

Full Length Research Paper

Views of prospective teachers about the seven principles of effective teaching and learning, using social studies as a case

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This study focuses on the extent the seven principles are utilized on social studies. The research model utilized in this study is a descriptive method. The sample of the study consists of 85 social studies prospective teachers. A scale or measure consisting of 49 questions was used as data collection tool. It has 7 principles with 7 items. The total internal reliability coefficient of scale was calculated as 0.68. In this study, social sciences teachers' and teachers' prospective viewpoints and practices are related to the seven principles developed by Chickering and Gamson (1987) for better education. According to this study's results, it said that females have more positive views than males.

Key words: Prompt feedback, communicating high expectations, seven principles.

INTRODUCTION

Today's education paradigm views teaching as a process which involves helping learners to create knowledge through interactive and authentic learning experiences (Aydoğdu et al., 2012). Students and learners create knowledge from experiences rather than just from received instruction (Bergsteiner et al., 2010). Basic characteristics of constructivist learning environments include active learning, authentic instructional tasks, cooperation between students, and diverse and multiple learning formats (Partlow and Gibbs, 2003). The learning goal is the highest order of learning: heuristic problem solving, metacognitive knowledge, creativity and originality (Lombardi, 2011; Meyer, 2009). In this context, there is a need for a holistic learning environment where responsibility is not merely on teachers. Therefore, the pedagogical literature suggests seven principles of instructional design that are good teaching methods (Chickering and Gamson, 1987). These seven practices

have been tested extensively for over twenty years for traditional face-to-face in-class instruction (Braxton et al., 1998; Kuh and Vesper, 1997).

Schools must encourage active learning, teacher-student school contact, cooperation among students, give prompt feedback, emphasize time-on-task, communicate high expectations, and respect diverse talents and ways of learning (Gamson, 1991; Bangert, 2004). With these principles providing a good learning environment, it is intended to establish the standards of education and improve the quality of a particular face-to-face teaching (Chickering and Gamson, 1999). The seven principles were developed as a solution for problems such as declining students' performance and interest and inadequate teaching strategies (Martyn, 2004; Batts, 2008; Taylor, 2002; Chickering and Gamson, 1991; Chickering and Ehrmann, 1996; Arbaugh and Hornik, 2006).

Student-faculty contact in and out of classes is the

most important factor in students' motivation and involvement (Bishoff, 2010; Tirrell and Quick, 2012; Cosgriff 2012; Howard, 2012). Student-faculty contact has been shown to have positive effects on students' retention and success in a variety of ways. The interaction outside of the classroom has been noted to be of particular importance (Alderman, 2008). On the other side, positive student-teacher relationships serve as a resource for students at risk of school failure, whereas conflict or disconnection between students and adults may compound that risk (Stipek, 2006; Treslan, 2006; Crosnoe et al., 2004; Cordell, 2011). Student-faculty contact positively affects the students' educational aspirations, attitudes toward school, academic achievement, intellectual and personal development. Student-faculty helps to reduce school drop-out rates and to continue education of students with low tendency to complete their education especially in the first years, helps less educated members of the family and failures in the social and academic sides (Kuh, 1995). When faculty and students collaborate within and outside of the classroom, students' learning and engagement increase (Astin, 1993; Tinto, 1997; Umbach and Wawrzynski, 2005). Students' out of classroom contacts with faculty staff have also been associated with benefits of academic and cognitive development (Terenzini et al., 1994).

Cooperation among students increases students' achievement, creates more positive relationships among students and generally improves students' psychological well-being. Learning is enhanced when it is more like a team effort than a solo race. Good learning, like good work, is collaborative and social; not competitive and isolated. Working with others often increases involvement in learning. Sharing one's ideas and responding to others improve thinking and deepen understanding (Ebrahim, 2012; Hsiung, 2012). When students work together, it improves their behavior to help friends. Students' higher-level cooperation provides benefit to all students (Zentall et al., 2011; Scheuerell, 2010).

Active learning is not a passive activity. Students do not learn much just sitting in classes and listening to teachers, memorizing prepackaged assignments and spitting out answers. They must talk about what they are learning, write reflectively about it, relate it to past experiences and apply it to their daily lives. Active learning requires multitude of teaching practices, such as lively debates between instructor and students, peer-to-peer discussions, reflective writing and team work, all of them make students to discover, process and apply knowledge through engagement (Kassens-Noor, 2012; McKinney and Heyl, 2008). While students actively participate in multiple learning contexts, their learning evolves within formal and informal settings (Greenhow et al., 2009). Informal learning is a course-related activity outside the classroom that centers on students' self-directed and independent learning activities including peer-to-peer interactions (Kassens-Noor, 2012; Aspden and Thorpe,

2009; Jamieson, 2009).

Active learning encourages the use of mental abilities, to think, to comment on the information learned. Learners are active in learning process, direct self-learning and use high-thinking and decision-making skills (Deed and Edwards, 2011). Active learning leads to live concrete experience of the students, gives feedback and integrates experiences (Lewis and Harrison, 2012; Schwarzmuller, 2011).

