

# Invasion of Collaborative Learning in Office Practice: Synergy Between University, Students, Industry and World of Work

Marsofiyati<sup>1</sup>(<sup>⊠</sup>), Etin Solihatin<sup>2</sup>, and Robinson Situmorang<sup>3</sup>

<sup>1</sup> Office Administration Education Study Program, State University of Jakarta, Jakarta, Indonesia

Marsofiyati@unj.ac.id

<sup>2</sup> Pancasila and Citizenship Education Study Program, State University of Jakarta, Jakarta,

Indonesia

etinsolihatin@unj.ac.id

<sup>3</sup> Educational Technology Study Program, State University of Jakarta, Jakarta, Indonesia robinsonsitumorang@unj.ac.id

Abstract. This study aims to analyze the learning model of Office Practice Course Based Collaborative Learning, the synergy between University, Students, Industry, and the World of Work. This research uses the survey method. The Office Administration Study Program, one of the vocational study programs whose main courses are practicum, must develop a learning model to realize this independent learning-independent campus curriculum. An office practice course is one of the practical courses supporting the competence of office administration expertise carried out in the Digital Office Administration study program, Faculty of Economics, Universitas Negeri Jakarta. Therefore, qualified competence is needed in carrying out various duties of the position. Continuous and repetitive practice makes a person proficient in carrying out his duties. The novelty of this research is a collaborative learning model involving three elements: (1) students, (2) lecturers, and (3) industry-business workplace. This study's results are collaborations carried out in office practice learning. Besides the collaboration between students in conventional study groups, groupware is also connected to the learning management system (LMS). In addition, study groups based on practice locations are also held to connect students with industrial advisers and supervisors lecturers.

### **1** Introduction

The passage of time and the launch of the MerdekaBelajar-Kampus Merdeka curriculum opens up opportunities for developing office practice courses in collaboration with industry, the business world, and the world of work. The synergy of universities with industry and the world of work is one of the efforts to improve the quality of student learning. A particular concern for the study program of education providers is to arrange lectures so that they can run even though learning activities are not only carried out on campus. The teacher's concern with this collaboration is that students are worried about not achieving predetermined learning goals because they cannot carry out practical tasks according to the company's subject matter or fieldwork practices. At the end of the lecture period, it is feared that students will not be able to complete the competency test because the teacher cannot monitor the practical tasks that should be done in the office lab. Therefore, an existing learning model is needed in this program for learning to be effective.

Meijer (2020) states that over the past two decades, many curricula in higher education have implemented collaborative learning [1]. Cloud computing tools benefit academics and practitioners in collaborative learning through education-based computer programs and form groupware according to the geographical location of coworking space [2]. The proposed system is a synchronous and asynchronous collaborative tool that allows learners and teachers to interact. In addition, computer-based learning (Computer Assisted Instruction) provides convenience in the learning process, one of which is the learning management system (LMS) which is one of the most common technology platforms that help the implementation of education by using server-based or cloudbased software programs that contain information about learning activities, materials, places/media for learning and teaching is not limited by time and space. Ouadoud's statement states that the scope of learning activities based on the LMS is Collaboration, where the process is carried out by two or more people or organizations who work together to achieve success [3]. This cooperation between teams results in more resources, recognition, and appreciation in the face of competition with limited resources. Collaborative learning based learning is needed to support learning. LMS helps collaborate, students, lecturers, and universities with industry supervisors in industry, business, and the workplace.

The novelty of this study is to develop an office practice learning model based on Collaborative Learning. The synergy between university, students, industry, and the world of work is the uniqueness of this research. Indicators of collaboration skills learned are actively contributing, working productively, demonstrating flexibility and compromise, demonstrating responsibility, and showing respect [4]. In addition, it turns out that here there has never been any research on collaborative learning models in the field of office administration, especially office practice.

Therefore, *collaborative learning* is expected to increase the active participation of students so that it can help complete individual and group tasks to improve students' skills, especially in office practice courses.

#### 2 Discussion

According to Joyce, A model of teaching is a way of building a nurturant and stimulating ecosystem within which the students learn by interacting with its components [5]. A learning model builds a nurturing and stimulating ecosystem in which students learn by interacting with its components. The learning model, sometimes called the teaching model or learning model, is a teaching tool every lecturer must have. Various levels of education have widely adopted the Collaborative Learning model for two decades. Collaborative learning could be categorized as one form of social interaction during learning processes that provide an additional platform for coordination within formal and informal learning environments [6, 7]. The definition of collaborative learning is the

co-construction of knowledge and competence growth in which many people have the chance to engage in creative thinking, present novel concepts, and take creative actions. A learning phenomenon where people interact on the same or distinct parts of a shared task to achieve implicit or explicit shared and individual learning goals in a physical or virtual setting (such as a group, team, or community). Office practice courses are practical to complete office work, including daily administrative activities, professional office activities, work related to its functions, and administrative decision-making.

