

# Level Of Digital Talent Readiness In Blended Learning Assessments At The Higher Education

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**Abstract:** The study aims at investigating the level of readiness of Digital Talent in the assessment of blended learning at universities. This was carried out to respond to the challenges ahead, namely, the application of blended learning in higher education. The assessment available so far is classroom face-to-face. The online learning assessments, however, has not yet fully considered. The component analysis procedure of blended learning assessment, instrument compilation, instrument validation, instrument dissemination, tabulation process, and data interpretation are critical parts of this descriptive study. The data was collected in the Education Technology Study Program at Universitas Negeri Padang in the Academic year of July-December odd semester. The sample was selected randomly. The results signified that that the Digital Talent has influential potentials and it, therefore, requires an assessment of blended learning. The implication is the instructional designer in designing blended learning designs and develops blended learning assessments to accommodate all learning activities and domains

**Index Terms:** digital talent, blended learning, assessment

## 1 INTRODUCTION

The Digital Talent requires self-development from various aspects ranging from hard digital skills and soft digital skills so that they are able to survive in the digital era [1]. Digital Talent is a human resource better known as Digital Learners [2]. Digital Talent in learning in higher education consists of instructional technology developers, lecturers, and students. This digital learner is a type of learning that is always connected and seeks information from many sources. Digital learners are visual, prefer and understand visual content such as understanding images, sound and video rather than text. Digital learners are pleased to digitally interact with content and other learning to explore and discuss information and draw their own conclusions. The today's trends encourage learning by integrating technology into learning such as the virtual reality that can fully involve individuals in learning. Digital learners must be supported with digital-based facilities and learning and create a learning atmosphere that is most relevant to their digital lives. Integration of digital technology into learning, in the future it is predicted that future technology can replace the position of lecturer. Digital technology allows each learner to learn independently and collaboratively anywhere and anytime. Even so, in the aspect of education that tends to reduce values to students still need to maintain face-to-face meetings in class. Three domains of learning, cognitive and psychomotor can be accommodated through digital technology-based learning, while affection is recommended by direct meeting because it is more effective and efficient. Therefore, blended learning is needed that combines the best in online learning with the best in face-to-face meetings in the classroom [3]–[5]. The many advantages offered by blended learning have emerged various studies such as the development of learning models [6]–[8], learning media [9]–[11], the message of blended learning [12], the effectiveness of organizing blended learning [13], [14]. Blended learning has been carried out, including assessing the implementation of blended learning [15], but not yet an instrument of blended learning assessment. It is necessary to investigate the Digital Talent readiness in the implementation

of blended learning with the aim of finding answers to instruments such as what is needed and readiness to participate in the blended learning assessment.

## 2 METHODOLOGY

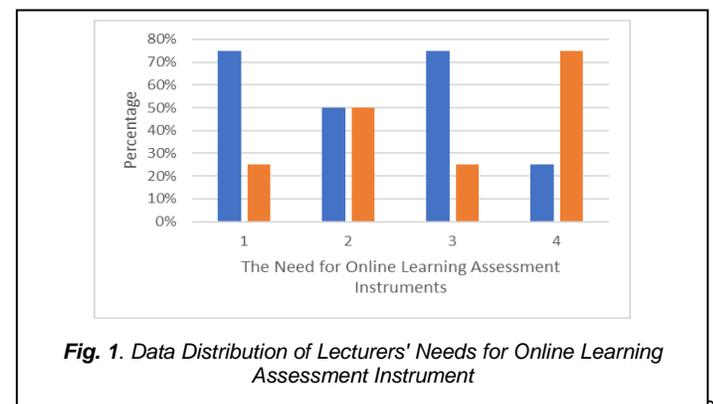
This research was a descriptive study through the analysis procedure of assessment components of blended learning, composing instruments, validating instruments, distributing instruments, tabulating processes, and interpreting data. The instrument used was a questionnaire with the results of the validity and reliability test. Data were collected in the Education Technology Study Program of Padang State University in the July-December semester. The sample selection was carried out randomly. The data that has been obtained was analyzed by quantitative data analysis.

## 3 RESULT AND DISCUSSION

Analysis of Digital Talent readiness in blended learning assessment in higher education covers the needs of lecturers for blended learning assessment, students' ability for blended learning assessment, and readiness of facilities owned by students in conducting blended learning assessment.

### 3.1 Final Stage Lecturer Needs Analysis of Blended Learning Assessment Instrument

Data related to lecturers in the form of the need for blended learning assessment instruments, including online learning assessment instruments and face-to-face assessment instruments in class.



