in the themes, since there are no recurring publications from the same institution or author.

In the following section, the concepts of innovation and quality evidenced by the analyzed studies are presented, in which it is intended to explain the interfaces observed by the literature in the area when distance education is taken through the discussion of the concepts of quality and innovation.

3. Innovation and quality: conceptual assumptions

3.1 The quality assumptions

Of the works considered for the conceptual verification of the term quality, the existence of formal conceptualization was not observed in any of them. Despite this, in some of these there was mention of the multiform character of the word through the incidence of complements or adjectives to the term, such as: quality of interactivity (PENALOSA-CASTRO, CASTAÑEDA, 2012), quality control (GIOLO, 2010; NEVES JUNIOR et al. al, 2011; CAMPOS, CANNELLA, CIANCIMINO, 2010), quality of education or teaching (SEGENREICH, 2009; TODOROV, MOREIRA, MARTONE, 2009), quality standard (PEÑALOSA CASTRO; CASTAÑEDA FIGUERAS, 2012), course quality (RODRIGUES, CAPELLINI, 2012; FIUZA, SARRIERA, 2013), quality of satisfaction (ISHIDA, STEFANO, ANDRADE, 2012), among others.

The works investigated are aimed at presenting indicators of quality or their use, or even changing the usual indicators adopted by Organs evaluators. In general, the following aspects permeate: academic-administrative management (AMAYA AMAYA; CUELAR CUELAR, 2016; BERTOLIN, MARCHI 2010), communication systems (ACUNA SOSSA; GIL RENDON; SANDOVAL POVEDA, 2016; DU TOIT-BRITS, 2015; BERTOLIN, MARCHI 2010; FIUZA, SARRIERA, 2013; JUCA MALDONADO, 2016), conception of education and curriculum in the teaching and learning process (BRENNAND, BRENNAND, 2012; BERTOLIN, MARCHI 2010); didactic material (AMAYA AMAYA; CUELAR CUELAR, 2016; BRENNAND, BRENNAND, 2012); multidisciplinary team (ALONSO, 2010; BERTOLIN, MARCHI 2010; FIUZA, SARRIERA, 2013); evaluation, financial sustainability and support infrastructure (BERTOLIN, MARCHI 2010; ESCUDERO NAHON, 2017), as well as the conditions and expansion of face-to-face support centers (ALONSO, 2010).

Among the current discussions, Segenreich (2009) draws attention to the processes of excluding inclusion and inclusive exclusion that the excessive expansion of distance education can generate. One of the problems to be discussed in an attempt to minimize these processes is the "effective democratization of access, permanence and, above all, the quality of education" (SEGENREICH, 2009, p. 218). The author also considers that the expansion of distance education and government policies in this area should be accompanied by greater publication of documents and statistics that allow monitoring and evaluating the implementation of these policies.

Articles from foreign collections also focus on quality indicators, such as:

Sin un conocimiento sobre los medios en la enseñanza como características técnicas, los lenguajes y formas de representación de la información, el software disponible, la utilización e integración curricular de estos medios, el profesorado no está en condiciones de desarrollar prácticas pedagógicas de calidad con estas tecnologías. (JUCA MALDONADO; XAVIER, 2016, p. 110, grifo nosso).

Likewise, other indicators not yet present in the usual educational quality assessment instruments were specified, such as: student satisfaction level (ISHIDA, STEFANO, ANDRADE, 2103; JIMENEZ, 2017; TODOROV, MOREIRA, MARTONE, 2009); student/faculty relationship (MARCINIAK, 2017; RANGEL, et al, 2015); response time (PEREIRA, CÉSAR, 2016); bill delivery time (PEREIRA, CÉSAR, 2016); delivery time of teaching material (PEREIRA, CÉSAR, 2016); dropout rate (BERTOLIN; MARCHI, 2010), graduation rate (BERTOLIN; MARCHI, 2010), distance and average travel time of the student to the face-to-face center (BERTOLIN; MARCHI, 2010), monthly fee (FIUZA, SARRIERA, 2013; (ISHIDA, STEFANO, ANDRADE, 2103; JIMENEZ, 2017), number of media and interaction (MARCINIAK, 2017; TODOROV, MOREIRA, MARTONE, 2009; VILLAFUERTE HOGUÍN, INTRIAGO PALACIOS, ROMERO ANDONEGI, 2017). on similar grounds, other indicators were observed, such as: financial, human and technological resources (RODRÍGUEZ-ESPINOZA, 2017), students' level of success in exams (BERTOLIN; MARCHI, 2010), proportion of those who passed and schooling rates (BERTOLIN; MARCHI, 2010); number of teaching hours ((BERTOLIN; MARCHI, 2010); dedication of teachers (LLORÉNS BAÉZ, ESPINOSA DÍAZ, CASTRO MURILLO, 2013; ACUNA SOSSA, RENDON, SANDOVAL POVEDA, 2016; access and use of ICTs (TODOROV, MOREIRA, MARTONE, 2009).

