Monograph
Digitalization
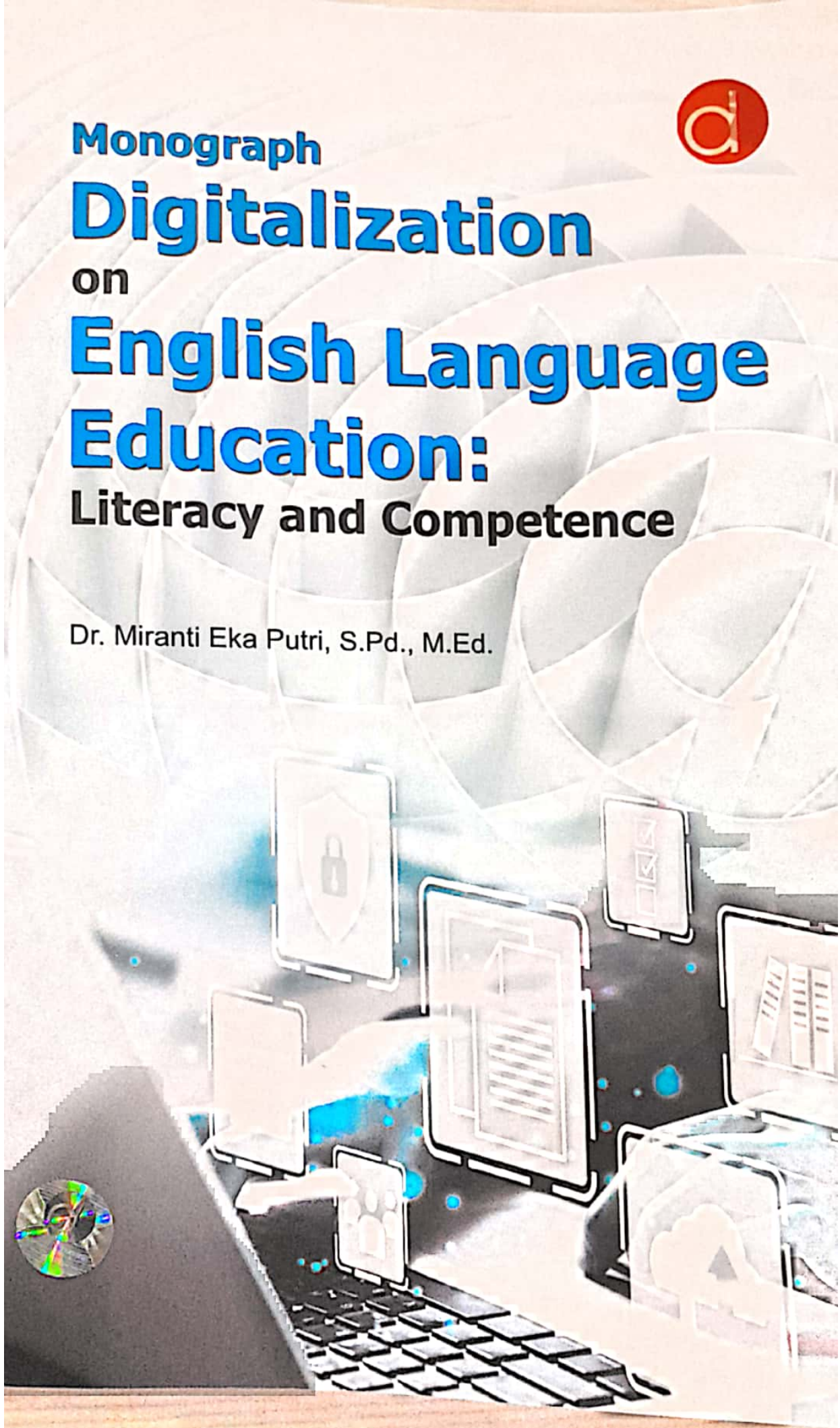on
English Language Education:
Literacy and Competence

Dr. Miranti Eka Putri, S.Pd., M.Ed.

Monograph
Digitalization on English
Language Education:
Literacy and Competence

UU No 28 tahun 2014 tentang Hak Cipta

Fungsi dan sifat hak cipta Pasal 4

Hak Cipta sebagaimana dimaksud dalam Pasal 3 huruf a merupakan hak eksklusif yang terdiri atas hak moral dan hak ekonomi.

Pembatasan Pelindungan Pasal 26

Ketentuan sebagaimana dimaksud dalam Pasal 23, Pasal 24, dan Pasal 25 tidak berlaku terhadap:

i. Penggunaan kutipan singkat Ciptaan dan/atau produk Hak Terkait untuk pelaporan peristiwa aktual yang ditujukan hanya untuk keperluan penyediaan informasi aktual;

ii. Penggandaan Ciptaan dan/atau produk Hak Terkait hanya untuk kepentingan penelitian ilmu pengetahuan;

iii. Penggandaan Ciptaan dan/atau produk Hak Terkait hanya untuk keperluan pengajaran, kecuali pertunjukan dan Fonogram yang telah dilakukan Pengumuman sebagai bahan ajar; dan

iv. Penggunaan untuk kepentingan pendidikan dan pengembangan ilmu pengetahuan yang memungkinkan suatu Ciptaan dan/atau produk Hak Terkait dapat digunakan tanpa izin Pelaku Pertunjukan, Produser Fonogram, atau Lembaga Penyiaran.

Sanksi Pelanggaran Pasal 113

1. Setiap Orang yang dengan tanpa hak melakukan pelanggaran hak ekonomi sebagaimana dimaksud dalam Pasal 9 ayat (1) huruf i untuk Penggunaan Secara Komersial dipidana dengan pidana penjara paling lama 1 (satu) tahun dan/atau pidana denda paling banyak Rp100.000.000 (seratus juta rupiah).

2. Setiap Orang yang dengan tanpa hak dan/atau tanpa izin Pencipta atau pemegang Hak Cipta melakukan pelanggaran hak ekonomi Pencipta sebagaimana dimaksud dalam Pasal 9 ayat (1) huruf c, huruf d, huruf f, dan/atau huruf h untuk Penggunaan Secara Komersial dipidana dengan pidana penjara paling lama 3 (tiga) tahun dan/atau pidana denda paling banyak Rp500.000.000,00 (lima ratus juta rupiah).

Monograph
Digitalization on English
Language Education:
Literacy and Competence

Dr. Miranti Eka Putri, S.Pd., M.Ed.

MONOGRAPH DIGITALIZATION ON ENGLISH LANGUAGE EDUCATION: LITERACY AND COMPETENCE

Miranti Eka Putri

Hak Cipta 2022, Pada Penulis

FOREWORD

Assalamu'alaikum, wr. wb

Our foremost and utmost gratitude to Allah Swt., for His abundant grace that allowed us, Deepublish Publisher to publish this book entitled *Monograph Digitalization on English Language Education: Literacy and Competence.*

As a publisher that–above other missions–prioritizes its role to educate and glorify mankind, as well as to utilize science and technology to its best, we do not only attend to the work of established writers, but we provide the room and facility for people who wish to express their creativity and innovation in writing and conveying ideas and values.

