

# Use of the Bibliometric Analysis to Assess the Scientific Productivity and Impact on the Individualised Educational Plan

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**Abstract:** This article aims to contribute to scientific research in the field of Education of Special Education, whose objective is to analyse the effects of the development and implementation of the Individualised Educational Plan (IEP) for students with intellectual disabilities, included in Youth and Adult Education (YAE) system, therefore, the objective of this work is to identify and relate the national and international scientific literature on (IEP), using the bibliometric methods with a quantitative and qualitative approach. Therefore, it was necessary to research and collect data on the website of the Digital Library of Theses and Dissertations (DLTD), Brazilian Institute of Scientific Information and Technology (BISIT) of the Ministry of Science, Technology and Innovation, Catalogue of Theses and Dissertations of the Periodicals Portal CAPES. After this step, the organisation and bibliometric assessment of the collected data was carried out, in order to map the field of knowledge, identifying the objectives of the research found, the dominant (or emerging) themes and approaches, as well as the gaps and small fields exploited. The results obtained showed that the scientific literature published during the analysed period resulted in four dissertations, two theses and 24 articles. The objectives of the theses and dissertations were mostly related to the implementation of the IEP, in relation to the articles, the diversified objectives, which included studies of theoretical review and discussion, eligibility of the IEP, family satisfaction with the individualisation, definition of objectives and writing of the IEP among others.

**Keywords:** Individualised Educational Plan. Special education. Bibliometric application.

## I. Introduction

A study was carried out within the scope of the Postgraduate Course in Special Education at the University of São Carlos, Brazil, whose main objective is to analyse the effects of the design and implementation of the Individualised Educational Plan (IEP) for students with intellectual disabilities, included in Youth and Adults Education (YAE), with the purpose of contributing to the organisation of more favourable pedagogical practices for the teaching and learning processes, thus enabling the inclusion and development of these students, in a process in which regular classroom and education teachers collaboratively organise the teaching and learning processes of these students.

The Individualised Educational Plan (IEP) is a document designed to plan and monitor the development of students in academic or social areas. It is an educational plan designed to meet the individual needs of each student. It describes the student's current level of academic performance, also sets the teaching goals, the deadlines for achieving them and what support is needed to ensure progress at school. In this way, it allows teachers to better assess student development, periodically reviewing it to ensure plan eligibility and integrity [1](GLAT; PLETSCHE, 2013).

The IEP must establish goals and objectives that reflect the individual needs of the students, it must be related to the syllabus contents, although there are no restrictions for other functional contents to be added. The IEP must be designed by a team of collaborators that include the family, the student, the school team and health professionals, when necessary, in addition to adopting strategies that better benefit the student's development, specify the roles and responsibilities of those involved as well as forms of evaluation and adaptations when necessary [2](TANNUS-VALADÃO, 2013).

The IEP can be defined as a pedagogical document designed to plan and monitor the development of students, in academic or personal, social, motor, professional areas, among others. Through it, teachers can better assess student development and requirements, therefore, it must be periodically reviewed, and likewise, target students also need to be re-evaluated to ensure the eligibility and integrity of the plan [1] (GLAT; PLETSCHE, 2013).

The importance of developing and implementing the IEP for students targeting public special education (PSE) is supported by Decree No. 7,611 of November 2011, which provides for Specialised Educational Assistance (SEA), considering the need for individualisation as a way to guarantee and enhance the academic and social development of students ([3]BRASIL, 2011). Law No. 13,146 of 2015 reaffirmed the need for “the adoption of individualised and collective measures in surroundings that maximise the academic and social development of students with disabilities [...] ([5] BRASIL, 2015, p. 7)”. However, national legislation does not have a specific guidelines in relation to a more uniform IEP model. Its elaboration is the responsibility of the teachers who work in the SEA, “[...] in collaboration with the other teachers of regular education, with the participation of families and in interaction with the other health services, social assistance, among others necessary to attend.” ([4]BRASIL, 2009, p. 2).

The distress to eliminate educational exclusion is one of the major debates in the area of Education, in an attempt to find favourable alternatives to inclusion and to the educational processes of students. In the case of intellectual disability, cognitive implications, will require specific demands for learning, which includes pedagogical and assessment practices appropriate to these students. Often, even after years of schooling, academic and social advances are small, that is, the school cannot overcome and contribute to the development of students [6](GLAT; VIANA; REDIG, 2012).

