

EIPPEE Annual Conference 2013

Frankfurt

The satisfaction of the educational community as a contributing factor to the quality in the school

Keywords: Evaluation of educational centers ; Satisfaction of the educational community; Quality in the School.

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Introduction

Reasons of the study

I am a math teacher in Grouping of schools D. Carlos I, Sintra-Portugal, and realized my PhD at the University of Salamanca. My PhD supervisors (Javier Tejedor and Gómez Dacal) challenged me to conduct a study in the area of analysis and improvement of processes in order to contribute to the quality of school organizations.

Abstract

This paper studies the contribution that the satisfaction of the educational community can have on the quality of the school. It was accompanied by the state of progress within two years.

To check this we used a model of process analysis, detecting areas where improvements can be made and planning and introducing approaches to improve existing processes.

The research work focused on the choice of tools that allowed the study of the factor, the satisfaction of the educational community. The contrasting hypotheses have been developed to study the effect of the factor identified in the school, checking if the data were in favour of building a model that would relate the questionnaire items (first and second year) and finally projecting the conclusions to other studies that can help educational centres in the constant search for quality.

Objectives

Check if the school's educational community (teachers, non-teaching staff, pupils and parents or guardians) are satisfied with the organization of the school, its responsiveness towards students, the equipment and its use, the embodiment of existing services, the security that presents and even the type of relationship between the agents and students of school.

Innovation

The degree of innovation foreseen for this study, was adapting a questionnaire to the reality of an elementary school and the verification of the effects and relationships among the variables used.

Introduction

This presentation discusses the satisfaction of the educational community in the school and how you can highlight aspects of possible improvement. Given that the "Satisfaction of Educational Community" is an integral part of quality models, helps improve school environments, aspects related to the teaching-learning process and other important aspects of life in schools. It also helps decision making and continuous improvement of processes.

- a) The creation of observatory quality and innovation that monitor the processes defined as priorities in the school.
- b) Realization of study to detect points of improvement in the teaching-learning process in math and Portuguese.

However, we need:

- a) School managers with knowledge or willingness to learn, communities continually learners with process improvement initiatives.
- b) Engagement of the educational community, students, parents and guardians, municipalities and autarchies; Favours part of this involvement by the school management.

After defining the overall objectives, we define the specific goals that are realized by posing and testing hypotheses.

Specific Objectives

- Detect the strengths and weaknesses, checking the satisfaction of the educational community regarding school, initially using five quality components: tangibles, reliability, responsiveness, reliability and empathy and a second phase, factors that best fit the reality data.
- Check the impact of the study and, with the inclusion of variables such as the expectations of teachers and school results, analyze the research done in two years.
- Propose hypothesis model (s) of satisfaction modeling the data.

Model of process analysis (K Sigma – Prof. Gómez Dacal)

Phases of the process K Sigma

Phase 1 – Evaluate: Satisfaction degree of service recipients with possible improvements; Achieve of expected standards in the results (school and others like principles and values, financial, ...).

Phase 2 – Organize: Constitution Team K sigma; Assign goals for the team K sigma; Provide resources to K sigma team.

Phase 3 – Diagnose: Internal processes that demonstrate effectiveness and efficiency and the possibility of improvements; Processes of other organizations that are significantly more efficient and effective; Critical processes; Priority processes.

Phase 4 – Analyse: Critical errors for efficiency and effectiveness; Causes of errors that do not generate efficiency and/or effectiveness.

Phase 5 – Planning: The intervention on the determinants of errors that are critical to improving the effectiveness and efficiency.

Phase 6 – Intervening: In the direction and coordination of the implementation of plans; In reviewing the forecasts and performances.

Phase 7 – Controlling: The effectiveness and efficiency of intervention: Statistical Control, Control capacity; Analysis settings.

Phase 8 – Propose Organizational change and technology to consolidate the improvement of effectiveness and efficiency.

Phase 9 – Consolidate: The effectiveness and efficiency through the incorporation of changes in the structure and functioning of the organization.

Methodology

Technical file with respect to 1st year

Student Questionnaire:

Distribution of questionnaires to randomly selected groups of students.

Sample: One class per year (5, 6, 7, 8 and 9 years).

Participation rate: 18.2% (107 responses)

Random Sampling of classes.

Classes chosen: 5C, 6F, 7A, 8C and 9B.

