

Classroom Environment: What Does Students' Drawings Tell?

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ABSTRACT It is important to design a classroom environment that meets the needs and perception of students to ensure effective communication and learning environment. Aim of this study is to provide a view about students' perception elicited from their drawings followed by their written descriptions about their ideal classroom settings and how could this study inform educators as they design classrooms. Drawing and written record of students' descriptions were used as a data collection method. 50 students from private primary school were participated in the study. Content analysis method was used to analyze the data. Findings from this study reveal that students typically did not give authority to teachers instead they gave authority to students or technology tools. Second findings of the study reveal that majority of students' drawings included evidences related to interaction with technology instead of teacher-student and student-student interaction.

INTRODUCTION

Rapid changes have been observed in the field of education past decades. These changes also affect students' perception about how a classroom structure should be organized (Freigberg 1998; Libbey 2004). Several researchers have a broad agreement on components of school climate, which are a place for learning and teaching, interaction with peers and teachers, and authority figures (Nwankwo 1979; Tisak 1986; Tisak and Tisak 1990; Libbey 2004). Moreover Jackson (1968) stated that:

School is . . . a place in which the division between the weak and the powerful is clearly drawn. This may sound like a harsh way to describe the separation between teachers and students, but it serves to emphasize a fact that is often overlooked, or touched upon gingerly at best. Teachers are indeed more powerful than students, in the sense of having greater responsibility for giving shape to classroom events, and this sharp difference in authority is another feature of school life with which students must learn to deal (p. 10).

An important question is what has been changed up to now and what is the new generation's perception of authority in the school and classroom environments. Tisak (1986, 2000) stated that assessing children's perception of authority in the classroom has received intense attention. Since this assessment is significant

to understand student-teacher, student-student interactions within classroom settings, this assessment will help educators to design their classroom based on the students' perception about how classroom environment should be.

According to Ruane (1989), in order to establish a social learning environment, understanding teacher roles in a classroom is the key. So what is the role definition of teachers in a traditional classroom setting versus in non-traditional classroom setting? In traditional classrooms, especially novice teachers tend to follow the procedures that experienced teachers follow to run their classrooms smoothly, to establish their authority in the classroom (Clark and Yinger 1980). They organize the classroom in a way that teacher is the ultimate source of knowledge and he or she transfers this knowledge to students. For instance, teacher writes on the board in front of all students' desk facing the board and students copy the board into their notebooks. This traditional approach in the classroom may focus on external issues as establishing teacher authority, keeping students in silence but leaves important learning components as classroom discourse, meaningful learning, teachers' academic content knowledge, teachers' social and intellectual ability, integration of innovative learning and teaching methods (that is, effective technology usage). On the other hand, in non-traditional classrooms those components are promoted and guided by

teachers (Walshaw and Anthony 2008). As a result, designing a classroom environment according to students' perception is important since "a low degree of shared perceptions may contribute to ineffective communication between the teacher and student" (McCroskey and Richmond 1982; McCroskey and Richmond 2006; Chory and Goodboy 2010).

Use of drawing and written records methodology is one of the effective ways of eliciting students' perception of ideal classroom: authority figure, role definition of teacher, innovative approaches to learning (technology integrated education) and actual design of classroom (traditional versus non-traditional). Drawing methodology was used in several research disciplines such as, psychology, education, science and arts. In those researches drawing was used as a tool to gain insight about individuals' perceptions, beliefs, knowledge, emotions and thoughts. Ulker (2012) and Yilmaz et al. (2012) studied how young children draw nature pictures, Prout and Philips (1974) investigated students' perception of school experiences, Bortwick (2011) examined how students perceive mathematics lessons.

In this study drawing and written record of students' thoughts were used as a method to collect data. Since, Malchiodi (1998) indicated, "drawings provides a multidimensional view of children" (as cited in Borthwick 2011:38). In addition, Weber and Mitchell (1996) stated that one could read drawings since they are a form of a text. Visual representations also carry communicative messages. They also pointed the role of drawing as people express their feelings and thoughts. They thought people who are not comfortable with verbal communication might express their emotions and thoughts with drawings.

The aim of this study is to provide a view about students' perception from their drawings followed by their written descriptions about their ideal classroom settings and how could this study inform educators as they design classrooms.

METHODOLOGY

In this study drawing and collection students' written works were used as data collection tool. Drawing methodology is used in this study since it is a powerful tool to collect data.