Educational plans that are structured based on differentiation, with individualisation being the means to respond to the individual needs of students, can favour the teaching and learning processes. Individualisation must be understood as a contextualised action for students, who demand some specificity in the teaching and learning process [6](GLAT; VIANA; REDIG, 2012). The IEP is an example of individualised action planning. For Campos [7](2016), differentiation is not synonymous with reduction or limitation of pedagogical practices for students with intellectual disabilities. Differentiation “[...] is a tool that, combined with the individualisation process, can enhance the development of these subjects.” [7](CAMPOS, 2016, p.58).

An individualised educational plan, periodically evaluated and revised, which considers the student at his / her current level of skills, knowledge and development, chronological age, educational level already achieved and desired educational objectives in the short, medium and long terms. Family and individual expectations are also taken into account [6](GLAT; VIANA; REDIG, 2012, p. 84).

Thus, the IEP must establish goals and objectives that reflect the individual needs of the students, it must be related to the syllabus content, and there are no limitations, so that other functional content can be added.

The difficulties of teachers in organising pedagogical work with students with intellectual disabilities are many, among other reasons, due to the lack of preparation in undergraduate courses in training teachers to work with these students. The opportunities for teachers to carry out continuing education are few, continuing their education is vital so that they can obtain qualifications to better organise their planning and pedagogical performance[9](AVILA, 2015).

On this issue, it is important to consider that even with the teachers' adherence to the design and implementation of the IEP, there is a need to offer opportunities for continuing education, preferably in a collaborative atmosphere as a way of articulating scientific knowledge with reality and daily life of school practices of these teachers [6](GLAT; VIANNA; REDIG, 2012).

[8]Alkahtani and Kheirallah (2016) investigated the preparation and implementation of the IEP in public schools in Australia, Canada, New Zealand, United Kingdom, United States and Saudi Arabia, based on the review of the policies of these countries. The plans are drawn up by a team composed of regular teachers and specialists, a member of the school management, family, professionals who work with the student regularly and the student himself when possible. The IEP is prepared in stages, with initial meetings, information gathering, construction and implementation of the plan, review and evaluation, to monitor the student's progress and guide decisions on the next steps. This educational plan aims to ensure that the determined learning is achieved within the stipulated deadlines, ensuring that the needs of the students will be met by the strategies and resources that should be available and with the involvement of the responsible individuals.

As a result of the above, this research aims to identify and relate the national and international scientific literature on the IEP, through the bibliometric approach with a quantitative and qualitative approach. Once the gained knowledge is analysed on the subject based on bibliometric indicators, it allows analysing the distribution of scientific result under different aspects, allowing to verify the tendencies of the structure of scientific result and even to understand its patterns and evolution on the investigated theme, which is essential to examine the study on a subject.

## **II. Methodological Path**

The bibliometric method is used to analyse qualitative and quantitative aspects about a given scientific literature, to investigate research trends and other aspects that can contribute significantly to the area. For [35]Silva, Hayashi and Hayashi (2011, p. 113-114), "bibliometric analysis is a flexible tool to assess the typology, quantity and quality of the sources of information cited in research. The outcomes of bibliometric analysis are the impact indicators of the measured scientific productivity." The examination of bibliographic material is valid for exploring and analysing information, organizing them on the investigated subject.

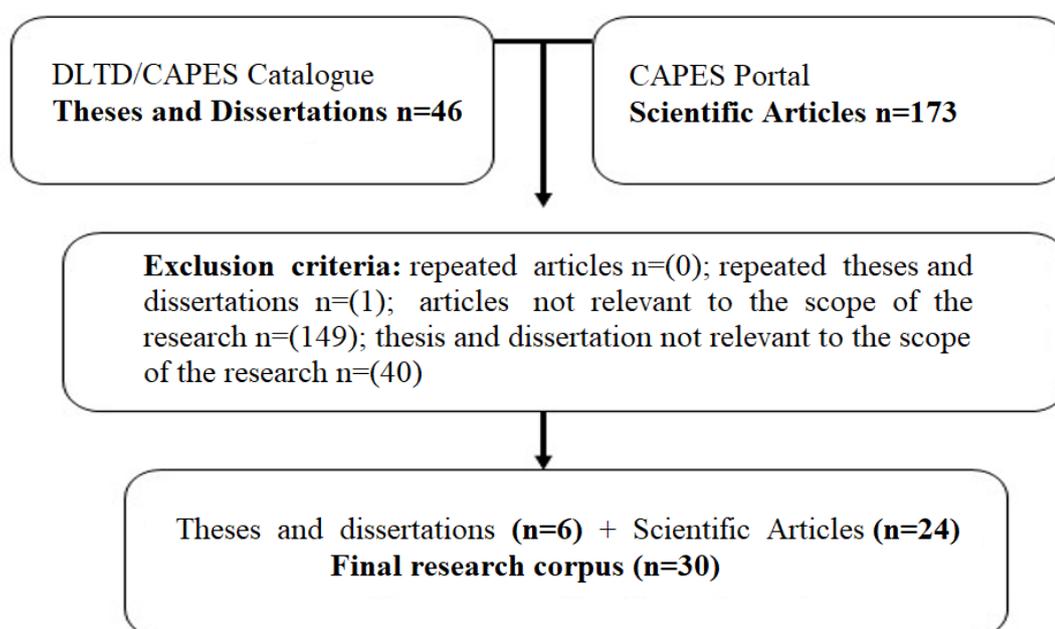
The data sources were composed of two types of documents: articles published in scientific journals, theses and dissertations defended in graduate programs in Brazil, all available online, being this Digital Library of Theses and Dissertations (DLTD) of the Brazilian Institute of Scientific Information and Technology (BISIT) from the Ministry of Science, Technology and Innovation (MSTI); CAPES Catalogue of the Thesis and Dissertations, and the CAPES Journals Portal. All of these sources incorporate and concentrate graduate-level publications and scientific production as a whole.

