

CHAPTER III

RESEARCH DESIGN

This chapter explains the methodology of the study. It covers the research design, population and sample, and data collecting techniques.

A. Research Design

This research was designed to find out the perceptions on the implementation of e-assessment which was undertaken by the students in English Language Education at the Islamic University of Indonesia. The research of e-assessment was done by applying quantitative research method. The researcher distributed online questionnaire to get the data from the respondents. The researcher applied the quantitative research method and survey study to identify the students' opinions regarding the use of e-assessment.

B. Population and Sample

This study uses purposive sampling with the criteria of respondents is students of English Language Education at the Islamic University of Indonesia who had experience using e-assessment. The target is a subject that applies blended learning with e-assessment as a formative assessment. Designing blended learning requires critical concepts, including combining the right technology (Stein & Graham, 2014). Blended learning is not only limited to the use of some media such as Kahoot, but many media can also be used as needed. The researcher determined to take the data in those subjects Language Assessment and

World Englishes Pronunciation because those subjects had applied online assessment. In the Language Assessment subject, the lecturer uses Kahoot, while at the World Englishes Pronunciation subject the lecturer uses Kahoot and Quizizz. The study involved 208 students from Language Assessment and World Englishes Pronunciation. According to Cohen, Manion, and Morrison (2007), it is stated that determining the number of samples in a study can be predicted from the total population.

