The Measurement of Collaborative School Culture (CSC) on Turkish Schools

Ali Ilker GUMUSELI  
Yildiz Technical University, Istanbul

Arzu ERYILMAZ  
Yildirim Beyazit University, Ankara

Abstract

Background: School culture is a system of shared orientations that holds a unit together and gives it a distinctive identity (Hoy, 1997). It is a multifaceted concept composed of different factors (Devos et al., 2004; Maslowski, 2001).

Aim: The study both aimed to measure the realization rates of collaborative school culture in Turkish public schools and determine the relation between the realization rates of collaborative school culture in terms of the "type" and "size" of schools.

Sample: The research was administered to school principals (n =756) in 6 different types of schools in Istanbul, Turkey, 2007. The sample of the study included 123 large-sized schools (2001-3000 students), 293 medium-sized schools (1001-2000 students) and 340 small-sized schools (10-1000 students).

Method: The quantitative research methodology was used to obtain data to validate six major factors: (1) unity of purpose, (2) collaborative leadership, (3) professional development, (4) teacher collaboration, (5) collegial support and (6) learning partnership. The School Culture Survey was developed by Gruenert (1998). It contains Likert-type response options of 36 items tested in a pilot study to establish "content validity" and "reliability". Analysis of variance (ANOVA) and t-test were used as descriptive statistics.

Results: Six of the collaborative school culture factors (Gruenert, 1998) were identified in Turkish public schools. As a result, Anatolian high school principals' perceptions of mean scores were identified as the highest whereas trade high schools’ were determined as the lowest. A significant difference with respect to the "type" of school was found; however, no significant difference with respect to the "size" of the school was identified.

Conclusion: Results implied that school principals generally created and contributed to develop collaborative school culture by building collective and collaborative relationships in schools.

Keywords: Organizational culture, collaborative school culture, collaborative leadership.

土耳其學校合作文化的量度

Ali Ilker GUMUSELI  
Yildiz Technical University, Istanbul

Arzu ERYILMAZ  
Yildirim Beyazit University, Ankara

摘要

背景：學校文化是一間學校師生的共同取向，維繫這個群體在一起，並賦予它一個獨特的身份（Hoy, 1997），這是一個由多方面概念組成的不同因素（Devos et al., 2004; Maslowski, 2001）。

目的：這項研究旨在量度土耳其公立學校的學校合作文化實現率，並確定其與學校的“類型”和“大小”的關係。

對象：在2007年，這項研究在土耳其伊斯坦堡8個不同類型學校的756個校長中推行。研究樣本包括123大型學校（2001-3000學生）、293中型學校（1001-2000學生）和340小型學校（10-1000學生）。

方法：研究使用定量方法，以驗證學校合作文化的六大因素：（1）團結的目的、（2）協作領導、（3）專業發展、（4）老師合作、（5）同儕支持、（6）學習夥伴關係。Gruenert (1998) 設計一個工具來測量學校的合作文化，導航研究使用李克特式的36條題目測試，以建立“內容效度”和“可靠性”，採用描述性統計的方差分析（ANOVA）和t-檢驗來分析數據。

結果：在土耳其公立學校確定有六個學校合作文化的因素（Gruenert，1998年），安納托利亞[Anatolian]高中校長們的觀念平均得分最高，而貿易高中校長們最低。在不同“類型”的學校發現顯著的差異；然而，沒有在“大小”不同的學校發現明顯的差異。

總結：結果暗示，校長普遍使用集體和協作關係來建立並發展學校合作文化。

關鍵詞：組織文化、學校合作文化、協作領導
Introduction

The role of organizational culture in the development of the educational systems cannot be overemphasized. In general, the term organizational culture is defined as "a system of shared meaning held by members which distinguishes the organization from others" (Robbins, 1989, p.595). In other words, organizational culture represents the "assumptions, attitudes, behaviours, beliefs, rituals, traditions, expectations, knowledge, language, norms and all the other values shared by the members of the organization" (Fullan & Hargreaves, 1991, p.49).

