CLASSROOM EFFECTS ON THE EFFECTIVENESS OF A SCHOOL

Habip Ozgan
Gaziantep University
Gaziantep- TURKEY
ozgan@gantep.edu.tr

Mustafa Toprak
Zirve University
Gaziantep- TURKEY
mustafa.toprak@zirve.edu.tr

Abstract

This study aims to assess the effects of classroom environment on the overall effectiveness of a school. Whether steps towards effective schools should be taken from top-down, that is from leaders, or bottom-up, that is from other members of school has been a matter of discussion. The truth is that a leadership that cannot reach classes cannot be considered to be an effective leadership. Among many factors leading up to effective schools, classroom environment is one of the most significant. Quality of classroom teaching and learning, teachers' characteristics, nature of teacher-student, student-teacher and student-student interactions, the way conflicts are resolved in class, learning habits, attitudes towards learning and how these factors are reflected on students' academic success and their social and cognitive attitudes play a role in increasing effectiveness of schools.

Key Words: Classroom Environment, Quality of Teaching, School Effectiveness, Teacher Characteristics.

INTRODUCTION

In recent years, class-level effectiveness and quality of instruction in classes have gained importance for the research on school and instruction. Whether school in macro-level influences class context or vice-versa has been a matter of discussion for years. Delving into school effectiveness research liteature, it is possible to see that there are a lot of studies showing that in order to ensure a change in a school, leadership, school-parents cooperation, school climate and culture are indispensable assets. The questions that this study will focus on are:

- Should school improvement efforts start from top or bottom level of the organization?
- What characteristics of classes contribute to overall school effectiveness of a school?

Leadership in school change efforts

As Townsend (1997) notes, nearly fifty discrete characteristics are identified as being consistent with improved school effectiveness. Apart from these, in trying to put these characteristics in priority order, he enumerates a lot of other qualities an effective school has to embody:

- ✓ A Clear School purpose (Policy),
- ✓ Academic and Administrative Leadership,
- ✓ Dedicated and Qualified Staff,
- ✓ Staff Development,
- ✓ High Expectations,
- ✓ Academic Focus on the curriculum,
- ✓ Time on task, Monitoring students Progress,
- ✓ Safe and Orderly Environment,
- ✓ Positive School Climate,
- ✓ Home school relations,

✓ School-based decision making,
✓ Teachers take responsibility for and are involved in school planning,
✓ Positive motivational strategies,
✓ Opportunities for student involvement (Townsend, 1997).

Looking at all these features that are naturally among a school leader's goals to be achieved, we can't help asking how all these characteristics could be integrated into a school culture. The question itself is harder than coming up with all these characteristics mentioned. Taking school-context into account, we can conclude that while theories behind school processes are of high importance, the "know-how" abilities that teachers, school leaders and all other partners involved in schools have to own are crucial, as well. That's, knowing about implementation strategies will show the way the change will take place. In that sense, whether there will be a bottom-up or top-down process in implementation process should be determined.

Elaborating more on top-down or buttom-up processes, the school change policies adopted in the US with the publication of *A Nation at Risk* in 1983 shed light on how to initiate change plans. The policy sparked a major wave of educational reform that focused on a need for greater governmental regulation of schools by raising standards for graduation and increasing testing requirements. Mandates and inducements were the favored policy instruments to promote excellence and efficiency (Stringfield, 1997). Decisions were made at the state level under former President Reagan's new federalism, thus reducing local control at the school site level. These reforms allowed teachers little freedom to decide the curriculum as a whole or to determine what to teach in their classrooms (McNeil, 1988).

Policy makers soon concluded that top-down implementation of standardized policies did not meet the diverse needs of students at the classroom level (Stringfield, 1997). The changes we are talking about in the US case are whether they should be at state level or school level and the policy makers agreed that teachers are best poised to make decisions about what their students need (Darling-Hammond, 1988). The failure seen by American educationalists was that the change should occur from bottom to top not vice-versa. Transferring this to school level, what we mean by bottom is of course class context and teacher characteristics and that any change effort has to start from improvement of classes.

