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# COMPARING MANAGEMENT MODELS OF SECONDARY SCHOOLS IN TAMAULIPAS, MEXICO: AN EXPLORATION WITH A DELPHI METHOD

## Abstract

For a preliminary exploration of management models between two secondary schools, a Delphi method was used in order to identify and focus relevant topics for a larger research. A first approximation with this method proved to be a heuristic tool to focus and define some categories and guidelines of enquiry. It was found that in both of the schools explored, teachers and non-teaching staff assign a similar set of priorities to dimensions of management: first priority is assigned to principal`s leadership, different internal relations come in second and external affaires come at last. When teachers' answers are separated from non-teachers', in the school with better academic results, the former assigned a first priority to teachers' updating. From these results, different narratives could be constructed.

## Purpose of the research

What this paper reports is part of a larger research project with the purpose to identify the models of school management that are related to successful educational outputs. It is expected that the findings of this research will cast some guidelines for the design of in-service training courses for headmasters and educational managers.

This research has specific objectives, but the first phase of the inquiry was to explore the different dimensions that make an effective school-based management from the perspective of the school actors and the importance that individuals assign to every one of them. The specific purpose of this paper is to report on the preliminary findings in two secondary schools selected for this exploration, with special reference to the difference between the visions of the teachers from the participants in the school organization, and the differences between the two schools.

## Method of inquiry

As this is an exploratory inquiry, there is no need for probability sampling. A purposive kind of sample has been chosen, also called an illustrative sample based on the purpose of the study and assuming that it is not representative of a larger population. In this way, we had asked the Sub-minister of Planning of the State Ministry of Education to select for us six basic education schools, with two criteria: first, that three of them had an average assessment above the national media on the National Evaluation of Academic Achievement in School Centers (ENLACE by its name in Spanish) and the other three with an average below the national media on the same exam; second, that the six schools were located on similar socioeconomic neighborhoods of the same city, in order to neutralize this variable.

We were given a list of four elementary schools and two secondary schools, one of them being a general secondary school and the other a technical secondary school. In Mexico, secondary school is the third section of the basic compulsory

education, for children with 12-15 years of age. The first is pre-school education and primary education is the second.

To compare management models constructed by people in these schools, the task is being approached in three phases: the first is an exploration with a Delphi method, the second is a set of in-depth interviews, and third will be an application of a questionnaire. This paper presents a preliminary report, comparing the two secondary schools' results of the first phase.

The Delphi method consists of a survey conducted in two or more rounds. The second round provides individuals with the results of the first, so that they can change their opinions or stick to them. One of the advantages of the method is that it is done anonymously, avoiding any possible pressure from the rest of individuals in the organization.

For this study, a small questionnaire was designed giving them a list of nine factors considered as constituent of the school management. A tenth slot was empty, for them to write down another factor considered to be important. The participants were asked to assign a number according to the priority they give them for the management of an effective school, which is to say, for a school with good academic achievement of students.

It is important to warn that the results analyzed in this paper are the results of the first round of the questionnaire, given that at this stage we were interested in discriminating the answers of the teachers from the answers of the rest of the personnel working at the school.

## Thesis statement

Learning of students in schools depends not only on the training and capacities of their teachers, but also on a number of factors associated with the conduction of a school as an organization which facilitates an environment for learning.

Besides the initial writings by Dewey (1946), about the limits of teachers to educate in the absence of an adequate environment, some authors have explained differences of school learning outcomes, just like the different family, social, religious or racial   aspects that produce predispositions for learning (Coleman, 1969; Jenks, 1972).

Nevertheless, some other authors have found evidence that socioeconomic inequalities, although with some weight, is not a determinant factor that makes the difference in learning outcomes among schools, but a set of factors that have been included in the notion of "school management". Notion that has been gaining importance during the last three decades, on studies by authors like Stenhouse (1987), Elliot (1990), and by the World Bank (2008), where some aspects, like principals and teachers sense of ownership of the school, or as parents involvement, are taken into account for the development of an adequate school environment.

In recent years, the approaches to educational quality have stressed attention on factors that impinge on school organization and its articulation with teaching (Bradley, 1993; Brahan, 1995; Gento, 1996). Nowadays, school management is recognized as the set of activities that, with different dimensions, are part of the school processes and may have implications in achievement of students. (Alvariño, 2000).

Researchers on effective schools appreciate the importance of a good management for the success of these institutions. They sustain that aspects such as organizational climate, leadership styles, an optimum use of human and material resources and time, planning of activities, distribution of tasks, the efficiency of administration, are related to the quality of educational attainment (Gento, 1996).

School management is defined as the set of actions realized by school actors in relation to the fundamental task of the school, which is to generate the conditions, environment and processes needed for students to learn according to the ends, the objectives and purposes of education.

In different terms, school management has been the object of diverse conceptualizations that recognize the complexity and the multiplicity of the component elements. From a comprehensive perspective of the processes going on inside the school, "school management is understood, as the scope of the organizational culture of the school, embodied by the managers, the teachers, the norms, school decision-makers; actors and factors related to a particular way of doing things at school, their understanding of objectives and their identity as a collective, the way they construct a learning environment and the links with the community where school is located" (SEP, 2001).