In addition, according to Reid, there are five stages in developing a collaborative learning model: *engagement, exploration, transformation, presentation, and reflection* can be seen in the *following collaborative learning cycle* [7] (Fig. 1):



Fig. 1. Collaborative Learning Cycle

### 3 Research Methods

The purpose of this study is to analyse development of a *Collaborative Learning Based* Office Practice learning. Therefore, this study aims to analyze the Office Practice learning model based on Collaborative learning. The research method is a *survey. The respondents are* students in the Digital Office Administration study program at the Faculty of Economics, Universitas Negeri Jakarta.

### 4 Research Results

In developing a learning model, researchers analyze the needs and literature studies by making observations in the Office Practice course class, students of the Digital Office Administration Study Program, Faculty of Economics, State University of Jakarta. When making these observations, researchers found that students had not yet received maximum learning outcomes; This can be seen from the Skill Level of Learners Office Practice Course (Fig. 2).

The average student's typing skills are only 65.5%, which means that students have not been able to type correctly; This can be seen from the typing results of students who



Fig. 2. Skill Level of Learners

have not reached the minimum standard of 50 WPM with an accuracy rate of 95%. While in terms of correspondence, students can already write letters. However, the choice of language used is inappropriate, so the information used is unclear. In addition, the type of writing (*font style*), line spacing, typos, letter language, and letter form have not been noticed; In terms of communication, students can already communicate well, but many students use colloquial and slang. Examples of slang are often used. In addition, the main problem is that students ignore the material taught because they feel that everything can be searched on the internet using gadgets. They rely heavily on the internet to learn, and the results of the acquired skills *are copied and pasted* from the internet.

Based on the results mentioned above, as much as 52% of the work done in the office lab is the same as that done at the internship site, while 35% strongly agree that there are similarities in office practices in the lab. Offices in colleges with internships, the remaining 13% are neutral to the similarity of practices carried out during internships. Based on the material taught, part of the work is applied in the internship, and some do not correspond to the material taught. The difference in employment is because the companies where interns have implemented technology-based jobs are more modern than jobs practiced in college. In addition, there are systematic differences between government agencies and private companies and the ability of students to adapt to changes.

In addition, another concern in office learning practices is the difficulty of communication between students, industry supervisors, and intern site employees, as well as with lecturers who teach courses due to time constraints. Students' difficulty communicating occurs at the beginning of the internship practice when students are still shy and lack confidence in communicating with industry supervisors and employees. It can last from the first to the fourth week of the internship. However, the following communication difficulties are between students and lecturers, where lecturers have material and communicating related to the material presented. Another obstacle is the supervisor's response, who is not fast in providing *feedback* to students, so there is a missed communication between the supervisor and the student. The next stage is for researchers to conduct interviews with a team of lecturers who teach courses about the student's learning outcomes. The interview results corroborate the need to update the learning model of office practice courses. Many office administration courses still survive or remain based on *their history*. The competency needs of students in this era are that students are required to have competencies in the field of Office Administration according to expertise competency standards, both SKKNI and international standards.

In the Merdeka Belajar-Kampus Merdeka curriculum, blended learning should be applied to help speed up the completion of tasks. Implementing FieldWork Practices accompanied by other courses requires unbound space and time to complete tasks, so implementing face-to-face lectures in higher education can be minimized.

*Collaborative learning* is a learning model that can be used in practicum learning. It can be seen from some of the statements of Chandra, Al-Rahmi, and Wu: Collaboration is a way of personal interaction and attitude in which individuals are responsible for their actions, learning, abilities, and contributions from their peers. More student centered collaborative learning by using social media as a transmission channel between the community and learners. Colleges have leveraged this social media to encourage collaborative learning and social interaction; Collaborative learning can be based on multi-access computing [8–10].

In respondents' opinion on the office practice learning model, 90% agreed that office practice tasks are performed in groups for part of the work done in teamwork and individually for essential and confidential tasks.

