



New insights on the history of education research: an Analysis of Term Frequency in the New Era Magazine via the ATLAS.Ti Software¹

Novos olhares para a pesquisa em história da educação: análise da frequência de termos na revista The New Era via uso do software ATLAS.Ti

Nuevas miradas para la investigación en historia de la educación: análisis de la frecuencia de termino en la revista The New Era a partir del uso del software ATLAS.Ti

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Abstract

This article aims to analyze the absolute frequency of terms related to schooling phases that we identified in *The New Era* magazine, official organ in English language, of the New Education Fellowship, between the 1920s to the 1930s. The theoretical and methodological implications are based on the intersection of propositions from Digital History and the History of Education. As a result, it was possible to observe that "nursery school" was the most frequent term. This result reflects social and educational discussions taking place in the British context at the time. Finally, from the theoretical and methodological approach used in this article, it was possible to reflect upon the importance of a Digital History of Education constitution. Thus, the organization of an epistemic arm of the Digital History of Education makes it possible to advance the field through the discussion and analysis of digital and digitalized collections.

Keywords: History of Education. Digital History of Education. Analysis of the absolute frequency of terms.

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Resumo

O artigo tem como objetivo analisar a frequência absoluta de termos referentes as etapas de escolarização presentes na revista *The New Era*, órgão oficial em língua inglesa, da *New Education Fellowship*, publicadas entre 1920 e 1930. As discussões teóricas e metodológicas apoiam-se na intersecção das proposições oriundas da História Digital e da História da Educação. Como resultado, pode-se observar que o termo mais frequente na revista foi *nursery school* e que reflete o período das discussões sociais e educativas em curso no contexto britânico no período analisado. Por fim, frente à abordagem teórica e metodológica acionada no artigo, é possível pensar sobre a importância da constituição de uma História Digital da Educação como braço epistêmico que oportunize ao campo avanços nas discussões e análises de acervos digitais e digitalizados.

Palavras-chave: História da Educação. História Digital da Educação. Análise de frequência absoluta de termos.

Resumen

El artículo tiene como objetivo analizar la frecuencia absoluta de términos referentes a las etapas de escolarización identificados en la revista *The New Era*, órgano oficial en lengua inglesa, de la *New Education Fellowship*, publicadas entre los años 1920 y 1930. Las discusiones teóricas y metodológicas apoyense en la intersección de las proposiciones originadas en la Historia Digital y de la Historia de la Educación. Como resultado, fue posible observar que el término más frecuente en la revista fue *nursery school* y que reflete el período de las discusiones sociales y educativas en curso en el contexto británico. Por fin, a partir de la abordaje teórica y metodológica accionada en el artículo, es posible pensar sobre la importancia de la constitución de una Historia Digital de la Educación como brazo epistémico que posibilite al campo los avances en las discusiones y análisis de los acervos digitales y digitalizados.

Palabras-clave: Historia de la Educación. Historia Digital de la Educación. Analice de frecuencia absoluta de términos.

Introduction

Taking Digital History (DH) as a theoretical and methodological basis to look at the History of Education (HE) can be a promising path for the establishment of new approach perspectives, both theoretical and methodological, due to the epistemological changes of the convergence with the digital universe that imposes new forms of relationship with the present, future, and the past. Although discussions about the HE and its relationship with the digital setting are carried out by some professionals, we still do not have sufficiently established work fronts in a systematized way that contemplate the various levels of the relationship with digital environments. In this scenario, we consider necessary to approach the topic from questions related to the training of the researcher, the construction of agendas for the digitization policies of archives together with custody institutions, the creation of Working Groups (WG) in the companies and associations in which HE is present as well as the holding of events, congresses, and specialized publications, among others, discussing the problem. A similar situation was pointed out by Ryuskensvelde (2014) for the international context.

If on the one hand the need to confront the theme is urgent, on the other hand it is not coherent to think education historians have refused to discuss the relations of the field with digital environments. Since 1990, following the digital turn, it is possible to locate the first investments on the subject by placing it next to other academic subjects in confronting the subject. In this context, the book organized by Faria Filho (2000) can be understood as a testimony of this moment. The work is a result of the seminar entitled “O impacto das novas tecnologias na pesquisa e na formação do pesquisador em História da Educação” (The Impact of New Technology on the Research and Training of the Researcher on the History of Education), which was sponsored by the WG History of Education of Associação Nacional de Estudos e Pesquisas em Educação (ANPEd), and was organized by the History Study and Research Group of the School of Education from Universidade Federal de Minas Gerais, by the Master's Degree Program in Education from Pontifícia Universidade Católica de Minas and by the Teacher Reference Center of the Department of Education of the state of Minas Gerais. The book is composed of 12 texts that covered the theme and recurring questions on the use of technologies in research and the availability of sources, the training of researchers and the presentation of initiatives and experiences.

