

Educator's Horizontal Mismatch in Open and Distance Learning

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Abstract *Open and distance learning (ODL) is more complex than conventional learning. Educators are required to have adequate soft skills and must be able to keep up with technological developments. The aim of this study is to examine the existence of educators' horizontal mismatch in the ODL system and efforts to reduce the occurrence of this mismatch. Horizontal mismatch occurs due to a mismatch in the abilities of educators, whether the educator is over-qualified or under-qualified. This study was conducted on Universitas Terbuka tutors who have used ODL system since 1984. The results of this study show that tutors feel all their abilities are in line with university expectations, but when carrying out teaching practice, university still found tutors who have difficulty in adapting to technological changes and have deficiencies in intrapersonal and interpersonal skills. Efforts that can be made are stricter supervision during the learning process, an official community of course lecturers, and the existence of team teaching between internal lecturers and tutors.*

Keywords horizontal mismatch, open and distance learning, soft skill, technological development

INTRODUCTION

New post-pandemic habits have made open and distance learning (ODL) systems superior and favorable, both for students and educators. Increasingly advanced technological developments have also been able to change the ODL system to what is known today. Currently, the ODL system can be said to be a learning system that is commonly found everywhere, especially in higher education. Various universities in the world currently offer ODL programs from face-to-face web-based learning to full online programs whose scope is not only domestic but international. Unfortunately, most institutions do not use the term ODL, but use the terms online, flexible, and blended learning (Zawacki-Richter & Qayyum, 2018).

Indonesia has Universitas Terbuka, a state higher education institution that has been established since 1984 and implements the ODL system. To date, the number of Universitas Terbuka students is more than 500 thousand with a total of thousands of internal lecturers and external lecturers called "tutors". All students, lecturers, and tutors are in all corners of Indonesia and even in several countries, such as in ASEAN countries, Hong Kong, Taiwan, and South Korea. To support and maintain the quality of learning, Universitas Terbuka has learning materials that have been prepared in print, interactive, audio, video, and radio formats. Apart from that, the assessment system is also structured so that the learning outcomes achieved by students are measured accurately (S.A. et al., 2011).

The massive number of students require Universitas Terbuka to employ a large number of lecturers and tutors with respectively same qualifications in competencies and technological skills. This, in the implementation is not always met and therefore triggers a skills gap/mismatch. A mismatch in the workforce is divided into two types, namely vertical and horizontal mismatch. Vertical mismatch is a mismatch caused by educational qualifications, which almost never happen at Universitas Terbuka due to the minimum requirement upon the recruitment. Meanwhile, horizontal mismatch is a mismatch caused by the differences of the workforce's educational major or skills from those required in their job (Hasibuan & Handayani, 2021).

Horizontal mismatch or also known as qualification mismatch can be identified using a self-assessment method (Montt, 2017). Several indicators of horizontal mismatch that are closely related to distance learning include technological abilities, soft-skill abilities (intrapersonal and interpersonal), ability to measure assessments, and ability to develop teaching materials (Liu, 2023). A mismatch in these indicators can have fatal consequences for distance learning activities, such as inefficiency in human resource allocation and productivity that is not in line with university demands (Hasibuan & Handayani, 2021).

Research on qualification mismatch has been dominated by studies on vertical mismatch or qualification mismatch based on education level. Meanwhile, studies regarding horizontal mismatch are still relatively few. Other studies that examine horizontal mismatch mostly discuss graduates who have just entered the world of work, not educators, especially educators in distance learning systems. This study is expected to fill the research gap in studies regarding educators' horizontal mismatch in distance learning systems and is expected to reduce this mismatch with efforts that can be made by institutions.

METHOD

This study analyzes horizontal mismatch of Universitas Terbuka's tutors. Horizontal mismatch can be identified by self-assessment methods (Montt, 2017), so the questionnaire is used as a tool to measure horizontal mismatch in the research object. Indicators used to measure the existence of horizontal mismatch include technological abilities, soft skills (intrapersonal and interpersonal), ability to measure assessments, and ability to develop teaching materials. Apart from that, to compare tutors' perceptions regarding horizontal mismatch, tutor evaluation data from universities is also provided which includes tutors' inaccurate timing in conducting student assessments. The analytical method used is descriptive analysis which will explain the horizontal mismatch between tutors and comparative analysis which will compare the tutor's perception with the university's expectations.