For the selection of material in the CAPES Catalogue and in the DLTD, the expression (in quotation marks) was used "individualised educational plan" in the CAPES Catalogue and (without quotes) in the DLTD, without determining a period for the selection of publications, precisely for to map the evolution of scientific productivity on the theme in Brazil. For collection at the CAPES Portal, due to the large number of publications, filters were used to select the material. Therefore, for the data collection, the term "individualised education programs" was searched in the referred database inserted in the search field by subject (in quotation marks). Afterwards, the option "peer-reviewed journals" was checked, then filtered by "Topic" selecting "Special Education" and after selecting the publications corresponding to the period 2014 to 2018.

The searches were carried out in July 2018. 173 articles and 40 theses and dissertations were identified. Duplicate articles, theses and dissertations were excluded, in addition to those that did not fit the scope of the research; 24 articles, 6 theses and dissertations were selected, corresponding to the documents that were selected for analysis. Figure 1 represents how the research corpus was built.

The selected publications were organised in the bibliometric data registration protocol prepared by [10]Hayashi and collaborators (2011), in the format of an Excel® spreadsheet with determined fields, such as: database, author (s), complete reference, year of publication, journal title, abstract, keywords, among others. After the organisation, bibliometric treatment and analysis of the collected data were carried out; reading the abstracts and keywords allowed to verify the presence or absence of the focus on the IEP. In the next section, we present and discuss the results obtained.

**Figure 1 - Flowchart of the research *corpus* selection process.**



Source: Own elaboration.

### III. Bibliometric Overview of Scientific Productivity

In this section the main indicators of the analysed scientific productivity are presented, organised in Bibliometric panorama, considering the temporal distribution of the works, titles of the journals that published the articles, identification of the authorship and co-authorships. Subsequently, we deepened the analysis with the identification of relevant aspects, categorised level of education, the target population, the professionals involved, the participation of the family and the main topics addressed.

Regarding the temporal distribution of the 30 studies analysed, the results indicated a span of 8 years, between 2010 and 2018 (Table 1), the productivity was not constant over the period; the first dissertation in Brazil on the subject dates from 2010, and the year 2017 presented more publications, with a thesis and a dissertation respectively. However, the total number of publications is scarce, theses (n = 2) and dissertations (n = 4), concentrated in the years 2010 and 2017. As for the articles, there is a variable productivity, over the analysed period. However the 2017 was the year with the most publications, totalling 10 articles.

Table 1. Distribution of annual theses, theses and analysed articles.

Year	Dissertations	Thesis	Articles	Total
2010	1	0	0	1
2011	0	0	0	0
2012	0	0	0	0
2013	0	1	0	1
2014	1	0	7	8
2015	0	0	1	1
2016	1	0	4	5
2017	1	1	10	12
2018	0	0	2	2
Total :	4	2	24	30

Source: Own elaboration.

Regarding the temporal distribution, of the 24 articles published in the period between 2014 and 2018, as shown in (Table 1), we can see that the productivity of the investigated theme fluctuated, and in 2014, 7 publications were found. On the other hand, in 2015, only 1 publication on IEP was found, however, in 2017 there were 10 publications, which may indicate that the theme is gaining coverage in discussions recently.

The survey also drew a profile of the journals that published the 24 articles. Titles and the impact factor of each article were investigated. The results can be seen in (Table 2), which lists the number of articles published in each magazine on the subject "Individualised Educational Plan".