Prompt feedback is seen as an important element in improving learning (Voerman et al., 2012). To become an efficient conversion of courses for students, students must take the appropriate feedbacks about what they have learned, what they lack and how they evaluate themselves (Duijnhouwer et al., 2012).

Prompt feedback as one of the motivational strategies can be regarded as the information available to the students which makes them compare their actual performance with some standard performance of a skill at an appointed time without delay (Oche, 2012). On the other hand, it is the process of informing students, parents and administrators regarding students' progress within the shortest possible period. For learners to change their responses they must be furnished with some kind of awareness of their consequences. This process is called "feedback" (Oche, 2012). Prompt feedback could facilitate the existence of interaction between teachers and students as well as the flow and exchange of information between them (Beard, 2008). A multitude of research exists that demonstrates that consistent and informative feedback is beneficial to learners (Swan, 2003; Janicki and Liegle, 2001). As also noted by Black and William (1998), effective feedback produces significant gains in both learning and achievement.

Time-on-task has typically been applied as a measure of the time students engage in academic activities. There are several reasons to believe that time-on-task could be an important indicator of academic growth and development (Taraban, 2012). Chickering and Gamsom (1987) list time-on task as one of the seven principles of effective teaching and learning. In research involving learning, it has been shown that increasing the number of practice trials results in greater learning. Allocating more time for students to study does not mean learning more. Time management relates not only to students' time management and study skills but also with the time management of the school (Chickering and Ehrmann, 1996). The school can contribute to students using time efficiently and create an effective learning environment with time planning and best use of other elements of the seven principles (Ritter and Lemke, 2000). Good time planning facilitates students' time management, provides prime for a task and motivates students' tasks that increase responsibility and promote learning (McCabe and Meuter, 2011).

Communicating high expectations are gaining more attention as the assessment movement progresses. The

successful schools share absolute characteristics: clear expectations and regulations, an emphasis on academics, high levels of students' participation and alternative resources such as vocational work opportunities, library facilities, music, art, and extracurricular activities. Schools also communicate expectations in the way they structure and organize learning (McVay et al., 2008; Weinstein et al., 1991). Researchers have studied the ways in which teachers' beliefs about students affect their behavior toward students. Some kinds of differential behavior toward students who vary in their mastery of the curriculum are appropriate and productive (Stipek, 2006). Giving some students more advanced material than others is clearly necessary when there is variability in students' skill level, and students need different amounts and kinds of teacher assistance and attention (Conceicao, 2007). Nevertheless, most of the teachers' behaviors described, which have been shown to be associated with high versus low expectations, cannot be defended as appropriate accommodations to individual students' needs (Stipek, 2006). Schools that encourage critical thinking and inquiry and the development of a critical consciousness are not only able to engage youths but are especially effective generally. Another view of curriculum that leads to high expectations and flexibility is the need for schools to inoculate multicultural content throughout the curriculum. This honors students' home cultures, gives them the opportunity to study their own and other cultures, and to develop cultural sensitivity (Wilson, 2004; Kohl, 1994; Mehan et al., 1994). The first condition for the creation of high expectations of students is to create a classroom environment where success is appreciated, errors are accepted, feedback is provided, cooperation is encouraged and where there is respect and tolerance for diversity and differing interests (Tavani and Losh, 2003; Scott and Tobe, 1995).

Learning styles refer to the way students concentrate on, process, internalize, and recall new and difficult information" (Rochford, 2003). People bring different talents and styles of learning to primary and high schools and college. Students in the classroom may be all thumbs in the lab or art studio (Chickering and Gamsom, 1987). Students rich in hands-on experience may not do so well with theory. Students need the opportunity to show their talents and learn in ways that work for them (Chickering and Ehrmann, 1996; McCabe and Meuter, 2011; Can, 2011). Then they can be pushed to learn in new ways that do not come so easily. Different individuals are comfortable with different learning styles. According to Richardson (2010), the approach and style of learning of students differ with their views and learning concepts. Teachers should respect students' different learning styles, levels of intelligence, values, goals and readiness levels (Şirin and Guzel, 2005). Success of students with different characteristics is not possible in a single teaching method.

In this research, the views and practices of the first, second, third and fourth social studies class pre-service

teachers about the Seven Principles for Good Practice in Undergraduate Education are focused on.

METHOD

Research design

Descriptive studies usually are used to determine current situation, and in these studies natural and social facts are not controlled and researchers do not interfere with these facts. These studies are preferred by many researchers in instruction process in order to perform without changing natural condition (Çepni, 2009; McMillan and Schumacher, 2010). In this research, descriptive- survey method was used in to determine the views and practices of the first, second, third and fourth social studies class prospective teachers about the Seven Principles For Good Practice in Undergraduate Education. These principles and its items are given in the Appendix section.

The sample of the study consists of 85 student teachers studying in the first, second, third and fourth classes at the Department of Social Studies Teacher Education.

