

SUMMARY / THESIS

2005 review of the doctoral thesis "Managing School Change" Central University of Venezuela. School of Social and Economic Sciences. Graduate Studies. Social Sciences Area. Author: Maria Elena Marroco)

The research was undertaken with the objective of resolving the PROBLEM of how to manage the change from a traditional educational institution to an Active Education school, to evaluate the degree of change implementation and levels of competence (efficacy - efficiency). This change refers: a) to promote and asses the Comprehensive Development (C.D.) of the student; b) to develop the organization's personnel to achieve significant learning in students; and c) to adopt the active methods in the teaching-learning process.

We have understood this change as per Carl Rogers and Jean Piaget; for that reason we have identified with their theories the desired humanist-cognitive education profile. Rogers maintained that the traditional concept of an educated person made no sense in modern society. He proposed significant learning (humanist theory) while Piaget proposed the Comprehensive Development of the individual and active learning methods (cognitive theory).

This scenario provided us with the necessity of analyzing the difficulties of the traditional school via a trial application (1969-1978), which corresponds with Clifton Chadwick's description (1978). He describes the school as a knowledge center, where the student's active participation is perceived as disturbing and his/her assessment refers only to knowledge.

Other experiences with change actions existed simultaneously with our efforts (A.S. Neill 1963; Ivan Illich 1977; E.A. Bernard 1975; Thomas Gordon, Lee J. Smith 1979).

The results of my trial and the particular and partial solutions of the other experiences led us to the statement of our problem.

In our theoretical discussion we delimit the characteristics of the change we aimed to achieve. That is from traditional education according to Jerome Brunner and B.F. Skinner to an Active Education according to Rogers, and Piaget. Therefore we propose changes in:

1. – the meaning of education;

2. - educational theory, as a process of instruction, to another theory that poses the comprehensive development of individuals in active interaction with their environment; and
3. – the theory of learning, which supposes in the beginning a methodology centered in teaching to reach another centered on learning.

The emphasis of our research is on finding the pertinent actions necessary to undertake the change of a school, modifying it in such a way that it achieves the Active School profile.

The first step is the identification of educational agents present in the initial situation and the desired profile for each one of them with the corresponding theories; these are, in addition of Rogers and Piaget, the theoretical positions of Peter Drucker (1990) on administration and management principles; C. Kepner and B.B. Tregoe (1982) on *The Rational Manager*; and P.H. Hersey and K.H. Blanchard (1977) on organizational behavior.

As a second step, it is required to determine the actions to achieve the desired profile represented by each theory and each educational agent.

The design of these actions will become our Strategy. This is accomplished however, within the field of Organizational Development (O.D.) due to the deficiencies found in educational theories on change management.

Likewise, in our theoretical discussion in O. D., we delimited the characteristics of the managerial process to delimit the problem of our study.

To that end we analyze:

1. The theoretical roots of organizational development that are found in Burke 1988; Dyer 1981; Walton 1988; Schein 1973; Pantin 1977 that provided us with an unconsolidated theoretical outlook and a non-systematic assessment of change. However, the aspects for us were a). - to consolidate O.D.'s diverse, fragmented theoretical aspects and b). - to propose an assessment system for the degree implementation and the improvement of its competence to change.
2. The management process according to the following authors and their different perspectives on undertaking change, as focused

on a) people; b) technology; c) processes; and d) the client: Argyris and Schön; Peter Senge; S.R. Covey; Mike Hammer; Tom Peters; James Harrington; T. Davenport and K. Albrecht respectively.

Nonetheless these authors offer only suggestions on undertaking these new focuses from the viewpoint of their experiences (with the exception of Argyris and Schön with their Theory of Action) and in general are centered on particular organizational aspects.

However our research problem goes beyond this, because as object of our research:

1. – we propose the facilitation of organizational change by means of a Strategy and a Model of their functioning, which evaluates results with a purpose that transcends the exclusively experiential initiative;
2. – we also address the establishment of the extent of change jointly with the strategy to evaluate its action without cause-effect relationships; and
3. - we perform educational change on the entire organization, which presupposes the interrelationships among all its agents: people, technology and processes, rather than attempting change as improvements in isolated or individual ways.

With all this, we delimit the managerial process for planned educational change in the organization that we conceive as the interaction of processes, technology and people.

We propose our theoretical focus based upon the proposals postulated in the works of the following authors: Bennis 1972; Beckhard 1988; Margulies 1983; Dyer 1976; Huse and Bowditch 1982; Lippit 1961; Napier 1975; and Nadler 1982.