Questionnaire of Parents and Guardians:

Distribution of Questionnaires to the Guardians of the classes chosen randomly.

Sample: One class per year (5, 6, 7, 8 and 9 years).

Participation rate: 13.9% (82 responses)

Teacher Questionnaire:

Distribution of questionnaires to all teachers

Sample: Teachers who respond

Participation rate: 75% (75 responses)

NonTeaching Staff Questionnaire:

Distribution of questionnaires to all elements of the non-teaching staff.

Sample: Non-teaching staff who respond.

Participation rate : 71,8% (28 responses)

Methodology

Technical file with respect to 2st year

Student Questionnaire:

Distribution of questionnaires to randomly selected groups of students in the previous school year, and to broaden the sample, all classes of eight years.

Sample: 5C, 6C, 7F, 8A, 9C, 8B, 8C, 8D, 8E e 8F.

Participation rate: 34,1% (216 responses)

Questionnaire of Parents and Guardians:

Distribution of Questionnaires to the Guardians of the classes chosen randomly.

Sample : 5C, 6C, 7F, 8A, 9C, 8B, 8C, 8D, 8E e 8F.

Participation rate : 21,5% (136 responses)

Teacher Questionnaire:

Distribution of questionnaires to all teachers.

Sample: Teachers who respond.

Participation rate: 87,2% (75 responses)

NonTeaching Staff Questionnaire:

Distribution of questionnaires to all elements of the non-teaching staff.

Sample: The non-teaching staff who respond.

Participation rate : 60,5% (23 responses)

Questionnaire of Teacher Expectations regarding the classification of students :

Distribution of questionnaires to all teachers of math classes in the 8th grade who filled, sending its expectation for all students in their classes.

Hypotheses of the Study

1º ano da investigação

- In the 1st year of the study, the school, for condition and functionality of the equipment and appearance of printed material, satisfies the teachers.
- In the 1st year of the study, the services of the school are well regarded by teachers.
- In the 1st year of the study, safety is one of the quality components very considered by teachers.
- In the 1st year of the study, the responsiveness of the school is considered of good quality by the teachers.
- In the 1st year of the study and for teachers, empathy shown by the staff (teachers, non-teaching and Executive Director) is of good quality.
- The assessment scale can be adapted and validated to gauge the satisfaction of teachers in a school of Basic Education.
- In the 1st year of study, students said they were satisfied in relation to various components of satisfaction.
- The assessment scale can be adapted and validated to gauge the satisfaction of students in a school of Basic Education.
- In the 1st year of the study, says the non-teaching staff are satisfied in relation to various components of satisfaction.
- A escala de avaliação pode ser adaptada e validada para aferir a satisfação do pessoal não docente, numa escola do Ensino Básico.
- In 1st year of the study, parents and guardians say they are satisfied in relation to various components of satisfaction.
- A escala de avaliação pode ser adaptada e validada para aferir a satisfação dos pais e encarregados de educação, numa escola do Ensino Básico.
- In the 1st year of study and teachers, there is significance between pairs of components of satisfaction in various subgroups of the population.
- The questionnaire of student satisfaction is liable to be improved by confirmatory factor analysis and it is possible to propose a model of satisfaction for the data obtained.