When the topic is narrowed down to "organizational culture at schools" it is often characterised by the behaviours and the assumptions of the school members, such as "how the staff dress" (Peterson & Deal, 1998, p.28), "what the teachers talk about in the teachers' lounge" (Kottler, 1997, p.17), "how the teachers decorate their classrooms", "how each person visibly interacts with each other and organizational outsiders" (Schein, 1985, p.21), "what their assumptions, predictions on certain aspects of the curriculum are or their willingness to change" (Fullan & Hargreaves, 1991, p.38) [as cited in www.usca.edu/essays/vol122004/hinde.pdf].

Another issue that determines organizational culture at schools is identified by "norms" that have strong impacts on building school culture. So, what are the "norms" at school? Richardson (1999, p.1) defined norms as the "unwritten rules for how and what we do to act". In addition, Richardson (1999, p.1) stated that norms are the "rules which also shape interactions; govern meetings or the ways that members of the organization make decisions". Based on these ideas above it can be inferred that "norms" cover many aspects of organizational functioning such as, "the formality or informality of the language used, the computer etiquette accessing to information and general rules of confidentiality at schools" [as cited in http://nationalserviceresources.org]. The general frame of cultural norms of improving schools are identified in Figure 1 as follows (Stoll, 1998, p.10);

**Figure 1. Norms of Improving Schools**

1. **Shared goals**—"we know where we’re going"
2. **Responsibility for success**—"we must succeed"
3. **Collegiality**—"we’re working on this together"
4. **Continuous improvement**—"we can improve"
5. **Lifelong learning**—"learning is for everyone"
6. **Risk taking**—"we learn by trying something new"
7. **Support**—"there’s always someone there to help"
8. **Mutual respect**—“everyone has something to offer”
9. **Openness**—"we can discuss our differences"
10. **Celebration and humour**— “we feel good about ourselves” (Stoll, 1998, p.10).

In Figure 1 it is pointed out that "cultural norms" at schools both represent the snap-shots of an effective school and focus on the fundamental issues like "how the school staff value and treat each other" (Stoll, 1998, p.10). When the contextual frame of the norms in Figure 1 is examined in details, it can be assumed that "school culture may vary according to the realization rates of the items listed above" (Stoll, 1998, p.10). To understand the link between the "school" and its "culture" it is also possible to emphasize that the organizational
culture of schools either have a positive influence on organizational behaviour patterns of the members or damage the functioning of schools.

In terms of collegiality, sharing strong norms between teachers and principals provides continuous improvement of schools. To illustrate this, Hinde (2002, p.4) pointed out that "if the teachers and school principals decide on the right curriculum or proper instructional strategies that can work in school, the staff will share strong norms of collegiality, value student learning and assume all students are able to learn" (Hinde, 2002, p.4) [as cited in www.usca.edu/essays/vol122004/hinde.pdf].

However, establishing and maintaining common grounds among different members in an organization in terms of various professional values are very challenging (Olson and Olson, 2000, p.139). Although a number of reasons are contributed to improve collaborative relations at schools, it is generally stated that "school principals play a key role in creating the conations that enable schools to become professional learning communities" (Du Four, 1998, p.63).

**Background of the Study**

Much of the literature about school culture demonstrated that there is a close correlation between positive school culture and high standards of organizational achievement (Purkey and Smith, 1983; Davis, 1989; Deal and Kennedy, 1982; Deal and Peterson, 1994). To begin with, Deal & Kennedy (1982) suggested how unhealthy the school culture might be in terms of "inward and short-term focus, low staff morale, fragmentation, inconsistency, emotional outbursts and subculture values" that supersede shared organizational values and impede organizational improvement (Lindahl, 2006, p.1) [as cited in http://cnx.org/content/m13465/latest]).

Cheng (1993) also made profound contributions to the improvement of school culture. The researcher correlated school culture with teachers' attitudes toward their work and stated that "as long as there is shared participation and collaborative leadership, teachers can experience higher job satisfaction" (Cheng, 1993, p.85). Finally, DuFour and Eaker (1998, p.57) built up the theory of "professional learning communities". They asserted that "the most promising strategy for sustained, substantive school improvement is developing the ability of school staff to function as a professional learning community" (DuFour and Eaker, 1998, p.57).

