Reflections on Group Work: Voices from Preservice Teachers *

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Abstract

This study focuses on group work in teacher education and aims to determine preservice teachers' views about group work. The participants were 485 preservice teachers in the faculty of education in a university in Ankara, Turkey. Data in this descriptive study was gathered through a questionnaire, including open ended questions. The results revealed that preservice teachers have positive viewpoints about group work in instructional environment. The participants also reported that group work can be beneficial for developing social and cognitive skills of students. Finally, the effectiveness of group work requires effective design in addition to the necessary knowledge and skills. In a sense, it might be crucial to conduct further research, investigating group work in the context of teacher education.

Introduction

The use of different approaches in the instructional process has been studied by many researchers. Teachers in different stages of education utilize different instructional methods, classroom arrangements and materials. The aim is to offer effective instruction by making use of various methods and techniques in the instructional process. Within this process, classes may at times be held for individual learning and at other times for group learning (Abu and Flowers, 1997). Group work has become an important dimension that is emphasized in many theories and approaches such as constructivism, student centred instruction, experiential and cooperative learning (Melles, 2004). In fact, group work which is considered crucial nowadays is a fact of life in the corporate workforce and group work learning as noted in a study conducted by Fernández-Breis, Castellanos-Nievesand Valencia-Garcia (2009).

Group work has been utilized in classrooms with various reasons and in different ways (Postholm, 2008). It is inevitable for many college students not to use small group work in their coursework (Myers et al., 2009). For example, group assignments provide the opportunity for cooperative learning (Schmer & Ward-Smith, 2011). In group work students work as teams in small groups (Reece & Walker, 1997). Cohen, Manion and Morrison (1996, p.156) indicate that group work is a pedagogical strategy and not simply a seating arrangement. There is more to group work than sitting students in groups as Blatchford, Kutnick, Baines and Galton (2003) stated. Group work which provides chances of negotiating meaning and manipulating ideas with others and reflecting upon

learning has been accepted as an effective learning strategy (Fraser & Deane, 1997; cited in Burdett, 2003).

Group work can be defined as a study format or way of learning in which two or more students work together to meet a common goal. On the other hand, different terminology is used in studies concerning group work (Li and Campbell, 2008). Keyes and Burns (2008) state in their study that: *"…The terms 'cooperative', 'collaborative', 'peer' and 'group' learning are used, but there is little agreement on what each term means, and some authors' definitions of these terms are inconsistent…"*. According to them, the distinctions used by different authors are not helpful and therefore, they prefer the terms 'cooperative' and 'group learning' or 'group work' interchangeably which refer to learning situations in which students work together. In this context, teachers are not directly involved but they are designers of this process.

It is worth noting that group work has been studied with teachers and students in almost all stages of education from elementary to higher education. As Chiriac and Granström (2012) stated, it is used as a means of learning at all levels of most educational systems. The finding of some studies emphasize that group work is also an effective approach in higher education. Pauli et al., (2008), for example, note that small group work which is commonly used in higher education is an effective teaching and learning method. Barfield (2003) stated that group work is accepted to a great extent by researchers in higher education and that the approach is an effective tool for teaching and learning. It is beneficial for both students and academic staff to utilize a team teaching approach according to many studies on teaching and learning, particularly, at tertiary education level (Hanusch, Obijiofor and Volcic, 2009). According to Hammar Chiriac (2008), group work is regarded as a means for learning and for professional development in addition to other forms of work in higher education. Keyes and Burns (2008) point to the positive outcomes of group work in their study. All of these studies reveal that group work yields positive results in higher education which suggests that it can be used effectively in higher education (Gottschall and García-Bayotms, 2008). However, another important issue is how group work can be implemented effectively. Indeed, some negative elements may also exist in the group work process.

In the light of the discussion so far, group work can also be considered as one of the most important and considerable teaching approaches in teacher education. It should be noted that when related literature in Turkey has been reviewed, there has been limited studies (e.g.Erdamar & Demirel, 2010) which take students' perceptions particularly in teacher education. For these main reasons, this present study purposes to explore preservice teachers' (PSTs) views about group work in teacher education context. In detail, it is sought whether they have experience about group work or not and their positive and negative viewpoints about their experiences, in addition to the problems they encountered during this process.

Method

In order to explore Turkish PSTs' views about group work and their experiences on group work, a descriptive research design was used in this present study. Data are based on the questionnaire which is applied to PSTs. The questionnaire consists of both closed and open ended questions.