In the literature it is reported that drawing allows students to express their thoughts, feelings and perception more comfortably. This advantage of drawing method let us to overcome the difficulty of engaging students' into the study that they were not willing to express their thoughts, feelings and perceptions verbally or they had difficulty with verbal communication. Also drawings let researchers to see multiple faces of the topic of interest, and drawings also carry out many communicative messages. Collecting written description of students' ideal classroom settings and environment, also strengthen researchers understanding of each students' drawings and their perception and thoughts.

Randomly selected 50 students (ages between 7 to 10, grades 2-5) from private primary schools were participated in the study. Students were participated in the study in their regular visual art and drawing courses. This also facilitates students' engagement into the study since in those hour students regularly draw pictures or engage in art related activities. As a result researchers established a non-threatening environment (Christensen 2004) for each student as they participated in the study. Initially, students were asked, "Please draw your ideal classroom environment on the blank white paper in front of you and explain what and why you draw the elements on the paper and describe your ideal classroom environment in your own words in relation to your drawings". Then each student made his or her own drawings. There was not a time limitation as students drew their picture and they were told that this is not an examination and there is no right or wrong way to draw their own ideal classroom picture, but also they were told not to copy each other's work. This comfortable atmosphere within the classroom helped students to draw freely without feeling under pressure of examination or time limitation.

Students in all grades asked the purpose of the study which researchers were expecting this question. In each classroom students were informed about purpose of the study as; their drawings would contribute to the effective design of teaching and learning environment in classrooms. The aim of this action was to help each student to feel valued as an individual and his or her work is valuable (Horstman et al. 2008).

In this study content analysis method (Finson et al. 1995) was used to analyze and explore

each drawing and student's written work. Two education researchers independently examined evidences from students' drawings and written works related to students' perception about authority, role definition of teachers, and classroom design settings (traditional versus non-traditional). Both researchers were categorized each picture under those two categories and then they aligned their decisions to determine the agreement level between two researchers. There were only four cases that researchers indicated different categories for the same picture. As a result researchers obtained a high level of agreement among researchers categorizations that ensured the reliability of the study. Artistic quality of the students' drawings was not considered as a factor as researchers categorized the students' drawings. Table 1 shows the each category and their description.

At the final stage after each students drawing were sorted under each category and related student work exemplars were selected for reporting purposes.

RESULTS

This section will report the findings of the study first providing frequency count and percentage distribution of drawings under each category. Second students' drawings will be presented as an exemplar of the categories.

Sixty-seven percent of students (33 out of 50) drawings did not include a teacher image

and teacher table in their ideal classroom design. In six out of those 33 drawings students explicitly wrote "No teacher" in their drawing descriptions by using capital letters. Figure 1 shows a student's drawing with this written description.

In Figure 1 although student clearly stated there is no teacher in the classroom, he drew linearly arranged desks. The first component (no teacher) clearly revealed this student did not perceive teacher as an authority figure in the classroom. But at the same time the amount of exposure of traditional education setting in his education might lead him to draw a traditional classroom design (linearly arranged desks) in which teacher is perceived as an authority in the classroom.

When researchers examined 33 drawings that did not include an actual teacher image as an authority researchers found that 78 percent of those drawings included evidence in which student gave authority to a technological tool. For instance, 11 out of 33 drawings included smart board drawings and written descriptions parallel to this statement "we can listen to courses from smart board". In addition seven students emphasized existence of distance education or virtual teacher. Figures 2A and 2B respectively show students' drawing and her written description, which emphasized distance education in an e-learning environment.

In Figure 2A, student drew a classroom environment in which she laid down in her bed and

Table 1: Coding schema of the study and descriptions of each category

<i>Category name</i>	<i>Description</i>
<i>Authority</i>	Students attach authority role to 1. Teacher by drawing actual teacher image in front of the classroom, a traditional classroom environment 2. Student by drawing students image in the classroom but not teachers, a non-traditional classroom environment 3. A technological tool by attaching teaching role to a technological tool in their drawings/written descriptions
<i>Role Definition of Teachers</i>	Students describe role and quality of teacher both in their drawings and descriptions: 1. Evidence of Academic Content Knowledge 2. Evidence of Pedagogical Content Knowledge
<i>Classroom Design</i>	Students drew/describe a traditional classroom design: 1. Linearly arranged students desks facing the board 2. Teacher is an authority figure 3. Few evidence of classroom interaction Students draw/describe a non-traditional classroom design: 4. Students draw/describe a non-traditional classroom design: 5. Do not include linearly arranged students desk 6. Teacher is not an ultimate authority figure (Include evidence of cooperative work and classroom discourse) 7. Include evidence related to technology integrated education