The previous researchers were mostly focused on "school culture", however; the researches in the twenty-first century are much more interested in building the ways of "collaborative school culture" at schools.

First, O'Neil and Conzemius (2002) conducted a project in Madison, Wisconsin from 2000 through 2002 where they found out school success was grounded in the "school staff's ability to learn, adopt, modify and innovate". In addition, the patterns behind the key elements which made a critical difference in terms of the school performance were determined as; "reflective practices, collaboration and partnership concepts and a continually increasing leadership capacity of the principals". In their research O’Neil and Conzemius (2002) asserted that "leadership capacity grows when individuals focus on student assessment and learn as a collaborative team at schools" [as cited in; Quiambao, 2004, p.23].

Similarly, Pardini (2002) indicated that "well organized teacher induction programs are the basis of positive school culture" [as cited in; Quiambao, 2004, p.24]. Abacıoğlu (2005) on the other hand, analyzed the relation between "conflict management styles of school principals' and the realization rates of collaborative school culture" at Turkish public schools. As a result
According to Figure 2, Fullan and Hargreaves (1991, p.49) pointed out the positive effects of collaboration on schools. First, it is assumed that collaborative school culture breaks the isolation of the classroom, reduces the end-of-year burn-out and stimulates enthusiasm between teachers. Next, it provides a cultural fit between teachers and their organizations which contributes employee retention and improves the productivity. Further, instead of grasping for the single event or the special achievements of students as the main source of pride, teachers detect and celebrate a pattern of accomplishments within and across classrooms, over time. They work closely together and discuss matters of curriculum and instruction so; they can find themselves better equipped for the classroom work (Stolp, 1994). To sum up, by deepening the importance of collaborative school culture (CSC) at schools, the principals need to focus on the continuous improvement efforts of the staff.
improvement of schools equipped by shaping values, beliefs and attitudes to promote a nurturing learning environment (Stolp, 1994). In order to achieve this, they need to build up supportive relationships; provide proper working conditions for teachers to enhance their professional performances. As a result, schools become well-organized places to examine new ideas, methods, and materials for all the members (Little, 1987) [as cited in http://vocserve.berkeley.edu/centerfocus/CF2.html]).

The idea of developing Collaborative School Culture (CSC) also allows constructing working teams at school. This activity is realized either through co-teaching in the classroom or by participation of the members in a school team. Therefore, teachers at school model collaborative behaviours for students. When teachers work closely together, they gain perspectives about student learning, analyze their problems and have better understanding of which students need assistance or which might benefit from intensive interventions within the general curriculum (as cited in slc.sevier.org/tcollab.htm).

Collaborative School Culture Survey (CSCS)

The research instrument in this study was developed by Steve Gruenert (1998) to identify the relations between "student achievement" and "collaborative school culture factors". Each factor in the Collaborative School Culture Survey (CSCS) measures a unique aspect of a school’s collaborative culture. As a result of the study, Gruenert (1998) determined a significant relation between collaborative school culture and increased student achievement. The assumption in his research is that "when positive relationships are established between instructional leadership and school culture, it results in teacher collaboration that increases student learning" (Gruenert, 1998). Therefore, it will be beneficial to describe the collaborative school culture factors (as cited in www.MLLC.org).

**Collaborative leadership.**

Collaborative leadership (principles value teachers’ ideas) measures the degree to which school leaders establish and maintain collaborative relationships with school staff. School leaders completely value ideas of the teachers, seek input, engage staff in decision-making and trust the professional judgment of the staff.

**Professional development.**

Professional development (making the most of oneself as a professional) measures the degree to which teachers seek ideas from seminars, colleagues and any other professional resources to maintain current knowledge about instructional practices.