The data gathering instrument was a scale and it was used to determine the seven principles created by Chickering and Gamson. This scale was created by Bishoff (2010) and developed by Aydoğdu et al. (2012). It contains 7 items for each one of the seven principles, totally 49 items. Reliability of scale was determined as 0.68. For analyzing the data obtained from the first, second, third and fourth social studies classes pre-service teachers about the Seven Principles For Good Practice in Undergraduate Education, descriptive statistics, one way ANOVA and independent t- Test were used.

FINDINGS

This part of the research is on the findings of the first, second, third and fourth social studies classes prospective teachers about the seven principles for Good Practice in Undergraduate Education.

According to the results of ANOVA as shown in Table 1, there is no significant difference in items. In order to determine the significant difference for gender variable, independent t-Test was implemented. According to independent t-Test, there is no statistical significant difference.

According to the results of ANOVA as shown in Table 2, there are significant differences in the second ($F_{(3-81)} = 3.548$; $p < 0.05$) and fifth ($F_{(3-79)} = 4,544$; $p < 0.05$) items. It is applied to LSD in order to determine difference in favor of some groups. With respect to LSD, there are significant differences between the second and third class pre-service teachers in favor of the third class pre-service teachers; and second and fourth class pre-service teachers in favor of the fourth class pre-service teachers in the second item. There are significant differences between the first and third class pre-service teachers in favor of the third class pre-service teachers and the first and fourth class pre-service teachers in favor of fourth class pre-service teachers in the fifth item.

In order to determine significant difference for gender variable, it is implemented independent t-Test. According to independent t-Test, there is a statistical significant

Table 3. Descriptive statistics of findings from obtained “good practice encourages active learning” principle’s items and results of ANOVA and independent t-test.

Items of Principle 3	First Class	Second Class	Third Class	Fourth Class	Results of ANOVA	Results of Independent t-Test
	N=23	N=21	N=20	N=21		
	X(SD)	X(SD)	X(SD)	X(SD)	F (P)	T (P)
M1	3.83 (1.435)	4,10 (1.221)	3.35 (1.387)	3.62 (1.071)	1.236 (.302)	.684 (.496)
M2	4.57 (.720)	4.24 (.990)	4.65 (.740)	4.05 (1.161)	1.953 (.128)	.591 (.556)
M3	3.53 (1.163)	3.24 (1.179)	3.40 (1.046)	3.67 (1.111)	.548 (.651)	.229 (.819)
M4	3.87 (1.014)	3.38 (1.161)	3.40 (1.095)	3.71 (1.146)	1.027 (.385)	.117 (.907)
M5	3.48 (1.377)	3.48 (1.167)	3.75 (1.020)	3.52 (1.078)	.252 (.859)	.498 (.620)
M6	4.48 (.790)	4.57 (.740)	4.45 (.760)	3.95 (1.244)	1.985 (.123)	.011 (.991)
M7	2.09 (1.083)	1.95 (.660)	1.85 (.930)	2.43 (1.121)	1.395 (.250)	1.653 (.102)

X: Maximum 5 scores.

Table 4. Descriptive statistics of findings from obtained “good practice gives prompt feedback” principle’s items and results of ANOVA and independent t-test.

Items of Principle 4	First Class	Second Class	Third Class	Fourth Class	Results of ANOVA	Results of Independent t-Test
	N=23	N=21	N=20	N=21		
	X(SD)	X(SD)	X(SD)	X(SD)	F (P)	T (P)
M1	3.04 (1.364)	2.71 (1.309)	2.95 (.990)	3.52 (1.167)	1.618 (.192)	.277 (.782)
M2	2.65 (.980)	2.48 (1.167)	3.00 (.790)	3.57 (1.076)	4.788 (.004)	1.334 (.186)
M3	3.39 (1.270)	2.43 (1.121)	3.50 (1.318)	3.14 (1.153)	3.287 (.025)	1.882 (.063)
M4	2.50 (1.263)	3.14 (1.389)	2.70 (1.418)	2.81 (1.197)	.900 (.446)	1.134 (.260)
M5	4.10 (1.044)	4.00 (1.304)	3.95 (1.317)	3.52 (1.401)	.828 (.482)	1.896 (.061)
M6	2.70 (1.063)	2.52 (1.123)	3.10 (.960)	3.24 (.830)	2.348 (.079)	.457 (.649)
M7	1.91 (.790)	1.86 (.850)	2.50 (.820)	2.76 (.940)	5.748 (.001)	.030 (.976)

X: Maximum 5 scores

teachers in the third item. In order to determine significant difference for gender variable, it is implemented independent t-Test. According to independent t-Test, there is a statistical significant difference on the second ($t_{(83)} = 2.015$; $p < 0,05$) item. In the second item, female pre-service teachers reported positive views than male pre-service teachers

According to the results of ANOVA in Table 6, there is a significant difference in the seventh ($F_{(3-80)} = 2.972$; $p < 0.05$) item. It is applied to LSD in order to determine difference in favor of some groups. With respect to LSD, there are significant differences between the first and fourth class pre-service teachers in favor of the fourth class pre-service teachers and the second and fourth class pre-service teachers in favor of the fourth class pre-service teachers in the seventh item.