Examples of these concerns, especially regarding the level of student satisfaction, can be observed from the excerpt: "[...] it is important to structure a course in which participants have the feeling of being assisted at all times, and that they can always count on the trainer and/or tutor" (RODRIGUES; CAPELLINI, 2012, p. 626).

The term quality in the works studied is usually associated with terms such as: guarantee of excellence, ensuring control of quality standards, effectiveness, efficiency, as can be seen in the transcript below:

Es preciso mejorar los parámetros de calidad y eficiencia de la educación a distância. Consideramos fundamental en este sentido tener una mejor comprensión del aprendizaje en estos ambientes. Un paso consiste en la propuesta de modelos teóricos que nos permitan entender mejor las características de este tipo de educación. El fomento de habilidades de autonomía, el trabajo en niveles altos de interactividad y el fomento de estructuras sólidas de conocimiento previo podrían ser centrales para mejorar la calidad y la eficiencia. Los costos podrían abatirse mediante el diseño de materiales didácticos interactivos a partir de fundamentos sólidos (PEÑALOSA CASTRO; CASTAÑEDA FIGUERAS, 2012, p. 281, italics ours).

In general, it can be observed that 7 (seven) of the studies studied refer to the Quality References of the Ministry of Education, which end up defining the concept of quality that marks the literature in the area (ALONSO, 2010; GIOLO, 2010).; RODRIGUES, CAPELINI, 2012; ISHIDA, STEFANO, ANDRADE, 2013; SGENREICH, 2019; BRENNAND, BRENNAND, 2011; FIUZA, SARRIERA, 2013).

Only one of the texts defined quality as related to a more social and political factor, when it mentions that quality is proportional "to critical, citizen and professional training in distance education", also relating



quality to demands for involvement of initial investments. Therefore, we highlight the work that brought the conceptualization of quality in an express way, from Lito (2008):

Whether in the conventional face-to-face option, or in the distance modality, the quality criteria in higher education must be the same, leading the student to the same purposes: using information with intelligence, applying the knowledge acquired in the chosen subject, and in other areas, developing critical spirit and conducting research, in addition to communicating clearly (LITO, 2008 apud GIOLO, 2010, p. 21).

In summary, it was observed that the analyzed works presented, to a large extent, an analysis of quality from the official documents of the MEC and UNESCO, making visible the concern with more technical and formal aspects of the conception of quality. There were few texts (GIOLO, 2010; RODRÍGUEZ-ESPINOZA, 2017; RUIZ BOLÍVAR, 2015) that showed a concern with a conception of social quality.

Therefore, the design of evaluation processes that could apprehend the social quality of distance education, with social control, in the manner indicated by the National Conference on Education (CONAE), still appears as a gap in the literature in the area, reinforcing positions that inform the complexity of the concept of quality, especially beyond the processes of measuring student performance and educational inputs.

3.2 The assumptions of innovation

The discussion about innovation appears in a more incipient way than quality. It is hypothesized that this fact is, in part, related to a historical context in which the quality of distance education is under discussion in view of the process of its marked expansion, an expression of a resistance movement in the face of the idea of the new (SILVA; PEIXOTO; PACHECO, 2017). This fact can serve as an inducing factor for researchers to seek solutions to this potential problem.

The concept of innovation appears as a way of relating to its opposite, that is, tradition and its contradictions, non-innovation. Associated with the concept of innovation, the words "educational innovation" and "innovation through social interaction" appear. In this sense, it is observed that technology is not enough to have innovation, but innovation must be allied to the interaction between the subjects that make up the whole of the teaching and learning process.

The reference used was from the UNESCO text (2014, p. 3), thus explained:

La innovación educativa es en acto deliberado y planificado de solución de problemas, que apunta a lograr mayor calidad en los aprendizajes de los estudiantes, superando el paradigma tradicional. Implica transcender el conocimiento academicista y pasar del aprendizaje pasivo del estudiante a una concepción donde el aprendizaje es interacción y se construye entre todos.

In general, the works presented strategies and experiences considered innovative, with innovation being understood in various ways, whether in the use of technologies, indicating "vanguards" actions in the area, or innovation in student motivation and performance, understood beyond of technological uses.

Así, el concepto de e-learning es mucho más integral, ya que si bien es parte de la virtualidad (medio), incorpora una serie de elementos metodológicos y pedagógicos-curriculares. Esto permite un aprovechamiento de las tecnologías digitales en busca de brindarle al estudiantado una educación de calidad, donde interactúan una



serie de elementos como políticas institucionales, capacitación docente, innovación metodológica, logística, recursos, acceso, calidad de materiales, entre otros..[...] En efecto, el uso de las TIC a través de la virtualización debe estar dotado de un sentido pedagógico, lo cual implica adecuar las estrategias de enseñanza-aprendizaje aprovechando la tecnología, ya que tener computadoras, tabletas, acceso a internet, plataformas virtuales o pizarras inteligentes implica solamente una innovación tecnológica, incluso técnica, pero no pedagógica (RODRÍGUEZ-ESPINOZA, 2017, p. 15;17).