Class context, quality of instruction and its attributes
Class context is not only to be interpreted as a simple aggregation of students' characteristics, but as an educational or socio-psychological construct with an additional potential of explanation beyond students' characteristics. Class context also refers to instruction quality, knowledge structuring strategies, grade level, socio-economic status of the students, cognitive prerequisites, ethnic composition, instructional styles, subject matter, lesson segments (Wolfgang, Treinies, 1997). As John Anderson, the head of New American Schools (NAS) articulates, national academics focus on the class level change which refers to well-designed materials and more comprehensive, detailed professional development programs. Referring to the fact that systemic changes should start from curriculum content enrichment, Schlecty (2005) believes that in order to have *engaged* students who learn at high levels and have a profound grasp of what they learn, and who can transfer what they learn to new contexts, instead of *compliant* students who find no meaning in what they learn in class, who try to attain to miniums and only try to meet exit requirements, the content should be restructured as to have content richness and texture by which he means curriculum content should appeal to students and arise the desire to learn meaningfully.

We use the term 'class context' in this double meaning: (a) cognitive abilities as an aggregated characteristic, (b) educational process as a global feature (Wolfgang, Treinies, 1997). Class context is the environment where the core activities of schooling process take place. It is where teaching-learning take place, where social living principles are learned and where students encounter emotional experiences. Restricting class context only to a place where student strive for academic excellence is a misperception as students learn how to behave and how to conduct social behaviors in micro-level, as well. So, in addition to academic dimensions, there are social and emotional dimensions of a class context.

In an international study, Scheerens, Vermeulen, and Pelgrum (1989) found that the class variables explained more variance of students' achievement than school variables did (Wolfgang, Treinies, 1997). Mortimore (1993), Scheerens (1993) and other researchers take the view that in the field of teaching research there are a lot of important results which have not been integrated enough into research on school effectiveness (cited in: Sammons, 95). Although, in his study about key characteristics of effective schools, Sammons (95) also stresses that there is less evidence about classroom processes that are important in determining a school's success, later studies show the profound effects of class context on an effectiveness of a school. Within that context, teachers are directly responsible for creating activities leading to results that will help students learn. (Schlecty, 2005).

Schools are made up of classes in the first place which are governed by teachers. In that sense, classes are the building blocks of school the strength of which depends largely on how these blocks are constructed, how they are managed and how they are maintained. Student outcomes to a great extend determines the success of a school. Although from the point of view of many school leaders, academic outcomes such as test results are the ultimate indicators of effective classes, schools are bound to achieve some social/affective outcomes, as well. In that sense, a very "powerful learning and teaching" have to be achieved in classes (Hopkins, 2001).

Referring to that "powerful learning and teaching", Hopkins (2001) maintains that 'effective student learning' is commonly equated with a range of test scores or examination results, rather than something broader. Powerful learning is more than just results and scores, it subsumes a range of cognitive and affective processes and outcomes. The challenge is to find ways of raising levels of attainment while at the same time helping students become more powerful learners, by expanding and making articulate their repertoire of learning strategies.

A key focus for authentic school improvement is high quality teaching. This reflects the teacher's ability to create powerful learning experiences for her students. Successful teachers are not, as Joyce and Showers (1991) note, simply charismatic, persuasive, and expert presenters; rather, they provide their students with powerful cognitive and social tasks and teach them how to make productive use of them.

Talking about the evidence of effectiveness in a school, Sammons (1995) maintains that most school effectiveness studies have focused on academic achievement in terms of basic skills in reading and mathematics, or examination results (Goodlad, 1984). He also mentioned that only some studies provided evidence of important differences in social/affective outcomes such as attendance, attitudes and behaviour (Reynolds, 1976; Rutter et all, 1979; Mortimore et all,1988a). So, we may note that as schools exist and develop in their social environment, it is very natural that they have a mission to shape characteristics of its members. These members all go through and are influenced by schooling process (Sammons, 1995).