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Basically, lecturers need blended learning assessment sheets. Collecting data on the need for online learning assessment instruments includes the need for online discussion assessment sheets (1), online assignment assessment sheets (2), online learning activity sheets (3), and online quiz values recap format (4). The need for online discussion scoring sheets, 75% of lecturers need and 25% really need these instruments. Whereas no one chooses answers that are rare and don't need instruments. The need for online assignment assessment sheets 50% of lecturers require and the remaining 50% of lecturers desperately need the online assignment assessment sheets. The needs of lecturers on observation sheets online learning activities 75% need and 25% really need it. The need for an online quiz score recap format 25% of lecturers need and 75% really need.

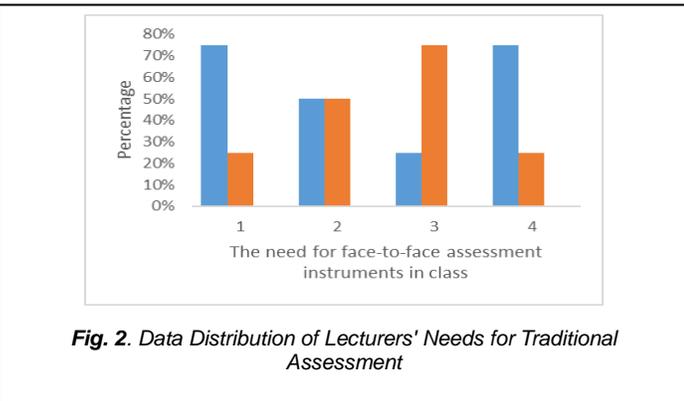


Fig. 2. Data Distribution of Lecturers' Needs for Traditional Assessment

Furthermore, the need for a blended learning assessment sheet is reviewed from the need for face-to-face learning activities in the classroom. Collecting data on the need for face-to-face assessment instruments in the class includes the need for face-to-face discussion assessment sheets (1), face-to-face assignment assessment sheets (2), face-to-face learning activity observation sheets (3), and the format of face-to-face quiz scores (4). The need for face-to-face discussion assessment sheets in class. From the data collected, 75% of the lecturers needed and 25% were in dire need of a discussion assessment score sheet in class. The need for assessment sheets on learning assignments in class, 50% of lecturers need and 50% of them stated they really need. The need for observation sheets of learning activities in class 25% of lecturers needs and 75% really need these instruments. And for quiz activities, 75% need and 25% really need. So it can be concluded that lecturers need the development of blended learning assessment instruments. The beliefs lecturers have about the assessment of classroom practices [16] and the concept of teacher assessment are important because they shape the use of assessment practices [17]. on teaching as something separated from the effects of assessment on learning [18]. Management's beliefs reflected the differing practices of assessment by the level of schooling [19]. So, the needs of lecturers for blended learning assessment instruments can affect learning organized by a blended learning system. So that each learning activity needs to be recorded the development of the learning domain, including cognitive, affective, and psychomotor students.

### 3.2 Analysis of Student Needs for Blended Learning Assessment Instruments

Data about students' needs for blended learning assessment instruments were explored from two aspects, namely online assessment and face-to-face assessment. The data are as in table 1.

**TABLE 1**  
**DATA DISTRIBUTION OF LECTURERS' NEEDS FOR TRADITIONAL ASSESSMENT**

No	Statement							
	Online Assessment				Face-to-Face Assessment			
1	0	0	0	0	0	0	0	0
2	2,344	1,56	,56	0,8	0	0,8	1,56	0,8
3	15,63	32,8	28,91	34	30,5	36	21,9	28,13
4	65,63	59,4	59,38	56	61,7	58	65,6	64,84
5	16,41	6,25	10,16	8,6	7,81	5,5	10,9	6,25
total	100	100	100	100	100	100	100	100

The distribution of data related to student needs for blended learning assessment instruments can be seen in Figure 3.

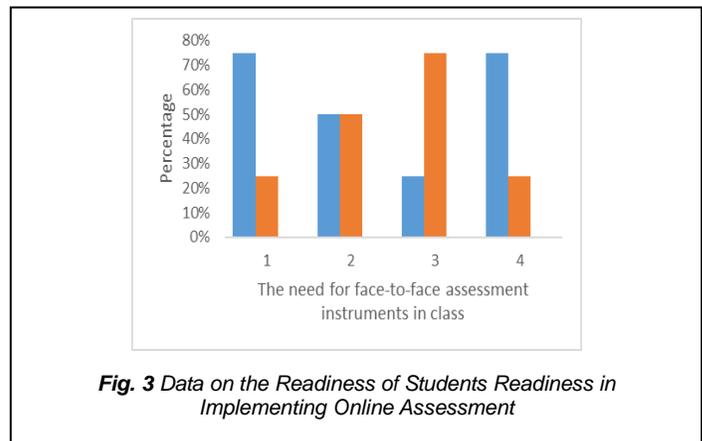


Fig. 3 Data on the Readiness of Students Readiness in Implementing Online Assessment

