



# Team-Based Project as a Strategy to Increase Student Career Engagement

Kusnarto Kurniawan<sup>1</sup>, Sunawan Sunawan<sup>1</sup>, Edwindha Prafitra Nugraheni<sup>1</sup>, Flemmings Fishani Ngwira<sup>2</sup>

<sup>1</sup> Universitas Negeri Semarang, Semarang, Indonesia

<sup>2</sup> Malawi University, Zomba, Malawi, East Africa  
kusnarto@mail.unnes.ac.id

**Abstract.** This study aimed to test the effectiveness of team-based projects to increase students' career engagement. The research subjects were selected by Semarang State University students (N = 28). This study used a one-group pretest posttest design. This research instrument uses a career engagement scale. The data analysis method used in this study used the t-test formula, to determine the significant difference between pre-test and post-test. The results showed that there was a significant difference between students' career involvement before and after treatment using the team-based project method. In other words, team-based project methods are effective in increasing student career engagement. Team-based projects are student-centered and provide a challenging and meaningful learning experience, which has four essential elements of grouping, accountability, feedback, and task design. Team-based projects train students to reflect on ideas, make decisions, collaborate, and present product outcomes. This research contributes that team-based projects can be an alternative learning method that can develop student involvement as well as communication skills.

**Keywords:** Career Engagement, Team-based project, university students

## 1 Introduction

The era of disruption is characterized by an era in which all current activities are almost entirely controlled by information technology. Various lines of life have changed and moved quickly, for example the transportation, communication, economy, and education sectors. In the sphere of education, disruption means the disconnection of traditional and established models of transmission of educational knowledge (Carolan et al., 2020; Mishra et al., 2020). The pandemic has accelerated digitalization and brought an era of radical technological transformation to higher education (García-Morales et al., 2021). Advances in educational technology have benefited during this pandemic, but lecturers, students, parents, and other relevant educators face many challenges they are not ready to face (Valenzuela, 1999). The influence of the Covid-19 pandemic and the development of the disruption era have provided significant changes to student conditions in learning, especially from face-to-face learning to online learning. The lack of academic social interactions during COVID-19 lockdowns has affected students' perceptions of life disruption

© The Author(s) 2023

E. Munawaroh (ed.), *Proceedings of the 2nd Semarang International Conference on Counseling and Educational Psychology (SICCEP 2023)*, Advances in Social Science, Education and Humanities Research 814, [https://doi.org/10.2991/978-2-38476-184-5\\_26](https://doi.org/10.2991/978-2-38476-184-5_26)

caused by the pandemic and their academic motivation and engagement (Ivanec, 2022; Martin et al., 2023). Therefore, universities have a great responsibility in preparing generational competencies that are able to adapt and be competitive.

In fact, the results of research in Indonesia show that online learning during the pandemic has several impacts on students, namely (1) online learning still confuses students, (2) students become passive, less creative and productive, (3) accumulation of information/concepts in students is less useful, (4) students experience stress, and (5) increase in students' language literacy skills (Argaheni, 2020). Online engagement can be perceived differently than face-to-face engagement, and it can be challenging for teachers to engage students online (Bergdahl, 2022).

In the aspect of career development, students still do not involve themselves fully in planning and equipping themselves with various competencies needed in the world of work. A preliminary study of researchers on Universitas Negeri Semarang students related to career engagement showed that early semester students had more career attachment than upper-level students. In other words, final year students are passive, less creative and productive in developing their potential.

Career engagement as a self-management behavior towards careers to increase career opportunities and success in the future (Wiernik & Kostal, 2019) is not widely realized by students. Career engagement is seen as a proactive form of individuals in developing their careers. Career engagement involves behaviors such as career planning, career self-exploration, exploration of the career environment, networking, human resources/skills development, and self-positioning behaviors for career development (Hirschi et al., 2014).

Basically, student involvement during the learning process is a proactive career behavior. But unfortunately, not all parties realize that Team-based learning can improve learning outcomes, student engagement, quality of learning, skill development, and teacher job satisfaction (Darby et al., 2023). Universitas Negeri Semarang, which has seen this opportunity, strives to innovate in learning activities for students through the application of the team-based project method.

Team-Based Learning (TBL) is one of the learning that encourages students in groups or social interaction to actively solve the problems given. Learning using the TBL model is basically no different from cooperative learning strategies, but in TBL it has a characteristic that teams are formed to solve problems (Michaelsen et al., 2014). Each group is given tasks independently in the form of problem solving. Independent learning in group learning will force students to play a more active role in applying the concepts learned when interacting with other group members. In Team-Based Learning there are three stages of learning, namely preparation, readiness assurance, and application of course concept.

Based on the background of the problems that have been explained, the problem and purpose of this study is to test the effectiveness of Team Based Project as a strategy to increase student career engagement. Thus, this research is important to be carried out in producing quality educational innovations and character in the form of inspiring and proactive student behavior.