This two-decade-long model of *collaborative learning* development has been widely applied in various fields of science. Moreno-Guerrero argues that *collaborative* learning is beneficial in problem-solving conditions [12]. Based on search results through ScienceDirect, in 2021, as many as 394 categories of publication titles have *collaborative learning* titles, as shown in the following image (Fig. 3):



Fig. 3. Collaborative learning articles

In addition, collaborative learning is more effective in ICT-based learning environments such as *Mobile learning* and the internet (*Website*). For example, Universities in Spain seek to offer a more flexible and high-quality education adapted to new social demands by offering technological resources in university management, teaching, and research development. The process of educational convergence is by promoting the experience of active collaboration and open education among their students by creating a Wikipedia site. The aim is to promote a different and more flexible teaching system in which teachers and students break away from their classical roles. Over the past two decades, many curricula in higher education have implemented collaborative learning [1]. However, on the other hand, the disadvantages of collaborative learning are (a) significant variations in students' domain-specific abilities (e.g., knowledge and skills) and the effort they invest into collaboration and (b) the limited knowledge of teachers on how to assess collaborative learning.

Gherib The use of Web 2.0 technologies in e-learning and e-health provides an opportunity to consider effective teaching and to learn with an emphasis on collaboration. The proposed model is concretized by a collaborative environment that supports behavioral competence in collaborative clinical reasoning based on Web 2.0 technologies (*MEDcollab*), which aims to make student learning visible and accessible to educators [11].

Berkes (2017) assumes adaptive governance is multilevel, starting from the bottom up and being carried out jointly at all levels. They recommend further research on *collaborative* learning, focusing on institutions at all levels, from local to international, as one of the necessary learning models [12].

**Contribute Actively.** Collaborative learning-based learning improves skills in terms of actively contributing to the group. One of the contributions that occur to students is in terms of solving problems in office practice activities at the internship. Group cooperation makes students feel confident in actively contributing to various activities at the internship because they feel that they are not alone in doing the assignments. These active contributions help solve problems, solve tasks, provide ideas, communicate actively, and provide assistance (Fig. 4).



Fig. 4. Active Contribution of Learners

**Work Productively.** Learners work while collaborating well. Good relationships between students, students, and industry supervisors, and students with supervisors can increase work productivity, and this is due to good relationships and practical cooperation between parties.

**Flexibility and Compromise.** Learners can quickly adapt to group members and contribute to each other in large and small groups. Students' flexibility can be manifested in accepting joint decisions during discussions, receiving criticism and suggestions from peers, executives, industry bosses, and supervisors who negotiate differences to find the best solution to a problem, and always Sacrificing various problems in a group.

**Responsibility.** Students demonstrate responsibility during office practice in the classroom and the company, where the intern is consistently present on time and follows the company's work schedule. With this, it is worthwhile to look at the stages for monitoring the activities and progress of student projects. In addition, learners are also responsible for information retrieval, task completion, consultation, and final reports.

**Shows an Attitude of Appreciation.** This indicator shows a respectful attitude when students are kind and polite to fellow learners from the same college in the classroom and other colleges practicing at the practice site on the spot. Speak and behave politely towards supervisors, industry supervisors, and other employees at the practice. Learners listen to the opinions of others, value and accept the opinions of others, respect each other's work contributions, and discuss ideas with others.

In the classroom, students are kind by listening and appreciating when teachers explain the purpose and learning process of office practice, the importance of information sharing, the importance of collaboration, responsibility, and mutual respect. In addition, students behave and are polite to fellow group members by listening and appreciating suggestions, input, or information in finding solutions to problems.

During internships in companies or industries, students consult with industry supervisors and accompany lecturers about various information and problems encountered during the internship and make a daily log book by reporting all activities carried out daily. At this stage, the interaction of students with groups, supervisors, and industry supervisors in terms of communicating in suitable language and at a particular time according to the ideal communication time. In addition, when communicating with industry advisors and other employees during practice in the company, learners can adapt well. See the diagram below (Fig. 5).