There is a text (VIDAL MARTINEZ; AGUILAR VALENZUELA, 2014) that indicates that one can understand that there was innovation based on the rate of its adoption, that is, the effect of innovation has to be perceived. He adds that, in order to perceive the innovation, one must consider: (i) whether it was relevant to the satisfaction of individual needs; (ii) whether it was consistent with individual attitudes and beliefs, to the point that individuals began to adopt it.

Es importante tomar en cuenta que el uso de la videoconferencia de escritorio no solo resolvió los problemas de interacción entre el docente y los estudiantes, sino que también se constituyó como una herramienta de apoyo al proceso de enseñanza y aprendizaje, la cual necesita ser respaldada por un proceso de mediación pedagógica y desarrollo de habilidades didácticas (VIDAL MARTÍNEZ; AGUILAR VALENZUELA, 2014, p. 15).

In general, it can be seen that there is still little concern with the field of education to understand and develop innovation in distance education, which also explains the lack of studies with propositional characteristics on the part of the education area, considering the incipient number of articles found on the subject, especially that relate the two constructs.

4. Conclusions

The research carried out with the Scielo database resulted in 26 (twenty-six) scientific articles, published from 2007 to 2017. Of these articles, 20 (twenty) focus on quality in distance education and 6 (six) focus on innovation., which explains a greater concern in the articles analyzed with the theme of quality.

It was also evident that among the collections of the 16 (sixteen) countries found in the Scielo database, the Brazilian educational field had the highest production, with 11 (eleven) articles, which represents 42.30% of the total production found. This theme still appeared in the collections of: South Africa, Costa Rica, Mexico, Portugal and Cuba.

Specialized groups on the subject were not identified, since several institutions and authors linked to them were found, nor were temporal milestones on the subject evidenced, as the production is randomly distributed throughout the analyzed period, with greater concentration in the most recent periods.

It can be noted that the objective of this article was met by explaining the results of research that deal with distance education from the perspective of the educational field, focusing on the association of the themes quality and innovation related to distance education. Despite the limitation of the analysis to focus on a single database, there is, on the other hand, the representativeness of the Scielo database for the area of education. This observation implied that, despite the centrality of these themes considered separately, the simultaneous presence of this discussion is not the focus of scientific concerns in the area

of education, since only 26 articles were selected, according to the criteria adopted, in a wider universe of discussions about distance education.

The selected works seek to indicate and guide aspects and requirements that must be met in order to offer quality courses in this modality. These are indicators that involve three aspects, such as: i) the educational input inputs: Virtual learning environment, infrastructure, didactic material, communication systems, internet, computers, instructional design of the course; ii) process indicators such as: academic management; formation of a multidisciplinary team; forms of student-teacher-tutor and student-student interaction; and iii) evaluation processes: innovative evaluation instruments; performance assessment, dropout rates, ways of diagnosing student satisfaction, among others. Therefore, the broadening of the aspects that indicate quality for distance education is evident, considering the current indicators used by the Brazilian public evaluation system.

In the discussion about innovation, the studies indicate by disassociating the use of technologies as a corollary of innovation, pointing to concepts that take into account more general meanings of what innovation means in distance education, including the procedural aspects of learning.

The methodology of the works consists of case studies and analysis of specific experiences, which start from field work with the application of questionnaires and interviews. These works seek to contribute with other works and experiences, based on the indicated indications. There are few works that present studies with more theoretical characteristics, with broader analyzes supported by documental research by public management agencies and official statistics that allow comparing and delineating the effects of DE expansion. Also, the evaluations of the implemented distance education policies are incipient, and these are more present in the national collection. No studies were observed that bring results from broader and longitudinal empirical studies, or even the result of network research.

The answer to the problem, initially raised from the following question: "what does the education area disclose about quality and innovation in distance education in the Scielo base?", can be evidenced by the small number of works that involve the themes, reinforced by the lack of conceptualization, in the set of studies surveyed.

The conceptualization of what constitutes quality and innovation is not at the center of the reflections of researchers in the field of education to deal with distance education, and these themes are only touched upon by these studies. It can be observed that the studies surveyed, unanimously, point to the potential of distance education to promote professional training and access to knowledge.

The limit of the works is in its intrinsic focus. Therefore, empirical research, with a longitudinal character and involving networks of researchers, is indicated as a suggestion so that the field of education can expand the potential of its production in the discussion about quality and innovation in distance education, analyzed together, evidencing possible interferences or mutual influences of these concepts with each other.

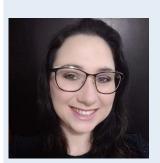
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