Participants

Participants were second, third, fourth and fifth year students (N=485) who were attending Gazi University, Faculty of Education in Ankara, Turkey. First year students were not included on the assumption that they did not have adequate experience to comment about the issue. Females constituted 69% of the participants and males 31%. Regarding the participants' year of study, 42 were second year students, 45 were third year students; 265 were fourth year students; and 133 were fifth year students. When analyzed with respect to branch of study, 341 were students of social fields, 104 of science and math fields, and 40 of foreign language education.

Research Instrument

Data were collected with a questionnaire consisting of closed and open ended questions. First, based on the literature, the questionnaire was prepared by asking 34 students to write down their opinions about their experience of group work in the instructional process. An explanation was made by the researcher to the students about the meaning of group work. It was defined as work that requires students to sit together in groups to plan, prepare and present a given task. The documents that students provided were analyzed one by one, and a questionnaire form was developed by considering the dimensions mentioned. The opinions of four experts in the field of education were obtained for the validity of the questionnaire. Feedback about its content and the structure of the questions was taken into account. After the necessary revisions and additions, the questionnaire was given to 485 students. The questionnaire had four sections. The first one included questions regarding personal information about participants such as gender, year of study, and area of study. The questions in the second section concerned group work strategies and aimed to identify preservice students' ideas about different dimensions of group work. There are several types of questions in this part of the instrument. One of the parts included fourteen items with five-point Likert scale including responses from 'very important' to 'not important'. For each item in the scale, the means were also calculated in addition frequencies and percentages.

Two open ended questions were also included in this section so that students could write their views about group work. In the third section, students were given fourteen items thought to be important in the process of group work and they were asked to mark one of the five alternatives. The literature and students' views during the pilot study were used while the items were being prepared. The alternatives given to students were 'very important', 'quite important', 'undecided', 'somewhat important' and 'not important at all'. The fourth and last section included two questions to determine students' views about whether they would use group work in the future.

Data Analysis

Data from closed ended questions were analyzed statistically and the numerical data were tabulated. Answers to sub problems were analyzed basically by using percentages, frequencies, and arithmetic means. These analyses were performed on the Statistical Package for Social Sciences (SPSS). Open ended data were analyzed by pen-and-paper content analysis (Miles and Huberman, 1994; Strauss and Corbin, 1990). In this process, the answers given by participants were separately entered into the computer program, followed by the removal of repeated items and listing of only different opinions mentioned. Relevant ones among these were brought together, categorized, and tabulated. Frequency calculations were not used in the analysis. It was also observed that some participants had left the open ended questions blank or supplied very limited answers. The analyses were performed based on the views mentioned by students, in other words, the meaning instead of quantification was considered in the analysis process of qualitative data.

Results

The findings of the initial questions in the questionnaire revealed that most of the students (93%) had experienced in group work in instructional processes. Half of the students (51%) reported that group work is partially used in their classes. Almost half of the participants (47%) stated that two-three students would make an ideal group, while the other half (53%) said that 4-6 people would do so. In the literature, the ideal group size is between four and six. However, in the present study while half of the participants in this study said 4-6 students would make an ideal group, the other half said they would prefer to work with smaller groups. Burdett's (2003) study also states that university student groups lose their effectiveness when group size reaches six. It is also remarkable that some comments were related to group size in the study conducted by Burdett (2003). These comments (five per cent of student responses) suggest that deciding group size is an important issue and if groups were kept small, effectiveness would increase.

Another important finding was about PSTs' views about the benefits of group work. With an open ended question preservice students were asked to write their opinions about the benefits of group work. Table 1 presents their answers without frequencies, by giving examples from the most repeated to the most striking.

Table 1. PSTs' Views about the Benefits of Group Work

Categories	Examples of PSTs' views
1.Enrichment and development of cognitive skills	• Enables the grasp of more information in a shorter time • Encourages information exchange • Facilitates quick thinking • Allows better understanding of the topic • Teaches analysis, synthesis, implementation skills • Allows permanent learning • Ensures ease of perception • Develops creativity • Enables information acquisition
2.Development of affective gains	• Increases self-confidence in a social environment • Improves self-confidence • Develops empathy • Enables learning with peers in a relaxed environment • Motivates learning and the learning environment
3.Development of social interaction and communication skills	• Develops interaction and communication • Develops discussion skills • Enables exchange of ideas between members • Ensures cooperation and learning together • Gives collaborative study skills
4. Others	• Adds to a variety of assessment options • Teaches effective time management • Teaches being practical