These theoretical proposals hold in common the undertaking of organizational development with the purpose of undergoing planned change, although each one separately is only an attempt at formulating a theory.

We also propose to accomplish planned change, but in our case we made the effort to determine in each theory the aspect, which it describes of our strategy.

This results in each theoretical perspective having to be integrated, consequently becoming a theoretical reference that transcends any one in individually. Every theory is integrated to represent an action structure, and each one, as part of this structure, holds a different meaning that is valued, not only in and of itself, but also for the manner in which it relates to the others. With this approach we designed a systemic body that made possible the integration of all theories into a unique theoretical referent.

Therefore, our theoretical focus consists in organizing the action of the strategy and interpreting its functioning as a system which we represent in the form of a Theoretical Model with the relationships that the theories present in their interaction in practice.

The analysis carried out of the O.D theories led us to the necessity of proposing an assessment criterion in that field. This is based on the theoretical propositions of K. Leithwood (1980), P. Lafourcade (1982) and M. Alkin (1969). These proposals have in common the assessment of change processes in educational institutions and their efficiency, but each one deals separately with the theoretical problem of change assessment.

We further integrate these two assessment perspectives with the same system and create a structure as part of the unique theoretical referent in the form of a systemic body.

This theoretical focus allows us to pose our questions:

1. - Can the action of the strategy be assessed?
2. - Can the results of change be assessed? and,
3. - Can change be achieved in other educational institutions with the application of the model?

Answering these questions by achieving the objectives will represent the results of our research. Their interpretation will result in our contribution toward the enrichment of the O.D.'s perspective.

Our thesis is that educational change from a traditional school to an Active School is achieved when the desired change is managed as both, a process of change in culture and a change in competence of the school institution. This is represented by all the educational agents with the strategy that assesses outcomes of the change in terms of degree of implementation and improvement of efficacy-efficiency (competence); furthermore, it evaluates

the achievement of the desired change in other schools institutions with the application of the functioning model of the strategy.

For all of the above, our general objective was focused on constructing a strategy as a managerial system for planned change to evaluate its action, the outcomes, and the achievement of change from a traditional school to an active education school.

In this respect, it is the General Hypothesis of our work that is reached with the following objectives:

1. To evaluate the action of the strategy to implement planned educational change of a traditional school into an active education school.
2. To contrast the results of said practice of educational change in the school with the action of the strategy for adjustments.
3. To evaluate the action of the strategy for the improvement of levels of competency in change of the educational institution.
4. To contrast the results of school competence improvement with the action of the strategy for its permanent adjustment.
5. To evaluate the achievement of change in other educational institutions with the application of the model.

THE STRATEGY IS DESIGNED

In educational change

It is defined as a “complex educational strategy” and the extent of the change is in the traditional school’s values and principles for those of the Active School, which will be the new culture in the administrative strategy and the manner of performing work. The organization’s theoretical focus will concentrate on social factors and the human perspective, and it is our position of analysis with the intention of improving the organization’s aptitude to deal with change. Our Model is one of Action-Research. Our Method is Permanent Diagnosis, which regulates the planning of the action, and assesses the change process through the operative group as a learning unit. The assessment is presented with the degree of implementation of educational change.

This process allows us to:

1. - evaluate the action of the strategy and
2. - contrast the results for the adjustment of the strategy.

In the competence to change

This is defined as “intervention”. The extent of change is the improvement of competence levels in the action of changing. The theoretical focus of the organization is systemic. The Model refers to those factors to be accounted for in the diagnostic task. Our Method is a permanent diagnosis of personnel in the performance of their tasks in the form of a Work Team. The group nature of the work team is understood through Systems Theory where information is considered a fundamental resource. The assessment is presented in terms of results in the improvement of competence levels (efficacy-efficiency) in educational change.

This process allows us to evaluate the action of the strategy and contrast the results in order to adjust it.

In both cases the focus is on organizing the Work-Learning System© in the form of an evaluated process in educational change and in competence to change.

For the construction of the Model

The strategy is designed with two actions in the form of process:

1. - for educational change;
2. - for competence to change (efficacy-efficiency); and with the construction of a model with this double action.

TECHNIQUES FOR COLLECTING INFORMATION AT THE ASSESSMENT MOMENTS are: a) Observation Techniques, b) Analysis of Results, c) Tests, and d) Questionnaires.