The *Monograph Digitalization on English Language Education: Literacy and Competence* is available in two versions, Indonesian and English.

Our warmest gratitude and appreciation to the author who has given us trust and contribution to the perfection of this book. Hopefully, this book is useful, and educative, and contributes well in glorifying mankind and the utilization of science and technology in the country.

Wassalamu'alaikum, wr. wb

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CHAPTER I
DIGITAL LITERATURE: WHAT AND WHY

A.   The Urgency of Digital Literacy

Nawacita's priority agenda on aspects of education and cultural development is at points five, six, eight, and nine in The National Medium Term Development Plan (RPJMN) year 2015–2019. There are six literacy skills that must be mastered by the Indonesian people to support Indonesia's country development, such as (1) language literacy, (2) numeracy literacy, (3) scientific literacy, (4) digital literacy, (5) financial literacy, and (6) cultural and social literacy of citizenship which has developed into the National Literacy Movement (GLN). It was initiated by the Ministry of Education and Culture and has been implemented in the family, school, and community scope.

The problem of people's interest in reading is at a serious level as evidenced in several surveys conducted, including:

1.   Human Development Index (2013) Indonesia is ranked 108 out of 187 countries;
2.   Central Connecticut State University (2016) Indonesia is ranked 60th out of 61 countries;
3.   Program for International Students Assessment (2016), Indonesia is ranked 64 out of 72 countries;
4.   The Indonesia National Assessment Program (INAP) states that the ability of elementary school students in mathematics competence is 77.13%, science competence is 73.61%, and reading competence is 46.83%.

It can be concluded that the level of interest in reading and literacy of the Indonesian people is at an alarming level and requires a significant solution.

The National Literacy Movement (GLN) must be applied to the family, school, and community environment. It has to be carried out, especially by the younger generation, to grow interest in reading. There are aspects that affect a person's interest in reading. Hurlock (2009) states that there are five components that affect a person's reading interest, such as awareness, attention, concentration, willingness, and pleasure.

The awareness of interest in reading is the introduction of an attractive object that has a force to make them feel happy and have a feeling of positive possession for an object (book). In the attention aspect, a person will be aware of and enjoy the object, causing direct or indirect attention. Furthermore, concentration is a form of full attention to an object and in this stage, the fun and attention will affect one's concentration when reading. The encouragement aspect will cause a will towards an object that causes interest. The last aspect is fun. The existing pleasure of reading will have an impact on repeated reading activities.

To increase the interest of reading in the academic community of higher education, there are several components that must be considered, that are awareness, attention, concentration, willingness, and pleasure. The research team will analyze digital literacy of English learning in universities so that it can provide awareness, attention, concentration, willingness, and pleasure, especially for the younger generation to be more interested in reading. With this matter, it is hoped that the level of reading awareness will be increased over time.

B.   State of the Problem

The problem of English learning and teaching in higher education can be formulated as follows:

1.   student's digital literacy,
2.   student's digital competency,
3.   lecturer's digital literacy,
4.   lecturer's digital competency,

5. the influence of the student's digital literacy and digital competence towards English learning and teaching, and
6. the influence of the lecturer's digital literacy and digital competence towards English learning and teaching.

CHAPTER 2
REVIEWING THE DIGITAL LITERACY
OF NATIONAL SCOPE

A.   The National Literacy Movement

The National Literacy Movement has goals to develop and cultivate literacy in Indonesia throughout life to improve the quality of life in the family, school and community (Kemendikbud, 2017) with 3 (three) basic principles, such as sustainability, integration, and involving all stakeholders. This activity must be carried out on an ongoing basis and literacy programs should be a concern for all levels of Indonesian society. The implementation of this program can be integrated with government or non-government programs, while providing opportunities for all stakeholders, both individuals and institutions, so that they mutually reinforce other programs as well. In the meantime, this national literacy movement can support people's reading interest with components of awareness, attention, concentration, will, and pleasure in the scope of literacy (Kemendikbud, 2017). The 7 literacy dimensions contained in the Indonesian national movement consist of reading and writing literacy, numeracy literacy, scientific literacy, digital literacy, financial literacy, and cultural literacy and citizenship with 3 domains of national literacy generation, namely the school literacy movement, the family literacy movement, and the community literacy movement (Kemendikbud, 2017). The implementation and stakeholders in this national literacy movement (Kemendikbud, 2017), are (1) the Ministry of Education and Culture; (2) other ministries or other institutions; (3) local government; (4) sub-district or village; (5) school principals; (6) education superintendent; (7) tutor teachers or non-formal education tutors; (8) school or community committee; (9)

educational staff; (10) literacy community and society; (11) universities; (12) business and industry (DUDI); (13) mass media.

B. Digital Literacy

Digital literacy is a digital technology that is effectively and critically navigated and evaluated. In other words, digital literacy is technology-based literacy. Digital literacy includes computer hardware and software, internet, mobile phones, websites and others in order to obtain information effectively. According to Newman (2009) and Ng (2012), the literacy model consists of three components in the form of techniques (knowledge of digital tools), cognitive (critical thinking), and social awareness. Technical context is the ability to possess the software and hardware knowledge or ICT literacy), while cognitive is the ability to evaluate and contextualize information or information literacy, and social awareness is the ability to understand oneself to collaborate, communicate according to context or audience.

C. Digital Competency

Digital competency is the ability of a person to use technology-based or digital literacy. There are five types of competencies in digital competence, which are information, communication, content-creation, electronic skills, safety, and problem solving.

1. **Information,** is the ability to identify, locate, retrieve, store, organize and analyze digital information, by assessing its relevance and purpose.
2. **Communication,** is a form of digital environmental communication, which are sharing resources online, connecting with others, collaborating through digital tools, interacting and participating in communities and networks, and cross-cultural awareness.
3. **Content-creation,** is the context of creating and editing new content (from word processing to images and videos), integrating and elaborating knowledge and content, generating

creative expression, media output, and programming, and also dealing with intellectual property rights and licenses.

4. **Safety,** is a form of personal, data, and digital identity protection, the sense of security in action that is safe and sustainable.

5. **Problem-solving,** is a form of identifying digital needs and resources, making the right decisions on the most appropriate digital tools, goals and needs, solving conceptual problems through digital means, creatively using technology, solving technical problems, updating competencies and others.

CHAPTER 3
THE ALLURING ASPECTS OF THE BOOK

A.   Material Deepening Style and Information Integration

The quantitative approach is used in this study with a cross-sectional survey design research data because it was only collected for a certain time with the aim of describing the population condition and using a questionnaire as the main data collection tool.