The analyses of the answers that PSTs supplied to the open ended questions showed that they mentioned the benefits of group work from many different perspectives. These benefits were divided into four categories in the table: enrichment and development of cognitive skills, development of affective gains, development of social interaction and communication skills and others. The most popular category is located as the first one. Burdett (2003) also mentions many benefits of group work for effective learning. As related research also emphasize, working in teams is very useful for students (Burbach, Matkin, Gambrell and Harding, 2010). Pan, Pan, Lee and Chang (2010) stated that the advantages of cooperative learning have been advocated in higher education context. As Galton, Hargreaves and Pell (2009) stated, group work generally results in not only academic gains but also social improvement. At the tertiary level, on the other hand, collaborative strategies have been mainly employed to improve creative thinking, communication skills, and mental organization of new information as mentioned by the other researchers (Mason, 2006; Rhys & Fetherston, 2008; Zuheer, 2008; cited in Nihalani, Wilson, Thomas and Robinson, 2010). Similar benefits about group work have also been listed in several previous studies. Shimazoe and Ardrich (2010), for instance, emphasized its benefits for mainly students but also for instructors and listed these benefits as: promoting deep learning, helping higher grades, teaching social skills, teaching higher order thinking skills, promoting personal growth, developing positive attitudes toward autonomous learning. Cohen et al., (1996) indicates the other benefits including helping children to work cooperatively, enabling students to learn from one another, encouraging the involvement of all children, enabling children to respect

others' strengths and weaknesses. In addition, group work has also shown to be useful in the acquisition and mastery of skills, including communication, leadership, decision-making, conflict resolution and time-management skills. Keyes and Burns (2008) also indicate that group work provides some contributions such as fostering positive relationships among people, promoting better psychological health, better awareness of diversity and being more tolerant, better empathizing skills, more social support and higher self-esteem. Similarly, Slavin (1987, p.1161; cited in Cowie and Berdondini, 2001) indicate that cooperative learning methods improve students' self-esteem and their social relationships. Moreover, in the findings of some other studies (Wenger and Hornyak, 1999), students generally had quite positive attitudes toward team teaching. As Pauli et al., (2008) highlights, for students cooperative learning in small groups has educational benefits as well as social ones and allows for the more effective sharing of limited resources. Similarly, based on their study, Livingstone and Lynch (2000) stated that students' response to the group work was found to be positive.

In order to obtain PSTs' opinions, in following open ended question, the three factors negatively affecting their group work process were asked. Content analysis on this question showed that not all PSTs answered this question and those who did emphasize the factors below. It should be mentioned here that the list in Table 2 shows PSTs opinions in general. As this question aimed to identify the factors that students thought had a negative effect on group work, frequencies are not given here either.

Table 2. Factors That Affect Group Work Negatively According to PSTs.

Categories	Examples of PSTs' views
1.Problems regarding task distribution	• One person doing all the work • Problems in task distribution • Mismatch between roles and students • Not everyone working enough • People not recognizing their responsibilities • Preference of some students for individual study
2.Problems regarding disagreements within groups	• Chaos in larger groups • Lack of communication between individuals • Disagreements within the group • Difficulty of working together
3.Problems regarding lack of group work plans and rules	• Having no study plan • Having insufficient knowledge of group work • Having no rules, or not obeying them • Inefficiency of group work in large classes
4.Others	• Negative effects regarding time and energy • Noise in the classroom • Difficulty of teacher control • Space and time problems

PSTs think that certain factors affect group work negatively. The responses of PSTs were gathered under four categories: problems regarding task distribution, problems regarding disagreements within groups, problems regarding lack of group work plans and rules and others. In Table 2, participant views in the first category 'problems regarding task distribution' are noteworthy. If the organizations were not carried out carefully, it was shown that the positive dimensions of group work could be turned to negative dimensions. For example, Pauli et al. (2008) stated that despite the potentially beneficial effects of collaborative learning in higher education, there is not much literature on the negative perceptions of small group work. Pauli et al., categorised group work related issues in two groups: motivational and instructional difficulties. Galton and Hargreaves (2009), for example, found in their study that students frequently sat in groups during their studies but only rarely worked as a group due to various reasons, which can also be observed in group work studies in tertiary level.