THE ASSESSMENT INSTRUMENTS FOR REGISTERING CHANGE are 44 Registry Forms that comply with the systemic Model for educational change, and for the Competence to change. These forms represent the electronic system.

THE METHODOLOGICAL OBJECTIVES are determined by the “Desired Profile” for evaluating the degree of implementation of educational change. This consists of converting a) the Desired Profile of each educational Agent into objectives; b) establishing the Goals to be evaluated; c) establishing the indicators; and d) the Performance Standard.

We evaluate the levels of Competence with the “Commitment to Achieve”, to evaluate, in terms of results, the improvement of these levels. This consists of: a) presenting the commitment to achieve change in each educational agent, these in terms of the results of the implementation of the conditions to be present in the organization of the educational institution; b) establishing the goals to be evaluated; c) the Indicators; and d) the Performance Standard.

THE APPLICATION OF THE STRATEGY For Educational Change:

As a process to learn to change with the Implementation Program, which consists in the learning of the new models of behavior as part of the Critical Tasks for all educational agents and of information for parents. This is done with the objective of creating the Mechanism of education – assessment– analysis– feedback; this is the responsibility of the operative group.

This program means having contrasted the results of intermediate-levels of change, corresponding to intermediate levels of expectation. This is the Innovation Profile in relation to corresponding intermediate action strategies.

The intermediate results of the change profile are due to unresolved obstacles within the organization. These obstacles with the corresponding competences of the educational agents and each action strategy are known as the Total Implementation Program.

The results of the change represent the performance level of the institution with the new behavior of personnel within the new profile of educated person and the new work culture in the manner of performing work.

For competence in Change:

As a process to build the aligned Work Network of Technologies- Processes- People with the Technical-Administrative Preparation Program consisting of 1).- the systematic application of the new models of behavior in the educational agents as part of the Initial Plan, the construction of the Organizational Agenda, the aligned plans and the Work Team as part of the Permanent Plan.

2) this Action Plan is with the purpose of constructing the interaction of: a) this Plan, b) its assessment and, c) the outcomes.

The assessment is performed with the Value Standard of the objectives selected by an assessment team that insures that the objectives meet the requirements of pertinence, efficiency criteria, representation of the results and levels of achievement.

Additionally, there is the standard of comparison of the student's quarterly grades that represent the levels of competence of the teaching-learning process.

The assessment also includes a diagnosis and two tables: 1) Adjustment of the Initial Plan and 2) Restoration Strategy corresponding to the intermediate levels of action.

The results of change mean that the levels of productivity that improve with the new managerial action that represent the capacity and commitment of personnel beginning with the conditions that must be present.

The indicators are the results of the school institution in comparison and possible discrepancy with the Standard Value of the objectives that represent the conditions that must be present and two tables: 1.- Adjustment and 2.- Restoration.

For the construction of the Model

In this case, it is carried out with the representation of the relationships in the experience of the theories that describe the functioning of WES© for change in culture and the level of competence in the school.

There are two models that operate in an integrated manner to form the Work Learning System©:

The Model for change of culture consists of:

1. - an educational program;
2. - its scope is for a change of culture (beliefs, values, habits) of the organization as a social system that "learns to change".
3. its dynamic for change follows the Education (Action) - Assessment (research) – Analysis – Feedback Model and

4. -its Method is the Permanent Diagnosis by the operative group and
5. – It's evaluated with the results obtained by the educational agents with the desired profile of an Active School.

The Model for competence to Change consists of:

1. – a planned Intervention program (Action Plan) supported by behavioral sciences and encompassing the entire organization.
2. -its scope is the improvement of competence levels with a comprehensive systemic focus for the new manner of functioning, due to the new managerial action that permits the organization to discover and resolve its difficulties.
3. – its change dynamics assumes the relationship between the Action Plan, the results and the assessment as per previous diagnostic orientation, and
4. - its Method is one of Permanent Diagnosis by the work team.
5. – its assessment is performed with the results obtained by the educational agents in the Achievement Conditions with the Technical-Administrative Preparation Program.

The functioning of this system in its experience is represented by the corresponding model, consisting of the simultaneous interaction of the two previously mentioned models. This is organized as an electronic assessment system based on knowledge.

The analysis of data refers to the presentation and interpretation of

1. - how to evaluate the action of the strategy,
2. - how to evaluate the results of change in the educational institution and
3. - the presentation and interpretation of how to evaluate the achievement of change in other institutions through the model's application. This analysis is the answer to the questions posed and to the achievement of the objectives in that sense.