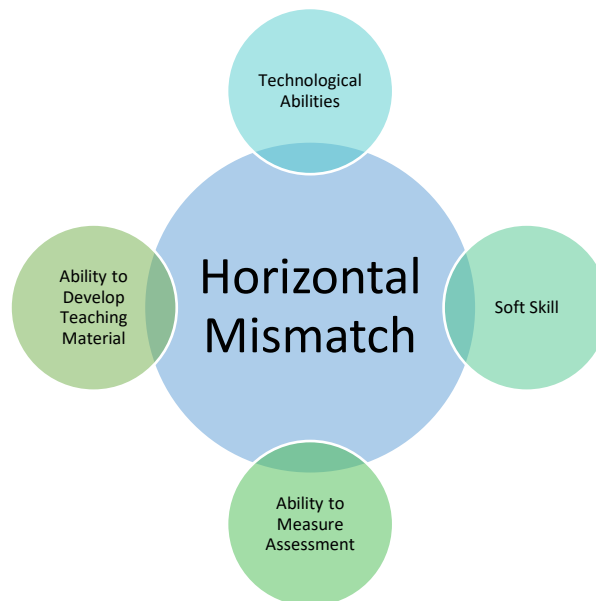


Figure 1. Horizontal Mismatch Indicators

RESULT & DISCUSSION

Open and distance learning (ODL) refers to a complex and planned teaching and learning system (Li & Wang, 2020). Higher education institutions that use the ODL system have a tough task in proving that the quality of their education is equivalent to that provided by higher education institutions that use conventional learning systems. There are still doubts about the quality of the ODL system today (Pannen & Riyanti, 2019). On the other hand, the ODL system is not as easy as imagined, the challenges faced are much more severe than conventional learning systems. In the ODL system, the available information must be packaged differently, the delivery of learning content must vary according to student needs, the assessment system is complicated, and of course it must always keep up with rapid technological developments (Li & Wang, 2020; Pannen & Riyanti, 2019).

The challenges of achieving quality institutions are the responsibility of educators in the ODL system. In fact, apart from the expected quality, there are also various other problems that educators must face. The mismatch in the skills of educators in the ODL system is something that must be corrected. The ODL concept is not just "online learning" but also how educators have skills as well

as intrapersonal and interpersonal soft skills to be applied to learning as well as face-to-face learning (Tarchi et al., 2022).

The respondents in this study were 392 tutors who taught at Universitas Terbuka, the pioneer of ODL in Indonesia. The respondents in this study were tutors who worked for a period of 8 years, namely since 2015, to those who were recruited for less than a year or only worked as tutors since 2023. Most respondents were tutors who worked from 2015 to 2019. The rest were classified as have only been a tutor for the last four years, namely recruitment in 2020 to the latest less than one year or recruitment in 2023. The year of recruitment or length of work can determine the characteristics of the tutor, for example in adapting to the ODL system.

Table 1. Respondents Based on Recruitment Year of Appointment

Year	Total Number of Tutor	Percentage
2015	25	6.38
2016	25	6.38
2017	147	37.50
2018	20	5.10
2019	8	2.04
2020	41	10.46
2021	28	7.14
2022	74	18.88
2023	24	6.12

Sources: Research Result (Processed), 2023

The indicators used in this research include technological abilities, soft skills (intrapersonal and interpersonal), ability to mark assessments, and ability to develop teaching materials. Each indicator has sub-indicators that can display more specific tutor abilities in the ODL system. Technological capabilities are measured based on the tutor's ability to operate the learning platform, namely moodle, and the tutor's ability to follow technological developments, for example the use of artificial intelligence (AI). Figure 2 shows

the results of the tutor's self-assessment and their perception on their ability to operate e-learning and ability to keep up with technological developments is at a good and very good level.