In order to determine significant difference for gender variable, it is implemented independent t-Test. According to independent t-Test, there is no statistical significant difference.

According to the results of ANOVA in Table 7, there are significant differences in the third ($F_{(3-80)} = 3.292$; $p < 0.05$), fourth ($F_{(3-80)} = 3.356$; $p < 0.05$) and seventh ($F_{(3-80)} = 3.548$; $p < 0.05$) items. It is applied to LSD in order to determine difference in favor of some groups. With respect to LSD, there are significant differences between the second and third class pre-service teachers in favor of the third class pre-service teachers and the second and fourth class pre-service teachers in favor of the fourth class pre-service teachers in the third item. There are significant differences among the first and the second class pre-service teachers and the third class pre-service teachers in favor of the third class pre-service teachers in the fourth item. In the sixth item, there are significant differences among the first, second and fourth class pre-service teachers and the third class pre-service teachers in favor of the third class pre-service teachers.

In order to determine significant difference for gender variable, it is implemented independent t-Test. According to independent t-Test, there is no statistical significant

Table 5. Descriptive statistics of findings from obtained “good practice emphasizes time on task” principle’s items and results of ANOVA and independent t-test.

Items of Principle 5	First Class	Second Class	Third Class	Fourth Class	Results of ANOVA	Results of Independent t-Test
	N=23	N=21	N=20	N=21		
	X(SD)	X(SD)	X(SD)	X(SD)	F (P)	T (P)
M1	2.74 (1.389)	3.43 (1.121)	3.35 (.875)	3.43 (.978)	1.995 (.121)	1.310 (.194)
M2	2.74 (1.251)	2.67 (1.238)	3.15 (1.089)	3.43 (.870)	2.152 (.100)	2.015 (.047)
M3	2.43 (1.080)	2.48 (1.250)	3.05 (1.050)	3.24 (.944)	2.975 (.036)	.516 (.608)
M4	3.43 (1.080)	3.52 (1.401)	3.90 (1.021)	3.43 (.926)	.812 (.491)	.164 (.870)
M5	2.74 (1.287)	2.62 (1.161)	3.15 (.933)	3.48 (1.078)	2.568 (.060)	.096 (.924)
M6	3.17 (1.230)	2.81 (1.504)	3.45 (1.050)	3.38 (1.284)	1.051 (.375)	1.504 (.136)
M7	4.09 (.900)	3.33 (1.017)	3.85 (.990)	3.81 (1.030)	2.232 (.091)	.899 (.371)

X: Maximum 5 scores

Table 6. Descriptive statistics of findings from obtained “practice communicates high expectations” principle’s items and results of ANOVA and independent t-test.

Items of Principle 6	First Class	Second Class	Third Class	Fourth Class	Results of ANOVA	Results of Independent t-Test
	N=23	N=21	N=20	N=21		
	X(SD)	X(SD)	X(SD)	X(SD)	F (P)	T (P)
M1	4.04 (.976)	3.67 (1.017)	3.89 (.994)	3.76 (.889)	.626 (.600)	.722 (.473)
M2	3.83 (.887)	3.86 (1.108)	3.89 (.875)	3.57 (1.121)	.440 (.725)	1.681 (.097)
M3	3.22 (.850)	2.86 (1.062)	3.47 (.905)	3.38 (1.161)	1.506 (.219)	.420 (.675)
M4	2.65 (.775)	2.86 (1.236)	3.32 (1.108)	3.29 (1.146)	1.970 (.125)	.703 (.484)
M5	2.87 (.920)	2.67 (1.065)	3.32 (.671)	3.10 (1.261)	1.564 (.205)	.010 (.992)
M6	3.83 (1.114)	4.10 (1.375)	3.58 (1.465)	3.67 (1.426)	.581 (.629)	1.672 (.098)
M7	2.39 (.839)	2.38 (1.203)	2.47 (.513)	3.19 (1.365)	2.972 (.037)	.144 (.886)

X: Maximum 5 scores

difference.

RESULTS AND DISCUSSION

Considering the articles of the first principle, it can be seen that there is no difference in both classroom and sex variables (Table 1). It is inferred prospective social studies teachers have similar ideas about student-faculty contact. The reason may be that the students do not use the other parts of the school, besides classroom and canteen. Another reason may be that there exists no institutional culture which generally provides school-student interaction. But fourth class students, on the other hand, have expressed more positive opinions on this.

Evaluating the data of the second principle, it is clear that there exists cooperation among students. However, according to the seventh article of the second principle, the cooperation between first and third class is stronger than that between second and fourth classes. Again,

according to the same article, the cooperation among the female students is much stronger than that among the male students. In this instance, it can be said that females are sensible (Ceja and Rivas 2010; Sax et al., 2005; Bishoff, 2010).

Considering the article of the third principle, it can be observed that the results are positive by means of both class and sex variables. But the students have expressed a lower score at the seventh article of the third principle. This means that the students have difficulty in adding fresh knowledge to their store of knowledge. The reason, also, may be that these active methods are not applied efficiently. It can be effective in this situation that teachers can be using these techniques in their courses. Active learning methods contain discussion, peer teaching, research, group projects, community experience, and other activities that promote engagement with materials (Cromack, 2008).