The term "model" is used in this paper as a representation of the set of priorities that school actors place on the different dimensions, or factors, that pertain to school management. A model of management focuses the school as an organization, with functioning and practices related to results. The role of the actors takes a relevant stand in terms of the generation of internal dynamics among colleagues to produce particular management frameworks that lead to particular learning environments and outputs.

One of the main assumptions of this research is that a successful management model is constructed with a culture of collaboration among the actors, with capacities to sustain the transformation of their practices as a condition to improve learning of students. To become a community motivated to learn from experience in the improvement of educational service, the planning of activities, the administration of resources, the involvement with parents and community, so as to exhibit results.

From this perspective, it is important to know the priorities that different actors of the schools assign to the management factors, or dimensions, of those schools that have produced a better learning attainment compared with schools with less educational success.

## Key findings and conclusions

Both of the secondary schools that were selected, were founded during the first half of the eighties to provide their services to outskirts neighborhoods of the city of Victoria, capital of the State of Tamaulipas, Mexico; One of them is a "general" secondary school (School A) and its results in the national exam are above the national media; the other is a "technical" school (School B) with results below the national media. The big difference between these kinds of schools is the weight allotted for technical training within the curriculum.

School A has a total enrolment of 682 students: 459 of them go during the morning shift and 223 go to the afternoon shift. Proportions by sex are similar for both shifts. Although the statistics department counts 249 people as the total of

personnel, actual teachers are only 76. The rest of them are commissioners to the union or to different offices of the ministry of education. For this study, the latter elements are considered as non-teacher staff.

School B has a total enrolment of 628 students: 442 go during the morning shift and 186 go to the afternoon shift. The personnel attached to this school are 151, from which the teachers are 75, the rest of them are considered as non-teacher staff. As in School A, many people of the non-teaching staff are commissioners to different offices and are not actually taking part of the daily school life.

There are many people attached to these schools, but the respondents of the Delphi questionnaire were the teaching and non-teaching staffs that actually work at these schools on a daily basis, participating in the construction of the organization and its management, with their social interaction.

In School A, the teacher priorities were in the next order: 1) Updating of teachers, 2) Principal leadership, 3) Planning of activities, 4) Colleague relations, 5) Resources administration, 6) Relations with parents, 7) Communication with supervisor, 8) Communication with authorities, 9) Neighboring relations, 10) Other.

At this same school, the non-teachers staff priorities were set in the next order: 1) Principal leadership, 2) Updating of teachers, 3) Colleague relations, 4) Planning of activities, 5) Communication with supervisor, 6) Communication with authorities, 7) Relations with parents, 8) Resources administration, 9) Neighboring relations, 10) Other.

The prioritization of all together, teachers and non teachers, in School A, were the next: 1) Principal leadership, 2) Updating of teachers, 3) Planning of activities, 4) Colleague relations, 5) Relation with parents, 6) Communication with supervisor, 7) Resources administration, 8) Communication with authorities, 9) Neighboring relations, 10) Other.

In School B, the teacher priorities were set in the next order: 1) Principal leadership, 2) Other (where many of the respondents used the blank slot to write down a number of phrases pertaining to pedagogical relations with students), 3) Updating of teachers, 4) Planning of activities, 5) Relations with parents, 6) Resources administration, 7) Communication with supervisor, 8) Colleague relations, 9) Communication of authorities, 10) Neighboring relations.

In School B, the non-teacher staff priorities were set as follows: 1) Principal leadership, 2) Updating of teachers, 3) Colleague relations, 4) Other (some of them filled the blank space with phrases related to pedagogical relations with students), 5) Relation with parents, 6) Planning of activities, 7) Communication with supervisor, 8) Communication with authorities, 9) Resources administration, 10) Neighboring relations.

Altogether prioritization in School B, was: 1) Principal leadership, 2) Other, 3) Updating of teachers, 4) Colleague relations, 5) Planning of activities, 6) Relations with parents, 7) Communication with supervisor, 8) Communication of authorities, 9) Resources administration, 10) Neighboring relations.

## Contribution and future direction

As an exploratory method, the Delphi helps in the first step for the construction of a heuristic approximation to focus and define the first categories and guidelines of enquiry.

One of the main findings, at this preliminary stage, was the fact that we were missing a management dimension that was important for people at schools. The answers given by them in the 10th empty slot of the Delphi questionnaire suggested that, besides the pedagogical dimension of the classroom setting, a pedagogical dimension of the school had to be taken into account. This management dimension is something produced by the school as an organization and has to be considered in the rest of the research.

Second. Within the set of external relations of the school, besides relations with supervisor, with authorities, with parents and with neighbors, the relations with the Teacher`s Union has to be considered, since it has a high level of influence in the posting of personnel, specially in the case of non-teacher staff that might orient the management model of the school. Who are the real and influential actors in the management of the school? Or, what is the weight every sector has in the configuration of a management model?

Answers given to this preliminary Delphi exercise come to the forefront with at least two narratives, not necessarily conflicting to each other: principal as a number one priority  is related to the traditional model, in which the headmaster is empowered up to the point where he is the only owner and responsible for the conduction of a school. Within this model, the rest of the members of an organization become alienated and detached from the social dynamics of the school. This explains why external relations of the school had the lowest priorities; those are a principal's duty.

When teacher answers are separated from the answers of non-teacher staff, their updating become the most important priority for teachers of School A. This would be a relevant difference between the two schools that calls for further research.

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