Table 2. Journals, publishing journals and impact factor classification

Journal	Total articles	Impact factor
Intervention in School and Clinic	1	0.578
Deafness & Education International	1	
Educational Evaluation and Policy Analysis	1	2486
<u>Educational Sciences: Theory &amp; Practice</u>	1	<u>0.565</u>
Exceptional Children	3	3340
International Journal of Whole Schooling	1	
<u>JOPERD: The Journal of Physical Education, Recreation &amp; Dance</u>	1	
Journal of Disability Policy Studies,	1	1104
Journal of Educational & Psychological Consultation	1	
Journal of Media Literacy Education	1	
<u>Journal of Research in Special Educational Needs</u>	1	
Michigan Academician	1	
NASN School Nurse	1	
Preventing School Failure	3	

Rural Special Education Quarterly	1	
Rutgers Computer & Technology Law Journal.	1	
Sage open	1	
School Psychology Quarterly	1	2913
TEACHING Exceptional Children	2	

Source: Own elaboration.

Regarding the distribution of theses and dissertations by institution and postgraduate program (Table 3), there was a predominance (n = 2) of studies defended in the Graduate Program in Special Education at the Federal University of São Carlos (UFSCar), with a dissertation and a thesis. The other studies were defended at each university, namely: Federal University of Santa Maria, Federal University of Rio de Janeiro, State University of Rio de Janeiro and Federal University of Rio Grande do Norte.

Table 3. Distribution of studies by institution and graduate program

Institution	Graduate program	Number of studies
UFSCar	Special education	2
UFSM	Education	1
UFF	Professional Master in Diversity and Inclusion Educational Institution	1
UERJ	Education	1
UFRN	Education	1
Total: 6		

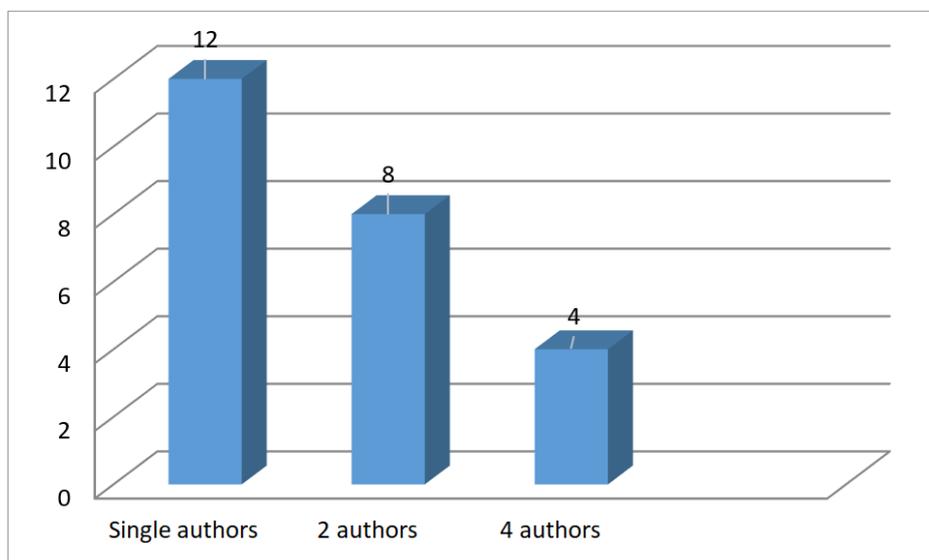
Source: Own elaboration.

Regarding the administrative facilities of these higher education institutions, four are federal (UFSCar, UFSM, UFF and UFRN), one is state (UERJ). These five institutions are distributed in the South (n = 1), Southeast (n = 3) and Northeast (n = 1) regions of the country.

The results showed that of the total of six theses and dissertations, five were prepared by female authors, with only one written by a male author. In relation to the orientation of these studies, the majority (n = 4) was performed by women, and an advisor was responsible for the orientation of a dissertation and thesis by the same person, while the minority (n = 2) was guided by man.

Regarding the articles, they were prepared by 48 different authors responsible for the creation of 24 articles, all of these authors did not publish or contributed with other works. In (graph 1) we can see better the authorship and co-authorship.

Graph 1 - Distribution of authorship and co-authorship.



Source: CAPES Journal Portal, CAPES databases. Own elaboration.

Graph 1 shows that authorship, that is, with a single author, accounted for 50% of the articles (n = 12), followed by co-authorship with two authors, making up 33.33% of the total of analysed articles (n = 8), and co-authorship with four authors (n = 4) corresponding to 16.66%. Complementing the information, (Table 4), presents the institution to which the authors of the articles are linked and the country of origin.