This article through the analysis of the absolute frequency of terms in the published issues of The New Era (TNE) magazine, between 1920 and 1930, with the use of the ATLAS.Ti software (version 9), presents possibilities of integration and interaction between the propositions of DH and HE. The approach used embraces the discussions about the use of software and other digital tools in qualitative research against the dynamics of mass digitization of historical sources and the easy access to different documents that the Internet currently offers us (free or not). The choice of the software was due to its user-friendly interface, because it does not require programming knowledge and as it corresponds to the demands of the research from the tools available for use.

The analysis of the subject and the surprise before the answer found

TNE magazine, the official English-language organ of the New Education Fellowship (NEF), played an important role in the context of the international new education movement, especially in English-speaking countries. Created in 1920 by Beatrice Ensor (1885-1974) and

still in circulation to the present day, linked to the World Education Fellowship (WEF), it was composed of texts referring to the various topics under discussion in the context of school renovation and in favor of the renewal of society such as education for peace, citizenship, coeducation, school subjects, methods and pedagogical models, as well as news related to the several affiliated associations, congresses, bibliographic indications and other information.

In recent years the collection of the magazine, belonging to the archive of the Institute of Education of the University of London, has undergone a process of digitization and has been made available for download on the institution's website and in the digital repository Internet Archive (IA),² from which we carried out the download of the volumes in PDF format referring to the 1920s and 1930s. In view of the characteristics presented by the material, we chose to establish a working methodology that combined the practice of the analog and digital historiographic work. By way of contextualization, each downloaded magazine file refers to a volume formed by the published issues of the magazine each year, apart from volume 1 which contemplates the issues published in 1920 and 1921. In the process of compiling the individual issues in annual volumes, some parts of the material were deleted, such as the pages, back covers and cover sheets; and a general index was integrated in each yearbook. In order to identify the beginning and end of each issue, we chose to create a summary in Excel.

By developing the summaries, it was possible to identify the names of the sections, titles of the articles, names of associates and institutions, news, advertisements, reviews, bibliographic lists, information about conferences, images, and photographs, among other elements. From this approach we identified that the 19 volumes include the 138 editions published in the first two decades of the journal's circulation (Table 1). This methodology allowed us to know the subject, its structure and topography, following the guidelines for the analysis of journals as pointed out by Vidal and Camargo (1992) and Catani (1996). By developing the summaries and the through human reading of the material, it was possible to identify that the journal contemplated different debates around education and schooling, from infant education to teacher training.

Table 1 - Number of TNE issue publications

Year	Issues of the magazine	Number of issues	Year	Issues of the magazine	Number of issues
1920	(No indication)	4	1930	(41-48)	8
1921	(No indication)	4	1931	(49-60)	12
1922	(No indication)	4	1932	(1-11)	11
1923	(No indication)	4	1933	(1-10)	10
1924	(No indication)	4	1934	(1-7)	7
1925	(No indication)	4	1935	(1-10)	10
1926	(25-28)	4	1936	(1-10)	10
1927	(29-32)	4	1937	(1-10)	10
1928	(33-36)	4	1938	(1-10)	10
1929	(37-40)	4	1939	(1-10)	10

Source: Prepared by the author.

² The collection can be accessed through the link: <https://archive.org/details/uclinstituteofeducation?and%5B%5D=creator%3A%22new+education+fellowship%22&sort=titleSorter>. The available formats are: ABBYY GZ, DAISY, EPUB, FULL TEXT, ITEM TILE, KINDLE, PDF, SINGLE PAGE ORIGINAL JP2 TAR, SINGLE PAGE PROCESSED JP2 ZIP and TORRENT

From the potentialities and possibilities of handling digital and digitized archives is the analysis of large collections through tools that allow complex and laborious analyses to be made in a short period of time and with little physical effort. As Lange (2019) pointed out, in a series of newspapers, for example, it is possible to search for keywords, scan and find the number and location of occurrences in the text in an automated way, both with the use of software and online digital tools:³

When a researcher is interested in a very clear-cut topic (e.g., historical weather forecasts), a simple keyword search with several strategic terms ('rain', 'sunny') can be sufficient to select a vast and relevant sub corpus for further investigation (LANGE, 2019).

