

SWOT ANALYSIS AS A RESEARCH METHOD IN PEDAGOGY

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Abstract. SWOT analysis is an approach traditionally applied in the field of strategic planning and strategic management. Its essence finds expression in the analysis of internal and external factors which can influence over development of the organization, a given managerial technique, etc. In view of this in present article are analyzed the possibilities for application of SWOT analysis in the field of pedagogy. This thesis is based on two basic points of view: first – in every scientific research the analysis of the received information and data is required and although that the said method is a specific type of analysis it has potential to be applied not only in the field of management and marketing but in others scientific spheres one of which can be pedagogy. Second – SWOT analysis can be treated as a scientific method and the results obtained through it – used for solving scientific tasks and purposes.

Keyword: SWOT analysis; research methods; pedagogical research; methodology

Introduction

Every single science uses some general and some specific research methods to explore phenomena and processes in its field. It's known that some of these methods are so closely specialize that is nearly impossible to be used in other scientific field. On the other hand, there are others that may be executed, with success, in many different sciences. According to the most popular classification of research methods in pedagogy they are divided into two basic groups – methods for empirical research and methods for theoretical research. The group of the letter includes analysis, synthesis, induction, deduction, formalization, thought experiment, modeling and others. Take into account some general characteristics of these methods can argue that they can be used in different scientific fields. This is because it is not possible to carry out scientific research without using most of these methods and to arranging theoretical information and data. Doubtless, analysis and synthesis are most often used methods for theoretical research.

SWOT analysis is specific type of analysis. In this sense it is a part of these methods that have potential to be applied not only in one scientific field. This makes

it possible to claim that there are certain possibilities for using SWOT analysis in the field of pedagogical research, and not only as a method for strategic planning and management. ***In this context, the main aim of this paper is to be investigated the possible applications of SWOT analysis in pedagogical researches.*** There are three ***tasks*** that stem from this aim, namely:

- clarification the specific possibilities for using this method in the field of pedagogy;
- determination of phases of pedagogical research in which it is possible to apply the method;
- definition of basic advantages and disadvantages of the method itself.

Materials and methods

Thus formulated the aim of this paper requires to be investigated the main characteristics of the SWOT analysis as a managerial and research method and on this base to be clarified – is it possible the said method to be applied, with success, in pedagogical research? In this sense, the general research method used in this study is theoretical analysis. It includes, first of all, investigation of theoretical resources related to the SWOT analysis in the scientific literature and on this base applied of some of its general manners, namely – classification and generalization. An important part of the whole theoretical analysis is the comparative analysis. With the means of it are investigated the similarities and differences between the SWOT analysis as a managerial method in the field of management and as a research method in the field of pedagogy.

This is a theoretical research in which are formulated the theoretical foundations of the thesis that SWOT analysis can be applied as a research method in the sphere of education and pedagogy. The conclusions made here, describe the basic steps with the help of which this method can be applied in real research practice.

Results

Possibilities for implementation in the field of pedagogy

A number of authors define the SWOT analysis in a similar way, namely: “SWOT analysis is a tool used for strategic planning and strategic management in organizations” (Gurel & Tat 2017, 995). On the other hand Hunger and Wheelen define strategic management as “a set of managerial decision and action that determines the long-run performance of a corporation.” (Hunger & Wheelen 2002, 3). According to the same authors the strategic management includes – environmental scanning; strategy implementation; evaluation and control. In this sense Gurel and Tat state that SWOT analysis “is a strategic planning framework used in evaluation of an organization, a plan, a project or a business activity.” (Gurel & Tat 2017, 995). In this sense, Bulgarian author Boncho Gospodinov points out that “every single scientific research, including pedagogical, is characterized with determination, planning and

high stage of organization.” (Gospodinov 2012, 50). Related to this, some similarities can be found between the management and implementation of scientific research in pedagogy and the management of an organization, i.e., **common aspects concerning both types of management mentioned could be identified**, namely:

- the good planning is extremely necessary condition;
- clear definition of goals is required;
- the manager/researcher has to find the most effective approaches, methods or procedures to achieve appointed purposes;
- a thorough research of the social area in which functions the organization/educational institution is necessary to carry out;
- the manager/researcher has to clarify the amount and the possibilities of a financial and other kind of resources which he can use;
- it is necessary to clarify which are the basic participants (persons; subjects and institutions) and, also, other partners which can be involved.