Table 4 - Characterisation of the authors of the articles regarding the institution

Author (s)	Institution	Country of Origin
11 Slade; Eisenhower; Carter, Blacher (2014)	Creek Elementary School District California, UNIVERSITY of Massachusetts, University of Massachusetts, University of California	United States
12 Lo (2014)	University of Massachusetts	United States
13 Evans; Langberg (2014)	Ohio University and Virginia University	United States
18 Blackwell; Rossetti (2014)	Lewis University and Boston University	United States
14 İlik; Sari (2017)	Necmettin Erbakan University	Turkey
15 Patti (2016)	Buffalo State College	United States
16 Zirkel; Hetrick (2016)	Lehigh University	United States
17 Columna; Lieberman; Lytle, Arndt (2016)	Syracuse University, Brockport College, University of California and Fisher College	United States
19 Wong; Ruble; Yu, McGrew (2017)	University of Kentucky, University of Kentucky, University of Indiana, Indiana University	United States
20 Yonkaitis; Shannon (2017)	University of Illinois	United States
21 More; Barnett (2014)	University of Nevada and University of Arizona	United States
22 Ryan, (2016)	Education Advisor	northern Ireland

23 Pennington, (2017)	Louisville University	United States
24 Tan (2017)	Tulsa University	United States
25 Hauser (2017)	Risk-Eraser President	United States
26 Hartmann (2016)	Newton College	United States
27 Probst (2017)	University of São José	United States
28 Rossetti (2017)	Boston University	United States
29 Brown, Byrnes (2014)	Melbourne University	Australia
30 Caruana (2015)	Mount Saint Mary College	United States
31 Bray, Russell (2018)	University of Pennsylvania and University of Pittsburgh	United States
32 Ulric (2014)	Lawyer	United States
33 Tarrien (2016)	Michigan University	United States
34 Lombardi, Kern; Flannery, Doren (2017)	University of Connecticut, University of Connecticut University of Oregon, University of Wisconsin-Madison,	United States

Source: Own elaboration.

A (Table 4) shows that most articles are published by university professors, especially from the United States, however, there have also been publications from Turkey, Australia and Northern Ireland, published by professionals in the field of education, such as counsellors and lawyers. The justification for the prevalence of North American articles may be related to the fact that the legislation (Education Law of Individuals with Disabilities - ELID) emphasised, since 1997, the use of individual educational plans (Individuals with Disabilities Education Act, 1997).

Next, in (Table 5), the objectives of the six theses and dissertations that dealt with the IEP are presented. Observing the objectives of the theses and dissertations presented, it can be seen that only Silva (2017) did not address the IEP itself in the objective, however, the study of the author tried to analyse the individual pedagogical plan and teaching strategies created collectively by the teachers. The other selected publications present in the objectives the direct relationship of the study with the IEP, as noted below.

Table 5. Characterisation of theses and dissertations in relation to the objectives

Author (s)	Objectives of theses and dissertations
35 Tannus-Valadão (2010) - Dissertation	Describe, analyse and compare the IEP proposals in Italy, France, USA and Spain, seeking to describe how it is regulated in these countries, in order to identify subsidies for the elaboration of suggestions on how this practice could be instituted in Brazil.
2 Tannus-Valadão (2013) - Thesis	Develop, implement and evaluate a continuing education program for Special Education educators, focusing on the IEP for students in a situation of disability, in a municipal education network.
37 Pereira (2014) - Dissertation	Develop an instrument that favours the academic inclusion of a student with autism through procedures that could simultaneously empower the teacher. In this perspective, the study aimed to analyse the effects of an Individualised Educational Plan (IEP), developed collaboratively with teachers, on the academic and functional development of a student with autism in the context of early childhood education.
38 Costa (2016) - Dissertation	Describe the process of implementing the IEP in a common elementary school in Santa Maria / RS and check its interference on the collaboration levels of the work team.

36 Silva (2017) - Dissertation	Implement a study group with teachers from the third district of Nova Friburgo to develop, and collectively, specific teaching practices for students with intellectual disabilities.
39 Mascaro (2017) - Thesis	Preparation, implementation and evaluation of an Individualised Educational Plan (IEP) model to be applied in the resource room.

Source: Own elaboration.

From the table above (Table 5), it can be seen that there was not a single parameter of the studies, which varied in terms of objectives, however, it is worth noting that five of them referred to processes of implementing the IEP, which is a good indicative to verify a set of advantages and limitations of the process of construction of this pedagogical document, adapted from other countries for a new culture and legislation. With the intention of better understanding how articles from other countries have been exploring the theme of IEP, we present in (Table 6), the objectives of the analysed studies.