In other words, this case might also be valid for higher education students. Melles (2004) realized during interviews with higher education students that they had problems with task distribution, the work process and assessment during group work. All these suggest that many factors might affect group work. As Livingstone and Lynch (2000) stated that the composition of the group work is an important aspect for the effectiveness of group work. An examination of the findings reveals that, regardless of student level, group work essentially requires the leadership and preparation of an educator. This suggests that teacher plays an important role. The teacher who is planning to use group work should train the students on group work and its applications and not leave the students during their work.

All this indicates that the effectiveness of group work will to a great extent depend on the preparations made. From the beginning, the group work process should be planned in detail by the educator regardless of students' year or field of study. Besides, the plan should be reflected in practice in the instructional process. So far, the findings of the present study shows that the use of even such a beneficial approach may lead to complications when not planned well. Thus, having adequate information and practical experience is important in the use of group work, as in any other method or technique.

Teacher training institutions have responsibilities in equipping their students with this knowledge and experience. Doing so through theoretical and practical work will facilitate the use of group work and give teachers positive experiences. Shimazoe and Aldrich (2010) for example, studied the dimensions of college students' views on group work, and emphasized that instructors have an important role in this process. Similarly, Steinert (2004) studied student perceptions of small group work, and particularly examined student views on working in small groups, effective instructor behaviours and their opinions about assessment methods with pedagogical materials. Students working in groups listed the most important qualities of effective small groups as relevance to the topic studied, provocation of thinking, problem solution and development of group interaction, and evaluated small groups as an effective way of learning.

In the present study, another question in this questionnaire examined the PSTs' thoughts about the importance of some of the elements of group work. Responses to each item are given in Table 3 with arithmetic means.

Table 3. Arithmetic Means of PST's Views about the Importance of in Factors Effective Group Work

Elements effective in group work	Mean	SD
1.Qualities of the topic studied	4.44	.73
2.Teacher's knowledge of group work	4.36	.81
3.Class size	4.15	1.00
4.Physical conditions and classroom environment	4.37	.77
5.Qualities to be gained by students	4.49	.70
6.The presence of a shared goal by the group	4.62	.58
7.A different task fulfilled by each member	4.11	.80
8.Use of discussion techniques such as brainstorming in the group	4.44	.67
9.Group members planning their work together	4.56	.61
10.Creation of a common product	4.47	.73
11.Presentation of the common product to the class	4.20	.85
12.Communication and interaction between groups	4.32	.90
13.Sitting in a group but working individually	3.24	1.27
14.Different roles assumed by group members	4.16	.83

Considering the arithmetic means given in the Table 3, the highest student opinion mean belongs to item six (Mean=4.62), while the lowest mean belongs to item 13 (Mean=3.24). These findings show that participants valued all dimensions in the group work process but they emphasized the

presence of a shared goal particularly. Similarly, Navickiené and Pevceviciüté (2009) stated in their study that a group or team's success and effectiveness will depend on several factors including clarity of goals. Borges et al., (2007) also contended that in order to perform a task, it is necessary for two or more people to agree on a common goal, deadlines, and responsibilities in a common context. Steinert (2004) also highlighted that medical students identified that adherence to small group goals as an important aspect of effective groups.

The preservice students were also asked about their views on the effects of group work on their learning. Almost half of them (47%) replied that it was "quite" effective which is also emphasized by Forslun Frykedal and Chiriac (2011). According to them, with the help of interaction, students have opportunities of learning to inquire, share ideas, clarify differences and construct new understandings. The last question in this section was about the views of students regarding the statement that "group work is fun". Almost half of the students (48%) said that they found group work "quite" enjoyable. This finding also shows that the students who think group work is effective also thought it was fun. Generally, the responses that students gave until this point suggest that as learning strategies may differ, group work may not fit with each student's study habits or strategies. In the last section of the questionnaire, students were asked "Would you consider using group work when you become a teacher in the future?"and the majority (89%) replied positively. The last question asked in order to elicit PSTs' views about group work was "Do you believe you possess the knowledge and skills needed to use the group work method?". More than two fifths (44%) of the students answered positively, while more than half (53%) said "partially". As can be seen, it is essential to equip students with more knowledge and practical skills about group work which facilitates the achievement of many and diverse instructional objectives. Thus, teacher education programs have an important responsibility to equip their students, the teachers of the near future, with these knowledge and skills.