Defined similarity of characteristics of the management of an organization and the management of a pedagogical research are clear proof that SWOT analysis has potential to be effectively used in the field of pedagogy.

The first approach of use of SWOT analysis in this field related to the management of the educational institutions. The principles of market economy put even these institutions in a competitive situation. They have to “struggle” attract more students; to build up a good social image, etc. These purposes can be solved by means of SWOT analysis. Using it, the managers of a school/kindergarten and their teams can generate innovative ideas for: the development of the institution; research the position of the institution towards similar institutions; the real social image of the institution; ways for improvement of the educational services offered by the institution. Consequently, there are basis to be claimed that the implementation of SWOT analysis as a method for taking decisions in the field of school/kindergarten management have some similarities with the implementation in each other organization. There is only one difference – the field of activity. In this sense the SWOT matrix have a classical form which is presented by Tasos Hovardas (Hovardas 2015, 1). This matrix is placed in table 1.

Table 1. Classical form of SWOT matrix

	Aspects that pertain to the organization itself; inner characteristics	Aspects that refer to environment of the organization
Potential that might promote the organization's goals	Strengths	Opportunities
Barriers that might hinder the achievement of the organization's goals	Weaknesses	Threats

In addition, Edhard Valentin points out that “Strengths” and “Opportunities” can be defined as favorable factors but “Weaknesses” and “Threats” – as unfavorable factors (Valentin 2005).

With regard to management of an educational institution, each of the four components of the SWOT analysis has to encompass all internal and external factors which influence the development of the school/kindergarten. “Strengths” and “Weaknesses” related to internal factors such as: teaching staff; necessary equipment; other specialists working in the institution; financial resources, etc. For their part, “Opportunities” and “Threats” identify all external factors – size of the settlement in which function the educational institution; connections with another institutions in social area as cultural, social, religious and so on; some specificities of education policy; basic characteristics of labor market and others. In Table 2 is described an example of SWOT matrix of analysis of school/kindergarten management.

Table 2. SWOT matrix of analysis of school/kindergarten management

	Internal factors	External factors
	Strength	Opportunities
Favorable factors	Very good necessary equipment; highly qualified teaching staff.	Multitude of present and potential sponsors.
	Weaknesses	Threats
Unfavorable factors	Small financial resources; high average age of the teaching staff.	Reduced number of students; many competing institutions.

Similar analysis can be made for each aspect of the management and activities of the educational institution, for example – full-time training; increase the extracurricular activities; attract more partners from social environment; social partnerships with other institutions, etc. As it became clear the use of SWOT analysis as a managerial method in school/kindergarten is very similar to this process in business organizations. The basic difference is the field of activity.

The second direction for the application of SWOT analysis in pedagogical science is as a part of the system of methods in a given scientific pedagogical research. In this context, with the help of this analysis can be analyzed and evaluated a new way, approach, method, technology or practice which have to be applied in real pedagogical practice. One of the authors considering SWOT analysis as a manner for management of some specific programs is Betsy Orr. She states that this method can be used for management of teacher education program too. According her through this type of analysis the researcher gets the information which might be used for development of the program itself. In this regard Orr declares: “A SWOT analysis of a teacher education program or any program can be the driving force for implementing change” (Orr, 2013: 383). An example could be a case where an author develops his own methodology

for working with children/students with special educational needs. In the field of pedagogical researches an example could be a case where an author develops his own methodology for training of gifted students. With the means of the SWOT analysis he can bring out and systematize key advantages and disadvantages of the methodology. Thus become possible to be formulated different ways for improvement this new approach in order to be effectively implementing in pedagogical theory and practice. In addition, in the implementation of this method other experts can be involved to define other points of view, which would be extremely useful both for the researcher and for the real examination and approval of the methodology. In this context the basic components of SWOT analysis are loaded with some specific meanings. Strengths and weaknesses will be considered all aspects and factors related to the essence of the technique itself as: theoretical base; peculiarity of usage in practice; methods and means for implementation; special preparation and qualification of teachers which will use this technique, if is necessary; what is its scope – for application in one or in more scientific fields. Opportunities and threats, in this case, have to cover: all factors arising from the institution in which will be executed the technique and might influence the process itself; some special features of social environment and the educational system, legislation and others. In fact, all this aspects and factors are external to this new methodology. By way of illustration might be pointed the social partnership as a model for interactions between educational and other institutions. In table 3 is presented sample SWOT-analysis of social partnership¹⁾.