Table 6. Characterisation of articles in relation to objectives

Author (s)	Objectives of the articles
Slade; Eisenhower; Carter, Blacher (2014)	Examine parents' satisfaction with various aspects of individualizing their children, considering: (a) content of the IEP document, (b) services provided, (c) perceived level of agreement between the IEP document and the services actually provided, and (d) the effectiveness of the IEP team.
Lo (2014)	Examine the readability of 28 individualised education programs.
Evans; Langberg (2014)	Assess the degree to which Individualised Education Programs and Education Plans prepared for high school students with attention deficit / hyperactivity disorder conformed to best practices and included evidence-based services.
Blackwell; Rossetti (2014)	Examine published, peer-reviewed studies that have examined the development of IEP since the 1997 reauthorization of the Education for Individuals with Disabilities Act (IDEA).
İlik; Sari (2017)	Reveal the effect that the IEP training program has on how inclusive education teachers perceive their IEP skills for the development process.
Patti (2016)	Provide five practical tips to facilitate the IEP drafting process.
Columna; Lieberman; Lytle, Arndt (2016)	Review the special education terminology commonly used by Adapted Physical Education teachers and Physical Education Teachers in general and includes suggestions for participating in the IEP meeting and collaborating with parents and other special education professionals.
Zirkel; Hetrick (2016)	Report the results of a comprehensive systematic review of judicial decisions specific to procedural violations related to the IEP following the 2004 amendments to the Education for Persons with Disabilities Act.
Wong; Ruble; Yu, McGrew (2017)	Apply the model by Maslach and Leiter (1999) to understand the direct effects of burnout in general education and the stress arising from the interaction with a specific student on the results of the individualised education program (IEP) of young children with autism spectrum disorder.
Yonkaitis; Shannon (2017)	It outlines the role of the school nurse in identifying and evaluating students who may benefit from special education services and outlines the rules for IEP, as well as procedural safeguards.
More; Barnett (2014)	Discuss the components of the quality IEP objectives, describe the challenges faced by teachers when using electronic objective banks and make practical

	recommendations that special education professionals can implement in a viable way to ensure that the IEP objectives are well written and meet the students.
Ryan, (2016)	Examine the origins of the origins of the Individual Educational Plans, before taking a critical approach to the concept, to highlight the deficiencies and failures that can now be found with the concept.
Pennington (2017)	Outline a process for the iterative refinement of teaching programs consisting of an evaluation of the program, the identification of improvement goals, the development of goals and objectives and the creation of an implementation plan.
Tan (2017)	Describe these strategies, resources and related processes to guide effective IEP practices and future research.
Hauser (2017)	Describe a framework that special educators can use to write and evaluate IEP goals and objectives.
Hartmann (2016)	Examine members' practice in two elementary IEP teams by analysing data from a one-year case study using the community of practice structure.
Probst (2017)	Investigate the possibility of using social media literacy as part of an IEP intervention to improve the social and emotional learning outcomes of students with disabilities.
Rossetti (2017)	Offer research-based strategies for teachers looking to improve their relationships with families with different linguistic cultures, to structure the development of an action plan to improve collaborative partnerships with families during the IEP process.
Brown, Byrnes (2014)	Investigate the quality of Individual Education Plans for deaf and hearing impaired students, attending primary and secondary schools in Victoria, Australia
Caruana (2015)	Provide IEP educators and staff with strategies to build competence in writing IEP goals based on standards in accordance with State Standards.
Bray, Russell (2018)	Explore how educators wrote, used and conceptualised the role of Individualised Education Programs for students with specific learning difficulties within inclusive secondary contexts.
Ulric (2014)	Provide a brief historical overview of special education in America, up to and including the enactment of Education for All, as a basis for further examination of the positive and negative aspects of using computer software to assist in the creation of IEP and data management.
Tarrien (2016)	Exploring as a program has helped law students improve their defence and dispute resolution skills, while helping parents and school administrators through the IEP process.
Lombardi, Kern; Flannery, Doren (2017)	Address disconnection by examining existing data consisting of annual and post-IEP goals in the context of an organisational career preparation framework.