Table 1. Rules of Material Deepening

Research Objectives	Research Types	Research Method	Analysis Unit	Time Horizon
T-1	Associative	Survey	Student-Lecturer	Cross-Sectional
T-2	Associative	Survey	Student-Lecturer	Cross-Sectional
T-3	Associative	Survey	Student-Lecturer	Cross-Sectional
T-4	Associative	Survey	Student-Lecturer	Cross-Sectional
T-5	Associative	Survey	Student	Cross-Sectional
T-6	Associative	Survey	Lecturer	Cross-Sectional

Description

T-1 = X1 = Student's Digital Literacy
T-2 = X2 = Student's Digital Competency
T-3 = X3 = Lecturer's Digital Literacy
T-4 = X4 = Lecturer's Digital Competency
T-5 = Y1 = English Learning
T-6 = Y2 = English Teaching

This research used independent and dependent variable as follows:
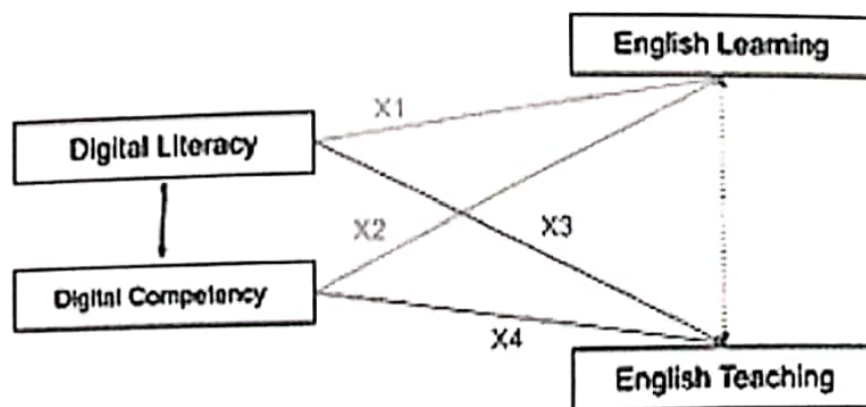
Picture 1. Variable Element

Independent Variable (X):
X1 = Student's Digital Literacy
X2 = Student's Digital Competency
X3 = Lecturer's Digital Literacy
X4 = Lecturer's Digital Competency

Dependent Variable (Y):
Y1 = Student's English Learning
Y2 = Lecturer's English Teaching

     The sources of data for this research are the students in the academic year of 2018 (160 students) and 10 lecturers who teach courses in Semester 6, Academic Year of 2018/2019 at the English Education Study Program, Faculty of Teacher Training and Education, Islamic University of Riau. Simple random sampling techniques were used in this study based on Isaac and Michael's Table (see attachment) and sample survey (data collection was drawn from the population sample).

     The instruments used in the survey are questionnaires and interviews. Questionnaires are used to determine the problems that exist in the field by using open and closed questionnaires followed by

interviews. The interview used is a conversation that takes place in a systematic and organized manner by the researcher with a number of respondents to obtain a number of related information and research problems. Structured interviews were conducted with a number of questions that had been arranged systematically.

Table 2. Material Deepening Subjects

Number	Group	Class	Population	Sample
1	Student	6A	25 Students	
2	Student	6B	25 Students	
3	Student	6C	25 Students	
4	Student	6D	25 Students	62 Students
5	Student	6E	25 Students	
6	Student	6F	25 Students	
7	Lecturer	6th Semester	11 Students	

Processing of samples using the Slovin formula with a significance of 0.10, which:

$$N = N/(1 + Ne^2) = 161/(1 + 161 \times 0,10 \times 0,10) = 161/(1+1,61) = 161/2,61 = 61,68 = 62 \text{ students}$$

Processing of samples using the Slovin formula with a significance of 0.10, which:

$$N = N/(1 + Ne^2) = 11/(1 + 11 \times 0,10 \times 0,10) = 11/(1+0,11) = 11/1,11 = 9,90 = 10 \text{ lecturers}$$

Table 3. Material Deepening Medium

No	Variabel	Instrumen	Keterangan
1	Digital Literacy	Questionnaire & Interviews	Student
		Questionnaire & Documentation	Lecturer
2	Digital Competency	Questionnaire & Interviews	Student
		Questionnaire & Documentation	Lecturer
3	English Learning	IELTS	Student
4	English Teaching	Questionnaire	Lecturer

Table 4. Material Deepening Medium of Digital Literacy

Data Type	Instrument	Indicator	Sub-indicator
Quantitative and Qualitative	Questionnaire and Interviews	Technical	Using learning technology
			Using and adapting to new technology
			Formatting and publishing research and idea electronically
			Solving basic technical problems
		Cognitive	Critical thinking skills when searching, evaluating, and creating digital information
			Ability to use and analyze text-based, visual or audio-based information, understand the form, location format and methods of accessing information sources
		Social Emotional	Structural social literacy by placing and producing socially
			Using a digital environment for learning and communication

Table 5. Material Deepening Medium of Digital Competency

Data Type	Instrument	Indicator	Sub-indicator
Qualitative and Quantitative	Questionnaire & Interviews	Information	Identifying
			Finding
			Retrieving
			Storing
			Arranging
			Analyzing
		Communication	Communicating through digital environment
			Sharing resources through online tools
			Connecting with other people
			Collaborating through digital tools
			Interacting
			Participating in communities and networks, cross-cultural awareness
		Content Creation	Creating and editing new content (from word processing to images and videos)
			Integrating and elaborating knowledge and content
			Producing creative expression, media output, and programming
			Dealing with and implementing intellectual property rights and licenses
		Safety	Personal Protection

Data Type	Instrument	Indicator	Sub-Indicator
			Data Protection
			Digital Identity Protection
			Security Measures
			Safe and sustainable use
		Problem solving	Identifying digital requirements and resources
			Making the right decisions on the most appropriate digital tools
			Objectives and needs
			Solving conceptual problems through digital means
			Creative in using technology
			Troubleshooting technical problems
			Updating competencies and others

Table 6. Material Deepening Medium of Student's English Learning

Data Type	Instrument	Indicator
Quantitative	IELTS Test Score Results	Listening, Reading, Writing, Speaking

Table 7. Material Deepening Medium of Lecturer's English Teaching

Data Type	Instrument	Indicator
Quantitative	Lecturer's Scores (Source: UPM FKIP UIR)	Teaching

B. Information Analyzing Process

This study used quantitative data (Cross-Sectional Survey). In the data collection technique, the researcher carried out several stages in the form of data collection, such as checking data (editing), coding data, data entry, data processing, data analysis, data interpretation, making conclusions and recommendations. Meanwhile, in the qualitative data, the researcher arranged an instrument in the form of a research interview to interview a group of samples and then waited for their response, then the researcher analyzed the data collected from the interviewee.

The quantitative data collection techniques using simple and multiple regressions, classical assumption test (normality test, heteroscedasticity test, multicollinearity test), validity and reliability test, correlation test, and hypothesis test design. The qualitative data collection techniques used interviews and documentation to support the specific results of this study, researchers will describe in detail.