In this course, Brasil and Nascimento (2020, p. 213) indicate that one cannot lose sight of the challenges and limitations of the use of these digital strategies in the reworking of historical research. The problems of optical character recognition (in the case of digitized sources) should be considered, as well as the need to "explain the method, the technological tools used during the research and their experience in the process, to corroborate their contextualization and final interpretation of the sources." In addition to the difficulties of management and handling due to the dense volume of information/data/sources, the researcher must be alert to the internal functioning of the digital aspect for the historiographic operation, that is, the modes of operation, selection, and availability of data, among others.

Considering that ATLAS.Ti offers the text search tool, we selected some terms identified in TNE that referred to stages/phases of schooling: *nursery school*, *kindergarten*, *pre-school*, *primary school*, *elementary school*, *secondary school*, and *high school*.⁴ In the software tool, we selected the option in the search field "exact matches" and entered the term of interest in the singular plus OR and the term in the plural (e.g., primary school OR primary schools). This choice allowed to locate the number of times that the term and variations inserted in the search field could be accounted for in the analyzed corpus.

From the process of *autocoding* it was possible to verify that the term *nursery school* between 1920 and 1939 was the one that presented the highest absolute frequency among the selected terms, accounting for 1417 occurrences, followed by *secondary school* (908) and *elementary school* (575) (Table 2). Our hypothesis was that TNE would favor subjects whose terms referring to primary education were more recurrent and before that, throughout their issues and content, the terms *primary school* and *elementary school* would be at the top of the list.⁵

³ Among the online digital tools are *Voyant tools* (<https://voyant.tools.org>) and *Tagtog* (www.tagtog.net).

⁴ The analyzed terms were collected from the information on the organization of education in different parts of the world present in TNE in the 1920s.

⁵ Since the software used performs *autocoding* by optical character recognition (OCR), it is possible that some terms have not been accounted for by ATLAS.TI due to the possible interferences in the process of ocerization in the digitization of the document.

Table 2 - Terms and number of occurrences

Term	Magnitude (occurrences)
Nursery school	1418
Secondary school	909
Elementary school	580
High School	535
Kindergarten	355
Primary school	298
Pre-school	230

Source: Prepared by the author.

Faced with this result, some questions arose: What are the possible meanings for the predominance of the term *nursery school* in TNE? What is the behavior of the frequency of the term in the analyzed historical series? Has the topic been concentrated at any time? What was its upturn? Is it possible to indicate relations with internal and external events regarding the NEF?⁶

Elementary, my dear Watson?

Often historical research requires from the historian an almost Sherlockian cunning, as Ginzburg (1989) has already pointed out, but we could add that a Watsonian doubt cannot be ruled out either. When facing a problem, it is necessary to seek and follow the traces, clues, and tracks in the search to solve the given “mystery”. In the case of this research, we seek to analyze the *strings* (data collected by using the software) and relate them to the context of the subject and the discussions present in the historiography. We start from the premise that the software is a research tool, the results presented by it before the analyzes carried out should be seen as notes for further involvement regarding the performance of the historian and not as the finished and result.