The scores are low at fourth, sixth and seventh articles by means of both class and sex variables in the first four articles of the fourth principle. There are differences at

Table 7. Descriptive statistics of findings from obtained “good practice respects diverse talents and ways of learning” principle’s items and results of ANOVA and independent t-test.

Items of Principle 7	First Class	Second Class	Third Class	Fourth Class	Results of ANOVA	Results of Independent t-Test
	N=23	N=21	N=20	N=21		
	X(SD)	X(SD)	X(SD)	X(SD)	F (P)	T (P)
M1	3.22 (1.204)	2.86 (1.315)	3.47 (1.073)	3.40 (1.095)	1.108 (.351)	.198 (.843)
M2	3.57 (1.343)	4.14 (1.276)	3.47 (1.611)	3.67 (1.197)	.996 (.399)	.872 (.386)
M3	2.96 (1.224)	2.52 (1.030)	3.42 (1.017)	3.48 (1.167)	3.292 (.025)	.686 (.495)
M4	2.70 (1.105)	2.48 (1.209)	3.53 (1.124)	3.10 (1.091)	3.356 (.023)	.342 (.733)
M5	3.57 (1.273)	3.48 (1.327)	4.05 (.848)	3.57 (1.121)	.981 (.406)	1.280 (.204)
M6	3.30 (1.185)	3.38 (1.284)	4.39 (1.037)	3.57 (1.076)	3.548 (.018)	.831 (.409)
M7	4.17 (1.072)	3.71 (1.102)	4.00 (1.054)	3.24 (1.338)	2.718 (.050)	1.217 (.227)

X: Maximum 5 scores

the second, third and seventh articles by means of classroom variable (Table 4). At the second article, third and fourth class students think that academic staffs do not read the papers (homework) they are given. The academic staff of these classes may not take sufficient feedback on the issue. As third and fourth class students express positive opinions, first and second class students express negative opinions at article 7. This may be explained as third and fourth classes accomplish the tasks they are given. In order for learning to be effective, students need feedback about how and what they are doing. Feedback allows students to understand where they are in regard to learning and understanding the course content (Collard, 2009). Lack of feedback affects students’ motivation and achievement (Van et al., 2012).

All classes have explained positive opinions for all articles in principle 5. However, it can be observed that female students have much more planned studies than male students at the second article. The reason may be cultural. Male students have much more opportunity of socializing than female students at the culture of study group. This may cause a more and planned study for the female students. These results are parallel with the studies in literature (Bishoff, 2010; Asfeldt and Hvenegaard, 2013).

All classes have expressed positive opinions for the articles except article seven in the sixth principle. According to independent t-Test principle 6, there is no statistical significant difference between genders. This result is parallel with several researches (McCabe and Meuter, 2011; Dursun and Dede, 2004). But no expected result has been gained at article seven. It is clear that scientific studies gain much more importance as the students move from first class towards fourth class.

Considering the articles of the principle seven, it can be seen that there is no difference by means of class and sex at the first, second, fifth and seventh articles. But, there exists difference by means of class variable at the third, fourth and sixth articles. In these articles, third and

fourth class students have expressed more positive opinions than first and second class students by means of using different styles of learning, ways of study and using the means of communications.

Seven principles implementations affect learning positively at educational process (Junco et al., 2011; Mukawa, 2006). In this study, using of seven principles created by Chickering and Gamson in 1987 by prospective social studies teachers studying in 1st, 2nd, 3rd and 4th classes at the Department of Social Studies Teacher Education was investigated. For this aim, views related to the seven principles from prospective social studies teachers were taken.

According to this study’s results, females have more positive views than males. It can be concluded that seven principle’s implementations must be necessary for good education, teaching and learning.

REFERENCES

- Alderman RV (2008). Faculty and student out-of-classroom interaction: Student perceptions of quality of interaction. Doctoral Dissertation. Texas A&M University.
- Arbaugh J, Hornik SD (2006). Chickering and Gamson’s seven principles also apply to online MBAs? *J. Educ. Online* 3(2):1-18.
- Asfeldt M, Hvenegaard G (2013). Perceived learning, critical elements and lasting impacts on university-based wilderness educational expeditions. *Journal of Adventure Education & Outdoor Learning*, DOI:10.1080/14729679.2013.789350.
- Aspden EJ, Thorpe LP (2009). Where do you learn?: Tweeting to inform learning space development. *Educ. Q.* 32(1).
- Astin AW (1993). What matters in college: Four critical years revisited. San Francisco, CA: Jossey-Bass.
- Aydođdu S, Doymuş K, Şimşek U (2012). Instructors’ practice level of Chickering and Gamson learning principles. *Mevlana Int. J. Educ.* 2(2).
- Bangert AW (2004). The seven principles of good practice: a framework for evaluating on-line teaching. *Internet Higher Educ.* 3(7):217-232.
- Batts D (2008). Comparison of Student and Instructor Perceptions of Best Practices in Online Technology Courses. *Merlot J. Online Learn. Teach.* 4(4):477-489.
- Beard KLS (2008). An exploratory study of academic optimism and flow of elementary school teachers. Doctoral Dissertation. The Ohio State