The assessment of the model has the scope of Conjecture Subject to Refutation (Popper, 1991).

The educational institution in which the experience occurs (Colegio Marroco) was founded in school year 1978-1979, after nine years of planning (1969-1978) during which the trial process was begun with an counseling service in order to recognize the difficulties of traditional education.

The actors are the following Educational Agents: Parents, Students, Educators-Facilitators, Managers, the Organization (the entire personnel), and the Quality of the Teaching-Learning -Process.

Other institutions where the experience has occurred include the public school sector and other sectors (banking, industrial, commercial). The only assessment results included here are for the public school as it was at the time of writing (1992), the latest experience and the only one to be externally evaluated (by CENAMEC, National Center for the Improvement of Science Education).

The results refer to this assessment (Presentation of results)

1. Presentation of Data of Educational Change

The results of the assessment of the Parents (students' representatives) are presented with:

INDICATORS	DIMENSIONS
Enrollment increase and decrease in desertion rates	Perception of the institution for the formation of students as citizens of a democratic society and as mature individuals in the management of their reality

The transition between the starting point and these results are made possible by the Information for Representatives (Parents) Program on education according to today's social context: Mission, Purpose and Objectives of the institution as an Active School.

The results of the assessment of the Students are presented with:

INDICATORS	DIMENSIONS
Monthly average of student grades in Performance and Behavior.	Student as solver of intellectual, personal, and socio-ethical problems: Comprehensive Development

The transition between the starting point and these results is made possible by the student's learning of "active participation" for significant learning in class, extra-class, institution and social environment in order to achieve the objectives in the Study Plan.

The results of the assessment of the Teachers-Facilitators are presented with:

INDICATORS	DIMENSIONS
% of the teacher-facilitator's achievements according to his/her students' average monthly grades. This % is in relation with the average expected by the facilitator in Performance and Behavior.	Teacher-Facilitator who generates qualitative and quantitative changes in his/her students.

The transition between the starting point and these results is made possible by the educator's learning of his/her role as a facilitator. These are the Critical Tasks or Key Competencies that make possible new ways of performing tasks in and out of class, planning and assessment.

The results of the assessment of the School Managers are presented with:

INDICATORS	DIMENSIONS
% of the manager's achievements according to the results of the students of the teachers-facilitators under his supervision.	Systematized action manager for the achievement of the objectives in the Plan.

The transition between the starting point and these results is made possible by the Manager learning his/her role as developed in a comprehensive Manner in performing his/her tasks: observation in and out of class, of personnel and of the Improvement Management Plan.

The results of the assessment of the Organization (all personnel) are presented with:

INDICATORS	DIMENSIONS
Level of adaptability and efficiency of each manager as leader of his/her group.	Organization by participation and in consensual decision-making to reach the results present in the plan.

The transition between the starting point and these results is made possible by learning for organizational growth in the new form of performing tasks of Analysis and Description of Personnel Results as a participatory, consensus-seeking group, in their work practice.

The results in Quality of Learning are:

INDICATORS	DIMENSIONS
The monthly average of grades of the entire student population in Performance and Behavior	Learning Process for the Comprehensive Development of the student population in each of the study areas, in a harmonious and interrelated manner through systematized learning.

The transition between the starting point and these results is made possible by those responsible for the quality of the learning process, during management coordination meetings and of Managers as an operative group.

2. Presentation of data on change of efficiency.

Students, Educators, Managers, Organization, Representatives

Following are the results for the diagnosis assessment of October 1986 in comparison with the Standard Value determined by the Assessment Team on seven objectives chosen for the educational agents. Comparing the standard value with the real value achieved performs the assessment.

The standard values are:

Values of importance of objectives between 4 and 5 points (scale 1 to 5)
Discrepancy between the real value and the standard value, between 0 and 3 points

Priority of attention according to the size of the discrepancy of: none, some, medium, large and extreme.

The results Marroco School of June 1989 are now presented and compared with the initial assessment of 1986. This is the representative condition as a performance standard for the assessment of competence level improvements within educational change according to capacity and commitment of personnel to improve the results of the educational institution.

Quality of Learning Process

The results are the comparison of the student population's average in the first month and the three following school year periods. This is the representative condition as a performance standard for the assessment of competence level improvements in educational change according to capacity and commitment of personnel to improve the organization's results.

The improvement of competence levels is made possible in both cases by interaction of the Action Plan, the results and the Work Team's assessment as done in meetings: the Institutional Agenda and the Management Improvement Plan.