Table 3. SWOT analysis of the social partnership as approach in school/ kindergarten management

	Internal factors	External factors
	Strength	Opportunities
Favorable factors	By means of social partnership the educational institution can respond to global processes driven by phenomena such as decentralization in management of education, principles of market economy, etc.	Better awareness and use of the opportunities for enrichment and improvement of training process with help of social partners.
	Weaknesses	Threats
Unfavorable factors	Social partnership allows interference in the management of the institution by persons, subjects and organizations external to it, which can lead to ineffective and wrong management decisions.	Many persons, subjects and institutions do not consider that partnerships with educational institutions can be beneficial for them. Because of this fact the attraction of partners of the educational institution is very hard.

The third possible usage of SWOT analysis in a process of pedagogical research is related to its application as an approach through which to assess the applicability, advantages and disadvantages of other research method which the researcher will use. In this case, SWOT analysis appears as a meta-method compared to other methods included in the given pedagogical research. In methodology the term “metamethod” is understood in two basic means: first – as a research method by which can be evaluated the efficiency of other research method/s and second – specific correlation among different methods in a certain science research. In pedagogy the experimental approach is an example for metamethod. The experiment is basic method in this approach but it includes in itself other research methods as observation, inquiry and so on. Consequently, the experiment is a metamethod since it unite in itself the rest of the research methods and instruments. In this sense the SWOT analysis can be define as a metamethod too, because with it can be analyzed the specific features, advantages and disadvantages of certain research method/s. Related to all of this, one important question must be clarified in the first place, namely – with regard to which types of methods SWOT analysis may apply to: those for theoretical or empirical research or both types? In view of this that SWOT analysis is a specific type of analysis it is a method for theoretical research. Consequently, it can't be a metamethod to the methods of this group. In other words, it seems unnatural and inexpedient to do analysis of the analysis or analysis of the synthesis or analysis of the induction and so forth. Moreover, at methods for theoretical research is nearly impossible to be indentified internal and external aspects and factors for a method itself and for its realization. The efficiency of these methods depends on the abilities of researcher for classification, summary, abstraction and others. Consequently, it can be supposed that as a metamethod SWOT analysis may be use only with respect to methods for empirical research as inquiry, observation, expert evaluation, etc. At this point, the following very important clarifications should be made immediately:

- The application of SWOT analysis as a metamethod at methods for empirical research must always be take into consideration with the main goal and tasks of the research. Only in this way received results may have sense and be expedient.

- Carrying out the SWOT analysis it is necessary to take into account the specifics of some factors as: type and specificity of information which is sought trough the given empirical method; concrete environment's conditions in which the empirical method will be realize; persons and subjects which will be investigate; who will realize the method in practice and who will indicate and analyze the received data and information? Each of these factors can influence the realization of the research itself as well as to predetermine the efficiency of every empirical method from the system of research methods.

The basic function of SWOT analysis as a metamethod is to identify the advantages and disadvantages of an empirical method itself in conformity with the achievement of the research's goal and some characteristic features of the environment which are expressed in SWOT matrix respectively as internal and external factors. Internal factors (strengths and weaknesses) include aspects as: realization's approach (written, verbal and others); number of persons who can be investigate; some special knowledge and abilities for method's application (if necessary); time for realization and so on. External factors (opportunities and threats) are related with factors as: some specific institution's features in which will be realized the research (school, kindergarten or other); willingness of the participants to cooperate; readiness for assistance on the part of management team of institution in which the research is to be carried out; volume of the financial resource available to the researcher and so forth. All this can be illustrated by the following hypothetical example: a research aimed to examine the relationship between the way students spend their free time and their study results at school. One of the research methods to be used in this case is an observation. With this method the researcher seeks to obtain information about where students spend their free time; what kind of occupations they fill it with; do these students have any hobbies; what part of it they dedicate to music, sport or other activities. In table 4 is showed sample SWOT matrix for the given example.