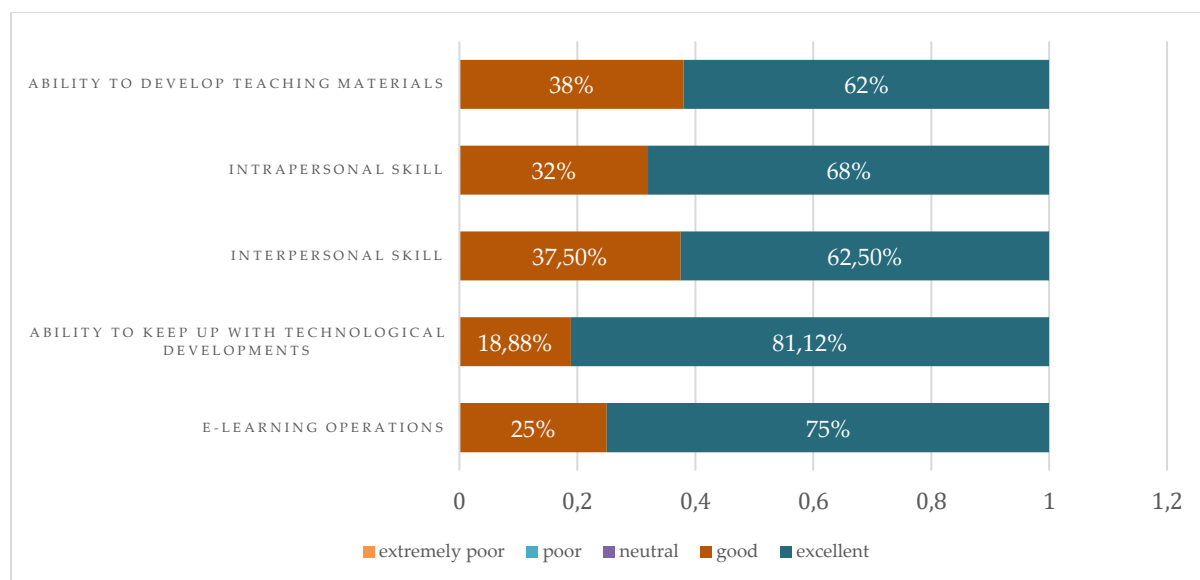


Figure 2. Tutor’s Perception of Technological Capabilities, Soft Skill, and Ability to Develop Teaching Materials

The ability to use technology must be accompanied by good soft skills. Human abilities related to soft skills are predicted to be highly needed in a dynamic environment, especially in industries that take advantage of technological developments. Soft skills are divided into 2 types, namely interpersonal and intrapersonal skills. Interpersonal skills are an individual's ability to work with other people efficiently. Abilities in interpersonal skills include the ability to solve complex problems, communication skills, the ability to work in a team, and leadership. Meanwhile, intrapersonal skills are individual abilities in self-management. Abilities in intrapersonal skills include creativity, critical thinking, the ability to survive in uncertainty, having orientation values, being flexible, having initiative and commitment, the ability to focus, being responsible, emotional intelligence, and being persistent (Poláková et al., 2023).

In this research, tutors provide perceptions of their abilities in both types of soft skills. For interpersonal skills, only communication skills are tested. Meanwhile, for intrapersonal skills, commitment and responsibility are

measured through time management in managing long distance classes. Based on the research results shown in Figure 2, tutors' perceptions of their interpersonal and intrapersonal are classified as good to excellent. The tutor's perception of their interpersonal skills (communication skills) is 37.5% for the good category and 62.5% for the excellent category. Meanwhile, the tutor's perception of their intrapersonal abilities (commitment and responsibility) is 32% for the good category and 68% for the excellent category.

The development of teaching materials in ODL is different from the development of teaching materials in conventional learning systems. There are various types of development of teaching materials in ODL, for example printed teaching materials, non-printed teaching materials, including digital teaching materials, teaching materials in the form of audio, radio, TV, and open educational resources (OER). The use and understanding of technology and intellectual property rights in cyberspace is very necessary for the development of digital teaching materials. The success and effectiveness of the ODL system is very dependent on the quality of the teaching materials (Ahmad Zabidi et al., 2017).

Tutors at Universitas Terbuka have the opportunity to develop teaching materials in digital form, including materials for OER and Massive Open Online Courses (MOOCs). UT has its own standards for developing its teaching materials, thus teaching materials developers including subject matter experts from other universities must comply with those standards. The research results show that the tutor's perception of the ability to develop teaching materials is good and excellent. As many as 38% of tutors have the perception that they are able to develop teaching materials well. Meanwhile, the remaining 62% had the perception that they have excellent ability to develop teaching materials.

The next indicator tested is the tutor's ability to carry out assessments. Assessment is an important component in ODL because through assessment, educators can find out whether students have met learning outcomes. Even though the ODL system is flexible, the deadlines and assessment measurements are quite complex (Petroman & Petroman, 2013; Rienties et al., 2023). Especially in higher education, student assessments are expected to contain tasks with high competency and complex problem solving (Vandeweyer et al., 2021). To

achieve the same quality in assessment measurements, Universitas Terbuka provides questions and scoring guidelines for each type of assessment. This is done so that the quality of the assessment materials received by all students is the same and all lecturers and tutors refer to the scoring guidelines to mark and score the assessment results.

The research results in Figure 3 show that 57% of respondents did not find it difficult at all to carry out learning assessments on the ODL system. As many as 36% felt it was slightly difficult to carry out the assessment. Meanwhile, 7% of respondents felt it was quite difficult to carry out the assessment. There were no respondents who felt it was difficult or very difficult to carry out learning assessments on the ODL system. This is because all assessment components have been provided with careful planning and execution from the university. The assessment components that have been provided include a guideline for creating questions that contain question indicators, questions that refer to the guidelines, and scoring guidelines that are used as a reference in assessing assessments.