- University.
- Bergsteiner H, Avery G, Neumann R (2010). Kolb's experiential learning model: Critique from a modeling perspective. *Stud Cont. Educ.* 32:29-46.
- Bishoff JP (2010). Utilization of the Seven Principles for Good Practice in Undergraduate Education in General Chemistry by Community College Instructors Dissertation submitted to the College of Human Resources and Education at West Virginia University in partial fulfillment of the requirements for the degree of Doctor of Education.
- Black P, William D (1998). *Assessment in Education: Principles, Policy Pract.* 5(1).
- Braxton JM, Olsen D, Simmons A (1998). Affinity disciplines and the use of principles of good practice for undergraduate education. *Res. Higher Educ.* 39(3):299-318.
- Can S (2011). Sınıf öğretmeni adaylarının öğrenme stilleri ile bazı değişkenler arasındaki ilişkinin araştırılması. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi* 41:70-82.
- Ceja M, Rivas M (2010). Faculty-student interactions and Chicana PhD aspirations. *J. Professoriate* 3(2):75-100.
- Çepni S (2009). Araştırma ve proje çalışmalarına giriş (4. Baskı). Trabzon.
- Chickering AW, Gamson Z (1999). Development and adaptations of the seven principles for good practice in undergraduate education. *New Directions for Teaching and Learning* 80:75-81.
- Chickering AW, Gamson ZF (1987). Seven principles for good practice in undergraduate education. *AAHE Bull.* 39(7):3-7.
- Chickering AW, Gamson Z (1991). Applying the seven principles for good practice in undergraduate education. San Francisco: Jossey-Bass.
- Chickering AW, Ehrmann SC (1996). Implementing the seven principles: technology as lever. *AAHE Bull.* 49(2):3-6.
- Collard TY (2009). An investigation of the use and implementation of the seven principles for good practice in undergraduate education by university faculty members. Doctoral Dissertation, Union University.
- Conceicao SCO (2007). Understanding the environment for online teaching. *New Directions for Adult and Continuing Education* 113:5-11.
- Cordell RC (2011). A qualitative study of relationship building between alternative high school students and their teachers' candidate for doctor of education degree, University of Missouri-Kansas City.
- Cosgriff JC (2012). A peer-delivered social interaction intervention for high school students with autism. Doctoral Dissertation, Vanderbilt University.
- Cromack J (2008). Technology and learning-centered education: Research-based support for how the tablet PC embodies the seven principles of good practice in undergraduate education. 38th ASEE/IEEE Frontiers in Education Conference, 22 – 25 October, Saratoga Springs, NY.
- Crosnoe R, Johnson MK, Elder JGH (2004). Intergenerational bonding in school: The behavioral and contextual correlates of student-teacher relationships. *Sociol. Educ.* 77:60-81.
- Deed C, Edward A (2011). "Unrestricted student blogging: implications for acting learning in a virtual text-based." *Active Learn. Higher Educ.* 12:11.
- Duijnhouwer H, Prins FJ, Stokking KM (2012). Feedback Providing Improvement Strategies And Reflection on Feedback Use: Effects on Students' Writing Motivation, Process, And Performance. *Learn. Instr.* 22:171-184.
- Dursun Ş, Dede Y (2004). Öğrencilerin matematikte başarısını etkileyen faktörler: Matematik öğretmenlerinin görüşleri bakımından. *Gazi Eğitim Fakültesi Dergisi* 2(24):217-230.
- Ebrahim A (2012). The effect of cooperative learning strategies on elementary students' science achievement and social skills in Kuwait. *Int. J. Sci. Math. Educ.* 10:293-314.
- Gamson ZF (1991). A brief history of the Seven Principles for Good Practice in Undergraduate Education. In: Chickering AW & Gamson ZF (Eds.), *Applying the Seven Principles for Good Practice in Undergraduate Education* pp.5-12.
- Greenhow C, Robelia B, Hughes J (2009). Web 2.0 and classroom research: What path should we take now? *Educ. Res.* 38(4):246-259.
- Howard C (2012). Emotionally supportive teacher-student interactions in elementary school as protective factors for young children at-risk for behavior problems. Doctoral Dissertation, University of Virginia.
- Hsiung C (2012). The effectiveness of cooperative learning. *J. Eng. Educ.* 1(101):119-137.
- Jamieson K (2009). Quenching a Thirst For Learning. *New York Times* (0362-4331) p.7.
- Janicki T, Liegle JO (2001). Development and evaluation of a framework for creating web-based learning modules: a pedagogical and systems approach. *J. Asynchronous Learn. Networks* 5(1).
- Junco R, Heiberger G, Lokent E (2011). The effect of twitter on college student engagement and grades. *J. Comput. Assisted Learn.* 27:119-132.
- Kassens-Noor E (2012). Twitter as a teaching practice to enhance active and informal learning in higher education: The case of sustainable tweets. *Active Learn. High Educ.* 13(1).
- Kohl H (1994). 'I won't learn from you' and other thoughts on creative maladjustment. New York: The New Press.
- Kuh GD, Vesper V (1997). A comparison of student experiences with good practices in undergraduate education between 1990 and 1994. *Rev. Higher Educ.* 21(1):43-61.
- Kuh GD (1995). The other curriculum: Out-of-class experiences associated with student learning and personal development. *J. Higher Educ.*, 66: 123-125.
- Lewis JS, Harrison MA (2012). Online delivery as a course adjunct promotes active learning and student success. *Teach. Psychol.* 39:72-76.
- Lombardi SM (2011). Internet Activities for a Preschool Technology Education Program Guided by Caregivers. Doctoral dissertation. North Carolina State University.
- Martyn M (2004). The effect of online threaded discussion on student perceptions and learning outcomes in both face-to-face and online courses a dissertation Presented to the Graduate Faculty of The University of Akron in partial fulfillment of the requirements for the Degree Doctor of Philosophy.
- McCabe DB, Meuter ML (2011). A student view of technology in the classroom: does it enhance the seven principles of good practice in undergraduate education? *J. Market. Educ.* 33(2):149-159.
- McKinney K, Heyl B (2008). *Sociology through Active Learning.* Thousand Oaks, CA: SAGE/ Pine Forge Press.
- McMillan JH, Schumacher S (2010). *Research in education: Evidence-based inquiry.* Seventh Edition. Boston, MA: Allyn and Bacon.
- McVay GJ, Murphy PR, Yoon SW (2008). Good practices in accounting education: Classroom configuration and technological tools for enhancing the learning environment. *Account. Educ.* 17(1):41-63.
- Mehan H, Hubbard L, Villanueva I (1994). Forming academic identities: Accommodation without assimilation among involuntary minorities. *Anthropol. Educ. Q.* 25(2):91-117.
- Meyer DL (2009). The Poverty of Constructivism. *Educ. Philosophy Theory* 41(3):332-341.
- Mukawa TE (2006). Meta-analysis of the effectiveness of online instruction in higher education using Chickering and Gamson's seven principles for good practice. Doctoral Dissertation, The University of San Francisco. San Francisco.
- Oche ES (2012). Assessing the effect of prompt feedback as a motivational strategy on students' achievement in secondary school mathematics. *Educ. Res.* 3(4):371-379.
- Partlow KM, Gibbs WJ (2003). Indicators of constructivist principles in internetbasedpractice_guides/ps0069_designing_assessment_to_improve_physical_science_learning_march_2009.pdf.
- Richardson J (2010). "Approaches to Studying, Conceptions of Learning and Learning Styles in Higher Education," *Learn. Individ. Dif.* 21(3):288-293.
- Ritter ME, Lemke KA (2000). Addressing the "Seven Principles for Good Practice in Undergraduate Education" with Internet Enhanced Education. *J. Geogr. Higher Educ.* 4(1):100-108.
- Rochford RA (2003). Assessing learning styles to improve the quality of performance of community college students in developmental writing programs: a pilot study. *Community Coll. J. Res. Pract.* 27(8).
- Sax LJ, Bryant AN, Harper CE (2005). The differential effects of student-faculty interaction on college outcomes for women and men. *J. Coll. Student Dev.* 46(6):642-659.
- Scheuerell S (2010). Virtual Warrensburg: Using Cooperative Learning and the Internet in the Social Studies Classroom. *Soc. Stud.* 101:194-