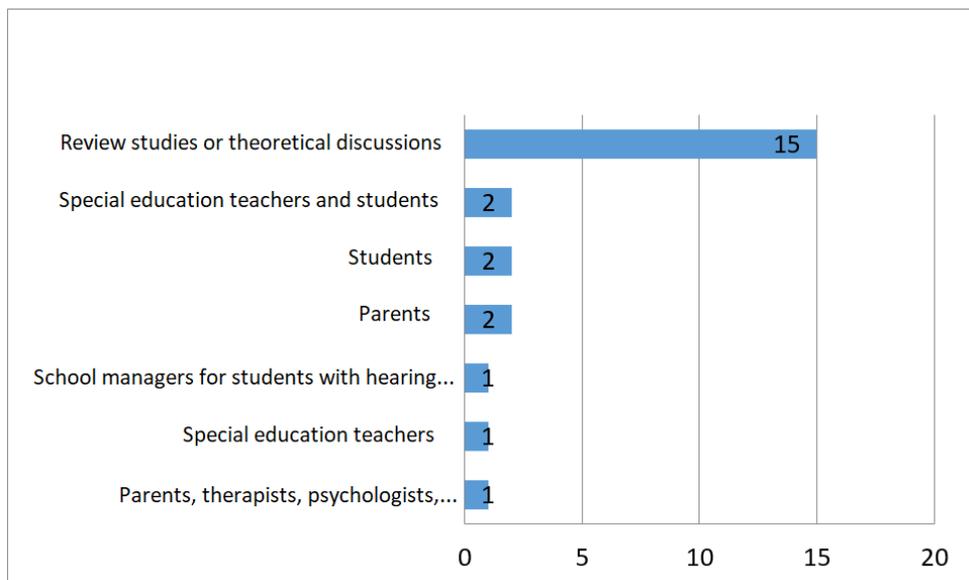
Source: Own elaboration.

The (Table 6) presents the wide variety of study objectives, which included this systematic review, specific court decisions on procedural violations related to the IEP and even articles that discuss the role of the nurse in identifying students who can benefit from special education services; there were also studies covering aspects of the writing of the IEP, the process of defining the objectives, the application of the IEP, the relationship with best practices considering scientific evidence, the meeting process, family satisfaction with the individualisation of education services, the use of information technology in the process of management and elaboration of the IEP.

The overview of the objectives presented above, clearly reveals the relevance of the studies, on the other hand, exposes the diversity as compared to Brazilian research related to the same theme. The aforementioned studies discuss issues often absent in Brazilian research, such as the scarcity of studies that discuss the inclusion of

evidence-based services in educational processes, and even the direct effects of burnout in education in general, the stress arising from interaction with a student and the results of the individualised education program. This, in turn, means that it is highly desirable for new Brazilian research to broaden the debate on the subject and to involve other means and future objectives.

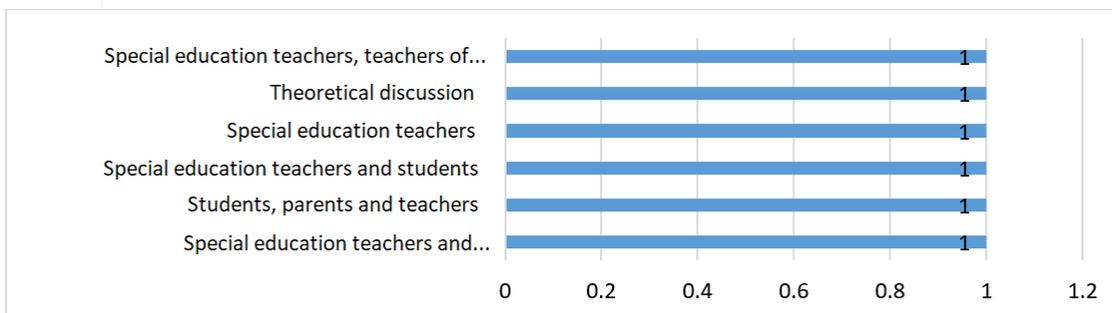
Graph 2 - Characterisation of the articles regarding the participants



Source: Prepared by the authors.

This graph suggests that most of the articles analysed (n = 15), referred to review studies or theoretical discussions. Then, the participants were special education teachers and students; students and parents with two articles for each audience, followed by a study involving school managers for students with hearing impairment and another study whose participants were the parents and team of educators and professionals. To better understand the studies, we present below the characterisation of the theses and dissertations regarding the participants.

Graph 3 - Characterisation of the theses and dissertations regarding the participants.



Source: Own elaboration.

Regarding the participants of the theses and dissertations, (Graph 3) shows that there was a divergence in relation to the target audience, however, only two studies involved the participation of the family in the construction of the IEP and one study also considered the school management in the development and implementation process of the IEP. It is important to highlight that, originally, the IEP must be designed by a

team of collaborators that include the family, the student, the school team and health professionals, when necessary, in addition to adopting strategies that better benefit the student's development, specify the roles and responsibilities of those involved, as well as forms of assessment and adaptations when necessary (TANNUS-VALADÃO, 2013).