**Teacher collaboration.**

Teacher collaboration (teachers are expected to work together to share pedagogical information) measures the degree to which teachers engage in constructive dialogues to build up the vision of the school. Moreover, it brings more experienced and less experienced teachers closer together and reinforces the competence and confidence of the less experienced ones.

**Collegial support.**

Collegial support (teachers are willing to help out when there is a problem) measures the degree to which teachers work together effectively, trust and assist each other as they work to accomplish the tasks of the school.

**Unity of purpose.**

Unity of purpose (demonstrates how the mission statement influences teaching) measures the degree to which teachers work towards the common mission of the school.

**Learning partnership.**

Learning partnership (teachers and parents have common expectations towards students performance)
measures the amount of time parents and teachers communicate with each other about students’ performance. Parents trust the teachers and students generally accept the responsibility for their own schooling.

Overview of the Types of Schools in the Study

In Turkish national educational system primary education is compulsory for eight years between the ages of 6-14. After primary education, secondary education encompasses two main categories of educational institutions; general high schools and vocational or technical high schools, where a minimum of three years of schooling is implemented.

In terms of secondary education, the types of high schools in this study were subclassed as general high schools, which provide schooling to children aged 15-17 for at least a 3-year period after primary education and Anatolian high schools, established for the purpose of teaching students at least one foreign language. The educational programme of Anatolian high schools is mostly implemented with science and mathematics lessons in the medium of English as well. Industrial and training high schools are subclasses of vocational schools, which include professional training in various fields of industry for the purpose of preparing students for both institutions of higher learning and various industrial fields. Trade high schools, a type of vocational school, offer education in the fields of business, administration, accounting, finance, marketing, tourism, banking and all other secretarial skills.

To sum up, the Collaborative School Culture Survey (CSCS) was administered to the participants employed in "other" types of religious high schools known as Imam Hatip and Imam Hatip Anadolu high schools, which have similar curriculum as Anatolian high schools. The schools are within the scope of vocational education established for the purpose of educating in religious subjects (as cited in www.meb.gov.tr/pdf).

Purpose

The general purpose of this article is to identify the realization rates of school principals’ collaborative school culture perceptions in Istanbul, Turkey, 2007. In the study, it was also aimed to determine the relationships between the collaborative school culture in terms of the "type" and "size" of schools. More specifically, this study addresses the following research questions:

RQ1. What is the extent that school principals’ perceive collaborative school culture in each of the six factors as determined by Gruenert (1998)?

RQ2. What is the relationship between the school principals’ perceived levels of collaborative school culture in each of the six factors (Gruenert, 1998) and the "type" of the school?

RQ3. What is the relationship between the school principals’ perceived levels of collaborative school culture in each of the six factors (Gruenert, 1998) and the "size" of the school?

Methodology

Participants

In order to answer the research questions a total number of (n: 868) school principals participated in the study in 2007. However, the representative sample of (n:756) principals’ data was found valid to be analyzed. As mentioned previously in the article before in the research sample the types of schools of the participants are classified as follows; primary schools (n: 562), general high schools (n: 75), Anatolian high schools (n: 75), and Imam Hatip schools (n: 69).
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Procedure
In this study, the quantitative method was used to measure the perceptions of school principals participated in a briefing organized by the National Education Directorate of Istanbul Province in 2007. All of the school types (6) in the study took place in this research are all located in the central districts of Istanbul. The school culture survey consists of 36 five-point Likert-scale items from 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly Agree. Higher ratings on the factors of the Collaborative School Culture Survey (CSCS) demonstrate stronger agreement with the survey statement. The quantitative data was analyzed through Statistical Package of Social Sciences (SPSS for Windows "16.0").

Data Analysis
Based on the outcomes of the preliminary studies, the Collaborative School Culture Survey (Gruenert, 1998) was tested in a pilot study to identify whether the six factors, 36 items of collaborative school culture were substantiated by empirical data on the types of school values that were presented in the research. The number of items in each factor of the Collaborative School Culture Survey (CSCS) is classified as follows: professional development (6), collegial support (4), collaborative leadership (11), teacher collaboration (6), learning partnership (4), and unity of purpose (5).

