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Responses to group-work among accounting students

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Abstract

The current study aims to assess group-work effectiveness among accounting students' attitudes. To achieve this aim, 72 students of accounting were chosen as the target population of the research applying simple random sampling. First, groups were chosen of three or five members. Then, during six weeks, the group projects were organized in 14 sessions and they were observed by lecturers with a problem-solving viewpoint. This educational viewpoint was considered as a 50 percent grade of computer application classes among accounting students. Cognitive perception of group-work was used by applying Garvin et al.'s questionnaire. By and large, the analysis of students' responses indicates that group-work is positively effective in promoting students' individual and social skills. The results of this study indicate positive outcomes from teaching group-work skills in accounting curriculum.

Keywords: group work, perception, accounting students

Introduction

Recently much attention has been directed towards group-work skills to be able to remain in business world. Some skills such as influencing, persuading and negotiating in groups and team bulding are essentially required to retain accounting status on the top of other commercial professions (Institute of Chartered Accountants in Australia and KPMG Consulting, Inc., 2002). In the last two decades, individual and social skills are reported as students' weakness even in prestigious universities. They are not technically expert in some issues such as Kaizen, and Total quality management which are highly in need of group works for organization's development (Berry, 1993; Gammie *et al.*, 2002; Gibbs, 1995; Gibbs *et al.*, 1994; Harvey *et al.*, 1997; Maiden, 2004; Romcke and patel, 1998). One of the introduced educational approaches to deal with these problems is improving group-work skills. Students in group-work look for their partners' ideas' perceptions and meanings; they behave more responsibly when learning and display the existing association between skills and knowledge acquisition (Spalding *et al.*, 1999; Walker, 2001). While group-work, group performance and group performance's measurement have recently received much attention, there is a growing tendency for researchers to evaluate group work skills. Represented attitudes demonstrate that various features of educational environments can be greatly effective in students' group-work (Garvin *et al.*, 1995; Bourner *et al.*, 2001; Mills, 2003; Dyball *et al.*, 2007; Ross *et al.*, 2009). It is alleged that the students who are more capable of managing group-work can effectually perform educational and research projects. Considering the importance of group work in higher education, the present study intends to appraise group-work effectiveness in accounting students' attitudes.

Review of literature

Swanson *et al.* (1998) stated that group-work can make it easier for students to interact with each other, and thus profit more from the information of other group members. It can also empower students to make decisions and help other students. According to some scholars (Spalding *et al.*, 1999; Walker, 2001), there are many advantages of employing groups, but also some pitfalls. Considering educational literature, management and psychology (Colbeck *et al.*, 2000; Cox, 1994; Carr and Kemmis,

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1993; Johnson and Johnson, 1994; Mello, 1993; Scho, 1983; Salomon. and Globerson, 1989; Vygotsky, 1978; Piaget 1932), advantages of group-work can be explained as follows:

It enables the students to get new knowledge from the dynamism of group-works; they can improve their group-work skills and also view issues from a variety of perspectives. They become ready to share their real ideas. Furthermore, thinking and negotiating will be of great importance for reflective and competent employees. From the viewpoint of academicians and employers, group-work skills are of considerable significance to be able to compete in the business world (Dearing, 1997).

Some investigated pitfalls of group working can be as following:

Employees' contradictions may hamper their ability to accomplish their work. Some members of the group may not do their fair share and their low mental activities decrease their collaboration. It can cause negative attitude towards group-work learning and experiences, especially when the manager cannot help the group and does not have sufficient managerial skills. Considering all aspects of group-work, its benefits are more and most of the managers prefer to implement group-work system in their organizations (Lejk *et al.*, 1999).

Table 1 shows a general sketch of conducted researches about students' responses to group working in different fields of study. In this article, various degrees of group-work effectiveness have been reported for students, since group-work designers and executions have been different and researchers have conducted their studies on the basis of dissimilar methodologies.

Table 1. Group working researchers.

Researchers	Research place University	Group working topic Year
Garvin et al. (1995)	Ireland, Belfast	Social sciences 1992
Bourner et al. (2001)	England, Brighton	Anatomy of animals 1997
Mills (2003)	Australia, Queensland	Organizational behaviour management 2001
Byball et al. (2007)	Australia, Macquarie	Programming and control 2004

Methodology

Design

The present study is an experimental one in which pre-test and post-test have been carried out without any control groups. On the basis of this plan, sample groups expressed their feelings and perceptions about group working within the framework of a questionnaire.

Participants

Target population of the research is consisting of all accounting students of Islamic Azad University and Payame Nour University of Neyshabour in 2012. First, 72 students were randomly chosen as the research sample. These students were divided into three classes of computer application in accounting. Then, the groups of three or five members were voluntarily organized. Voluntarily chosen groups' performance was better than specific groups'. Moreover, smaller groups of two or four had less contradictions and more exchanges of ideas (Swanson *et al.*, 1998).

