

Group and Individual Assignment

Amin Chegenizadeh¹⁺, Hamid Nikraz²

¹ Curtin University of Technology, Perth, Australia

² Department of Civil Engineering, Curtin University of Technology, Perth, Australia

Abstract. This paper investigates the effect of group and individual assignments toward better learning. For this purpose, different types of assignments were used. Finally, the feedbacks from students are presented in result section. The students' feedbacks proved that using team work method was more popular compare to individual one. The students also preferred working on analytical assignment rather than theoretical one.

Keywords: Assignment, Team work, Individual

1. Introduction

According to Opdecam et al report published report ,however, the new circumstances in higher education inhibit the active engagement of students in the learning process (Braxton, Milem, & Sullivan, 2000; Kelly et al., 2005). The situation in higher education has changed considerably during the last two decades as the massification of higher education has emerged (Trow, 1999; Tynjälä, Välimaa, & Sarja, 2003). Massification in higher education has resulted in an expansion of the student population (Tynjälä et al., 2003) and increased academic heterogeneity (Schoenecker, Martell,& Michlitsch, 1997). Furthermore, considering increased faculty workload, a cost-effective learning method is needed. Cooperative learning provides a potential solution because it can implement active learning in a large group setting (Sand-Jecklin, 2007). Team learning is a specific type of cooperative learning that requires an acceptable investment of time and energy from the instructor while inducing active learning in students. The core issue in team learning is that people learn not only from their own experiences but also from colleagues' experiences (Ickes & Conzales, 1994). The massification of higher education has resulted not only in an expansion of the student population but also in a growing diversity of the student population (Trow, 1999). Therefore, today's students attend university with a variety of instructional preferences and educational needs.

The aim of this paper is to present a comparison between team-work and individual assignment effects on student learning in geotechnical class. Different types of assignments were given to students and students put their efforts toward solving analytical and theoretical problems. The results are presented in this study.

2. Assignment Types

Three assignments were designed systematically to examine different assignment feedback from students. Different types of assignments are as follows:

- Analytical assignment

This assignment included a series of analytical problem by applying the principles and asking students to put their own calculations toward the final answer.

- Theoretical assignment

This assignment included solving different theoretical questions and asking student to put their mathematical principles together to achieve final equations.

3. Experience with Assignments in tutorial classes

The assignments were given to students as team working and individual assessments, so that the students could give proper feedback for choosing the better types of assignments for next year class.

⁺ Corresponding author. Tel.: +61-413165961.
E-mail address: amin.chegenizadeh@curtin.edu.au.

The following feedbacks were collected:

- Team work- Analytical assignment
- Team work- Theoretical assignment
- Individual- Analytical assignment
- Individual-Theoretical assignment

Next section focuses on feedbacks from the students.

4. Results

The results proved that team-work assignment increased the satisfaction of student. Figure 1 shows the answers of student to the specific question related to team-work as teaching method. Figure 1 shows that from 74 students in class, the majority agreed that team-wrok in teaching have preference over individual assignment on analytical assignment. Figure 2 shows the students feedback regarding theoretical assignment. Figure 3 also shows interest of student feedback regarding having theoretical and analytical assignment.