CHAPTER 4
COMPLETE REVIEW OF DIGITALIZATION ON ENGLISH LANGUAGE EDUCATION

A.   **Systematic Course of Digitalization on English Language Education**

The research data consists of four variables, which are: Student's Digital Literacy (X1), Student's Digital Competence (X2), Lecturer's Digital Literacy (X3), Lecturer's Digital Competence (X4), English Language Learning (Y1), and English Language Teaching (Y2). The data processing steps were processed using SPSS 24 with (1) a set of variables; (2) data input; (3) respondent mapping; (4) mapping the respondents' answers; (5) computing the variables, and (6) testing the quality of the data. The first to fourth data are for respondent's identity data by describing the mapping of respondents through frequency. The fifth to twelfth data are intended to accommodate respondents' data answers that symbolized by Q (Question) which consists of 36 statements for 4 variables, namely: Q1–Q8 for the Student's Digital Literacy variable (X1), Q9–Q36 for the Student's Digital Competence variable. (X2), Q37–Q44 for Lecturer's Digital Literacy variable (X3), Q45–Q72 for Lecturer's Digital Competency variable (X4), Q73 for English Language Learning (Y1), and Q74 for English Language Teaching (Y2).

Table 8. Student's Class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		7	9.6	9.6	9.6
	A	23	31.5	31.5	41.1
	B	15	20.5	20.5	61.6
	C	5	6.8	6.8	68.5
	D	7	9.6	9.6	78.1
	E	11	15.1	15.1	93.2
	F	5	6.8	6.8	100.0
	Total	73	100.0	100.0	

Table 9. Student's Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	L	9	12.3	12.3	12.3
	P	64	87.7	87.7	100.0
	Total	73	100.0	100.0	

Table 10. Student's Work Unit

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		66	90.4	90.4	90.4
	PBIng	7	9.6	9.6	100.0
	Total	73	100.0	100.0	

Research Question #1: How does the student's digital literacy affect the English Learning in Universities?

Table 11. Descriptive Statistics of The Student's Digital Literacy

	N	Minimum	Maximum	Mean	Std. Deviation
Student 1's Digital Literacy	66	3.00	5.00	4.5606	0.52999
Student 2's Digital Literacy	66	2.00	5.00	4.1818	0.67730
Student 3's Digital Literacy	66	2.00	5.00	3.7879	0.62055
Student 4's Digital Literacy	66	2.00	5.00	3.8030	0.70645
Student 5's Digital Literacy	66	2.00	5.00	3.8485	0.72838
Student 6's Digital Literacy	66	3.00	5.00	4.1818	0.57937
Student 7's Digital Literacy	66	3.00	5.00	3.9394	0.60457
Student 8's Digital Literacy	66	3.00	5.00	4.3485	0.61999
Valid N (Listwise)	66				

	N	Minimum	Maximum	Mean	Std. Deviation
Literasi Digital Mahasiswa 1	66	3.00	5.00	4.5606	.52999
Literasi Digital Mahasiswa 2	66	2.00	5.00	4.1818	.67730
Literasi Digital Mahasiswa 3	66	2.00	5.00	3.7879	.62055
Literasi Digital Mahasiswa 4	66	2.00	5.00	3.8030	.70645
Literasi Digital Mahasiswa 5	66	2.00	5.00	3.8485	.72838
Literasi Digital Mahasiswa 6	66	3.00	5.00	4.1818	.57937
Literasi Digital Mahasiswa 7	66	3.00	5.00	3.9394	.60457
Literasi Digital Mahasiswa 8	66	3.00	5.00	4.3485	.61999
Valid N (listwise)	66				

Table 11 shows that the Student's Digital Literacy variable has the highest order of scores on the first sub-indicator of the technique indicator (4, 56); then the sixth sub-indicator of the cognitive indicator (4, 18); and the eighth sub-indicator of the social emotional indicators (4, 34). So that it can be concluded that the influential indicators are (1) technique; (2) social-emotional; and (3) cognitive.
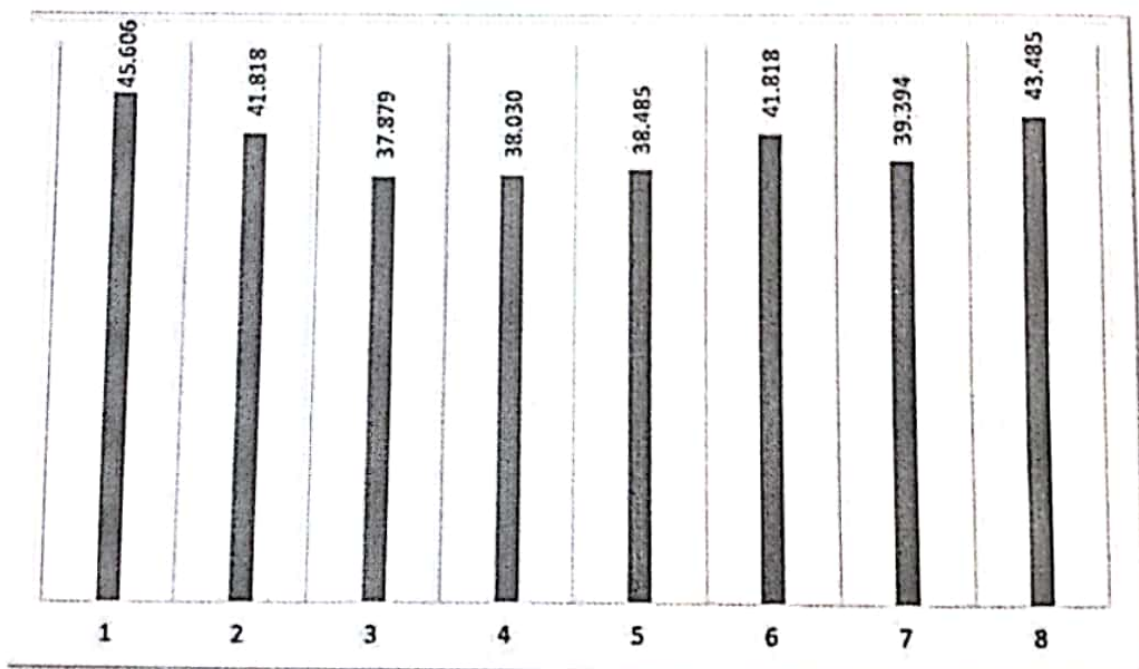
Picture 2. Student's Digital Literacy

Table 12. The Correlation Between Student's Digital Literacy and Scores

		Student's IELTS Score	Student's Digital Literacy (X1)
Student's IELTS Score	Pearson Correlation	1	0.091
	Sig. (2-tailed)		0.469
	N	66	66
Student's Digital Literacy (X1)	Pearson Correlation	0.091	1
	Sig. (2-tailed)	0.469	
	N	66	66

		Nilai IELTS Mahasiswa	Literasi Digital Mahasiswa (X1)
Nilai IELTS Mahasiswa	Pearson Correlation	1	.091
	Sig. (2-tailed)		.469
	N	66	66
Literasi Digital Mahasiswa (X1)	Pearson Correlation	.091	1
	Sig. (2-tailed)	.469	
	N	66	66

Table 12 shows: First, the relationship between the two variables has a Pearson coefficient of 0.091 close to 1 which means that it has a correlation between student digital literacy and student grades. Second, then the significance of the two variables is 0.469 > 0.01, which means that both variables are not significant. Third, the correlation value is positive, 0.469, which means that it is correlated in the same direction. So that if students' digital literacy increases, the student's value also increases. With the conclusion of 0.469 > 0.05, then H0 is accepted, and Ha is rejected.