3. Results of educational change and competence within change in a government educational institution.

During culture-wide educational change, the institution covers the levels and phases present in the Work-Learning System©.

In competence within change, the results are presented as both a comparison of grades per student for school year 1993-1994 against 1992-1993 results and as a comparison of passing students in both years.

4. Interpretation of Results.

The answers to the questions of the study are the following:

Answer 1

It was possible to reproduce the Work-Learning System© capable of evaluating the action of the strategy incorporating the concepts of

Performance-Behavior within the new education. This is the Performance Standard that serves to evaluate the Desired Profile; which contains the indicators offered by the theories that explain it (Rogers and Piaget; Peter Drucker, C. Kepner and B.B. Tregoe, P.H. Hersey and K.H. Blanchard) though dimensions of and in relation with the action of the strategy to be evaluated.

Answer 2

It was possible to reproduce the Work-Learning System© that was capable of evaluating the results of institutional educational change so that the results of each educational agent can be measured with the Performance Standard of the Active School Profile.

Managers, Facilitators, Students, Administrative Organization, Quality of the Learning Process and Parents

The personnel's percentage of achievement in relation to the desired 15.5 (on a scale of 0-20) and 77.5 (on a scale of 0-100) in Performance and Behavior:

MANAGERS: Percentage of achievement of personnel under their supervision in relation to the average expected, 15.5 in a scale of 0 to 20.
PERFORMANCE AND BEHAVIOR: 1986-87: between 13.3 and 13.8 over 15.5 between 86% and 89% 1987-88: between 13.0 and 14.0 over 15.5 between 84% and 90% 1988-89: between 13.0 and 14.0 over 15.5 between 84% and 90%

TEACHERS- FACILITATORS: Percentage of achievement of their students in relation to the average expected, 15.5 in a scale of 0 to 20.
BEHAVIOR: 1986-87 13/15.5 84% 1987- 88 13/15.5 84%

1988-89	12.5/15.5	81%
PERFORMANCE: 1986-87	14.3/15.5	92.0%
1987- 88	14/15.5	90.0%
1988-89	14.5/15.5	94.0%

STUDENTS: Range of the average in Performance and Behavior of the school institution.	
BEHAVIOR: AVERAGE	
67% of the student population	
1986- 87	12.5 between 10.1 and 14.9
1987-88	12.7 between 10.3 and 15.1
1988-89	11.5 between 9.4 and 13.6
PERFORMANCE: AVERAGE	
67% of the student population	
1986- 87	14.1 between 12.3 and 15
1987-88	13.8 between 12.3 and 15.3
1988-89	13.5 between 11.5 and 15.5

ADMINISTRATIVE ORGANIZATION: Functioning, Participation and consensus	
LEVEL OF LEADERS	
ADAPTABILITY (Standard (3,3,3,3))	EFFICIENCY (Scale -24 to +24)
(4,3,4,1)	+15,
(3,3,4,2)	+23,
(3,3,3,3)	+10,
(2,4,4,2)	+9

QUALITY OF THE TEACHING-LEARNING PROCESS: Comprehensive development of student population.			
Monthly average at institutional level in Performance and Behavior.			
End of school year Elementary, Middle and High	1986-87 Between:	1987-88 Between	1988-89 Between

	13.3 and 14.3	13.0 and 14.1	12.5 and 14.0
Kindergarten	-----	Between 11.5 and 19.4	Between 12.3 and 17.8

PARENT'S: Perception of the Institution		
Increase of the number of students enrolled and % of desertion per year		
Year	New Students	Desertion %
1986- 87	156	24%
1987- 88	173	15%
1988 - 89	223	15%

Answer 3

It was possible to reproduce the Work-Learning System© capable of evaluating the action of the strategy with the achievement conditions or key competencies that should be present in the organization. This is the performance standard that serves to evaluate the Commitment to Achieve Change for each educational agent. This contains the criteria and procedure offered by the theories that explain it through the conditions required and in relation to the action of the strategy to be evaluated. This is achieved through the required conditions and in relation with the action of the strategy to be evaluated. A further assessment is made possible by comparing the student population's grades the three following quarters in relation with the starting month (Quality of Teaching-Learning Process)

Answer 4

It was possible to reproduce the Work-Learning System© that was capable of evaluating an educational institution's results on competence levels by comparing the Educational Agents' results with the performance standard of the achievement conditions present in the organization.

Comparison of discrepancies of each of the objectives with the standard, for the purpose of establishing priorities of attention per objective (on a scale of 1-5).