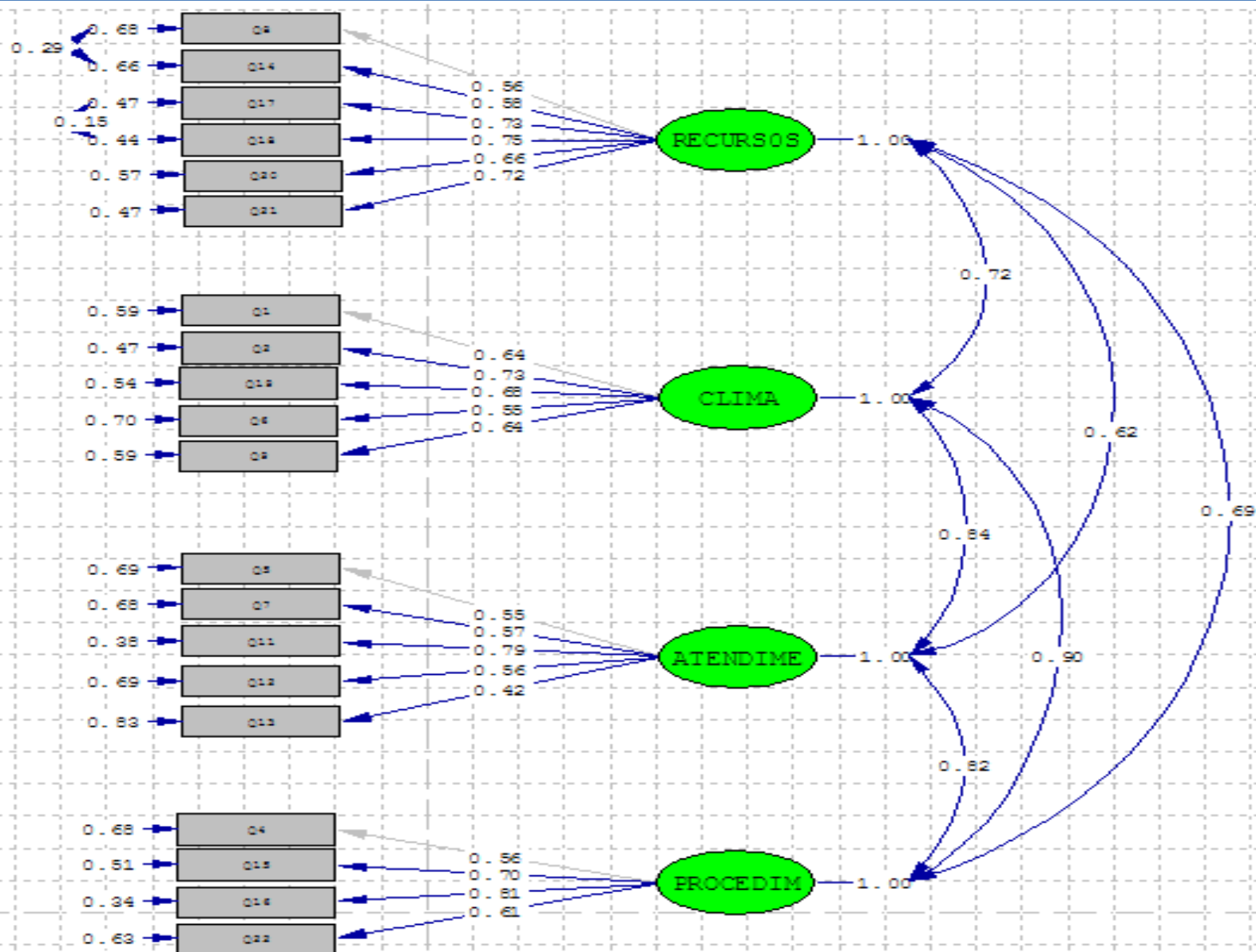
2º ano da investigação

- There is no significant relationship between parental satisfaction and expectations of teachers.
- It is possible to propose a model of student satisfaction for the data obtained in the 2nd year.

Data Analysis and Results

Q	
Factor 1 – Recursos	
14	Instalações e equipamentos da escola (edifícios, laboratórios, salas, ...)
17	Tecnologia na escola (software, computadores, hardware e outra), para leccionar de forma actualizada e acompanhar a sociedade
18	Disponibilidade e acessibilidade aos computadores (incluindo Internet) para os alunos utilizarem nas horas que mais lhe convêm.
20	Forma como respondem os serviços e infra-estruturas de suporte (papelaria, reprografia, secretaria, bar, etc ...).
21	Horário e funcionamento do Centro de Recursos.
8	Espaço de aprendizagem das salas (conforto e apresentação)
Factor 2 – Clima Escolar	
1	Disponibilidade de professores e funcionários da escola para ajudar os alunos.
2	Forma dos funcionários de apoio resolverem os problemas dos alunos
6	Sociabilidade das pessoas da escola
9	Interesse sincero dos funcionários, pelos alunos.
19	Segurança e acessibilidade da escola.
Factor 3 – Atendimento	
5	Atenção individual dos professores aos alunos, quando é necessário.
7	Prontidão na resposta e com igual tratamento, dos funcionários, a perguntas e pedidos colocados pelos alunos.
11	Atenção e educação, das pessoas da escola, em relação aos alunos.
12	Informação aos alunos de alterações nos horários ou eventos (actividades desportivas, visitas de estudo ou outras).
13	Preparação dos professores (pedagógica e cientificamente) para leccionar.
Factor 4 - Procedimentos	
4	Divulgação do Regulamento Interno aos alunos, nomeadamente sobre o aspecto disciplinar na sala de aula.
22	Horário e funcionamento do Centro de Recursos.
15	Eficácia na entrega de documentação (fichas, testes, informação do interesse dos alunos e outra) aos alunos.
16	Disponibilidade dos professores para, no relacionamento com os alunos, os ajudarem e valorizarem todos de forma igual