Of course, pupils come to schols with some intake characteristics and these also influence success of the students. But, as schooling is a long process that influences students' development largely, class context, the way teachers behave and interact with students, the way students interact with each other, the way learning occurs, the perceptions teacher and pupils hold towards learning and life in general have an overwhelming effect on students outcomes.

In that sense, it is useful to claim that instructional climate is an important factor in determining school effectiveness (Grift, Hutveen, Vermeulen, 1997). Grift, Hutveen and Vermeulen (1997) in their study on school climate emphasize the fact that social school climate and social class climate have to be integrated. They point out that student behaviour and student attitude (e.g. enjoyment in learning) can be seen as outcome measures that can be influenced by learning climate. Schlecty (2005) makes a comparison between attendance, compliance, attention and commmitment. He notes that school systems today function under the pretense of compliance and attendance. Compliant and attendance do not produce learning while students who put meaning to what they learn and identify with it are engaged learners. Compliant and attentive learners just do what they are asked to do while engaged learners who are actively attending and committed to learning tasks analyze and question what they are taught. Our classroom enivironments must be designed to make students more engaged in the tasks they are given.

Student behavior and student attitudes are good indicators for the quality of instructional climate (Grift, Hutveen, Vermeulen, 1997). That's why, it is possible to argue that safe, task-oriented, orderly learning environment with useful teaching strategies will create desirable behaviors in students. Getting both academically and social/affectively desirable behaviors from students will add to the strength of school effectiveness.

Cohen (1983) also notes that school effectiveness is clearly dependent upon effective classroom teaching. Similar conclusions about importance of teaching and learning at the classroom level are evident in reviews by Scheerens (1992), Mortimore (1993) and Creemers (1994). Sammons (1995) mentions the quality as well as the quantity of teaching and learning that take place in class.

Creemers (1994), likewise, in his book *The Effective Classroom* elaborates on class context and quality of instruction and argues that the classroom is the most important place for achieving educational effectiveness. It is acknowledged that teaching quality, time, and opportunity at the classroom level are influenced by factors at the school and classroom level that may or may not promote these classroom factors. Thus, indirectly these factors may contribute to students' learning achievement as well, respectively may hinder this to take place. So, it can be argued that while classroom outputs such as test scores, whether students are engaged in higher order thinking skills influence the effectiveness of a school, school level variables such as positive instructional climate, effective leadership, how innovation is perceived by all members of the school affect classroom level effectiveness. Creemers (1994)' table that shows the details of quality of instruction is given below:
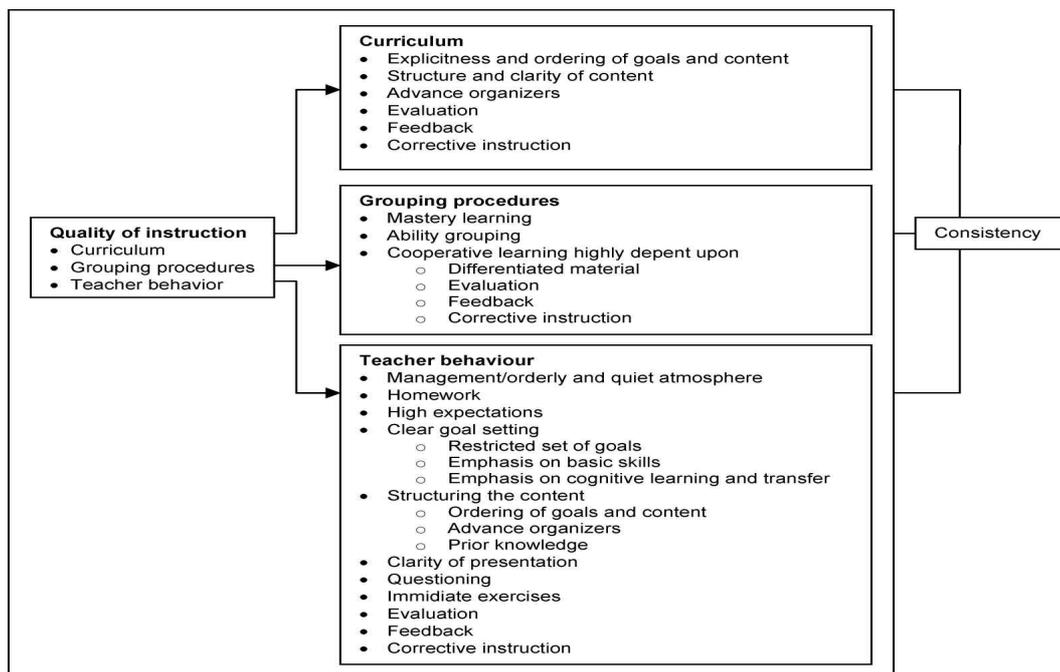