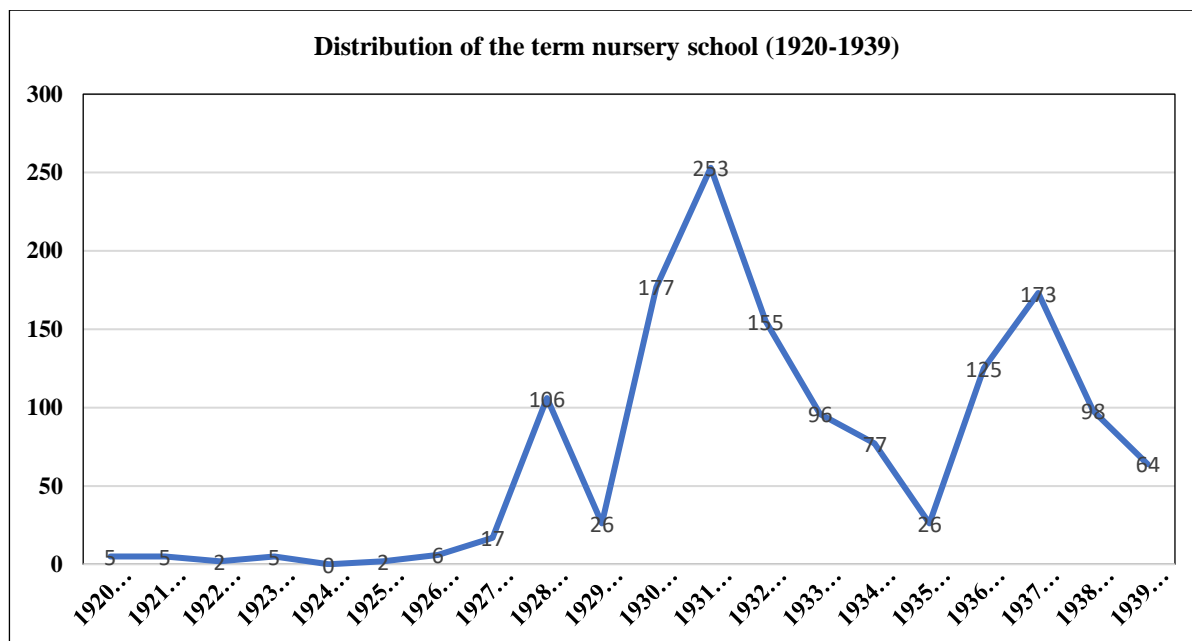
By invoking the expression “Elementary, my dear Watson,” plus the question mark at the end, we point to the relationship between Sherlock Holmes and John Watson (characters of fiction literature created by Arthur Conan Doyle in the late nineteenth century) before the problem. The result of sequencing facts is not always as obvious as it may seem. Although in research mediated by qualitative analysis software we may be affected by a sense of accuracy of the presented result, we must adopt a position of constant doubt in relation to the results found. As De Certeau (2017) warned us, we must look for the spoken and the unspoken that are engendered in the complexity of historical making.

In addition to the “text search” tool, we resort to the analysis of the data obtained by *autocoding* through the “cross tab” tool on the ATLAS.Ti where it was possible to verify the distribution of the quantity of terms in the annual volumes of the magazine in code-document table. Thus, we identify the rise of the term *nursery school* began as of 1927, showing three peaks in the following years: the first in 1928 with 106 occurrences, the second (and largest) in

⁶ We consider it is relevant to point out that digital history and the use of a large volume of data (serial or not) does not distance us from the problems and discussions arising in the context of the development of quantitative and serial history (see Barros, 2012). Although the approaches between the historical perspectives can be seen as close, we consider that digital history is immersed in a different context permeated by other layers that are reflected in the use of the digital setting as for collection, storage, and management of large databases; in addition to the new forms of dissemination of the knowledge produced, as well as the tools for digitization, retrieval, and transposition of its material. Among the existing discussions on the broad dimension on which digital history is immersed, see Lev Manovich (2012), Gerben Zaagsma (2013) and Helyom Viana Telles (2017).

1931 with 253 occurrences, and the third in 1937 with 173 occurrences (Chart 1). In order to identify which contents were covered in the respective years, we carried out an analysis of the summaries and thematic issues published during the two decades of analysis, following the notes made by Haenggeli-Jenni (2017) and Monção (2021).⁷

Chart 1: Distribution of the term *nursery school* between 1920 and 1939.



Source: Prepared by the author.

By analyzing the summaries of the four issues of TNE published in 1928, three were structured from a thematic axis. The 33rd edition was devoted to education in Russia and the countries of the Soviet Union; the 35th edition to education in England; and the 36th edition to the teaching of English. In 1931, 12 issues of the magazine were published, of which four thematic editions were identified: issue 51, theater; issue 53, coeducation; issue 55, geography; and issue 56, *film in education*.

Yet in 1937 10 issues were published with seven thematic editions dedicated to *Sex relationships* (issue 2), *Religious education* (issue 3), *Coeducation* (issue 4), *Citizenship* (issue 5), *Education for Citizenship* (issue 6), *Nursery School* (issue 7) and *Expect* (issue 8) (MONÇÃO, 2021). From this survey, it was possible to observe that only issue 7, of 1937, offers evidence that supports the hypothesis of the frequency of the term related to a thematic issue of the magazine.