To address the aspects of reliability and content validity, "test-retest method" was applied. The content validity of the survey was improved by making adaptations and corrections in terms of wording. The scale was revised, translated into Turkish and the wording was checked again. The reliability coefficient of the survey was calculated on the data. Later, the reliability of the survey with that of the original survey was compared and the reliability score was determined as (.90). Finally, after piloting, the scale reliability and validity of the questionnaire were verified.

The correlation of results of the research was found to be; 8282, Spearman-Brown as 9061, Guttman Split-half as: 9060 and Alpha as 9251. In addition, the Alpha values of the cultural subsizes for each were calculated and identified as: "unity of purpose": 9602, "collaborative leadership": 9606, "professional development": 9600, "collegial support": 9603, "teacher collaboration": 9600, "learning partnership": 9605. The above values were found to be satisfactory for application of the survey. Finally, after the validity and reliability of the survey were verified. The survey was administered to the school principals in Istanbul in three groups.

Findings
Findings in the study were organized to answer the research questions in the same order as stated in the research and the survey was administered to the school principals in Istanbul, Turkey, in 2007. In the first research question, the main aim was determined to identify the realization rates of the collaborative school culture factors in general with regard to principals’ perceptions. In order to answer the first research question, the mean scores and standard deviation values were identified (see Figure 3).
When the data in Figure 3 is examined, the most frequently realized collaborative school culture factor in terms of school principals’ perceptions was identified as; professional development (4.2), (referring the continual professional development of teachers through seminars, colleagues and other professional resources about instructional or educational practices), followed in descending order by the factor collegial support (4.19) (referring to the collegiality among teachers), collaborative leadership (4.12), (school leader’s maintaining collaborative relationships with staff), unity of purpose (3.99), (teachers’ work towards the common mission of the school), teacher collaboration (3.92), (teachers’ planning observing and discussing teaching practices together) and the least frequently realized factor was determined as learning partnership (3.61), (referring to teachers and parents’ common expectations about the academic performance of students).

The second research question in the research was concerned about the relationship between the school principals’ perceived levels of each of the six factors of collaborative school culture (Gruenert, 1998) and the "type" of the school. The mean scores regarding the types are presented (see Table 1).

Table 1
Re-conceptualized Teacher Authority: An Integrated Way

<table>
<thead>
<tr>
<th>SCHOOL TYPES</th>
<th>UP</th>
<th>CL</th>
<th>PD</th>
<th>CS</th>
<th>TC</th>
<th>LP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>3.98</td>
<td>4.05</td>
<td>4.15</td>
<td>4.04</td>
<td>3.81</td>
<td>3.59</td>
</tr>
<tr>
<td>General</td>
<td>4.03</td>
<td>4.00</td>
<td>4.19</td>
<td>4.08</td>
<td>3.80</td>
<td>3.58</td>
</tr>
<tr>
<td>Anatolian</td>
<td>4.28</td>
<td>4.32</td>
<td>4.45</td>
<td>4.44</td>
<td>4.23</td>
<td>4.04</td>
</tr>
<tr>
<td>Industrial</td>
<td>3.83</td>
<td>4.06</td>
<td>4.13</td>
<td>4.12</td>
<td>3.86</td>
<td>3.68</td>
</tr>
<tr>
<td>Trade</td>
<td>3.84</td>
<td>3.94</td>
<td>4.03</td>
<td>3.95</td>
<td>3.62</td>
<td>3.60</td>
</tr>
<tr>
<td>Others</td>
<td>4.20</td>
<td>4.20</td>
<td>4.39</td>
<td>4.30</td>
<td>4.08</td>
<td>3.81</td>
</tr>
</tbody>
</table>

The data in Table 1 indicated that "Anatolian" high schools had the highest mean scores followed by "Others" ("Imam Hatip" and "Imam Hatip Anatolian") high schools. The highest factor scores in Anatolian high schools were realized as; professional development (4.45), followed, in descending order, by collegial support (4.44), collaborative leadership (4.32), unity of purpose (4.28), teacher collaboration (4.23) and learning partnership (4.04) with the lowest mean scores. General high schools, primary schools and industrial high schools followed the mean scores of "others" in order.