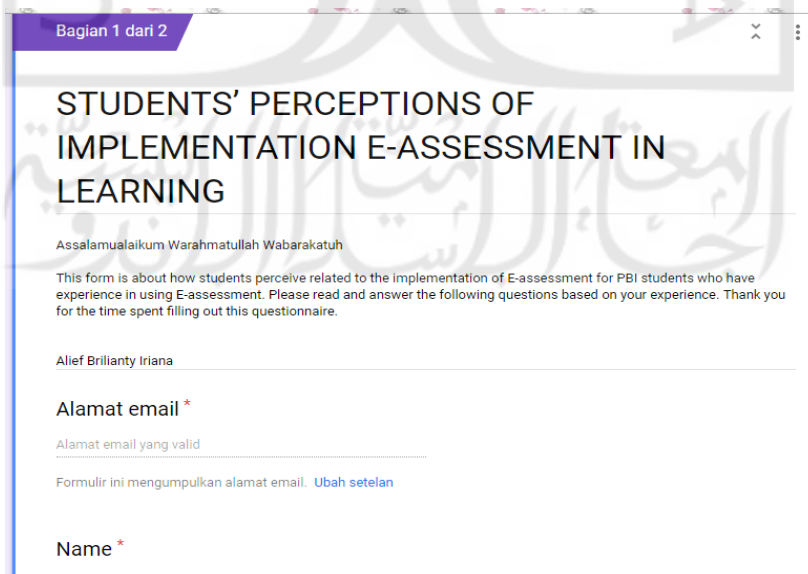
Table 1. Table of Cohen and Morrison

Population	Confidence level 90 per cent			Confidence level 95 per cent			Confidence level 99 per cent		
	Confidence	Confidence	Confidence	Confidence	Confidence	Confidence	Confidence	Confidence	Confidence
30	27	28	29	28	29	29	29	29	30
50	42	45	47	44	46	48	46	48	49
75	59	64	68	63	67	70	67	70	72
100	73	81	88	79	86	91	87	91	95
120	83	94	104	91	100	108	102	108	113
150	97	111	125	108	120	132	122	131	139
200	115	136	158	132	150	168	154	168	180
250	130	157	188	151	176	203	182	201	220
300	143	176	215	168	200	234	207	233	258
350	153	192	239	183	221	264	229	262	294
400	162	206	262	196	240	291	250	289	329
450	170	219	282	207	257	317	268	314	362
500	176	230	301	217	273	340	285	337	393
600	187	249	335	234	300	384	315	380	453
650	192	257	350	241	312	404	328	400	481
700	196	265	364	248	323	423	341	418	507
800	203	278	389	260	343	457	363	452	558
900	209	289	411	269	360	468	382	482	605
1,000	214	298	431	278	375	516	399	509	648
1,100	218	307	448	285	388	542	414	534	689
1,200	222	314	464	291	400	565	427	556	727
1,300	225	321	478	297	411	586	439	577	762
1,400	228	326	491	301	420	606	450	596	796
1,500	230	331	503	306	429	624	460	613	827
2,000	240	351	549	322	462	696	498	683	959
2,500	246	364	581	333	484	749	524	733	1,061
5,000	258	392	657	357	536	879	586	859	1,347
7,500	263	403	687	365	556	934	610	911	1,480
10,000	265	408	703	370	566	964	622	939	1,556
20,000	269	417	729	377	583	1,013	642	986	1,688
30,000	270	419	738	379	588	1,030	649	1,002	1,737
40,000	270	421	742	381	591	1,039	653	1,011	1,762
50,000	271	422	745	381	593	1,045	655	1,016	1,778
100,000	272	424	751	383	597	1,056	659	1,026	1,810
150,000	272	424	752	383	598	1,060	661	1,030	1,821
200,000	272	424	753	383	598	1,061	661	1,031	1,826
250,000	272	425	754	384	599	1,063	662	1,033	1,830
500,000	272	425	755	384	600	1,065	663	1,035	1,837
1,000,000	272	425	756	384	600	1,066	663	1,036	1,840

Based on the table above, the researcher used data from the total population in Language Assessment and World Englishes Pronunciation which consisted of 208 students. Based on the population, the researcher used 95% of confidence level and 0,1 of margin error. It showed that the researcher had a level of confidence 95% and the sample must involve 151 respondents.

C. Data Collecting Techniques and Research Instrument

This study was conducted to collect data using the questionnaire to get the result from the research. The researcher adapted SPEAQ by Alsadoon (2017) to investigate the students' perceptions of the implementation of E-assessment. This study focused on the survey and questionnaire using Google form as online media. This media is very easy for the researcher in taking data because it does not need a lot of costs. In addition, the respondents were likely to fill Student Perceptions of E-assessment Questionnaire (SPEAQ) in ease. The following is an example of a google form design:



The image shows a screenshot of a Google Form titled "STUDENTS' PERCEPTIONS OF IMPLEMENTATION E-ASSESSMENT IN LEARNING". The form is displayed in a browser window with a purple header bar that says "Bagian 1 dari 2". The form content includes a greeting "Assalamualaikum Warahmatullah Wabarakatuh", a description of the form's purpose, and two required text input fields: "Alamat email *" and "Name *". The "Alamat email *" field has a placeholder text "Alamat email yang valid" and a note below it: "Formulir ini mengumpulkan alamat email. [Ubah setelan](#)".

STUDENTS' PERCEPTIONS OF IMPLEMENTATION E-ASSESSMENT IN LEARNING

Deskripsi (opsional)

Online assessment enhances quality aspect of my learning *

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

Online assessment gives me immediate feedback about my performance *

	1	2	3	4	5	
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The SPEAQ consisted of 15 items which were evaluated through five-point Likert scale ranging from 1 to 5. The number indicates whether the students agree or not on the implementation of the online assessment. As 1 means 'Strongly agree' (*Saya sangat setuju dengan pernyataan ini*), 2 means 'Agree' (*Saya setuju dengan pernyataan ini*), 3 means 'Netral' (*Saya netral dengan pernyataan ini, 50:50*), 4 means 'Disagree' (*Saya tidak setuju dengan pernyataan ini*), 5 means 'Strongly disagree' (*Saya sangat tidak setuju dengan pernyataan ini*).