By approaching the issues published in these years, checking the titles of the articles, we sought to identify if there was any reference to the theme of childhood education and, in particular, the use of the term in question. In 1928, 47 articles were published, four of which were dedicated to the topic of childhood education. Of these, three used the term *pre-school*⁸ and one used the term *nursery school*.⁹

⁷ Haenggeli-Jenni (2017) and Monção (2021) differentially. The first author collected the information from the documentation located in the archives of the *Bureau International d'Éducation* (BIE); the second carried out the reading and the analysis of the titles of the articles published by the magazine.

⁸ The articles published in issue 33: "Ten Years of pre-school work in Soviet Russia," by Vera Fediaevsky; "The Apiary' Moscow (A Russian Kindergarten, visited in Summer, 1926)," by H. W. Hawkins; and "Research into the Drawings of Pre-School Children", by E. Florina.

⁹ The article published in issue 35: *The Nursery School Movement in England*, by Grace Owen.

In 1931, 117 articles were published and six referred to childhood education. Among them, five presented the term *nursery school*¹⁰ in their titles and one used the term *pre-school*.¹¹ Yet in 1937, 92 articles were published, 14 of which dealt with childhood education and were concentrated in the thematic edition commented earlier. In addition to these, we identified an article in issue 8 (Table 3).

As indicated in the section *Outlook Tower* (the first that opens the issues of the magazine), this edition did not consider the various experiences and international contexts such as the “South Americans, Scandinavians and people from Austria, Belgium, Canada.” But in turn it considered to offer sufficient content for the discussion of the implementation of infant schools (day cares and kindergartens) for the care of children (health, social, pedagogical and food aspect) prior to compulsory schooling. In this same opening section, the collaboration of Miss Hawtrey and other members of the *Lady Astor's Ten-Year Plan*¹² and The *Save The Children Found and Nursery School Association* stood out (THE NEW ERA, 1937, n. 7, p.).

Table 3: Articles about nursery school published in TNE (1937).

Year/Issue	Article	Author	Page
1937/7	Physical Care of Children in the Nursery Years	Ethel Dukes	183
1937/7	Learning the Social Virtues in the Nursery School	Louis Verel	186
1937/7	Play in the Nursery School	D. E. May	188
1937/7	The Education of Parents through Nursery Schools	G. M. Berryman	192
1937/7	A Nursery School in an Egyptian Slum	M. C. Liesching	194
1937/7	A Note on Nursery Schools in Holland	J. E. Schaap	199
1937/7	The Day-Nursery School an After-war Problem	Rose Marie Vajkai	200
1937/7	Infant Schools in Italy	Aurora Beniamino	203
1937/7	Nursery Schools in the United States	Mary Dabney Davis	206
1937/7	An English Visitor's Impressions of the Nursery Schools of America (Eastern States)	C. M. Styer	209
1937/7	Nursery Education in the Soviet Union	Vera Fediaevsky	210
1937/7	Notes on Pre-School Education in Zurich	Emmy C. Hiirlimann	214
1937/7	Points I had in Mind when Designing a Nursery School	A. K. Tasker	216
1937/8	What the Nursery School expects of the Infants School	E. R. Boyce	234

Source: Prepared by the author.

By analyzing the summaries, we observed that the number of published articles that carried the term *nursery school* in the title is considerably low compared to the total universe of articles published each year. Before this insight, we feel the need to analyze the digitized corpus in another way. From the analysis of annual volumes to the analysis of individual issues.

¹⁰ *Essentials in nursery school education*, by Lillian de Lissa (issue 52); *The Mental Health of the pre-school child*, by Margareth Drummond (issue 54); *Advantages of the Nursery School*, without authorship (issue 57); *What do we need to know about young children in the nursery school*, by C. Winifred Harley (issue 58); *Some studies made on the sleep and diet of nursery school children*, by Mary E. Sweeny.

¹¹ *Habits and the pre-school child*, by Maria B. Te Water (issue 59).

¹² Campaign undertaken by Lady Astor (Nancy Witcher Langhorne, 1879-1964) started in the late 1920s in favor of *nursery education* and *nursery school* in Britain. See Brehony, 2009.

The prevalence of the term *nursery school* in the British context

In order to analyze the issues individually, it was necessary to restructure the digital corpus. The annual volumes collected were fragmented. The pages of the compilation were separated by an online digital tool, respecting the composition of the issues of the magazine, and after separation we grouped the pages referring to each edition.¹³ Thus, the 19 volumes originally downloaded were regrouped in the 138 issues published in the 1920s and 1930s, and after applying the methodology previously used to analyze the volumes it was possible to identify in which issue of the magazine the terms were more frequent.