Conversely, the mean scores of trade schools
yielded the lowest. The school culture factors with the mean scores in trade schools were professional development (4.03), followed, in descending order by collegial support (3.95), collective leadership (3.94), unity of purpose (3.84), teacher collaboration (3.62) and learning partnership (3.60).

To identify the differences between the variables, single-sided variance analysis was conducted and the results of descriptive statistics were examined (see Table 2). More specifically, the mean difference, the sum of squares, standard error, and the level of significance and the 90% confidence interval of the difference was compared with each factor of school culture with respect to the school types. The mean difference was significant at 0.05 level in the factors of unity of purpose (.0.35*), professional development (.015*), collegial support (.012*) and teacher collaboration (.003*). Those factors that didn’t reach a level of significance were identified as collaborative leadership (0.11) and learning partnership.

Table 2
Collaborative School Culture Factors Variance Analysis with Regard to the Types of Schools

<table>
<thead>
<tr>
<th>Collaborative School Culture Factors</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unity of Purpose</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>4.932</td>
<td>5</td>
<td>.986</td>
<td>2.410</td>
<td>.035*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>306.958</td>
<td>750</td>
<td>.409</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>311.890</td>
<td>755</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2.664</td>
<td>5</td>
<td>.533</td>
<td>1.795</td>
<td>.112</td>
</tr>
<tr>
<td><strong>Collaborative Leadership</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>223.000</td>
<td>751</td>
<td>.297</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>225.664</td>
<td>756</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>4.593</td>
<td>5</td>
<td>.919</td>
<td>2.840</td>
<td>.015*</td>
</tr>
<tr>
<td><strong>Professional Development</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>242.938</td>
<td>751</td>
<td>.323</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>247.532</td>
<td>756</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>5.840</td>
<td>5</td>
<td>1.168</td>
<td>2.958</td>
<td>.012*</td>
</tr>
<tr>
<td><strong>Collegial Support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>296.570</td>
<td>751</td>
<td>.395</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>302.410</td>
<td>756</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>7.233</td>
<td>5</td>
<td>1.447</td>
<td>3.636</td>
<td>.003*</td>
</tr>
<tr>
<td><strong>Teacher Collaboration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>298.810</td>
<td>751</td>
<td>.398</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>306.044</td>
<td>756</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>5.297</td>
<td>5</td>
<td>1.059</td>
<td>2.074</td>
<td>.067</td>
</tr>
<tr>
<td><strong>Learning Partnership</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>383.672</td>
<td>751</td>
<td>.511</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>388.969</td>
<td>756</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*The mean difference is significant at the 0.05 level*
It is apparent from the data analysis in Table 2 that in terms of "types" of schools there is a statistically significant difference between the Anatolian high schools principals’ perceptions of collaborative school culture and the industrial and trade high schools.

In the factors of "collegial support, teacher collaboration, unity of purpose and professional development", there was a significant difference in principals perceptions at *p=.05 level between the perceptions of Anatolian high school principals and primary, trade, industrial and general high school principals. To sum up, the general theme that emerged from the analysis was that; Anatolian high schools principals viewed their school culture as collaborative and there are significant differences in terms of "collaborative school culture" factors and the "types" of the schools.

In order to explore the third research question, the relationship between principals' perceived levels of each of the six factors of collaborative school culture and the "size" of the school was examined. The analysis in Figure 4 was identified by using Spearman correlations which revealed that school size was significantly related to an emphasis on school culture ($r = 0.24$).

The research sample included 123 large-sized schools (2001-3000 students), 293 medium-sized schools (1001-2000 students) and 340 small-sized schools (10-1000 students). The figure above indicates the results of the factors based on the determined size of schools (n=756). In general in most of the collaborative school culture factors (Gruenert, 1998) the perception scores of the school principals in less populated schools (10-1000) were found higher than those which had more (1001-3000) students. To determine whether there was a significant difference between collaborative cultural factors and school size, the variance analyses was conducted (see Appendix .1.). However, no significant difference was found between the mean values of the collaborative school culture factors and the school size.