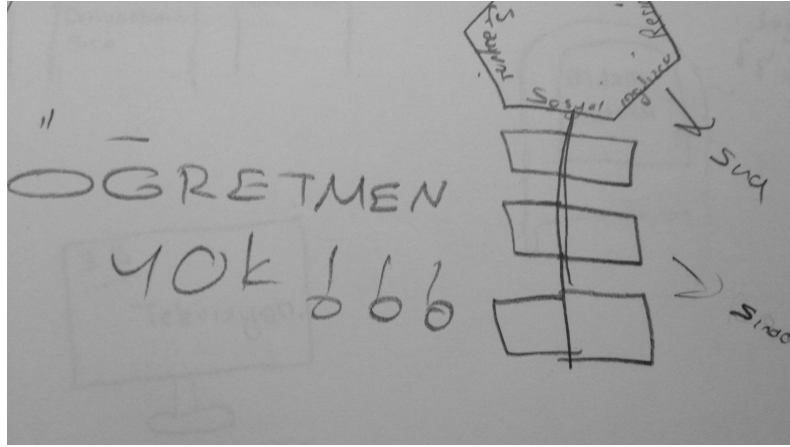


Fig. 1. No teacher (ogretmen yok) description near to a student's drawing

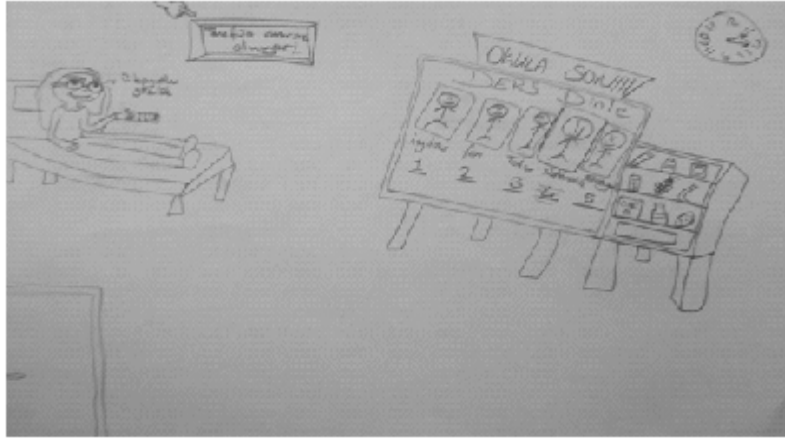


Fig. 2A. A student's ideal classroom setting: Distance education

Eve yattığım yerden 3 boyutlu ders dinleyebilirim. Bir tuvaletle
 telefus yapabilirim. Okula gitmek, hazırlanmak ve eve ge-
 gelmek zorunda olmazdım veya saatlere uyup erken kalk-
 mak zorunda kalmazdım. =)

Fig. 2B. Student's written description of her ideal classroom settings

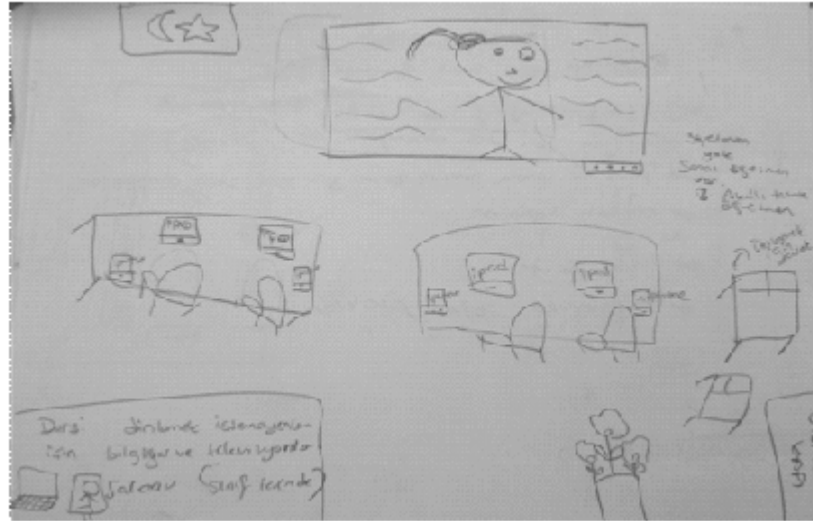


Fig. 3. Exemplar of both non-traditional and traditional classroom elements

selected the courses (English, Science, Mathematics) from the screen with a remote control. Moreover she clearly stated in her drawing “end to the school”. This evidence from her drawing indicated that she did not give ultimate authority to an actual teacher image in an actual classroom. In Figure 2B student wrote “I can attend my course work through 3-D environment at my home while laying down. I can give a break using remote control. I do not have to go to an actual school everyday or get up early every morning”. Her description clearly emphasized why she would like to attend to the courses from her home through 3-D environment.