Faced with the use of different terms referring to childhood education (*nursery school*, *kindergarten*, and *pre-school*), although there is enough space to discuss them in this work, we consider it important to point out what Georges Mounin (1975) considered regarding the translation of terms into different languages. For the author, the translation is beyond a simple linguistic operation and it is necessary to analyze the context in order to understand the meanings in which the terms are inserted. In our case of analysis, the variety of terms used to refer to institutionalized childhood education varies between contexts and the theoretical and methodological bases adopted by each country or region. By analyzing the four issues published in 1928, for example, it was possible to realize that the higher frequency of the use of the term *nursery school* was in issue 35 (101 occurrences), which dealt with the theme of Education in England. Followed by *kindergarten* and *pre-school* in issue 33 (64 and 37 occurrences respectively), concerning education in Russia and the states of the Soviet Union. For the Soviet context,¹⁴ we note prevalence of the use of the term *kindergarten* (64 occurrences), followed by *pre-school* (37 occurrences) and *nursery school* (2 occurrences). For the English context, there is a preference for the use of the term *nursery school* (101 occurrences), and a low adherence to the terms *pre-school* (3 occurrences) and *kindergarten* (1 occurrence) (Table 4).

Table 4 - Frequency of terms in TNE issues in 1928.

Terms	Year and issue			
	1928_33	1928_34	1928_35	1928_36
Elementary school	12	17	8	4
High school	6	1	6	3
Kindergarten	64	0	1	3
Nursery school	2	2	101	1
Pre-school	37	1	3	0
Primary school	3	0	2	0
Secondary school	16	17	31	10

Source: Prepared by the author.

In the issues published in 1931, in which no thematic edition on childhood education was identified, we observed that the term was present in a dispersed way during the year, but with greater incidence in issues 52 and 53. The highest frequency of the term *nursery school* was registered in issue 53 (71 occurrences), and concentrated in the article by Grace Owen and the informative note on the *Nursery School Association of Great Britain*. The *pre-school* and *kindergarten* terms registered five and two occurrences, respectively. Following, number 52 presented 60 occurrences, concentrated in the article by Lillian de Lissa; and the terms *pre-school* and *kindergarten* registered 8 and 0 occurrences, respectively. Number 48

¹³ In order to divide the volumes and regroup the pages into issues, we used the tools available on the PDF24 Tools website <https://tools.pdf24.org/>

¹⁴ New Era Magazine, issue 33, 1928.

presented 32 occurrences for *nursery school* which are concentrated in the Article by C. Winifred Harley, three to *kindergarten* and one for *pre-school*. Issue 57 presented 28 occurrences for *nursery school*, where they are distributed among informative notes, book reviews, in an untitled article and advertisements of private schools, two for *kindergarten* and one for *pre-school* (Table 5). From that year's articles and highlighted herein, it is worth pointing out that Owen and Lissa were members of the *Nursery School Association of Great Britain* and held the positions in the board of directors of the association; and Harley was the director of the *Nursery School Research Center*.

Table 5 - Frequency of terms in TNE issues in 1931.

Year and issue	Terms		
	kindergarten	Nursery school	Pre-school
1931_49	0	10	8
1931_50	2	2	1
1931_51	4	1	0
1931_52	0	60	8
1931_53	2	71	5
1931_54	0	6	3
1931_55	0	10	0
1931_56	1	8	1
1931_57	2	28	1
1931_58	3	32	1
1931_59	3	12	1
1931_60	1	13	1

Source: Prepared by the author.

Finally, in 1937 issue seven stands out as a thematic edition for *nursery school* accounting for 119 occurrences, followed by *kindergarten* (40 occurrences) and *pre-school* (7 occurrences) (Table 6). It was possible to observe that issue eight of the same year presented a considerably high frequency of the term *nursery school*, compared to the other two terms, which are scattered throughout the magazine and present in the article by E. R. Boyce, *What the Nursery School expects of the Infants School*.

Table 6- Frequency of terms in TNE issues in 1937.

Year and issue	Terms		
	kindergarten	Nursery school	Pre-school
1937_01	1	0	0
1937_02	2	4	0
1937_03	2	0	0
1937_04	1	3	0
1937_05	2	1	0
1937_06	0	2	0
1937_07	40	119	7
1937_08	2	32	1
1937_09	1	7	3
1937_10	2	5	0

Source: Prepared by the author.