Research Question #2: How is the student's digital competence toward English learning in universities?

Table 13. Descriptive Statistics of the Student's Digital Competency

	N	Minimum	Maximum	Mean	Std. Deviation
Student 1's Digital Literacy	66	1.00	5.00	4.0303	0.67868
Student 2's Digital Literacy	66	3.00	5.00	4.3030	0.55386
Student 3's Digital Literacy	66	3.00	5.00	4.1970	0.63778
Student 4's Digital Literacy	66	2.00	54.00	5.4697	7.82927
Student 5's Digital Literacy	66	2.00	5.00	3.9848	0.61999
Student 6's Digital Literacy	66	3.00	5.00	4.0152	0.56819
Student 7's Digital Literacy	66	2.00	5.00	3.9545	0.88460
Student 8's Digital Literacy	66	2.00	5.00	4.1212	0.75478
Student 9's Digital Literacy	66	2.00	5.00	4.1212	0.92012
Student 10's Digital Literacy	66	2.00	5.00	4.0000	0.85934
Student 11's Digital Literacy	66	1.00	5.00	3.7121	0.97294
Student 12's Digital Literacy	66	1.00	5.00	3.6970	0.78387
Student 13's Digital Literacy	66	3.00	5.00	4.1515	0.66199
Student 14's Digital Literacy	66	3.00	5.00	3.9242	0.61546
Student 15's Digital Literacy	66	3.00	5.00	4.2121	0.73412
Student 16's Digital Literacy	66	2.00	5.00	3.9394	0.78208
Student 17's Digital Literacy	66	1.00	5.00	4.0152	0.83191
Student 18's Digital Literacy	66	2.00	5.00	4.1364	0.80166
Student 19's Digital Literacy	66	2.00	5.00	4.1818	0.82105
Student 20's Digital Literacy	66	2.00	5.00	4.1970	0.68432
Student 21's Digital Literacy	66	3.00	5.00	4.1515	0.70694
Student 22's Digital Literacy	66	3.00	5.00	3.9545	0.59308
Student 23's Digital Literacy	66	2.00	5.00	4.0455	0.75308
Student 24's Digital Literacy	66	2.00	5.00	3.8939	0.68228
Student 25's Digital Literacy	66	2.00	5.00	3.7576	0.70297
Student 26's Digital Literacy	66	3.00	5.00	4.4697	0.63778
Student 27's Digital Literacy	66	2.00	5.00	3.8182	0.72130
Student 28's Digital Literacy	66	2.00	5.00	4.0455	0.79289
Valid N (Listwise)	66				

	N	Minimum	Maximum	Mean	Std. Deviation
Kompetensi Digital Mahasiswa 1	66	1.00	5.00	4.0303	.6786\
Kompetensi Digital Mahasiswa 2	66	3.00	5.00	4.3030	.5538(
Kompetensi Digital Mahasiswa 3	66	3.00	5.00	4.1970	.6377\
Kompetensi Digital Mahasiswa 4	66	2.00	54.00	5.4697	7.8293\
Kompetensi Digital Mahasiswa 5	66	2.00	5.00	3.9848	.6199\
Kompetensi Digital Mahasiswa 6	66	3.00	5.00	4.0152	.5681\
Kompetensi Digital Mahasiswa 7	66	2.00	5.00	3.9545	.8846(
Kompetensi Digital Mahasiswa 8	66	2.00	5.00	4.1212	.7547\
Kompetensi Digital Mahasiswa 9	66	2.00	5.00	4.1212	.9201\
Kompetensi Digital Mahasiswa 10	66	2.00	5.00	4.0000	.8593\
Kompetensi Digital Mahasiswa 11	66	1.00	5.00	3.7121	.9729\
Kompetensi Digital Mahasiswa 12	66	1.00	5.00	3.6970	.7838\
Kompetensi Digital Mahasiswa 13	66	3.00	5.00	4.1515	.6619\
Kompetensi Digital Mahasiswa 14	66	3.00	5.00	3.9242	.6154(
Kompetensi Digital Mahasiswa 15	66	3.00	5.00	4.2121	.7341\
Kompetensi Digital Mahasiswa 16	66	2.00	5.00	3.9394	.78208
Kompetensi Digital Mahasiswa 17	66	1.00	5.00	4.0152	.83191
Kompetensi Digital Mahasiswa 18	66	2.00	5.00	4.1364	.80166
Kompetensi Digital Mahasiswa 19	66	2.00	5.00	4.1818	.82105
Kompetensi Digital Mahasiswa 20	66	2.00	5.00	4.1970	.68432
Kompetensi Digital Mahasiswa 21	66	3.00	5.00	4.1515	.70694
Kompetensi Digital Mahasiswa 22	66	3.00	5.00	3.9545	.59308
Kompetensi Digital Mahasiswa 23	66	2.00	5.00	4.0455	.75308
Kompetensi Digital Mahasiswa 24	66	2.00	5.00	3.8939	.68228
Kompetensi Digital Mahasiswa 25	66	2.00	5.00	3.7576	.70297
Kompetensi Digital Mahasiswa 26	66	3.00	5.00	4.4697	.63778
Kompetensi Digital Mahasiswa 27	66	2.00	5.00	3.8182	.72130
Kompetensi Digital Mahasiswa 28	66	2.00	5.00	4.0455	.79289
Valid N (listwise)	66				