Data Analysis and Results



Chi-Square=235.40, df=162, P-value=0.00015, RMSEA=0.065

Structural Model of Student Satisfaction (1st year)

Some Conclusions

Observations drawn from the contrast of hypotheses:

- As the value of Cronbach's alpha coefficient is above 0.90, the questionnaires of all groups of the educational community, applied in both years, it is considered that the assessment scales can be adapted and validated to gauge the satisfaction of the educational community in a school of Basic Education.

- You can propose a model of student satisfaction for the data obtained in the first year, either using the conceptual schema components considered in satisfaction questionnaires Servqual either using the conceptual framework created based on educational factors that better reflect the reality of a school and a model of student satisfaction for the data obtained in the second year.

- The student satisfaction in isolation affects the set of dependent variables. The interaction of variables ("Satisfaction of students" and "teachers' satisfaction") influence the expectations of teachers. Singly, the students' satisfaction influences the expectations of teachers.

- There is no significant relationship between parental satisfaction and expectations of teachers.

- The model most suitable for the target population of the study will be the proposed in the second year, although other models can be accepted.

Some Conclusions

In the model proposed in the 2nd year, the most reliable indicator of the factor "Resources" is Q14-Installations and equipment School (buildings, laboratories, classrooms, etc ...), the factor "Climate" is Q2-Form of employees solve problems Q9-pupils and staff care about the students, the factor of "Service" is Q11-treatment in relation to the students (respect and consideration) and, of the "Procedures" is Q4-Information on issues relating to students (and other Rules). When considering the entire model, the more reliable indicators are only Q2-shape employees to solve students' problems and Q9-Employees care about students.

Based on the models of student satisfaction proposed (1st and 2nd year), we can see which indicators considered in the questionnaires used that are critical to improving both the satisfaction of the educational community group wants a factor considered in the models. The structural equations allow us this kind of analysis.

Among other conclusions, the work concluded by the utility and validation of the instrument used in this paper, the satisfaction of the educational community and the utility of the approach processes performed which allows to act gradually in the verification and improvement of processes and to use the most appropriate statistical methodology in a given problem.

Proposals and Recommendations

The best way to avoid unwanted situations in the process, passes through the study of the processes using existing methodologies such as the "K Sigma" or simply "PDCA" (Plan circuit [plan], that [do], check [check] and Act [act]), tools that can be used in continuous process improvement.

It is also necessary to have a plan that favors the constant updating of teachers and therefore students, with the aid of new technologies permanent. What this plan encourages students to contact the emerging technologies and innovative information management to the student accesses, whatever technological support. And yet, it also promotes interaction among educational agents, in order to create a rich environment for learning interesting and motivating for students.

This type of study is useful to schools as it may give clues to conduct investigations on the work done by the centers themselves. Such studies allow you to control the variables you want to achieve the goals set out in the project's education schools.

Proposals and Recommendations

This study demonstrates how we can act in micro systems, not only to improve where the study was conducted but also in how it can serve as a reference for other studies of samples more numerous, within school/groups, both regionally (with samples comprised of schools in the region), or at the national level (with samples comprising schools/ groups from across the country). It is a type of study that can further characterize existing problems in schools with similar characteristics (socioeconomic status, level of education, ...)

I suggest that similar studies are developed by school and part of internal reviews, national and regional, that the samples are representative of space and extended to encompass (school, region or country), preferably including multivariate analysis given the wealth obtained from analyzes and to propose reference models in the conclusions. This would represent a different job and very rewarding in terms of education, without ignoring what has been and is being done in terms of research in this area. The discussion and debate of studies that promote continuous improvement in schools would allow a better option at the time of the decision, at all levels, and control of crucial variables for these schools.

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Thank You!

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