After the identification of the terms and their frequencies, the following question remains: "what reasons are related to the prominence of the term *nursery school* to the detriment of *kindergarten* and *pre-school*?" Although the answer is not simple, it is possible to indicate two non-exclusive interpretative lines. The first refers to the reorganization of the NEF in 1929 and the change of location that TNE would undergo in this context; and the second refers to the social and political matters that crossed the British context between the 1920s and 1930s. However, before we dwell on the specific question about the frequency of the term analyzed, it is important to point to the reconfiguration of the magazine, because we realized that it was an event that made the result found a possibility.

Regarding the first point, Haenggeli-Jeni (2017) indicates the reformulation of the NEF forwarded at the Elsinore congress in 1929. Individual admissions ceased to be made exclusively by the subscription of the magazines and under the sole responsibility of the NEF's headquarters in London and started to be made by the national sections. In this context, the membership modality called *Federating membership* was created, intended for admissions, training institutions, government departments and other institutional modalities. For this modality there was an interest in creating an international bulletin aimed at the dissemination of international events in the educational field that would seek "to keep its readers informed of educational advance and experiment in all countries and should be of special value to government departments, associations, school principals and editors" (THE NEW ERA, 1929, p. 232). In this case, it is possible to identify the decentralization of the NEF in London and the valorization of the national sections. Following the 1929 rule, TNE began to serve the local context, adopting a perspective focused on the internal contexts of Great Britain and the Commonwealth.

Following the reorganization aims of the NEF, the new phase of TNE was launched in the July 1930 edition. As pointed out by Haenggeli-Jenni (2017) from the analysis of the covers, back covers and cover sheets of the magazine, we observed the suppression of the expression "the English organ of the New Education Fellowship" shortly after the name of the magazine, as observed in the years following 1922. The magazine was called *The New Era in home and school*. In addition, the principles and objectives of the association disappear from its cover page. Another element emphasized is the reference to the name of Beatrice Ensor as president of the international council, followed by the structure of the English section of the NEF.¹⁵ Although the editorial change marks the issue for the month of July, some aspects of the prominence of the English section (created in 1927) can be seen in 1929, with the creation of the specific news column on the national section. The column was not kept for the following years.

Also, as an element of differentiation of the new phase, a message by the English Prime Minister James Ramsay MacDonald (1866-1937), accompanied by his photograph, was published on the first page of the magazine.

In the world of to-day it is the men and women of character who count, those who can co-operate, bear responsibility, think peace, and extend their sympathies beyond the boundaries of their own nation and country. Believing this, it interests me to know that the "New Era" is widening its field to include home as well as school education. For the home is the first school, and the influence of the home can be traced throughout a life. The best school in the world can be of little use if the

¹⁵ Considering that the material handled in our research refers to a digitized corpus, in which the covers, back covers and cover sheets were suppressed in the act of composing the issues of the magazine in annual volumes, it was not possible to reproduce the analysis performed by Beatrice Haenggeli-Jenni.

home is unworthy. It is essential that parents should know how to educate their children in the early days before they go to school, and that then home and school should know how to work together to fit boys and girls for the work the world will demand of them as men and women. I will follow with interest the development of the “New Era” (MACDONALD, 1930).

The relationship between MacDonald's speech and the perspective adopted by TNE can be perceived by the agenda that the magazine adopted throughout the 1930s. In July the articles published privileged the debate of cooperation between parents and teachers in the education of children, a subject that appeared in other issues. The addendum *Parents and children* was created, which circulated between the years 1932 and 1934. The presence of the Prime Minister and the link of TNE with the theme of home education performed by the parents¹⁶ suggest that the editorial of the magazine adopts the current political line by the British government and its closer link with the English section of the NEF and the national political-social context.

Regarding the frequency of the term *nursery school* in the selection analyzed, especially with the three peaks of occurrences in TNE, it is possible to establish a relationship with the political and social aims established in the period. In 1918 it was promulgated the *Education Act*, which inserted infant school under State management (OWEN, 1928, p. 144). Following the act, some developments such as the creation of the *Nursery School Association* (NSA) in 1923, and the expansion of the *Nursery School Movement* in 1927 are observed. And, as Brehony (2009) pointed out, between the 1920s and 1930s there was a movement in Britain in favor of *nursery school*.