Figure 3 shows that students need an online learning assessment because data distribution tends to the right. That means that many of the respondents gave the answers needed for the assessment of blended learning. The statement consists of two groups, namely the readiness of students to take part in an online learning assessment and an assessment of face-to-face learning activities. Both aspects are explored with four statements, namely readiness to participate in online discussions, online assignments, online learning activities, and take online quizzes. In part 1, no student responds unnecessarily to all statements. In response less need (part 2) for all statements <of 2.5%. The response felt sometimes needed and sometimes did not need (part 3) a maximum of 32.8%. In response to need (section 4), it looks very high, reaching 65.6% of all statements. And respondents who really need for the four statements reached 16.4%. The aspects of face-to-face meetings are, however, related to discussions in class, assignments in print, participation in face-to-face learning activities in class, and readiness to take quizzes in class. Distribution of student needs data on the needs of blended learning assessment can be seen in Figure 4.

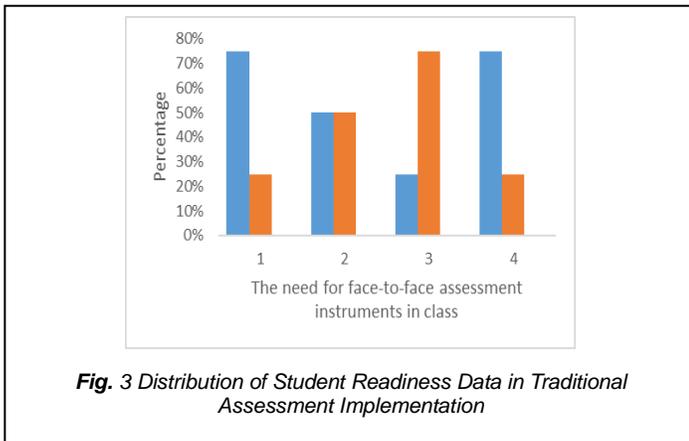


Fig. 3 Distribution of Student Readiness Data in Traditional Assessment Implementation

Table 4 shows that the readiness and needs of students towards the assessment of blended learning because the spread of data tends to the right. That means that many of the respondents gave the answers needed to assess blended learning, especially for face-to-face meetings. The statement consists of four statements, namely readiness to attend face-to-face discussions, tasks in print, involvement in class face-to-face, and take quizzes in class. In part 1, no student responds unnecessarily to all statements. In response less need (part 2) for all statements <of 1.56%. The response felt sometimes needed and sometimes did not need (part 3) a maximum of 36%. In response to the need (section 4), it looks very high, reaching 65.6% of all statements. And respondents who really need for the four statements reached 10.9%.The perspective on assessment presents the collage students as responsible for their own learning and that they have to obtain the necessary qualifications in order to access different educational levels [20]. As with learning, student readiness is also needed in the assessment process [21]. Actually, it is considered that this method gives students / pupils useful feedback and it facilitates their engagement in assessment through the process of self-assessment or peer assessment [22]. So, this assessment is beneficial for lecturers, students, and institutions.

**3.3 Feasibility Analysis Supporting Facilities for Blended Learning Assessment Instrument**

Data on the feasibility of supporting facilities for conducting a blended learning assessment was explored from two aspects, namely online assessment and face-to-face evaluation. The data occurs in table 2.

The distribution of data related to the readiness of students related to the facilities they have in implementing the blended learning assessment can be seen in Figure 5.

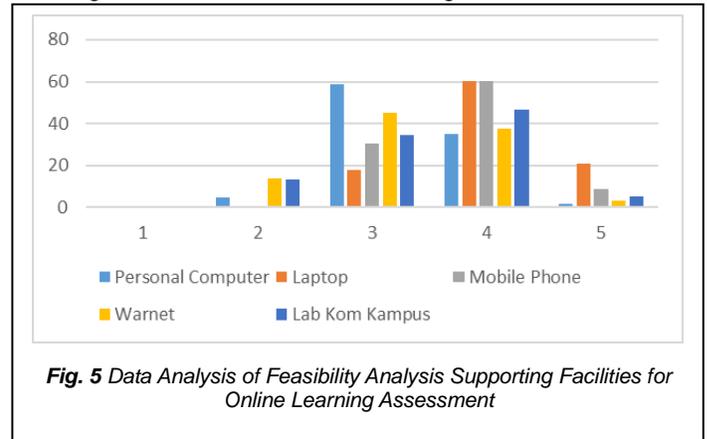


Fig. 5 Data Analysis of Feasibility Analysis Supporting Facilities for Online Learning Assessment