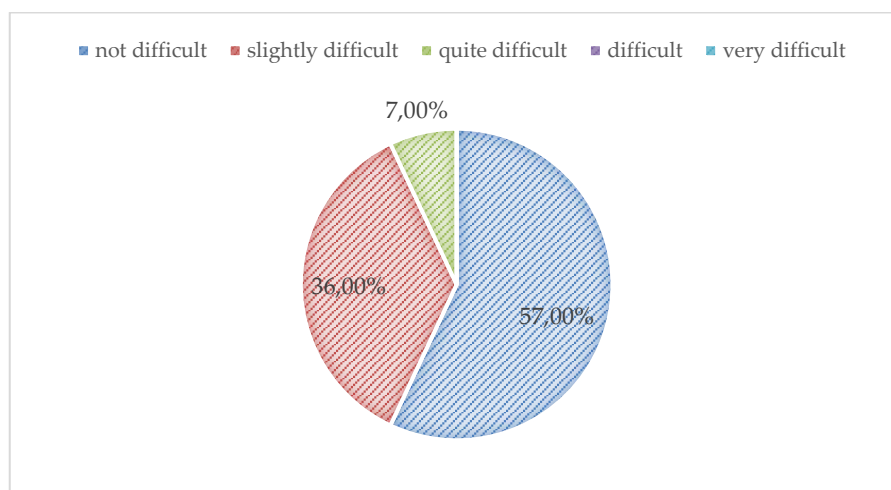


Figure 3. Tutor's Perception of Ability to Measure Assessment

The research results show that tutors' perceptions of their ability to keep up with technological developments, soft skills, and ability to develop teaching materials are classified as good and excellent. Meanwhile, regarding the ability to carry out assessments, most tutors found no difficulty at all with the ODL system. Tutors' perceptions differ slightly from university expectations. Tutor performance is reviewed every semester, both by the student and by the

university. Students can provide feedback through a student evaluation questionnaire at the end of the lecture period. Meanwhile, the performance of tutors by the university is measured based on analytical data drawn from the e-learning platforms. The assessment report contains data on tutors who have not completed the marking of student assessments. Based on this report, it can be seen that tutors are lacking commitment, responsibility and self-management.

Regarding tutor's performance, student considered their tutors to be relatively good, especially for tutor's ability in communication with students. However, tutor's performance based on the university assessment was still relatively poor. Tutors seem to only use default teaching materials and learning materials from universities. Initiatives to add learning resources are still very lacking. OER and MOOCs are still rarely used by tutors. Scoring student assessments are often not completed in a timely manner by tutors. This mean that the assignment of scoring student assessment being transferred to internal lecturers in order to maintain the quality of learning. This poor tutor performance also shows that the tutor's soft skills are not good, which is inversely proportional to the tutor's own perception.

Several efforts can be made to reduce this horizontal mismatch. Supervision of the tutor's performance has been carried out from the start of the learning process to the end. However, tutors still often show poor performance during the learning process. Stricter supervision during the learning process and the current assessment must be carried out to reduce horizontal mismatch. Strict supervision by the university can hone the tutor's soft skills. For example, to organize self-management, increase tutor commitment and responsibility in completing their assignments.

The large number of tutors who teach compulsory and general courses requires the existence of an official community of course teachers. This will reduce asymmetric information between tutors. Compulsory and general courses in one semester are available in hundreds of classes. Asymmetric information is very prone to occur. An example that often occurs is the many discussions regarding scoring guidelines in student assessment measurements.

Thus, it is recommended that an official community of course instructors be formed and course instructors must join this community.

To reduce asymmetric information, team teaching should be formed between tutors and internal lecturers. The existence of team teaching will increase the ability to collaborate between tutors and internal lecturers. This collaboration can certainly align the tutor's perception with the university's expectations regarding the ability to develop teaching materials, the ability to assess, and the ability to soft skills. Apart from that, collaboration between the two can also increase the use of technology in ODL. Thus, all these efforts are expected to reduce the horizontal mismatch that exists between tutors and university expectations, so that the quality of ODL is maintained and can be improved.

CONCLUSION

Horizontal mismatch is a mismatch due to the educational major or skills possessed by the workforce being different from those required in their job. Horizontal mismatch in Universitas Terbuka educators is still found if the tutor's perception is compared with the university's expectations. The tutor's ability to keep up with developments in technology, soft skills, the ability to develop teaching materials, and the ability to carry out assessments are still not good. To reduce this horizontal mismatch, several efforts are recommended for universities to undertake, including increasing supervision from universities to tutors during the learning process, forming an official community of tutors for each course, and forming team teaching between internal lecturers with tutors.

DECLARATION OF CONFLICTING INTERESTS

The authors state that there is no conflict of interest in the publication of this article.

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