Figure 1. The basic model of educational effectiveness: quality of instruction (Creemers, 1994, p. 98).

For Creemers (1994), a quality instruction cannot be ensured without the quality of teacher behaviours, grouping procedures and the design of curriculum. How teacher perceive these features add a lot to overall quality of instruction and class context. He also maintains that the quality of instruction the details of which are given above have a profound effect on the general effectiveness of a school. Schlecty (2005) argues that all school programs that do not enhance student learning must be abandoned. A school's first mission is to create safe and rich learning environments, to come up with good works for students, and to annihilate obstacles beyond teachers to achieve these goals.

Paralell to the features mentioned by Creemers (1994), while talking about increasing the quality of instruction, Hopkins (2001) touches upon four characteristics a powerful teacher has to have: *a)* the creation of powerful learning experiences, *b)* perspectives on the research on curriculum and teaching, *c)* a framework for thinking about teaching, *d)* the nature of teaching style (p.72).

a) Creating Powerful Learning Experiences: Teaching cannot be confined to only present the material and let it happen. It is more about how to integrate learning content to learning experiences through use of appropriate teaching strategies.

In Models of Learning: Tools for Teaching (Joyce et al., 1997: 7) the idea of powerful learning experiences is expressed in this way:

"Learning experiences are composed of content, process and social climate. As teachers we create for and with our children opportunities to explore and build important areas of knowledge, develop powerful tools for learning, and live in humanising social conditions."

It is the integration of 'content, process and social climate' that puts the 'power' into the powerful learning experience. Bruner (1966:21) has written evocatively about the dialectic between curriculum, teaching and learning. In his book*, Towards a Theory of Instruction,* he wrote:

> "Let me conclude with one last point. What I have said suggests that *mental growth* is in very considerable measure dependent upon growth from the outside in – a mastering of techniques that are embodied in the culture and that are passed on in a contingent dialogue by agents of the culture."

There is a similarity between Bruner's notion of 'mental growth' and what has been referred to here as 'powerful learning'. He argues convincingly for an integration of the ways in which individuals develop and grow, the ways in which they are taught, and what it is that they are taught. Teaching is more than just presenting material, it is about infusing curriculum content with appropriate instructional strategies that are selected in order to achieve the learning goals the teacher has for her students (Hopkins, 2001). It will be more useful if students not only learn but also experience whatever they are involved in the class. The person who has the most responsibility in that sense is of course the class teacher.

b) Perspectives on the research on curriculum and teaching: One of the most important barriers for creating an effective class context and teaching methods is that most teachers are not informed enough about the research on teaching. The lack of profound knowledge and insights about curriculum designs and learning strategies result in problems that put obstacles beyond effective teaching. In addition to not knowing enough about the nature of teaching and learning, teachers often do not keep up with the latest developments in their area. Joyce (1997: 43) mentions some key lessons for school improvement and for creating effective class:

- There are a number of well-developed models of teaching and curriculum that generate substantially high levels of student learning than does normative practice.
- The most effective curricular and teaching patterns induce students to construct knowledge – to enquire into subject areas intensively. The result is to increase student capacity to learn and to work more effectively.
- The most effective models of curriculum and teaching increase learning capacity for all students, greatly reducing the effects of gender, socioeconomic status, linguistic background, and learning styles as factors in student learning.