Table 5 shows that the tools possessed by students in conducting blended learning assessments because data distribution tends to the right. That means that many of the respondents provided information that students have facilities in conducting blended learning assessments. The statement consists of five statements related to the readiness of the device owned by students to take part in an online learning assessment and an assessment of face-to-face learning activities. The statement explores information related to devices used by students such as the selection of personal computers, laptops, mobile phones, internet cafes, and utilizing computer laboratories provided by the campus. In part 1, none of the students who responded did use any of the tools for all statements that were raised. In response rarely use (part 2) for all statements <of 14%. The response felt that sometimes using a certain device (part 3) a maximum of 59%. The response often uses a certain device (section 4), which is very high, reaching 60% of all statements. And respondents who always use all devices only 8.6%. This means that all students have used all devices even though everyone has a different device. For the needs of supporting facilities, the implementation of blended learning must have at least one device. However, variations in the use of devices by students actually have a good impact on familiarity in the use of technology. While the face-to-face meeting aspect is related to the use of laptops and mobile phones every time they study in class, and the skill of taking notes during face-to-face lectures takes place in student notebooks. Distribution of supporting facilities data in face-to-face learning on the needs of blended learning assessment can be seen in Figure 6.

**TABLE 2**  
**DATA DISTRIBUTION OF LECTURERS' NEEDS FOR TRADITIONAL ASSESSMENT**

No	Student Devices Readiness							
	Online Assessment				F2F Assessment			
1	0	0	0	0	0	0	0	2,34
2	4,69	0,78	0,78	14,1	13,3	0,78	1,56	0,78
3	58,6	18	30,5	45,3	34,4	35,9	32	31,3
4	35,2	60,2	60,2	37,5	46,9	60,2	59,4	60,2
5	1,56	21,1	8,59	3,13	5,47	3,13	7,03	5,47
	100	100	100	100	100	100	100	100

Fig. 3 Data Analysis on Feasibility of Supporting Facilities for Blended Learning Assessment

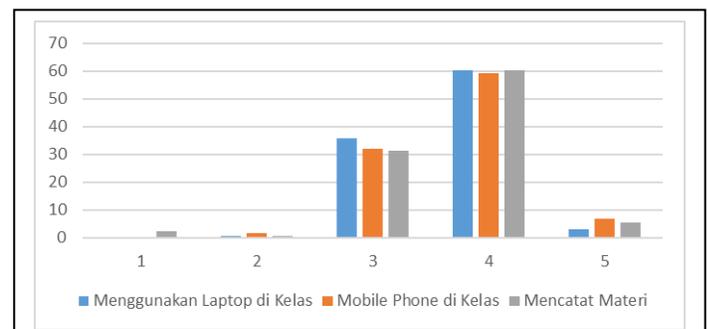


Fig. 6 Data Analysis on Feasibility Analysis Supporting Facilities for Traditional Appraisal

Table 6 shows that the tools possessed by students in conducting blended learning assessments specifically for face-to-face meetings because data distribution tends to the right. That means that many of the respondents provided information that students had facilities in conducting face-to-face assessments in class. The statement consists of three statements related to the readiness of the device owned by students to follow the assessment in class. The statement digs up information related to the use of devices in classrooms such as laptops and mobile phones and records lecture material during the lecture. Supporting facilities for face-to-face lectures both laptops and mobile phones are owned and used by students. The percentage of data for the two devices is almost the same, meaning students have a laptop or have a mobile phone. While there are 2.3% who are not ready to take notes in class. This indicates students need help to improve learning facilities and equipment in face-to-face learning. The equipment can be in the form of office stationery; notebooks, pens, pencils, erasers, double portfolio paper, and other office stationery. The equipment is also needed when evaluating face-to-face learning in class. Similar to learning, blended learning assessment also needs to do a feasibility analysis [12]. Such support can come from lecturers, students, and universities [23], [24]. So, the readiness of lecturers and students does not mean anything without the support of tools that are relevant to the implementation of the blended learning assessment.

#### 4 CONCLUSION AND RECOMMENDATION

Research and studies on Digital Talent readiness in conducting blended learning assessments are discussed from three aspects, namely the readiness of lecturers, the readiness of students, and support for the feasibility of facilities relevant to blended learning. The results of this study indicate that Digital Talent has potential and requires an assessment of blended learning. The implication, instructional designer in designing blended learning also designs and develops blended learning assessments to accommodate all learning activities and domains. Based on the results of the study, the researcher recommends designing and developing a model or framework for implementing learning assessments conducted with blended learning. Teachers / Lecturers, Instructional Designer, Learning Technology Development (PTP), and various technical personnel are needed to produce the framework or model of blended learning assessment needed and of course in accordance with the needs of the course.

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