Discussion, Conclusion and Suggestions

Different studies about group work have dwelled on the different dimensions of the topic, and reached different results and recommendations. As Hillyard et al. (2010) mentioned that few studies have focused students' attitudes about their group work in their undergraduate courses. Aiming to identify PSTs' views about group work, this study reached the following main results:

- In general, the PSTs displayed a positive perspective towards group work.
- PSTs think that group work is fun and an effective way of learning.
- PSTs believe that one of the most important elements of group work is having a common goal.
- PSTs views showed that there had been some benefits as well as some shortcomings of group work in the courses.

The results of the study suggest that group work is an important teaching and learning method. In every stage of education, teachers can use group work effectively to improve students' cognitive, emotional, psychomotor and in particular, social learning domains. Indeed, the present study indicates that group work can also be useful in higher education if the necessary requirements are met. In line with the results of this study, recommendations were given on two dimensions: (1) recommendations for teacher education programs and (2) recommendations for future research.

In teacher education programs, instructors teach by using various instructional methods, approaches and techniques. Group work is one of these methods and, when used effectively, benefits both students and educators. At this point, educators have certain responsibilities. As Ventimiglia (1994; cited in Attle and Baker, 2007) stated that instructors should guide the formation, composition, dynamics of the group, students' work assessment and the design of group tasks during the cooperative and collaborative learning experiences. Considering that group work is only beneficial when it is planned well, it is obvious that educators need a plan stating their aims and procedures, which requires having detailed knowledge and skills on group work. According to Chiriac and Granström (2012) teachers should help students learn group work and teach them planning and communicating in a group situation. Additionally, teacher education programs may offer both theoretical knowledge and practical activities on group work, thus equipping students better with these. As Navickiené and Pevceviciüté (2009) stated, it is essential for university teachers to ensure that they have helped the students become active participants in their professions.

Based on the findings of this present study, the second group of recommendations concern future studies. All this suggests that more researches are needed in this field. New studies may be planned to explore different dimensions of group work. To begin with, studying student and educator views about the implementation of group work can increase the effectiveness of this approach. Secondly, student and educator views may be studied in more detail in elementary, secondary and higher education. Thirdly, this study was of a descriptive nature. In further research, this topic can be studied with different research methods. For example, future research can be conducted in order to examine the empirical evidence that group work increases learning as preservice teachers' believes in this study. In addition, qualitative methods might be used in order to see different applications of group work in classrooms. As a final remark, future research should continue to explore different aspects of the topic in detail in higher education, particularly in teacher education.

References

Abu, R.B & Flowers, J. (1997) The effects of cooperative learning methods on achievement, retention, and attitudes of home economics students in North Carolina, *Journal of Vocational and Technical Education, 13* (2).http://scholar.lib.vt.edu/ejournals/JVTE/v13n2/Abu.html (23 December 2008).

Attle, S. and Baker, B. (2007) Cooperative learning in a competitive environment: classroom applications, *International Journal of Teaching and Learning in Higher Education,* 19(1), 77-83.

Barfield, R. L.(2003) Students' perceptions of and satisfaction with group grades and the group experience in the college classroom, *Assessment & Evaluation in Higher Education,* 28 (4), 355-369.

Blatchford, P., Kutnick, P., Baines, E. and Galton, M. (2003) Toward a social pedagogy of classroom group work, *International Journal of Educational Research,* 39, 153–172.

Borges, M.R.S., Brézillon, P, Pino, J.A. and Pomerol, J.C. (2007) Dealing with the effects of context mismatch in group work, *Decision Support Systems*, 43, 1692–1706.

Burbach, M.E., Matkin, G.S., Gambrell, K.M., Harding, H.E., (2010) The impact of preparing faculty in the effective use of student teams, *College Student Journal, 44*(3).

Burdett, J. (2003) Making groups work: university students' perceptions, *International Education Journal*, 4(3).

Chiriac, E.H. (2008) A scheme for understanding group processes in problem-based learning, *High Educ*, 55, 505–518.

Chiriac, E.H. & Granström, K. (2012) Teachers' leadership and students' experience of group work, *Teachers and Teaching: Theory and Practice,* 18(3), 345-363.

Cohen, L., Manion, L. & Morrison, K. (1996) *A Guide To teaching Practice*, Fourth edition, London & New York: Routledge.

Cowie, H. and Berdondini, L. (2001) Children's reactions to cooperative group work: a strategy for enhancing peer relationships among bullies, victims and by standers, *Learning and Instruction*, *11*, 517–530.