- 199.
- Schwarzmueller A (2011). A multi-modal active learning experience for teaching social categorization. *Teach. Psychol.* 38:158-161.
- Scott RA, Tobe DE (1995). Communicating High Expectations. *Liberal Educ.* 81(2):38-44.
- Şirin A, Güzel A (2005). The Relationship Between Learning Styles And Problem Solving Skills Among College Students, *Educational Sciences: Theory Pract.* 6(1):255-264.
- Stipek D (2006). Relationships matter. *Educ. Leadersh.* 64(1):46-49.
- Swan K (2003). Learning effectiveness: what the research tells us. In: Bourne J & Moore JC (Eds), *Elements of Quality Online Education. Practice and Direction.* Needham, MA: Sloan Center Online Educ. pp.13-45.
- Taraban R (2012). Time-on-Task: A pedagogical measure to assess differences in U.S. and Indian engineering curricula and outcomes, *American Society for Engineering Education, www.asee.org/.../TOT_International Forum.*
- Tavani C, Losh SC (2003). Motivation, Self-Confidence And Expectations As Predictors of The Academic Performances Among Students. *Child Study J.* 33:141-152.
- Taylor J (2002). The use of principles for good practice in undergraduate distance education. Blacksburg, VA: Virginia Polytechnic Institute and State University.
- Terenzini PT, Springer L, Yaeger P, Pascarella E, Nora A (1994). The multiple influences on students' critical thinking skills. Paper presented at the annual meeting of the Association for the Study of Higher Education, Orlando, FL.
- Tinto V (1997). Classrooms as communities: Exploring the educational character of student persistence. *J. Higher Educ.* 68:599-623.
- Tirrell T, Quick D (2012). Chickering's seven principles of good practice: student attrition in community college online courses, community college. *J. Res. Pract.* 36(8):580-590.
- Treslan DL (2006). Transformational leadership in the classroom: Any evidence? *Education Canada* 46(2).
- Umbach PD, Wawrzynski MR (2005). Faculties do matter: The role of college faculty in student learning and engagement. *Res. Higher Educ.* 46(2):153-184.
- Van KFM, Eggen TJHM, Timmers CF, Veldkamp BP (2012). Effects of feedback in a computer-based assessment for learning. *Comput. Educ.* 58:263-272.
- Voerman L, Meijer PC, Korthagen FAJ, Simons PRJ (2012). Types and frequencies of feedback interventions in classroom interaction in secondary education. *Teach. Teacher Educ.* 28:1107-1115.
- Weinstein R, Soule C, Collins F, Cone J, Mehlorn M, Stimmonacchi K (1991). Expectations and high school change: Teacher-researcher collaboration to prevent school failure. *Am. J. Community Psychol.* 19:333-363.
- Wilson ME (2004). *Teaching, learning and millennial students, New Directions for Student, Yorke M and Longden B (2008) The First Year Experience of Higher Education in the UK.* York: Higher Education Academy.
- Zentall S, Kuester DA, Craig BA (2011). Social behavior in cooperative groups: Students at-risk for ADHD and their peers. *J. Educ. Res.* 104:28-41.