Although students typically did not draw a teacher image in their drawings, 35 out of 50 (70 %) drawing included evidence of a traditional classroom design. In those drawings students typically drew linearly arranged desks facing the board, teacher table and a board in front of the classroom. 35% percent of student’s drawings included elements of non-traditional classroom design. Some of the ideal classroom drawings included both elements from traditional and non-traditional classroom. Figure 3 shows an example of drawings that were categorized under both traditional and non-traditional classroom design.

In Figure 3, although students did not draw a teacher image as in traditional classroom he drew a board and student desks facing the board.

In the board he drew a virtual teacher with the same role of a teacher in a traditional class that is instructing the lesson. Student’s desks were faced to this teacher. Those features interpreted as elements of traditional class. On the other hand, all students were given tablets as technological tools instead of books that were coded under non-traditional class element.

The findings reported above indicate that students included virtual or actual image of the teachers in their drawings (17 actual teacher images and 7 virtual teacher). Following were the role description of teachers from students written descriptions of their ideal classroom settings. Those characteristics of actual teachers coded under either teachers’ academic content knowledge or pedagogical content knowledge. Actual teacher role definitions can be listed as:

- ♦ be knowledgeable about the course content which was coded under academic content knowledge
- ♦ should not shout at students which was coded under pedagogical content knowledge
- ♦ let students to play games which was coded under both academic and pedagogical content knowledge
- ♦ encourage students and should not name students as lazy which was coded under pedagogical content knowledge

In this study, researchers did not categorize virtual teachers' role definition under ACK or PCK since they believe that more research should coin a terminology of characteristics of virtual teachers. But according to students' drawings and written descriptions virtual teachers role definition can be listed as:

- ♦ be accessible
- ♦ explain students the content that they did not understand

All these findings highlight the students' perception about their ideal classroom environment: what is the role definition of teacher, teacher is not the ultimate authority in the classroom, instead he is a facilitator, innovative education methods should be integrated into learning environment as technological tools (tablets, games, and smart boards), teachers should be knowledgeable about e-learning opportunities and should cooperate this into their classroom learning environment and classrooms should be designed according to students' perception that gives opportunity for students to engage into classroom activities, that is student-centered learning (Ulker 2009).

DISCUSSION

This contradiction might indicate that current student generation may experience a transition phase. They experience exposure to the traditional learning and teaching in their classroom design. On the other hand, advancement in technology such as educational games, software, technological tools (tablets, laptops) and online tutorials rapidly integrate in their lives and affect their learning interactions. As a result, students' perception of ideal classroom design reflects their experiences of this transition phase.

Role of teacher should be carefully determined in this transition and students' experience in this phase should not be underestimated in a learning environment. Findings of this study may inform teacher educators and teachers about students' expectations from a classroom environment, teachers and also students' interest and needs. Understanding students' perception about classroom environment and settings is important so that educators can meet their needs and reach desired learning outcomes. In addition, establishing shared perspectives among students and teachers may ensure an effective teaching and learning environment and communication within classroom. As a first step, this

study examined the students' perception of an ideal classroom setting. Further studies should be conducted to test how educators can mediate learning environment according to students' interest, needs, experience and perceptions, so that better learning will occur and desired learning outcomes will be realized.

CONCLUSION

Overall findings of this study indicated that majority of students' drawings did not include actual teacher image in the classroom and there were evidences that they did give the authority to a technological tools such as virtual teachers or tutorials. Although there were some evidence that students did not completely give the authority to the teacher in their ideal classroom settings drawings and descriptions, they drew a traditional classroom setting with certain components such as teacher desk in the front of the classroom, and linearly arranged students' desks facing the board.

NOTE

1. An earlier version of the paper presented at the 1th International Counseling and Education Conference, 2012, Istanbul, Turkey.

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