Table 13 shows that the Student's Digital Competence variable has the highest order of values on the fourth sub-indicator of the information indicator (5, 46); then the eighth and ninth sub-indicator of the communication indicators (4, 12); then the fifteenth sub-indicator of the content creation indicator (4, 21); then the twentieth sub-indicator of the safety indicator (4, 19); the last problem-solving indicator is on the twenty-sixth sub-indicator (4, 46). So that it can be

concluded that the influential indicators are (1) information; (2) problem solving; (3) content creation; (4) safety; and (5) communication.
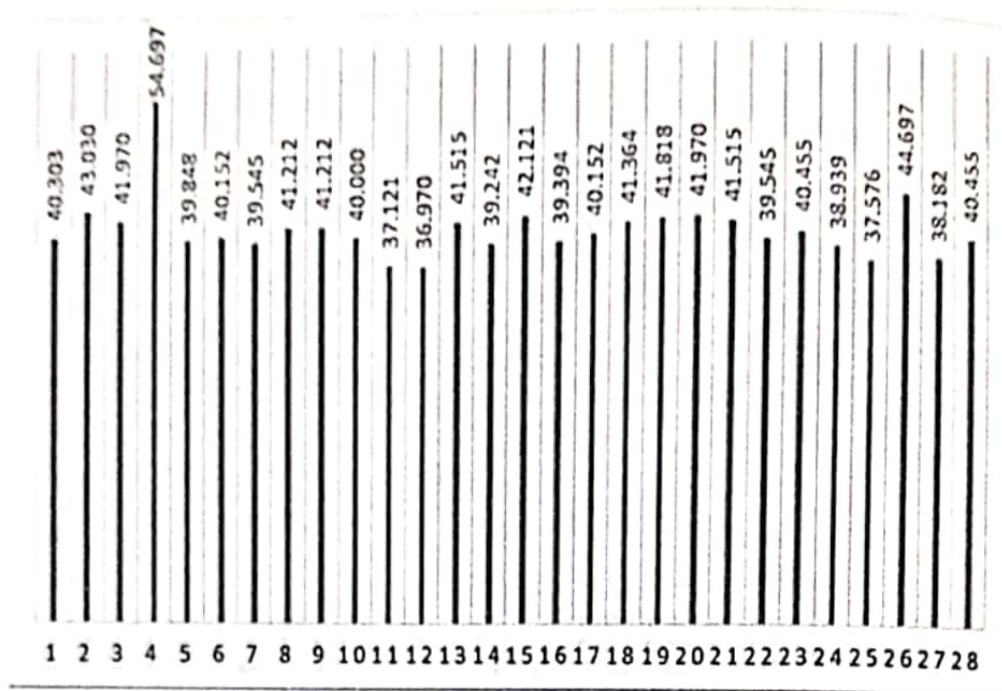
Picture 3. Student's Digital Competency

Table 14. The Correlation Between Student's Digital Competency and Scores

		Student's Digital Competency (X2)	Student's IELTS Score
Student's Digital Competency (X2)	Pearson Correlation	1	0.117
	Sig. (2-tailed)		0.348
	N	66	66
Student's IELTS Score	Pearson Correlation	0.117	1
	Sig. (2-tailed)	0.348	
	N	66	66

		Kompetensi Digital Mahasiswa (X2)	Nilai IELTS Mahasiswa
Kompetensi Digital Mahasiswa (X2)	Pearson Correlation	1	.117
	Sig. (2-tailed)		.348
	N	66	66
Nilai IELTS Mahasiswa	Pearson Correlation	.117	1
	Sig. (2-tailed)	.348	
	N	66	66

Table 14 shows: First, the relationship between the two variables has a Pearson coefficient of 0.11 which is close to 1. It means that it has a correlation between a student's digital competence and scores. Second, the significance of the two variables is 0.348 > 0.01, which means that both variables are not significant. Third, the correlation value is positive, 0.348, which means that it is correlated in the same direction. So that if the digital competence of students increases, then the value of students also increases. With the conclusion 0.348 > 0.05, then H0 is accepted and Ha is rejected.

Research Question #3: How does the lecturer's digital literacy affect the teaching of English in universities?

Table 15. Descriptive Statistics of Lecturer's Digital Literacy

	N	Minimum	Maximum	Mean	Std. Deviation
Lecturer 1's Digital Literacy	66	3.00	5.00	4.5714	0.78680
Lecturer 2's Digital Literacy	66	4.00	5.00	4.4286	0.53452
Lecturer 3's Digital Literacy	66	3.00	5.00	4.1429	0.69007
Lecturer 4's Digital Literacy	66	3.00	5.00	4.1429	0.69007
Lecturer 5's Digital Literacy	66	3.00	5.00	4.0000	1.00000
Lecturer 6's Digital Literacy	66	3.00	5.00	4.2857	0.75593

	N	Minimum	Maximum	Mean	Std. Deviation
Lecturer 7's Digital Literacy	66	3.00	5.00	4.0000	0.81650
Lecturer 8's Digital Literacy	66	3.00	5.00	4.2857	0.95119
Valid N (Listwise)	66				

	N	Minimum	Maximum	Mean	Std. Deviation
Literasi Digital Dosen 1	7	3.00	5.00	4.5714	.78680
Literasi Digital Dosen 2	7	4.00	5.00	4.4286	.53452
Literasi Digital Dosen 3	7	3.00	5.00	4.1429	.69007
Literasi Digital Dosen 4	7	3.00	5.00	4.1429	.69007
Literasi Digital Dosen 5	7	3.00	5.00	4.0000	1.00000
Literasi Digital Dosen 6	7	3.00	5.00	4.2857	.75593
Literasi Digital Dosen 7	7	3.00	5.00	4.0000	.81650
Literasi Digital Dosen 8	7	3.00	5.00	4.2857	.95119
Valid N (listwise)	7				

Table 15 shows that the Lecturer's Digital Literacy variable has the highest order of values on the first sub-indicator of the technique indicator (4, 57); then the sixth and eighth sub-indicator of the cognitive indicators (4, 28). So that it can be concluded that the influential indicators are (1) technique; (2) cognitive and social emotional.
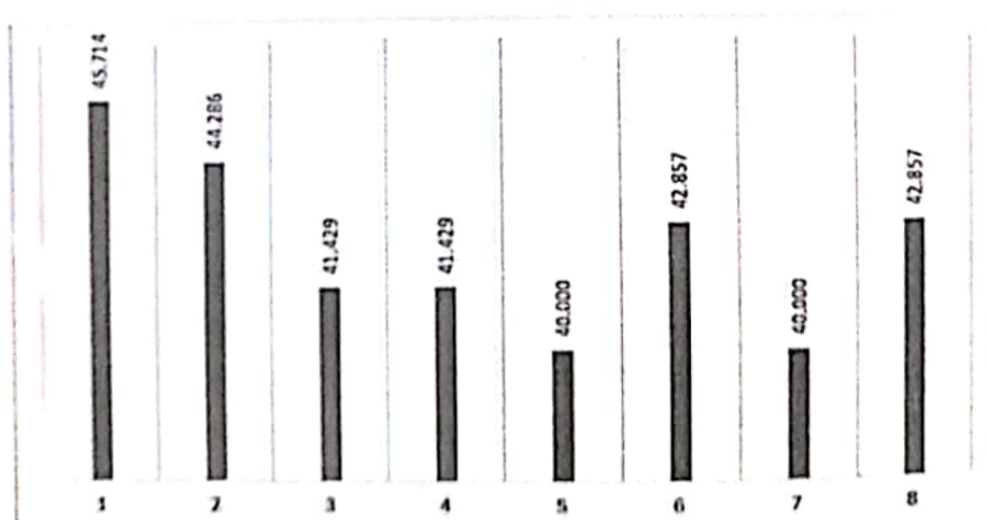
Picture 4. Lecturer's Digital Literacy