## 2 Methods

This study used an experimental model with pre-experimental designs in the form of one-group pretest posttest design, which compares student career engagement between before and after getting treatment. This research design was carried out twice, namely before the experiment and after the experiment. This study design only used post-test values in testing the hypothesis. This study has two variables, namely independent variables and dependent variables. The independent variable in this study is team-based project and the dependent variable is student career engagement. The instrument used in this study is the career engagement scale. The data analysis method used in this study used the t-test formula, to determine the significant difference between pre-test and post-test.

## 3 Results and Discussion

The results of the final data calculation, tested the average difference between experimental classes. The difference test between the two averages uses a one-sided t test, namely the right-party test using SPSS. With a significant level of 5%, it is said that there is an increase in the average value after treatment if  $t$  is calculated  $\leq t$  table. On the other hand, it is said that there is no increase in the post- treatment mean value if  $t$  count  $> t$  table. The results of data analysis using paired t test are as follows.

**Table 1.** Different test results increase career engagement

	Mean	Std. Deviation	t df	Sig. (2-tailed)
Pair 1 Before - After given TBP	-3.42	7.24	-2.506	.019

Based on calculations using SPSS data obtained  $t$  arithmetic  $\leq t$  table, it can be concluded that the rejection of  $H_0$ . This shows that the average post-treatment scale results are higher than the average pre- treatment questionnaire results, so it can be said that the team-based project method is effective in increasing student career engagement.

Based on the identification of the initial conditions, it is known that the obstacles in the learning process are students who tend to be passive during lessons. During the learning activities, students spend most of their time listening to the teacher's explanations. If this goes on continuously, students will get bored faster and think that learning is something that is not fun. When this assumption has been embedded in the minds of students, the willingness to take lessons becomes low which results in decreased enthusiasm and student engagement in learning.

The results of the analysis of the hypothesis test with the t-test showed that there was a significant difference between student career engagement before and after treatment using the team-based project method. The average results of the post-treatment student career engagement scale were higher than the average results of the pre-treatment scale.

In team-based learning project is a learning strategy that uses student group activities (Clair & Chihara, 2012). Groups or teams are formed permanently at the beginning of learning and are fully responsible for team cohesiveness to achieve better individual understanding. TBL has four important elements, namely group, accountability, feedback, and assignment design (Dee Fink, 2009).

Team-based project as a teaching approach that is built on learning activities and real tasks that provide challenges for students related to everyday life to be solved in groups (Goodman & Stivers, 2010). The formation of groups must really be formed and managed, considering the following three things: the group has adequate group members in the problem-solving process, avoiding coalitions that might interfere with group cohesiveness and ensuring that each group can develop into a learning team. After students are formed in teams, they are responsible for themselves and for the team (accountability) so as not to hinder the development of team cohesiveness. Feedback and assignments. Design needs to be done so that students can carry out team development, especially in solving the challenges given by the teacher.

This learning is student-centered and provides a meaningful learning experience for students. Students' learning experiences and concepts are built based on the products produced in the project-based learning process. In the team-based project model, students not only understand the content, but also develop skills in students how to play a role in society. Skills developed in team-based projects include communication and presentation skills, organizational and time management skills, research and inquiry skills, self-assessment and reflection skills, group participation and leadership, and critical thinking.

Performance appraisals on team-based projects can be done individually by considering the quality of the products produced, the depth of understanding of the content shown, and the contribution made to the ongoing project realization process. Team-based projects also allow students to reflect on their own ideas and opinions and make decisions that affect project outcomes and the learning process in general and present the final product.

## **4 Conclusion**

The application of the team-based project learning model can significantly increase student career engagement compared to the use of conventional learning models. Student responses to the application of the learning model are positive which is indicated by the responses given by students through a good category scale, especially in terms of students' desire for this learning method to be used. on courses and other materials. For lecturers who apply the team-based project method, they are expected to be able to provide intensive assistance and interaction during project completion. In addition, an assessment of the work of each student is made transparently according to the understanding and contribution of students in completing their assignments.

## **Acknowledgement**

The researcher expressed his gratitude to the Institute for Research and Community Development (LPPM) for providing funding assistance for the research team.