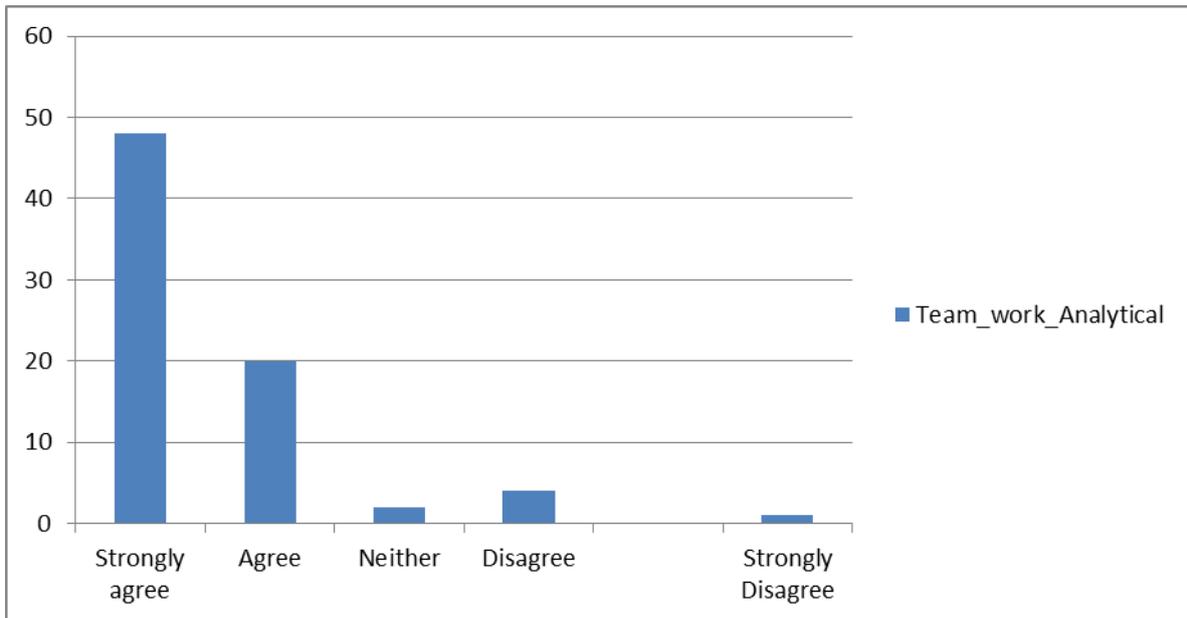


Figure1 Preference of Team work against individual analytical assignment

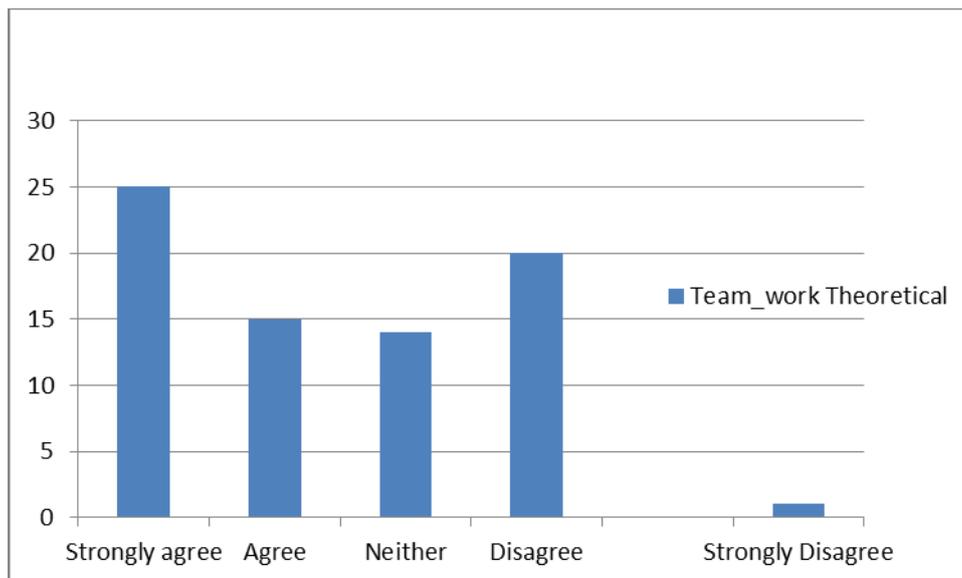


Figure2 Preference of Team work against individual theoretical assignment

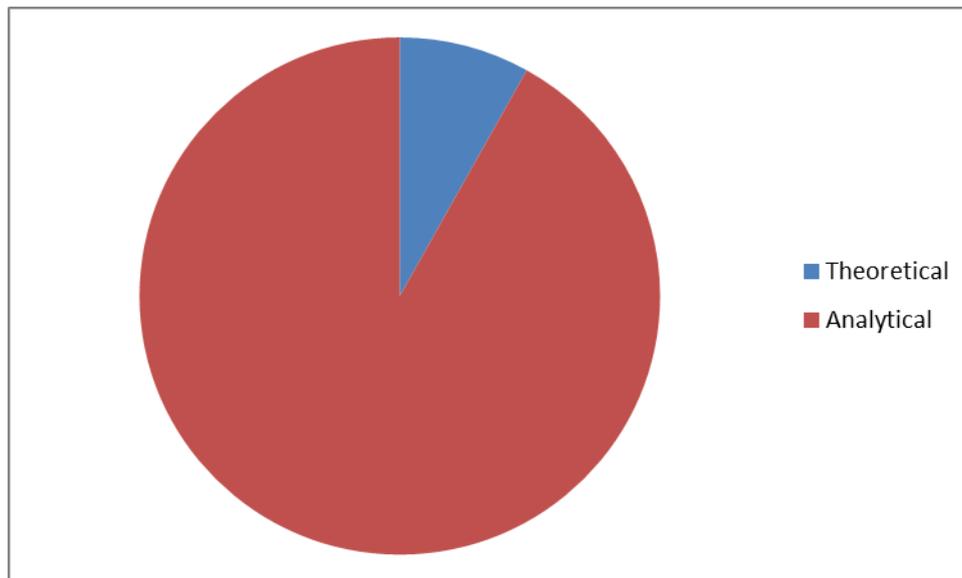


Figure3 Student Preference Analytical and Theoretical assignment

5. Conclusion

This paper focused on investigation on usage of different types of assignments on teaching and learning of student. Different methods of submission were allowed (i.e. team work and individual). The paper reflects feedback from students of a geotechnical tutorial class. The results proved that:

- Students preferred team work rather than individual work
- Students preferred analytical work compare to theoretical work

6. References

- [1] Braxton, J. M., Milem, J. F., & Sullivan, A. S. (2000). The influence of active learning on the college student departure process: Toward a revision of Tinto's theory. *Journal of Higher Education*, 71, 569-590.
- [2] Ickes, W., & Conzaes, R. (1994). " Social" Cognition and Social Cognition: From the Subjective to the Intersubjective. *Small Group Research*, 25(2), 294-315.
- [3] Sand-Jecklin, K. (2007). The impact of active/cooperative instruction on beginning nursing student learning strategy preference. *Nurse Education Today*, 27(5), 474-480.
- [4] Schoenecker, T. S., Martell, K. D., & Michlitsch, J. F. (1997). Diversity, performance, and satisfaction in student group projects: An empirical study. *Research in Higher Education*, 38(4), 479-495.
- [5] Toto, R., Wharton, M., Cimbala, J., and Wise J. "One Step Beyond: Lecturing with a Tablet PC," Proceedings of the 2006 American Society for Engineering Education Annual Conference & Exposition, 2006. American Society for Engineering Education.
- [6] Tynjälä, P., Välimaa, J., & Sarja, A. (2003). Pedagogical perspectives on the relationships between higher education and working life. *Higher education*, 46(2), 147-166.
- [7] Trow, M. (1999). From mass higher education to universal access: The American advantage. *Minerva*, 37(4), 303-328.