Table 4. SWOT analysis of the research method "Observation"

	Internal factors	External factors
Favorable factors	Strength	Opportunities
	Immediate perception of the necessary information.	No explicit consent from research participants is required.
Unfavorable factors	Weaknesses	Threats
	Too much waste of time; opportunity for too high degree of subjectivity.	It is not possible the observation to be carried out in all places and institutions that the surveyed persons visit.

Phases of the research at which SWOT analysis may be applied

From the analysis and conclusions made so far, can be concluded that the proper application of the SWOT analysis is in the initial phases of the pedagogical research which are mainly connected with investigation of number of theoretical sources, classification of data and information and planning. This is because with this type of analysis can be determined certain perspectives of managerial approach realization, a methodology, technology and given method/s in terms of certain theory, concept or paradigm. In this sense, it can be said that SWOT analysis is tool for definition of some standards and directions of essential pedagogical research's aspects and

components. Therefore, this analysis is practically inapplicable in final phases of the research where the planning and approach's evaluation is not required.

Advantages and disadvantages of SWOT analysis as a research method in pedagogy

As is well known every research method in science has some advantages and disadvantages which every researcher must know very good. Advantages and disadvantages of SWOT analysis as a managerial method in the management and marketing are defined from Emet Gurel and Merba Tat (Gurel & Tat, 2017, 1003-1005). Based on the analysis of these authors in the field of pedagogy said method acquires some specific strengths and limitations, as follows:

Advantages

- Through SWOT analysis can be made an in-depth analysis of advantages and disadvantages of certain managerial strategy, experimental model or approach, method, technology and others applied in the field of education.

- “SWOT analysis is an analysis technique that has a general perspective and presents general solutions.” (Gurel & Tat 2017, 1003).

- Through this type of analysis can be examine all of internal and external factors which may influence the realization of whole pedagogical research. In fact, SWOT analysis is one of the few methods for science research that pays great attention to the external factors. This is very important advantage of this method because in some cases the external factors can be decisive for the successful realization of the research.

- For the purposes of SWOT analysis the researcher may involve “external” specialist or experts with the help of which can be increased the quality and effectiveness of the whole research.

Disadvantages

- The results of SWOT analysis cannot always be fully related to the real pedagogical practice.

- It is possible in realization of SWOT analysis the researcher to demonstrate subjectivity in one or other degree. This can influence the results to every of the four aspects of the analysis (strengths, weaknesses, opportunities, threats) and as a consequence – the whole research's results.

- Sometimes, it is possible one or several factors to fall into more than one column of the SWOT matrix. For example, to be assessed at the same time as internal and as external or as a threat and as a weakness. This may complicate the analysis process and the researcher to assert contradictory conclusions.

- By the means of SWOT analysis it is impossible for the researcher to make a comparison between two or more methods, technologies, approaches and others and on this base to choose the better and the more effective one. In other word, this analysis cannot be comparative because its essence is examination of one and only object.

Discussion

The described results of this research represent a good theoretical base for applying the SWOT analysis as a research method in the field of pedagogy. This base can be developed and enriched with information and data received from the real pedagogical research practice. Some of the basic aspects that must be clarified and confirmed in this practice are the relationship between the type of the research – qualitative or quantitative and the specific characteristics of the SWOT analysis itself as a research method in education; differences of applying this method in an empirical and theoretical researches and last but not least, how this method and information received through it can be validated?

All this can be a wide basis for realization future researches directed to the improvement of applying SWOT analysis in a pedagogical research practice.

Conclusion

It is likely that in the coming decades the main area of application of SWOT analysis will continue to be the strategic planning and the strategic management which are part of the field of marketing and management. However, as it became clear this method has a potential to be applied in other scientific areas and in particular in the field of management of education and pedagogical researches. Used in the pedagogy some method's characteristics change but others remain the same and this is completely logically. But even applied in this field the SWOT analysis retains its general and most important priority as a research method – thorough examination of internal and external factor which can influence the development of every institution or the overall research process.

NOTES

1. SWOT-analysis of social partnership as approach for interactions between educational and others institutions is made by the author of this article in his doctoral thesis. It can be found on internet address: <https://ras.nacid.bg/dissertation-preview/49251>.

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