Research subjects

This study examined a case study including accounting students as the topic of their project. It can be an opportunity to express and discuss new ideas, represent students' attitudes, improve team learning skills, share students' views, cooperate with other members of the group in spite of some contradictions between management and administration. They can also take advantage of existing variation in investigating strengths and weaknesses of students. Team projects were selected mandatorily, since if they had been chosen voluntarily, they thought they would have been capable of leading the group without any helps or educational assistants (Leveson, 1999). Due to the fact that some analyses and descriptions are done when conducting a case study and it is an influential element in enhancing students' perception of group learning (Burns and Grove, 1999; Yin,

1989). the aforementioned case study was assessed in this research. Besides, case studies are recommended in educating students about accounting (Milne and McConnell, 2001). Two factors were considered in selecting and regulating this case study which can be listed as follows: participants should be capable of improving intellectual skills (Bourner *et al.*, 2001), and enhance their attempts and group interactions (Jaques, 2000).

Data collection tools

The advanced team work questionnaire of Garvin et al. was applied in this study to assess students' group- work (appendix 1). This questionnaire is consisting of 18 questions which can calculate qualitative and quantitative issues of group working. Quantitative questions are Likert scale questions. Validity and reliability of the questionnaire has been evaluated in similar researches.

Research application process

This research has been conducted during six weeks and accounting students were participated in team works. After two weeks that team works had finished, post-tests were given. This period of time is regarded as cooling-off period of the research which is essentially effective in removing destructive environmental effects of students' cognitive abnormalities (Handy, 1990).

Data analysis and Results

Students' impression of group work

Table 2 indicates the average grades of students in response to the questionnaire's first questions.

Table 2. Students' impression of group-work.

Grade 5	Grade 1	Average grade
Pleasant	Unpleasant	2.9
Active	Passive	2.7
Easy	Difficult	2.8
Satisfactory	Unsatisfactory	2.7
Profitable	Unprofitable	3.5
Strong learning experience	Weak learning experience	2.9
High creativity	Low creativity	3

The results of analysing qualitative questions demonstrate some advantages such as correspondence with modern issues, the application of the theories, communication improvement, and learning how to behave in group working environments, finding new friends, becoming familiar with different people. These issues can be an indication of good impression of group-work among students. The achieved findings of this study are in the direction of conducted studies in Sidney, Brisbane, Brington and Belfast.

Students' impression of group works at the beginning and end of the project

Table 3 shows student's impression of group work's advantages.

Table 3. The mean of students' impression of group-work at the beginning and end of the project.

	Mean	
Students' impression	At the beginning of the project	At the end of the project
Awareness(1-5)	3.1	2.8
Trust (1-5)	3.3	3.2
Flexibility (1-5)	3.3	3.2
Independency (1-5)	3.2	3.5
Empowerment (1-5)	3.3	3.4
Encouragement (1-5)	3.2	3.6
Creativity (1-5)	3.1	3.3

Considering the obtained results of table 4, students had similar perceptions of different variables at the beginning of the project. When assessing the qualitative section of the questionnaire, some answers such as tiredness, complication and difficulty were also seen. Furthermore, the above table indicates that the grades of conducted group-work were higher than students' expectancy before executing the project, since students firstly reported grades' increase in all assessed elements. Results of table 4 show more analyses of the findings of table 3. According to the results of testing the paired samples of table 4, students' impression of group-work was at the end of the project considerably higher than the beginning of the project; therefore, it can be concluded that students' impression of group-working and their attitudes toward awareness, self-confidence, flexibility, independency, competency and creativity were significantly enhanced.

Table 4. Students' impression at the beginning and the end of the project.

	Paired samples			
	Mean	SD	SEM	Minimum
Awareness	0.792	1.094	0.046	0.701
Assurance	0.5	0.987	0.042	0.418
Flexibility	0.489	0.932	0.040	0.411
Independency	0.203	0.929	0.039	0.126
Competency	0.352	0.811	0.035	0.284
Self-confidence	0.216	0.976	0.01	0.135
Creativity	0.288	0.882	0.038	0.214

Table 5. The grades of students' skills which are developed or in need of developing.

	Average grades of developed skills	Average grades of skills in need of developing
Problem-solving	3.1	3.1
Researching	3.7	3.7
Data analysis	3.6	3.6
Written representation of data	3.1	3.1
Oral representation of data	3.4	3.4
Cooperating with other members of the group	3.2	3.2
Programming, practical organizing and time management	3.5	3.5

Skills developed or need to be developed

Table 5 demonstrates the answers to the 13th question of the questionnaire. As it can be noticed, students' replies are mostly alike about acquiring problem-solving skills, researching, analysing new data, representing written or oral information, cooperating with other members of the group, programming, organizing and managing time (between 3.1 and 3.8).