Fig. 5. Diagram of difficulty in communicating

Based on the results of the questionnaire, it can be seen that only three students, or 5.77%, have difficulty communicating their duties to supervisors/industry leaders. The remaining 49 students, or 94.22%, had no difficulties. Students cannot communicate well due to the vast age difference between students and industry supervisors/company leaders, and sometimes students have difficulty understanding the words or sentences conveyed by the leadership. Meanwhile, the reasons for not having difficulties include the following:

- 1. Advisors/industry leaders are very guiding and communicate tasks very well.
- 2. The work environment is very supportive and has a positive aura.
- 3. Relationships are well intertwined.
- 4. Mentors are very friendly and easy to communicate with
- 5. The industry guide was very open when I had difficulties completing the assigned tasks.
- 6. We communicate and cooperate in our duties.
- 7. Guidance and leadership are always open and helpful in various matters, so they can be discussed if there are difficulties.
- 8. Respond quickly to assigned commands or tasks.
- 9. The company has always been cooperative and communicative.
- 10. A credit and response to tasks that must be done to minimize communication and learning *miss* for professionals.
- 11. Students must also understand the situation; If the conditions are not right every time, they will have to solve their difficulties.
- 12. Manage the right time to negotiate difficulties with the leader.

Based on the study's results, this communication difficulty does not hinder the completion of tasks assigned by industry supervisors and leaders to students. Delays in completing assignments due to the increasing number of assignments assigned and students becoming less focused on performing tasks indicate that collaboration between students and executives/industry leaders does not affect work outcomes.

The intensity of students' interactions with industrial supervisors and lecturers is carried out in various ways through the LMS, namely synchronous and asynchronous., which makes it easier for universities and workplaces to coordinate, monitor, and evaluate.

Therefore, developing a collaborative learning-based office practice-based learning model needs to be continuously improved with various strategies and capable learning media in this digital era.

## 5 Conclusion

Collaborative learning models supported by industry and the world of work make student learning visible and accessible to educators. Collaborative learning models can improve multilevel adaptive governance, starting from the bottom up and being carried out jointly at all levels. A collaborative learning model focusing on institutions at all levels, from local to international, is one of the necessary learning models.

# References

- Meijer, H., Hoekstra, R., Brouwer, J., & Strijbos, J. W. (2020). Opening collaborative learning assessment literacy: a reflection on current assessment methods in higher education. Assessment and Evaluation in College, 45(8), 1222–1240. https://doi.org/10.1080/02602938.2020. 1729696
- Ouadoud, M., Chkouri, M.Y. (2019). Designing an IMS-LD Model for Sharing Space of Learning Management System. In: Ben Ahmed, M., Boudhir, A., Younes, A. (eds) Innovations in Smart Cities Applications Edition 2. SCA 2018. Lecture Notes in Intelligent Transportation and Infrastructure. Springer, Cham. https://doi.org/10.1007/978-3-030-11196-0\_30
- 3. Greenstein, L. (2012). Assessing 21st Century Skills: A Guide to Evaluating Mastery and Authentic Learning. Corwin.
- 4. Joyce, Bruce, M. W. (2015). *Models Of Teaching*. New Jersey, United States of America: Pearson.
- Fakomogbon, M. A., & Bolaji, H. O. (2020). Effects of Collaborative Learning Styles on Performance of Students in a Ubiquitous Collaborative Mobile Learning Environment. Contemporary Educational Technology, 8(3), 268–279. https://doi.org/10.30935/cedtech/ 6200
- Moreno-Guerrero, A. J., García, M. R., Heredia, N. M., & Rodríguez-García, A. M. (2020). Collaborative learning based on harry potter to study geometric figures in mathematics subjects. Mathematics, 8(3). https://doi.org/10.3390/math8030369
- 7. Reid, J.-A. (2002). *Managing Small-Group Learning*. Newtown: Primary English Teaching Association.
- Chandra, R. (2015). Collaborative Learning for Educational Attainment. Journal of Research & Education Methods IOSR (IOSR-JRME), 5(2).
- Al-Rahmi, W. M., & Zeki, A. M. (2017). A model of using social media for collaborative learning to improve student performance in learning. King Saud University Journal – Computer and Information Science, 29(4), 526–535. https://doi.org/10.1016/j.jksuci.2016.09.002
- Wu, C., Liu, Z., Liu, F., Yoshinaga, T., Ji, Y., & Li, J. (2020). Collaborative learning routes communication in an edge-enabled multi-access vehicle environment. IEEE Transactions on Cognitive and Network Communication, 6(4), 1155–1165. https://doi.org/10.1109/TCCN. 2020.3002253
- Gherib, T., & Bouhadada, T. (2021). Towards a new platform based on Web 2.0 technologies that support collaborative clinical reasoning behavior skills. International Journal of New Technologies in Learning (IJET), 16(08), 106. https://doi.org/10.3991/ijet.v16i08.19471
- 12. Berkes, F. (2017). Environmental Governance for the Anthropocene? Social Ecological Systems, Resilience, and Collaborative Learning. Sustainability, 1–12.

**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.