**Conclusion and Discussion**

The data in the study was presented in terms of school principals’ (n=756) perceptions on Collaborative School Culture (CSC) in six types of schools. The analyses conducted in this study revealed that all of the (6) collaborative school factors (Gruenert, 1998) exist in schools. In general, the collaborative school culture factors were mostly realized at the highest rate in the
"professional development" (4.2) and "collegial support" (4.19) factors.

According to the results, Anatolian high school principals’ perceptions of mean scores were found the highest when compared with the other types of schools. On the other hand, trade high schools’ mean scores ranked the lowest. In addition, "other" types of high schools in the research, "Imam Hatip" and "Imam Hatip Anatolian" high schools, yielded the second highest score after Anatolian high schools. These schools have the main responsibility of training the staff for religious institutions as prayer leaders (in Turkish: imam), preachers and teachers of the Qur’an (in Turkish: hatip). On the topic of collaborative school culture (CSC), "Imam Hatip" and "Imam Hatip Anatolian" high schools are important characteristics of Turkish secondary schools that mostly reveal the transmission of "cultural values" and "religious knowledge" from one generation to the other. In other words, collaborative school culture (CSC) (Gruenert, 1998) is correlated with the higher qualifications of "Anatolian", "Imam Hatip" and "Imam Hatip Anatolian" high schools’ principals, teachers and students.

Conversely, in trade high schools, the service conditions for teachers are determined as insufficient therefore, their impacts on teacher commitment; or school performance will normally be lower than the other types of schools in Turkey. To put it another way, the low standards of physical conditions in trade high schools neither foster the professional development skills of teachers nor the collaborative leadership attitudes of principals in vocational schools.

According to the World Bank Report (2001), it was stated that the "teacher training system in trade-high schools is mostly theoretical rather than practical and not updated to take account of recent pedagogical advances in secondary education besides the voc/tech teacher-training seldom have relevant industrial experience in Turkey" (World Bank Report No: 22858, 2001, p.3). Therefore, the training of teachers in vocational schools is seen as the main drawback of trade high schools in terms of establishing collaborative school culture. However, in recent years studies and projects of strengthening vocational schools have been in progress. For example, MODEV ("Modernization of the Vocational and Technical Education Institutions") aims at modernizing the educational standards within the structure of the Ministry of National Education in Turkey.

Another reason of the lowest ranks of vocational schools might have been the secondary school education entrance system in Turkey, 2007. The enrollment in well-resourced, high-quality schooling of secondary schools was determined by the "Secondary School Student Selection and Placement Examination" (Turkish Acronym: OKS) administered in 2007 at the end of eighth grade in Turkey. The evaluation of this exam was undertaken in a highly centralized way. Thus, families in Turkey with economic means enrolled their children in private teaching institutions to obtain one of the scarce places in more prestigious Anatolian high schools. Those who failed to achieve high marks from the exam generally attended general public secondary schools or vocational schools, such as trade schools (Sahin, 2004; Kuitunen, 2004) [as cited in; World Bank Report No: 32450-TU, 2005, p.21]. Secondary School Student Selection and Placement Examination measured the success of students by the general number of all students who gained access to the secondary school or university entrance exam rather than evaluating the specific skills of all students. Therefore, it was assumed that the ongoing placement examination system prevent providing knowledge and skill competencies to students who were driven by several selection exams [as cited in;
Furthermore, collaborative school culture (CSC) in Anatolian high schools might be associated with the high levels of teacher morale, school performance and parental participation. In other words, most of the parents of Anatolian high school students’ are more likely to be involved in scholar activities, such as participating in school events, planning, helping teachers with classroom or extra-curricular activities and providing extra support to their children in Turkey (Sahin, 2004; Kuitunen, 2004 [as cited in: World Bank Report No: 32450-TU, 2005, p. 23]). Thus, school principals can establish collaborative relationships with teachers; teachers exchange their experiences, challenges and solutions and ensure that all the students are actively engaged in classroom activities. To support this idea the researches claim that teachers’ engaging constructive dialogues have numerous constructive effects for school improvement (DuFour, 1998; Fullan and Hargreaves 1991). To sum up, in terms of analyzing the relationship between the "types" of schools and "collaborative school culture factors" (Gruenert, 1998) significant difference was identified.