Table 6 represents correlation matrix for developed skills (question 12) and skills which are in need of developing (question 13). Regarding the correlation coefficient of examined elements in tables 5 and 6, it can be concluded that there is a positive correlation between skills which are developed or in need of developing at the significance level of 0.01.

Table 6. Correlation matrix of skills which are developed and in need of developing.

	12a	12b	12c	12d	12e	12f	12g	12h
13a	0.283							
13b		0.263						
13c			0.185					
13d				0.238				
13e					N/A*			
13f						0.173		
13g							0.175	
13h								0.158

sig=0.01; *data is not available.

Conclusion and suggestions for further research

New educational approaches should be accurately programmed, prepared and recognized before implementing. Thus assessing strengths and weaknesses is essential to make students capable of encountering with adversities in broader dimensions. In spite of some differences in applied methods and elements, educational researches have represented various experiences of group-work effectiveness in different fields of study (Garvin *et al.*, 1995; Bourner *et al.*, 2001; Mills, 2003; Dyball *et al.*, 2007; Ross *et al.*, 2009). In this study, the positive effectiveness of group-work in accounting stu-

dents can be regarded as a significant variable in different academic courses of accounting at educational environment of Iran. The obtained results of this article can drastically prove the improvement of some skills such as information dissemination in team works, self-management, programming and organizing the students, and informing about the necessity of developing these skills in the future. Moreover, an accurate plan is required to achieve positive outcomes in group-work. Well organized and executed group-work can develop cognitive skills. Group guide has an effective role in making students aware of their strengths and weaknesses. Based on the positive findings of this study this can conclusion can be drawn that group-work in educational system of Iran are significantly efficacious to conduct accounting courses and managers in the same direction. It is recommended that scholars consider some other variables in future studies such as selection of group members (by lecturers or students), selection of project's topic (by lectures or students), number of group members and its effectiveness in the level of improvement in skills which are related to group-work.

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Appendix 1

An assessment of accounting students' impression of group-work

Educational data: please give just one answer to each question.

Please select the item which is closer to your idea.

1. Cooperating with other members in the project

1	2	3	4
Very rarely	Rarely	Occasionally	Very frequently

2. I felt at the end of the project that:

3. I felt at the beginning of the project that:

5	4	3	2	1	
Pleasant					Unpleasant
Effective					Boring
Easy					Difficult
Satisfactory					Unsatisfactory
Profitable					Unprofitable
Useful					Unnecessary
New approach					New approach

	5	4	3	2	1	
Informing topic						Ambiguous topic
Effective						Ineffective
Flexible						Inflexible
Independent						Dependent
Empower ment						Weakness
Competency						Incompe tency
High creativ- ity						Low creativ ity

	5	4	3	2	1	
Informing topic						Ambiguous topic
Effective						Ineffective
Flexible						Inflexible
Independent						Dependent
Empower- ment						Weakness
Competency						Incompe tency
High creativ- ity						Low creativ ity

4. Cooperation between members of the group

5	4	3	2	1
Very good	Good	Barely acceptable	Poor	Very poor

5. Briefly explain your answer to question 4.

6. How much do you desire to remain in these groups?

4	3	2	1
To a great extent	Somewhat	Very little	Not at all

7. In your opinion, how much is the project's output?

5	4	3	2	1
Very good	Good	Barely acceptable	Poor	Very poor

8. Briefly explain your answer to question 7.

9. Considering the aforementioned issues, does a group need a guide?

Yes
No

10. How much did you learn about yourself in this project?

4	3	2	1
To a great extent	Somewhat	Very little	Not at all

11. How much did you understand other members of the group?

12. My skills were improved in the following fields (please select an item in each row).

	high				low
	5	4	3	2	1
Problem solving					
Researching					
Data analysis					
Written representation of data					
Oral representation of data					
Cooperating with other members of the group					
Programming and organizing					
Time management					

13. I could distinguish some skills in myself which should be developed in the future.

	high				low
	5	4	3	2	1
Problem solving					
Researching					
Data analysis					
Written representation of data					
Oral representation of data					
Cooperating with other members of the group					
Programming and organizing					
Time management					

14. If you duplicate this project, how do you change it? Please circle your considered items.

1	More programming
2	More preparation
3	Better time management
4	More theoretical studies
5	Better division of the labour
6	More group meetings
7	Other specific issues

15. Which of the above circled items is more important than others? Please write the number (1-7) in the square.

16. Which aspect of the project did you like the most?

17. Which aspect of the project did you like the least?

18. How can group projects be expanded in number?