October 1986-June 1987-June 1989.

AGENT: TEACHERS AND MANAGERS. YEAR 1989	
OBJECTIVES	PRIORITY OF ATTENTION
CLIMATE, ATTITUDE TOWARDS CHANGE, CHANGE STRATEGIES	None, no priority of attention because there is coincidence with the standard.
IDENTIFICATION WITH THE ACTIVE SCHOOL OBJECTIVES, FACILITATOR'S ATTITUDE TOWARDS ACTIVE SCHOOL, COORDINATION MECHANISMS, INSTRUMENTS OF ASSESSMENT.	Some, priority of attention because the discrepancy is less than one. ($X < 1$)

ADMINISTRATIVE ORGANIZATION	
OBJECTIVES	PRIORITY OF ATTENTION
CLIMATE	None, no priority of attention because there is coincidence with the standard.

STUDENTS	
OBJECTIVE	PRIORITY OF ATTENTION
CLIMATE,	None, no priority of attention because there is coincidence with the standard.
ATTITUDE TOWARDS CHANGE,	Some, priority of attention because the discrepancy is less than one. ($X < 1$)
IDENTIFICATION WITH THE OBJECTIVES OF ACTIVE SCHOOL	Medium, priority of attention because discrepancy is greater than one ($X > 1$).

PARENTS	
OBJECTIVES	PRIORITY OF ATTENTION
KNOWLEDGE ABOUT ACTIVE SCHOOL	Some, priority of attention because the discrepancy is less

ATTITUDE TOWARDS ACTIVE SCHOOL	than one. ($X < 1$) Medium, priority of attention because the discrepancy is greater than one. ($X < 1$)
IDENTIFICATION WITH THE OBJECTIVES OF ACTIVE SCHOOL	Medium, priority of attention because the discrepancy is greater than one. ($X < 1$)

QUALITY OF THE LEARNING – TEACHING PROCESS IN ELEMENTARY, MIDDLE AND HIGH SCHOOL.				
COMPARISON OF EACH QUARTER WITH FIRST MONTH PERFORMANCE AND BEAHVIOR				
Elementary, Middle and High school	October	1 st . Quarter	2 nd . Quarter	3 rd . Quarter
1986 - 87				
1987 – 88	14.0	13.8		13.8
1988 – 89	12.5	13.7	13.8	14.7
	13.6	12.6	15.4	14.7
Kindergarten			13.6	
1987 – 88	11.5	13.9		17.6
1988 - 89	14.2	11.8	18.4	16.1
			14.8	

Answer 5

Change was achieved at a government school institution (Instituto Experimental Docente Los Dos Caminos) through the Work- Learning System© model, with expected results along all phases of change. These results are observed with the improvement of the student population's grades in 1993-1994 after the implementation of the strategy, during the previous school year 1992-1993.

These results refer to the Quality of the Learning Process regarding the increase of school grades.

COMPARISON OF PUBLIC SCHOOL GRADES IN THE 1ST.
QUARTER OF SCHOOL YEAR 1992 – 93 WITH SCHOOL YEAR
1993 – 94.

16 Sections and 94 subjects	Results for Elementary School 52.1 % increase in student's grades during the morning shift and 67.7 % in afternoon shift.
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COMPARISON OF PERCENTAGES OF PASSING STUDENTS
OF THE SAME GROUPS DURING THE SAME PERIODS.

62.5 %, INCREASE IN MORNING SHIFT, AND 68.7 %, INCREASE IN AFTERNOON SHIFT

These results are independent of those involved in elaborating the strategy as they correspond to a government institution that operates with different characteristics from those of the school (Colegio Marroco) where the strategy was designed. These results are evidence that the model works independently of the developer of the change program.

This work demonstrates that the Work-Learning System© successfully evaluates the action of the strategy and the planned-for achievement of change, obtaining the desired results and satisfying the general hypothesis. It also demonstrates the positive application of this model in another school in this case, a government public school.

These results opened new perspectives for further investigations about the applicability of the model in non-educational institutions; that is why they are of great interest nationally, continentally and universally.

For this same reason, we have applied WES© in public and private, for and not for profit organizations since 1986 with equally satisfactory results. In these organizations, the agents are of a different nature from the educational agents, nevertheless WES© equally achieves the aspired changes in culture and in competence in change.

This study also constitutes a significant contribution to educational theory, specifically the Theory of Learning Planned Organizational Change and for the theory of Organizational

Development, with the consolidation of theories and basis for the assessment of planned change.