Table 2. Mean and Standard Deviation each statement

No/Domain	Statement	Mean	SD
1/D6	Online assessment enhances quality aspect of my learning	3.80	0.784
2/D6	Online assessment gives me immediate feedback about my performance	3.85	0.867
3/D4	Online assessment provides students with feedback to improve learning	3.86	0.842
4/D5	Online assessment provides an unbiased grading	3.53	0.826
5/D2	Online assessment helps in improving the quality of assessment in higher education	3.90	0.824
6/D6	Online assessment enhances self-learning	3.98	0.843
7/D1	Online assessment reduces exam stress	3.58	1.020
8/D3	Online assessment improves my technical skills	3.73	0.855
9/D3	I prefer online assessment rather than the traditional one	3.71	1.023
10/D2	Online assessment is appropriate for all subjects	3.44	0.987
11/D4	Online assessment is appropriate for all students	3.62	1.016
12/D3	Online assessment does not require advance technical skills from students	3.38	0.946
13/D2	Online assessment promotes applying a variety of questions	3.82	0.798
14/D5	Online assessment does not facilitate cheating	3.23	1.110
15/D1	Reading from a screen does not make it difficult to use online assessment	3.36	1.041

D. Validity and Reliability

1. Validity

The original version of questionnaire validity was ensured by obtaining feedback experts from the evaluation and measurement department of the university, and the reliability was 0.91. However, the original version only had 4

scales. Thus, to accommodate the validity of the modified scale version, the researcher conducted validity and reliability test.

All items:

Table 3. Validity each statement

Question	R Hitung	R Tabel	Validitas
Q1	0.664	0.1476	Valid
Q2	0.671	0.1476	Valid
Q3	0.619	0.1476	Valid
Q4	0.472	0.1476	Valid
Q5	0.707	0.1476	Valid
Q6	0.611	0.1476	Valid
Q7	0.441	0.1476	Valid
Q8	0.619	0.1476	Valid
Q9	0.679	0.1476	Valid
Q10	0.565	0.1476	Valid
Q11	0.610	0.1476	Valid
Q12	0.520	0.1476	Valid
Q13	0.622	0.1476	Valid
Q14	0.553	0.1476	Valid
Q15	0.504	0.1476	Valid

Based on the table above it is known that the r count for question 1 is 0.664, question 2 is 0.671, question 3 is 0.619, question 4 is 0.472, question 5 is 0.707, question 6 is 0.611, question 7 is 0.441, question 8 is 0.619, question 9 is 0.679, question 10 is 0.565, question 11 is 0.610, question 12 is 0.520, question 13 is 0.520, question 13 is 0.622, question 14 is 0.553, question 15 is 0.504. These results indicate that all questions are valid because the calculated r value is greater than r table (0.1476).

2. Reliability

Table 4. Reliability of SPEAQ

Variabel	Cronbach's Alpha	N of Items	Batasan	Reliabilitas
Student perceptions of implementation e-assessment in learning	0.862	15	0.60	Reliabel

Based on the results of the reliability test above, it is known that the Cronbach alpha number is 0.862, so the questionnaire (0.862) is greater than the minimum value of Cronbach alpha 0.6. Therefore it can be concluded that the research instruments used to measure online assessment variables can be said to be reliable.

E. Data Analysis Techniques

This study used Google form as the media to complete the SPEAQ. The researcher distributes the questionnaire directly in each class of courses and shares through the group Line and Whatsapp. By using the Google Form, each score data can be summed up and analyzed automatically on the spreadsheet application by Google. The data were analyzed using manual steps which were be done with Microsoft Excel.

The data were analyzed quantitatively by using SPSS. The steps were:

1. Checking each item of Students' Perceptions of e-assessment Questionnaire to make sure it is easy to understand through the process of consultation to the lecturer.
2. Creating the questionnaire by using google form web, and changing it to a simple link using tinyurl.com
3. Distribution the link of the Questionnaire to 208 students in the English Language Education Department within the subjects of Language Assessment and World Englishes Pronunciation
4. Analyzing and calculating the data using Microsoft Excel.
5. Processing the data using SPSS software to find validity and reliability.
6. Using Microsoft Excel to find the highest and lowest points of the questionnaire.