Table 16. Correlation Between Lecturer's Digital Literacy and Scores

		Lecturer's Digital Competency (X3)	Lecturer's Score
Lecturer's Digital Competency (X3)	Pearson Correlation	1	0.439
	Sig. (2-tailed)		0.324
	N	7	7
Lecturer's Score	Pearson Correlation	0.439	1
	Sig. (2-tailed)	0.324	
	N	7	7

		Literasi Digital Dosen (X3)	Nilai Dosen
Literasi Digital Dosen (X3)	Pearson Correlation	1	.439
	Sig. (2-tailed)		.324
	N	7	7
Nilai Dosen	Pearson Correlation	.439	1
	Sig. (2-tailed)	.324	
	N	7	7

Table 4.9 shows: First, the relationship between the two variables has a Pearson coefficient of 0.439, close to 1, which means that it has a correlation between lecturers' digital literacy and scores. Second, then the significance of the two variables is 0.324 > 0.01, which means that the two variables are not significant. Third, the correlation value is positive, 0.324, which means that it is correlated in the same direction. So, if the lecturer's digital literacy increases, the lecturer's value also increases. With the conclusion 0.324 > 0.05, then H0 is accepted and Ha is rejected.

Research Question #4: How is the lecturer's digital competence towards English teaching in universities?

Table 17. Descriptive Statistic on Lecturer's Digital Competency

|	N	Minimum	Maximum	Mean	Std. Deviation
Lecturer 1's Digital Literacy	7	3.00	5.00	4.2857	0.75593
Lecturer 2's Digital Literacy	7	3.00	5.00	4.7143	0.75593
Lecturer 3's Digital Literacy	7	3.00	5.00	4.5714	0.78680
Lecturer 4's Digital Literacy	7	3.00	54.00	4.7143	0.75593
Lecturer 5's Digital Literacy	7	3.00	5.00	4.5714	0.78680
Lecturer 6's Digital Literacy	7	3.00	5.00	4.4286	0.78680
Lecturer 7's Digital Literacy	7	2.00	5.00	4.0000	1.15470
Lecturer 8's Digital Literacy	7	3.00	5.00	4.2857	0.95119
Lecturer 9's Digital Literacy	7	3.00	5.00	4.2857	0.95119
Lecturer 10's Digital Literacy	7	2.00	5.00	4.0000	1.00000
Lecturer 11's Digital Literacy	7	3.00	5.00	4.0000	1.29099
Lecturer 12's Digital Literacy	7	3.00	5.00	4.4286	0.97590
Lecturer 13's Digital Literacy	7	3.00	5.00	4.2857	0.95119
Lecturer 14's Digital Literacy	7	3.00	5.00	4.2857	0.95119
Lecturer 15's Digital Literacy	7	2.00	5.00	4.2857	0.75593
Lecturer 16's Digital Literacy	7	2.00	5.00	4.0000	1.15470
Lecturer 17's Digital Literacy	7	3.00	5.00	4.0000	1.15470
Lecturer 18's Digital Literacy	7	3.00	5.00	4.5714	0.78680
Lecturer 19's Digital Literacy	7	3.00	5.00	4.4286	0.78680
Lecturer 20's Digital Literacy	7	3.00	5.00	4.1429	0.69007
Lecturer 21's Digital Literacy	7	3.00	5.00	4.5714	0.78680
Lecturer 22's Digital Literacy	7	3.00	5.00	4.1429	0.89974
Lecturer 23's Digital Literacy	7	3.00	5.00	4.2857	0.95119
Lecturer 24's Digital Literacy	7	3.00	5.00	3.7143	0.95119
Lecturer 25's Digital Literacy	7	3.00	5.00	3.4286	0.78680
Lecturer 26's Digital Literacy	7	2.00	5.00	4.0000	1.15470
Lecturer 27's Digital Literacy	7	2.00	5.00	3.2857	0.95119
Lecturer 28's Digital Literacy	7	3.00	5.00	4.0000	0.81650
Valid N (Listwise)	7				

	N	Minimum	Maximum	Mean	Std. Deviation
Kompetensi Digital Dosen 1	7	3.00	5.00	4.2857	.75593
Kompetensi Digital Dosen 2	7	3.00	5.00	4.7143	.75593
Kompetensi Digital Dosen 3	7	3.00	5.00	4.5714	.78680
Kompetensi Digital Dosen 4	7	3.00	5.00	4.7143	.75593
Kompetensi Digital Dosen 5	7	3.00	5.00	4.5714	.78680
Kompetensi Digital Dosen 6	7	3.00	5.00	4.4286	.78680
Kompetensi Digital Dosen 7	7	2.00	5.00	4.0000	1.15470
Kompetensi Digital Dosen 8	7	3.00	5.00	4.2857	.95119
Kompetensi Digital Dosen 9	7	3.00	5.00	4.2857	.95119
Kompetensi Digital Dosen 10	7	3.00	5.00	4.0000	1.00000
Kompetensi Digital Dosen 11	7	2.00	5.00	4.0000	1.29099
Kompetensi Digital Dosen 12	7	3.00	5.00	4.4286	.97590
Kompetensi Digital Dosen 13	7	3.00	5.00	4.2857	.95119
Kompetensi Digital Dosen 14	7	3.00	5.00	4.2857	.95119
Kompetensi Digital Dosen 15	7	3.00	5.00	4.2857	.75593
Kompetensi Digital Dosen 16	7	2.00	5.00	4.0000	1.15470
Kompetensi Digital Dosen 17	7	2.00	5.00	4.0000	1.15470
Kompetensi Digital Dosen 18	7	3.00	5.00	4.5714	.78680
Kompetensi Digital Dosen 19	7	3.00	5.00	4.4286	.78680
Kompetensi Digital Dosen 20	7	3.00	5.00	4.1429	.69007
Kompetensi Digital Dosen 21	7	3.00	5.00	4.5714	.78680
Kompetensi Digital Dosen 22	7	3.00	5.00	4.1429	.89974
Kompetensi Digital Dosen 23	7	3.00	5.00	4.2857	.95119
Kompetensi Digital Dosen 24	7	3.00	5.00	3.7143	.95119
Kompetensi Digital Dosen 25	7	3.00	5.00	3.4286	.78680
Kompetensi Digital Dosen 26	7	2.00	5.00	4.0000	1.15470
Kompetensi Digital Dosen 27	7	2.00	5.00	3.2857	.95119
Kompetensi Digital Dosen 28	7	3.00	5.00	4.0000	.81650
Valid N (listwise)	7				