## References

- Argaheni, N. B. (2020). Sistematis Review: Dampak Perkuliahan Daring Saat Pandemi COVID-19 Terhadap Mahasiswa Indonesia. *PLACENTUM: Jurnal Ilmiah Kesehatan Dan Aplikasinya*, 8(2),99. <https://doi.org/10.20961/placentum.v8i2.43008>
- Bergdahl, N. (2022). Engagement and disengagement in online learning. *Computers and Education*, 188(June), 104561. <https://doi.org/10.1016/j.compedu.2022.104561>
- Carolan, C., Davies, C. L., Crookes, P., McGhee, S., & Roxburgh, M. (2020). COVID 19: Disruptive impacts and transformative opportunities in undergraduate nurse education. *Nurse Education in Practice*, 46(January). <https://doi.org/10.1016/j.nepr.2020.102807>
- Clair, K. S., & Chihara, L. (2012). Team-based learning in a statistical literacy class. *Journal of Statistics Education*, 20(1), 1–20. <https://doi.org/10.1080/10691898.2012.11889633>
- Darby, S., O’Hanlon, D., Casterton, S., Harding, N., O’Brien, A. M., Quinn, G., Urmeneta, O., & Tweddell, S. (2023). Improved learning outcomes and teacher experience: A qualitative study of team-based learning in secondary schools. *Social Sciences and Humanities Open*, 8(1), 100590. <https://doi.org/10.1016/j.ssaho.2023.100590>
- Dee Fink, L. (2009). Editorial. *New Directions for Teaching and Learning*, 119, 1–7. <https://doi.org/10.1002/tl>
- García-Morales, V. J., Garrido-Moreno, A., & Martín-Rojas, R. (2021). The Transformation of Higher Education After the COVID Disruption: Emerging Challenges in an Online Learning Scenario. *Frontiers in Psychology*, 12(February), 1–6. <https://doi.org/10.3389/fpsyg.2021.616059>
- Goodman, B., & Stivers, J. (2010). Project-Based Learning Why Use It? *Educational Psychology*, *ESPY* 505, 1–8.
- Hirschi, A., Freund, P. A., & Herrmann, A. (2014). The Career Engagement Scale: Development and Validation of a Measure of Proactive Career Behaviors. *Journal of Career Assessment*, 22(4), 575–594. <https://doi.org/10.1177/1069072713514813>
- Ivanec, T. P. (2022). The Lack of Academic Social Interactions and Students’ Learning Difficulties during COVID-19 Faculty Lockdowns in Croatia: The Mediating Role of the Perceived Sense of Life Disruption Caused by the Pandemic and the Adjustment to Online Studying. *Social Sciences*, 11(2). <https://doi.org/10.3390/socsci11020042>
- Martin, A. J., Ginns, P., & Collie, R. J. (2023). University students in COVID-19 lockdown: The role of adaptability and fluid reasoning in supporting their academic motivation and engagement. *Learning and Instruction*, 83(September 2022), 101712. <https://doi.org/10.1016/j.learninstruc.2022.101712>
- Michaelsen, L. K., Davidson, N., & Major, C. H. (2014). Team-Based Learning Practices and Principles in Comparison With Cooperative Learning and Problem-Based Learning. *Journal on Excellence in College Teaching*, 25, 57–84.
- Mishra, L., Gupta, T., & Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational Research Open*, 1(September), 100012. <https://doi.org/10.1016/j.ijedro.2020.100012>
- Valenzuela, A. (1999). *Subtractive Schooling: U.S.-Mexican Youth and the Politics of Caring*. *SUNY Series, The Social Context of Education*. 24(1), 346. [https://uml.idm.oclc.org/login?url=https://www.proquest.com/books/subtractive-schooling-u-s-mexican-youth-politics/docview/62311274/se-2?accountid=14569%0Ahttps://search.lib.umanitoba.ca/openurl/01UMB\\_INST/01UMB\\_INST:UMB?url\\_ver=Z39.88-2004&rft\\_val\\_fmt=inf](https://uml.idm.oclc.org/login?url=https://www.proquest.com/books/subtractive-schooling-u-s-mexican-youth-politics/docview/62311274/se-2?accountid=14569%0Ahttps://search.lib.umanitoba.ca/openurl/01UMB_INST/01UMB_INST:UMB?url_ver=Z39.88-2004&rft_val_fmt=inf)
- Wiemik, B. M., & Kostal, J. W. (2019). Protean and boundaryless career orientations: A critical review and meta-analysis. *Journal of Counseling Psychology*, 66(3), 280–307. <https://doi.org/10.1037/cou0000324>

- Wawan, J. H. (2022, October 09). Penjelasan Hotel Porta soal Kasus Mahasiswa UGM Lompat dari Lantai 11. *Detikcom*. <https://www.detik.com/jateng/jogja/d-6337958/penjelasan-hotel-porta-soal-kasus-mahasiswa-ugm-lompat-dari-lantai-11>
- Wicaksono, P. (2023, October 2). Mahasiswi UMY Meninggal Dunia Jatuh Dari Lantai 4 Asrama, Diduga Bunuh Diri. *Tempo.com*. <https://nasional.tempo.co/read/1778747/mahasiswi-umy-meninggal-dunia-jatuh-dari-lantai-4-asrama-diduga-bunuh-diri>
- Young A., Dollarhide C. T., Baughman A. (2015). The voices of school counselors: Essential characteristics of school counselor leaders. *Professional School Counseling*, 19, 36-45.
- Yulismawati, E.A. (2023, October 11). Mahasiswa Unnes Tewas Diduga Bunuh Diri di Mall Paragon Semarang, Tinggalkan Surat Wasiat Bikin Nyesek. *Jawapos.com*. <https://www.jawapos.com/berita-sekitar-anda/013064680/mahasiswa-unnes-tewas-diduga-bunuh-diri-di-mall-paragon-semarang-tinggalkan-surat-wasiat-bikin-nyesek>

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