In this context, Palmer (2016, p. 108) highlighted the participation of some characters in the broad discussion that was established by the act of 1918 such as Michel Sadler, Percy Nunn (professor of the Institute of Education of University of London), Margaret McMillan (pioneer of the *nursery schools* and first president of the NSA), Grace Owen (secretary of the NSA). In addition to representatives of the "Froebel and Montessori Societies; the Birmingham People's Kindergarten Association and the Workers' Educational Association." From the characters mentioned, their names were identified in several moments of TNE during 1920 and 1930.

Although the discussions and propositions in the establishment of infant schools were in the wake of the discussion of attention to the childhood of the working classes, McMillan (1919) stressed that *nursery school* was different from day care, from *Baby-welfare center*, from *Baby clinic* and from *Infant School* for following the educational perspective supported by child psychology. The approach to psychology can be understood as a follow-up to the ongoing trend for childhood education.¹⁷ From the possibilities of approach between the meanings and significations among the three terms analyzed for childhood education, it is possible to understand *nursery school* was different from kindergarten, because it did not follow the methodology developed by Froebel; and it was different from *pre-school* because it was not interested in offering only instruction in writing, reading and arithmetic to children before the age of elementary schooling. Its pedagogical proposition consisted of a practice of care for children (especially poor children) offering food, physical care, and hygiene, associated with the introduction of the child to school knowledge through observation, musical activities, physical exercises, and colors and geometric shapes.

¹⁶ The term used is *Parent Education*.

¹⁷ On this discussion in the European context see: Hameline (1996) and Hofstetter (2004).

Final considerations

By using ATLAS.Ti, it was possible to glimpse a possibility of analysis of the magazine that, at first, was submerged in the various layers of information that the journal presents. As indicated at the beginning of this article, the use of the digital tool was opposed to our initial hypothesis by finding a high frequency of the use of the term *nursery school* in a space we thought there was a higher incidence of terms related to primary schooling. Thus, being seduced by the numbers and the results indicated by the analysis via software, we chose to follow the Watsonian way of suspicion when facing the certainty of the analysis data offered by the digital tool.

In a game of dimensions, between digital and analog, of the practice of digital research and the knowledge derived from the historian's analog work, it became essential to read the magazine (as sources and as a subject of analysis) identifying its topography, subjects, associates, and distribution of the term before so many others. Therefore, human reading was elementary to the composition of the complex picture and to approach the political and social issues that were posed in the analyzed period and that crossed TNE. If the initial surprise suggested that the magazine prioritized issues related to childhood education, the suspicion allowed us to understand that the frequency of the term does not support the first impression, because several other matters were addressed during the two decades. In the late 1920s TNE began to deal with specific discussions in its issues, following the specialization of the educational debate in the international context, as we point out (MONÇÃO, 2021) in the reconstitution and analysis of the summaries.

The prominence of the term and its frequency peaks followed the internal political movements in the British context, with the institutionalization of education for children, via the model of *nursery school* and the expansion of discussions on the subject, the emergence of associations, the circulation of bibliographies and the establishment of infant schools and teacher training. Identifying that *nursery school* was the most frequent term should not lead us to think that this model of childhood schooling was the only one popular and well-founded among the most diverse characters in the educational field. Given this, we can consider that the analyzed magazine offers us an index of terms on the different forms and processes of schooling of subjects in international circulation that were anchored in an existing political debate and not directly to the academic field of education, which in the 1920s and 1930s were still to be constituted.

The propositions for childhood education of Froebelian, Montessorian, Decrolian matrix and others as pointed out by Cohen (2006), as well as other educational proposals related to *nursery school* as *nursery class* and *open air-nursery school*, cohabited the space of TNE and disputed space and legitimacy. Regarding the domain of the term discussed in this article, it is possible to understand *nursery school* as a British experience for childhood education and that refers us to the pedagogical propositions developed by Robert Owen (1771-1858) in the early nineteenth century.

It is on this topic that reflecting upon the history of education from a transnational perspective can be invoked. Models, proposals, and pedagogical projects in circulation provide opportunities for the emergence of approaches, which are outcomes of feedback and that, in the end, identifying the pure origins becomes practically impossible if we consider that the pedagogical perspectives in progress are identified in different contexts. The adoption of the term *nursery school* can be understood as an element of local culture, but in turn, does not ignore exchanges with experiences from other places. Finally, from the theoretical and methodological approach used in this article, it was possible to reflect upon the importance of a Digital History of Education constitution as an epistemic arm that makes it possible to advance the field through discussions and analyzes of digital and digitalized archives.

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