Appendix. The seven principles and its items for good practice in education.

Principle 1: Good practice encourages student-faculty contact	
1. I contact with the faculty in case of any problem.	M1
2. I use comfortably the faculty library, internet and laboratories.	M2
3. I participate in meetings, activities at the faculty	M3
4. I set up good communication with the academic staff of the faculty	M4
5. While my work, I get help from my supervisor, course instructors or other instructors.	M5
6. I contact with students studying in different parts of the university or faculty.	M6
7. Instructors attend our courses disregard students.	M7
Principle 2: Good practice encourages cooperation among students	
1. I share my information with my friends.	M1
2. I work with my friends when I do my homework or scientific studies.	M2
3. If I work on a project, I want to work together with my friends.	M3
4. I congratulate my successful friends.	M4
5. I participate together with my friends in social meetings, activities.	M5
6. I discuss with my friends on a scientific problem or a social issue.	M6
7. I want my friends to be successful in cases that I will be successful.	M7
Principle 3: Good practice encourages active learning	
1. I prefer to courses told by the instructor.	M1
2. I want to be made courses with different methods and techniques.	M2
3. I perform a topic that I have learned in daily life.	M3
4. I want to make study and research alone.	M4
5. I want to make study and research with my friends.	M5
6. I want to be made courses using a variety of technological tools.	M6
7. I have difficulty in adding new information on prior information about the issues raised.	M7
Principle 4: Good practice gives prompt feedback	
1. I enjoy doing homework and reading textbook.	M1
2. I reiterate topics that I learned from the course, I get help understanding the topic at the points where the shortcomings from instructor or my friends.	M2
3. I do not think that instructors read students homework because of they do not give feedback us on homework.	M3
4. It is asked our opinions about how the course should be taught.	M4
5. I want to see my exam papers.	M5
6. I make a positive recommendation about the lesson to my friends who do not like the course or absent.	M6
7. Before going to class, I read and try to understand that today's topic.	M7
Principle 5: Good practice emphasizes time on task	
1. I do homework on time.	M1
2. While preparing for course, I do plan.	M2
3. I study my courses with plan and program.	M3
4. I determine myself a goal on my courses and try to reach that goal.	M4
5. I use any material related to the course.	M5
6. Then I recover courses that I cannot enter or cannot do homework.	M6
7. I understand the course during the course.	M7
Principle 6: Good practice communicates high expectations	
1. I do my best to get a higher level in my work.	M1
2. Every semester, I try to be more successful.	M2
3. I prepare vigorously my all courses.	M3
4. To be more successful, I do the exchange of ideas with instructors or my friends.	M4
5. I read regularly textbooks and other reference books.	M5
6. I study mostly writing my courses.	M6
7. I follow scientific studies about all subjects that I have learned course.	M7

Principle 7: Good practice respects diverse talents and ways of learning

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|---|----|
| 1. I say easily a topic that I do not understand to officer course | M1 |
| 2. I do not mock with my friends in the classroom, faculty or outside the faculty. | M2 |
| 3. I study my courses in different ways (styles). | M3 |
| 4. I come together with my friends about courses and study. | M4 |
| 5. If I have not the appropriate course work environment, I change my environment. | M5 |
| 6. When I study my courses, I benefit from technologies internet, etc. | M6 |
| 7. I can work together with my friends come from different cultural and social environment. | M7 |
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