When the results are reviewed in terms of the second variable the "school size", it was determined that there was no statistically significant difference between the "size" of the schools and the realization rates of "collaborative school culture". However, teachers’ attitudes about "collective responsibility" and "collaborative leadership" are found more positive in smaller-sized schools than in larger ones. An explanation for this may be that in large schools teachers (2001-3000) are generally more likely to have less autonomy and less participation in organizational decisions than their colleagues in smaller-sized schools. To support this idea it can be said that informal relations are more evident in relatively small organizations, staff members are more thrown onto each other’s company, whereas large organizations have a more elaborate structure, as well as more rules and procedures so as to coordinate the activities of individual staff members (Schein 1985).

Furthermore, many of the results from earlier studies indicated that when the school size is smaller, student achievement increases particularly for minority which means student attendance improves, graduation rates rise, and college going rates increase. Additionally, it was stated that “students are more engaged in their studies, more likely to participate in extracurricular activities and well-educated in collaborative school cultures”[as cited in http://www.smallschoolsproject.org].

In conclusion, as noted earlier the principal's role would be a significant factor in any kind of collaborative effort at schools. Thus, the prominent role of the principal is to stimulate colleagues’ professional learning communities and create working teams to improve the quality of the school.

References
The Measurement of Collaborative School Culture (CSC) on Turkish Schools


Authors

Dr. Ali Ilker Gümüşeli, Lecturer, Yildiz Technical University, İstanbul, Turkey [gumuseli@yildiz.edu.tr]

Arzu Eryılmaz, English Language Instructor, Yıldırım Beyazıt University, Ankara, [eryarzu@gmail.com]

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## Appendix

### Table 3

**Collaborative School Culture Factors variance Analysis with regard to the Size of Schools**

<table>
<thead>
<tr>
<th>Collaborative School Culture Factors</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td><strong>Unity of Purpose</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>4.784</td>
<td>6</td>
<td>.797</td>
<td>1.945</td>
<td>.071</td>
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<tr>
<td>Within Groups</td>
<td>307.105</td>
<td>749</td>
<td>.410</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td>311.890</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Between Groups</td>
<td>3.329</td>
<td>6</td>
<td>.555</td>
<td>1.872</td>
<td>.083</td>
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<td><strong>Collaborative Leadership</strong></td>
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</tr>
<tr>
<td>Within Groups</td>
<td>222.335</td>
<td>750</td>
<td>.296</td>
<td></td>
<td></td>
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<tr>
<td>Total</td>
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<tr>
<td>Between Groups</td>
<td>1.638</td>
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<td>.833</td>
<td>.545</td>
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<td><strong>Professional Development</strong></td>
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<tr>
<td>Within Groups</td>
<td>245.894</td>
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<td>Total</td>
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<td></td>
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<tr>
<td>Between Groups</td>
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<td>6</td>
<td>.717</td>
<td>1.803</td>
<td>.096</td>
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<td><strong>Collegial Support</strong></td>
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<td>Within Groups</td>
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<td>750</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>302.410</td>
<td>756</td>
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<td></td>
<td></td>
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<tr>
<td>Between Groups</td>
<td>3.651</td>
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<td>.609</td>
<td>1.509</td>
<td>.172</td>
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<td><strong>Teacher Collaboration</strong></td>
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<td>.819</td>
<td>1.599</td>
<td>.144</td>
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<tr>
<td><strong>Learning Partnership</strong></td>
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<tr>
<td>Within Groups</td>
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<td>750</td>
<td>.512</td>
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<tr>
<td>Total</td>
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</table>