

Search query as a methodological indicator of new pedagogical conceptualizations (on the example of hip-pedagogy)

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Abstract. The article discusses the question of what precedes the theoretical formulation of new pedagogical conceptualizations. It is shown that new directions in the development of pedagogical knowledge can appear in accordance with the emerging needs of educational practice. To clarify the question of what structural components of pedagogical theory and in what form are formed at the pre-theoretical stage, as an example, a new conceptualization of “hip-pedagogics” is considered, which solves the problems of rehabilitation and correction. The hypothesis is tested that the direction of Internet search queries in the special Google Trends resource characterizes the features of this stage in the development of theoretical conceptualization, which is reflected in the frequency of the choice of the search query and the features of the lexical form of its representation. It is concluded that the emergence of new conceptualizations is associated, among other things, with the extrapolation of the results obtained on one object of the model to another, which can potentially contain similar characteristics and/or perform similar functions.

1 Introduction

The development of pedagogical knowledge is determined by the influence of multidirectional trends, which are influenced by external factors and features of the internal self-development of science. This is due to the expansion of the problem field of pedagogy and its functional orientation. Modern pedagogical science is represented by a large number of conceptualizations determined on the basis of various criteria. Among them: ways of mastering reality (pedagogy as a science and as an art) [1], forms of scientific knowledge (theoretical and empirical pedagogy) [2], types of cognitive abilities (intuitive, instinctive, rational, reflexive, pedagogy, etc.) [3, 4], leading pedagogical schools (Herbartianism, Pestalozzianism, Rousseauism, etc.) [5, 6, 7].

Diagnostics of the moments of generation of new pedagogical knowledge is based on a critical analysis of lines of similarity and differences of positions contained in thematic publications of theorists. This is reflected in research practices devoted to the review and/or comparison of positions within a certain issue. As a rule, content-analytical studies, carried

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out in compliance with the principle of searching for a new semantic category and identifying a trend towards the frequency of its use, make it possible to fix terminologically fixed, "become", "ready" knowledge.

Abstract and bibliographic sources (Scopus, Web of Science, etc.) are widely used for this. These databases have built-in tools that allow you to visualize the state of development of a particular problem, taking into account the intensity of use by the authors of given semantic categories. However, this stage of research practice is preceded by a stage when researchers are in a state of conceptual search, determined to a large extent by curiosity and research intuition. Before the advent of Internet technologies, this approach was difficult and required a significant effort and time. However, the transition to a new technological paradigm allows the use of such resources that make it possible to focus on the products of preliminary intellectual search. These include a new resource created in 2004 - the Google Trends web application, which takes into account user search queries. Some users believe that it is ideal for promoting products, since it takes into account the semantics of requests from representatives of any typological groups included in the information search.

We believe that the information provided by this resource can have a methodological focus and be used as an indicative parameter. Using the system of search queries, we can determine the main trends in the generation and formation of new pedagogical conceptualizations at the stage when they have not yet taken shape in a full-fledged theory.

2 The concept and methodology of the study

The purpose of the study is to determine the stably recurring connections that accompany the generation of a new pedagogical conceptualization. The concept of hip-pedagogy was chosen as the object of research, which at present is a complex of rather disparate pedagogical ideas aimed at developing the use of the potential of an animal (horse) for the implementation of correctional pedagogical goals.

When organizing the study, we proceed from the *hypothetical idea* that the design of this direction is reflected in the qualitative originality and features of the search queries of theorists and interested teachers. Teachers intuitively carry out a contextual search for some ideas that contribute to the organization of work and the implementation of the functions of psychological support for those in need of rehabilitation.

The source base of the study is the Google Trends web application, which takes into account the number and allows you to visualize the frequency of thematic queries.

The research methodology consists in the search and consistent selection of semantic categories that reflect the structural components of pedagogical theory and / or its content. Taking into account the fact that Google Trends is an interactive system, the settings of the built-in tools (period, location, categories) may change, which will.

3 Research results and discussion

At the first stage of the study, the settings "worldwide", "2004 - present", "all categories" were chosen in order to cover queries on the topics of interest to us as much as possible.

The categories *hip pedagogy*, *pedagogy with the help of animal*, *equestrian pedagogy*, *animal learning* were introduced into the search system. For all positions, with the exception of *animal learning*, Google Trends did not have information. The results of queries on the position of *animal learning* are shown in Figure 1.