Erdamar, K.G. & Demirel, H. (2010) Öğretmen adaylarının grup çalışmalarına ilişkin algıları, *Ahi Evran Üniversitesi Eğitim Fakültesi Dergisi,* 11*(3), 205-223.*

Fernández-Breis, J. T.; Castellanos-Nieves, D. & Valencia-Garcı´a, R. (2009) Measuring individual learning performance in group work from a knowledge integration perspective, *Information Sciences*, 179, 339–354.

Forslund Frykedal, K. & Chiriac, E.H. (2011) assessment of students' learning when working in groups, *Educational Research*, 53(3), 331-345.

Galton, M. & Hargreaves, L. (2009) Group work: still a neglected art? *Cambridge Journal of Education,* 39(1), 1-6.

Galton, M., Hargreaves, L.and Pell, T. (2009) Group work and whole-class teaching with 11-to 14-year-olds compared, *Cambridge Journal of Education,* 39(1), 119–140.

Gottschall, H. & García-Bayotms, M. (2008). Student attitudes towards group work among undergraduates in business administration, education and mathematics, *Educational Research Quarterly*, 32(1), 3-27.

Hanusch, F., Obijiofor, L. and Volcic, Z. (2009) Theoretical and practical issues in team teaching a large undergraduate class, *International Journal of Teaching and Learning in Higher Education,* 21(1), 66-74.

Hillyard, C.; Gillespie, D. & Littig, P. (2010) University students' attitudes about learning insmall groups after frequent participation, *Active Learning in Higher Education,* 11(1),9-20.

Keyes, M. and Burns, K. (2008) Group learning in Law, *Griffith Law Review, 17* (1).

Li, M. and Campbell, J. (2008) Asian students' perceptions of group work and group assignments in a New Zealand tertiary institution, *Intercultural Education*, 19(3), 203–216.

Livingstone, D. & Lynch, K. (2000) Group project work and student-centred active learning: two different experiences, *Studies in Higher Education,* 25 (3), 325-345.

Melles, G. (2004) Understanding the role of language/culture in group work through qualitative interviewing. *The Qualitative Report,* 9(2), 216-240. Retrieved [14.01.2010], from http://www.nova.edu/ssss/QR/QR9-2/melles.pdf

Miles, M.B. & Huberman, A.M. (1994) *An Expanded Sourcebook-Qualitative Data Analysis.* London: Sage Publications. [2nd Edition].

Myers, S. A., Bogdan, L.M., Eidsness, M.A., Johnson, A. N., Schoo, M.E., Smith, N. A.,Thompson, M.R., Zackery, B. A. (2009) Taking a trait approach to understanding college students' perceptions of group work, *College Student Journal,* 43 (3).

Navickiené, V. & Pevceviciüté, S. (2009) Communication skills in group/team work for personal and Professional development, *TILTAl, (1),* 83-91.

Nihalani, P.K., Wilson, H. E., Thomas, G. and Robinson, D.H. (2010), What determines high and low-performing groups? The superstar effect, *Journal of Advanced Academics, 21*(3), 500-529.

Pan, P.J.D.; Pan, G.H.M.; Lee, C.Y. & Chang, S.S.H. (2010) University students' perceptions of a holistic care course through cooperative learning: implications for instructors and researchers, *Asia Pacific Education Review,* 11, 199-209.

Pauli, R., Mohiyeddini, C., Bray, D., Michie, F. and Street, B. (2008) Individual differences in negative group work experiences in collaborative student learning, *Educational Psycholog, 28(1),* 47–58.

Postholm, M.P. (2008) Group work as a learning situation: a qualitative study in a university classroom, *Teachers and Teaching: theory and practice*, 14(2), 143–155.

Reece, I. & Walker, S. (1997) *Teaching training and learning (a practical guide),* Third Edition, Business Education Publisher.

Schmer, C. & Ward-Smith, P. (2011) Learning Outcomes Associated with Group Assignments, *MERLOT Journal of Online Learning and Teaching*, 7(3).

Shimazoe, J. and Aldrich, H. (2000) Group work can be gratifying: understanding &overcoming resistance to cooperative learning, *College Teaching,* 58, 52–57.

Steinert, Y. (2004). Student perceptions of effective small group teaching, *Medical Education, 38*, 286–293.

Strauss, A. & Corbin, J. (1990) *Basics of Qualitative Research: Grounded Theory Procedures and Techniques.* Newbury Park, CA: Sage.

Wenger, M.S. & Hornyak, M.J. (1999) Team teaching for higher level learning: a framework of professional collaboration, *Journal of Management Education*, 23 (3), 311-327.