#### **IV. Relevant Aspects of the Analysed Scientific Productivity**

When comparing theses and dissertations with each other, it is possible to notice a similarity in the objectives, since five of them dealt with aspects related to the implementation and / or development of the IEP, namely: [35]Tannus-Valadão (2013); [37]Pereira (2014); [38]Costa (2016); [36]Silva (2017) and [39] Mascaro (2017). In contrast to these scenarios, the study by [35]Tannus-Valadão (2010) investigated and compared the IEP proposals in Italy, France, the U.S. and Spain, to understand the IEP regulations in these countries.

In Brazil, studies carried out on the creation and implementation of the IEP have found results that demonstrate that it helps schools to define goals, establish teaching strategies that best meet the learning needs of students, providing tools that indicate how to evaluate them, defining the learning objectives, in addition to describing the necessary adaptations to the syllabus to reach the established goals ([35] TANNUS-VALADÃO, 2013; [38]COSTA; 2016; [39] MASCARO, 2017).

Therefore, training teachers to think about collaborative action and the design and implementation of the IEP is an alternative to create conditions for constructive dialogue, for example, between teachers from the Specialised Educational Service and the common classroom that will redefine roles and responsibilities in the educational process of students. In this sense, the IEP can be the guiding document that will provide new conditions for learning and development, however, organised in a collaborative way and appropriate to the demands and skills of students; considering the context, the objectives and the syllabus proposal of the school period that the student is enrolled ([39] MASCARO, 2017).

Even so, this process becomes a challenge, [14]Ilik and Sari (2017), point out that teachers have insufficient knowledge on how to create the IEP, mainly related to how to define support services during the process of preparing the IEP, according to the authors, probably due to flaws in the team's collaboration process at the time of building the IEP; it is important to note that these supports must be defined in the IEP, indicating when and where they will be offered and those responsible for providing them.

In the same direction, [15]Patti (2016) highlights that even special education teachers learning about IEP writing in their training process, it is still difficult to apply this knowledge in practice. [21]More and Barnett (2014) describe many challenges that teachers face, even when using software to define IEP objectives and goals, especially with regard to the issue of writing and meeting the needs of students, since the goals must be linked to individual learning needs, academic, functional, and / or social skills of students, although programs are a useful mechanism for education of professionals, there may be a disconnect, requiring a critical investigation of the content of the objectives for each student and thus define the teaching goals.

In general, the researchers aim to understand the process of development, implementation and evaluation of the IEP, with regard to the eligibility of the document and even the educational services provided.

Bibliometric analysis allows the identification of different aspects of studies developed and the paths that can still be followed by future research. The convergence between the research proposal in progress and the research already carried out, lies in the relationship between the theme, which intends to contribute to the discussion, by investigating the process of implementing the IEP in a specific context, in this case, the Youth and Adults Education (YAE) to check the limits and possibilities of the development of this document in the final stage of schooling, going in contradiction with the legislation of other countries that institutes the IEP as a document that accompanies the entire school trajectory of the student.

#### **V. Conclusions**

The study carried out presented an overview of the scientific productivity on "Individualised Educational Planning (IEP)" based on the theses and dissertations published in Brazil and journal articles, investigating the subject from 2014 to 2018. Thus, it was possible to identify a recent and comprehensive

overview of scientific productivity. In addition, bibliometric analysis, together with the well-defined scientific body of the research, made it possible to cover important topics on the investigated subject.

Therefore, the preliminary results were verified with contributions to the understanding of several aspects related to the IEP, which include, since the writing, definition of objectives, use of technology in the development and management process, eligibility processes, educational practices, implementation processes and protocols for preparing the IEP, among others. These contributions were important, as it allowed to verify the process of development of the IEP in other countries, such as, for example, the United States, Turkey, Australia and Northern Ireland, with the first implementation studies in Brazil; thus, it understands this reality, it is a stage that precedes and strengthens the process of development and structuring of the IEP in Brazil.

In conclusion, the bibliometric indicators presented, made it possible to trace the characterisation of the most recent research, collaboration patterns and objectives of the studies, revealing, among other issues, that the theme about the IEP is still little investigated in Brazil and more discussed in the United States. This, in turn, means that it is highly desirable that new studies are carried out, precisely because the indications about the IEP suggest better conditions to guarantee the inclusive process, although it is not the only factor.

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