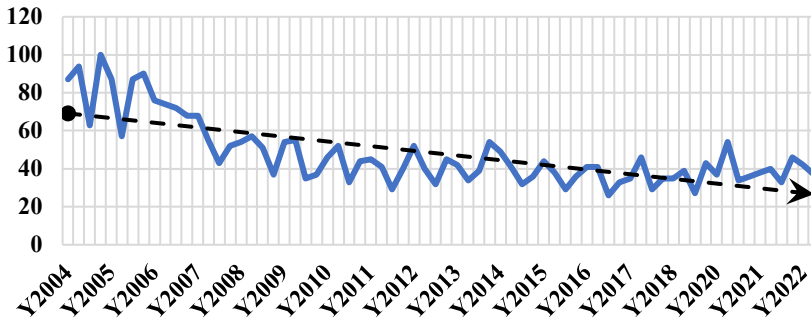


Fig. 1. Search query distribution polygon by *animal learning* position in Google Trends. To draw up the graph, we used data characterizing the activity of users in each season in the amount of four positions for one year (<https://trends.google.ru/trends/explore?date=all&q=animal%20learning>)

As the graph shows, the number of requests shows average values, however, when considering this information in chronological order, a clear downward trend is found. The maximum interest was shown in the period from 2004 to 2009, when the number of requests fluctuated between 75 and 46 units. The maximum interest was shown in the period from 2004 to 2009, when the number of requests fluctuated between 75 and 46 units. The general trend is down.

According to the "popularity by regions" criterion, the resource shows the following distribution (Figure 2).



Fig. 2. Popularity of the search query *animal learning* by regions of the world. Figure generated by Google Trends (<https://trends.google.ru/trends/explore?q=animal%20games&date=all>)

The intensity of the color shown in the figure depends on the percentage of requests. The range of requests from countries such as the USA, Canada, Pakistan, Australia and the UK is 67 - 51 units. The remaining countries have from 2 to 21 search queries for the period under review. In general, it can be concluded that English-speaking countries dominate the system of thematic search queries. At the second stage of the study, the task of defining pedagogical terminology, which became the subject of search queries in the context of hip-pedagogical topics, was solved. When conducting a study, the previously accepted settings of the Google Trends resource are saved.

In the system, in order of comparison, terms were included, the content of the pedagogical component: *equine assisted learning*, *hippotherapy training*, *equine chiropractic school*. The results are presented in Figure 3.

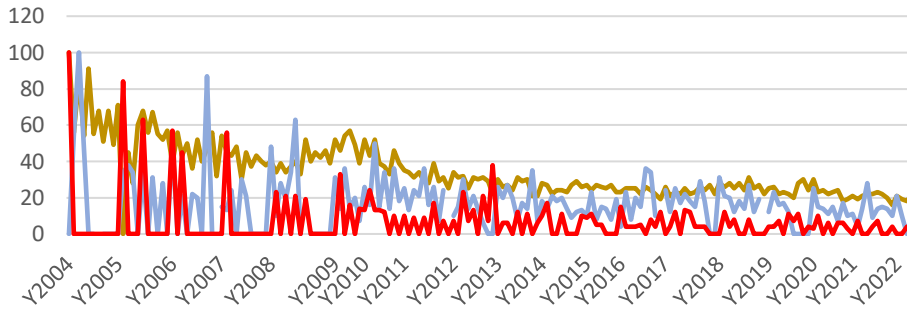


Fig. 3. Popularity of search queries containing pedagogical vocabulary. Google Trends data was used to draw the graph. ● – *equine assisted learning*; ● – *hippotherapy training*; ● – *equine chiropractic school*. (<https://trends.google.ru/trends/explore?date=all&q=equine%20assisted%20learning,hippotherapy%20training,equine%20chiropractic%20school>)

Comparison of the frequency of requests for pedagogical vocabulary showed that there is a different level of manifestation of its intensity. The most popular search queries are addressed to the category of *equine assisted learning*, the peak of which falls on January 2004 and amounts to 99 units. Between 2005 and 2008 search queries for this position amounted to zero 6 times, and then never reached zero values.

The averages over the entire period are 19 units of *equine assisted learning*, 3 units of *hippotherapy training*, and 4 units of *equine chiropractic school*. The results of the comparison by regions are shown in Figure 4.



Fig. 4. Popularity of search queries containing pedagogical vocabulary by regions of the world. ● – *equine assisted learning*; ● – *hippotherapy training*; ● – *equine chiropractic school*. Figure generated by Google Trends (<https://trends.google.ru/trends/explore?date=all&q=equine%20assisted%20learning,hippotherapy%20training,equine%20chiropractic%20school>)

As follows from the visualization of regional locations, the search queries from the United States dominate. The share of the total number of requests in the US is: *equine assisted learning* - 57%, *hippotherapy training* - 18%, *equine chiropractic school* - 25%.

4 Conclusion

A search query can be considered as an initiative research in a situation where there is a stage of "pre-theoretical" design, which precedes the development of a new pedagogical conceptualization. As the analysis of the special terminology, which has become the subject

of search queries by specialists, has shown, the full name of the new industry has not yet been formalized in a strict scientific discourse. However, its design is preceded by the appearance of a conceptual apparatus that outlines the boundaries of a new conceptualization. The terminology includes concepts that have as a denotation generic pedagogical concepts (*learning, training, school*), which are expanded due to improper features (assidens).

Thus, the emergence of new conceptualizations is associated, among other things, with the extrapolation of the results obtained on one model object to another, which can potentially contain similar characteristics and/or perform similar functions.

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