This is just one model teachers have to be updated about. Learning about the nature of learning, various curriculum designs, learning behaviors will all lead to a more powerful class context.

c) A framework for thinking about teaching: How teaching and its nature is viewed by individual teacher contributes a lot to the quality of teaching. How teacher maintains his relationships with students, how he integrates his teaching skills into meaningful learning experiences are very important in creating a positive atmosphere in a class. Teachers' skills, relationships they create with students and the models they base their teaching are important in creating that class atmosphere (Hopkins, 2001).

d) The Nature of Teaching Style: Teaching style refers to teacher perceptions, teaching models and strategies. It is about how teacher reflects on teaching processes. In his book, *School Improvement for Real*, Hopkins (2001:90) notes that it is through reflection that the teacher harmonises, integrates and transcends the necessary classroom management skills, the acquisition of a repertoire of models of teaching, and the personal aspects of her teaching into a strategy that has meaning for her students.

In a comparative study of policies aimed at improving teacher quality conducted for the OECD six characteristics of high quality teachers were identified (Hopkins and Stern, 1996):
• commitment
• love of children
• mastery of subject didactics
• a repertoire of multiple models of teaching
• the ability to collaborate with other teachers
• a capacity for reflection.

All these factors constitute powerful teaching which powerful teachers carry out, leading to powerful class context with powerful students which will ultimately result in powerful and effective schools.

Class Culture vs. School Culture

Each class is a unique entity with its pupils, teacher, resources and interactions going on. That is what Fullan (2007) means by asserting that classes have different "personalities" (p.24). Classes obviously develop their own "culture", genuine styles of a more formal interaction or of an interaction which has higher cognitive demands. The research on school effectiveness and on instruction should try to identify further types of class contexts, such as types resulting from groups of student characteristics and types resulting within the cognitive and socio-emotional domain (Brady, 2005).

Teachers are very effective in creating a sub-culture, in other words, class culture. However, when creating this culture, they have to be extra vigilant to create a culture consistent with school culture. According to Page (1987:) , teachers' definitions of students reflect the culture of the educational organizations and are, simultaneously, one of its defining elements (p. 89), a factor that is related directly to the manner in which they interact with their students (Brady, 2005).

DISCUSSION AND RESULTS

Studies on school effectiveness imply that creating an effective school is a long-term process that starts with small steps each of which has to be taken cautiously. Research also show that a school leader has to create common values, shared rules and agreed-upon strategies while increasing effectiveness of a school. So as to achieve this end, all members of the school community have to believe in change and strive for excellence in that community. Among the most important assets of a school community are students and teachers. Teachers' perceptions, their interactions with students, problem-solving strategies, learning habits, perceptions about learning, how these perceptions are transferred to student are of high importance in creating an effective class. One of three dimensions mentioned by Fullan (2007) as *the possible use of new teaching approaches* refers to classroom effects In order to create effective schools and bring about positive change. While turning ineffective schools into effective ones is seen as a daunting task, decision makers who launch such efforts must pay strong attention to what is going in classes. Classes are where the culture,- in its small sense-, is created in a school. As every school has a culture, each class with its culture comprises the big picture, that is, school culture. So, in order to create a strong culture that is open to change in a school, the first place to start is to create a desirable class culture. It's crucial to note here that creating a positive school culture is hard without a positive class culture, since "a sense of belonging to a community" initiates from inside a positive class environment. Effective classes give a "driving force" to effectiveness of a school. So, it will not be an exaggeration to claim that effectiveness in a school is hard to attain unless the core of school community is enhanced and empowered. And, that core is the class and its members.

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