Table 17 shows that the Lecturer Digital Competence variable has the highest order of values in the second sub-indicator of the information indicator (4, 71); then the twelfth sub-indicator of the communication indicator (4, 42); then the thirteenth, fourteenth, fifteenth (4, 28) sub-indicator of the content creation indicators; then the eighteenth and twenty-first sub-indicator of the safety indicators (4, 57); and the problem-solving indicator is on the twenty-third sub-indicator (4, 28). So that it can be concluded that the influential indicators are (1) information; (2) safety; (3) communication; (4) content creation and problem solving.
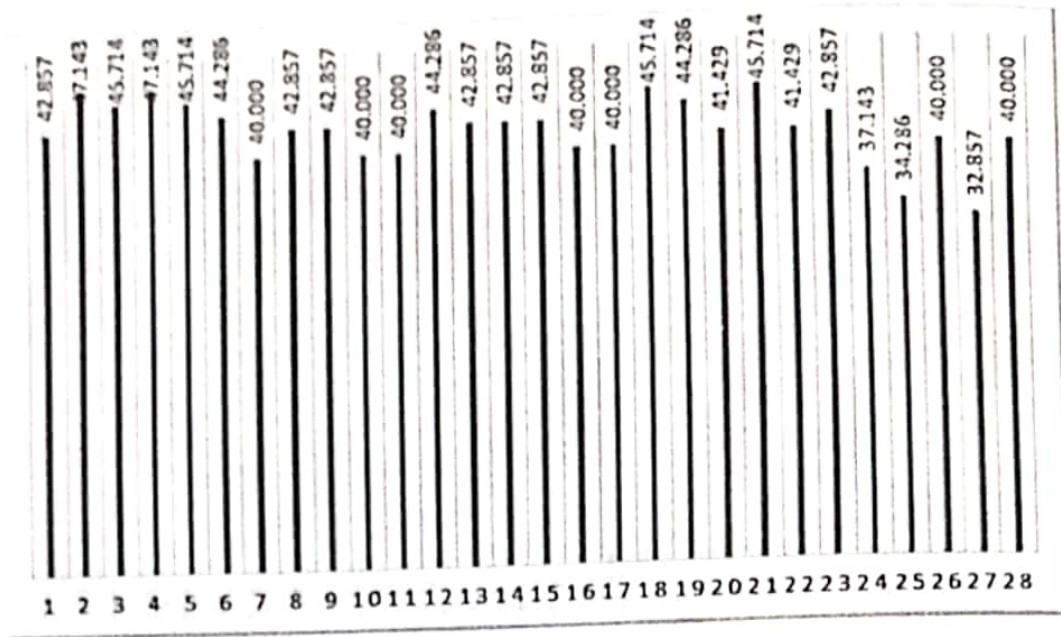
Picture 5. Lecturer's Digital Competence

Table 18. Correlation Between Lecturer's Digital Competence and Scores

		Lecturer's Digital Competency (X4)	Lecturer's Score
Lecturer's Digital Competency (X4)	Pearson Correlation	1	0.187
	Sig. (2-tailed)		0.688
	N	7	7
Lecturer's Score	Pearson Correlation	0.187	1
	Sig. (2-tailed)	0.688	
	N	7	7

		Kompetensi Digital Dosen (X4)	Nilai Dosen
Kompetensi Digital Dosen (X4)	Pearson Correlation	1	.187
	Sig. (2-tailed)		.688
	N	7	7
Nilai Dosen	Pearson Correlation	.187	1
	Sig. (2-tailed)	.688	
	N	7	7

Table 18 shows: First, the relationship between the two variables has a Pearson coefficient of 0.18, close to 1, which means that it has a correlation between lecturer's digital competence and lecturer's scores. Second, then the significance of the two variables is 0.688 > 0.01, which means that both variables are not significant. Third, the correlation value is positive, namely 0.688, which means that it is correlated in the same direction. So, if the lecturer's digital competence increases, the lecturer's value also increases. With the conclusion 0.688 > 0.05, then H0 is accepted and Ha is rejected.

Research Question #5: How does the student's digital literacy and digital competence affect English learning in universities?

Table 19. Descriptive Statistics

	Mean	Std. Deviation	N
Student's IELTS Score (Y1)	3.8030	0.75066	66
Student's Digital Literacy (X1)	4.0814	0.39437	66
Student's Digital Competency (X2)	4.0893	0.51015	66

	Mean	Std. Deviation	N
Nilai IELTS Mahasiswa (Y1)	3.8030	.75066	66
Literasi Digital Mahasiswa (X1)	4.0814	.39437	66
Kompetensi Digital Mahasiswa (X2)	4.0893	.51015	66

Table 19 presents the data Variable X1 with Mean of 4.081; SD of 0.394; and N of 66. While the variable X2 with Mean of 4.089; SD of 0.510; and N of 66. Furthermore, the Y1 variable with Mean of 3.803; SD of 0.750; and N of 66.

Table 20. Descriptive Statistics

		Student's IELTS Score (Y1)	Student's Digital Literacy (X1)	Student's Digital Competency (X2)
Pearson Correlation	Student's IELTS Score (Y1)	1.000	0.091	0.117

		Student's IELTS Score (Y1)	Student's Digital Literacy (X1)	Student's Digital Competency (X2)
	Student's Digital Literacy (X1)	0.091	1.000	0.375
	Student's Digital Competency (X2)	0.117	0.375	1.000
Sig. (2-tailed)	Student's IELTS Score (Y1)		0.234	0.174
	Student's Digital Literacy (X1)	0.234		0.001
	Student's Digital Competency (X2)	0.174	0.001	
N	Student's IELTS Score (Y1)	66	66	66
	Student's Digital Literacy (X1)	66	66	66
	Student's Digital Competency (X2)	66	66	66

		Nilai IELTS Mahasiswa (Y1)	Literasi Digital Mahasiswa (X1)	Kompetensi Digital Mahasiswa (X2)
Pearson Correlation	Nilai IELTS Mahasiswa (Y1)	1.000	.091	.117
	Literasi Digital Mahasiswa (X1)	.091	1.000	.375
	Kompetensi Digital Mahasiswa (X2)	.117	.375	1.000
Sig. (1-tailed)	Nilai IELTS Mahasiswa (Y1)	.	.234	.174
	Literasi Digital Mahasiswa (X1)	.234	.	.001
	Kompetensi Digital Mahasiswa (X2)	.174	.001	.
N	Nilai IELTS Mahasiswa (Y1)	66	66	66
	Literasi Digital Mahasiswa (X1)	66	66	66
	Kompetensi Digital Mahasiswa (X2)	66	66	66

Table 20 presents the correlation of the matrix data for Student's Digital Literacy Variables (X1) with Student's IELTS Scores (Y1) and it obtained r = 0.091 with probability of 0.234 > 0.05, which means H0 is accepted and there is no significant relationship/ correlation between Student's Digital Literacy (X1) with Student's IELTS Score (Y1). Student Digital Competence Variable (X2) with Student's IELTS Score (Y1) are obtained r = 0.117 with probability of 0.174 > 0.05 which means H0 is accepted and there is no significant

relationship/correlation between Student's Digital Competence (X2) and Student's IELTS Score (Y1).

Table 21. Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.128[a]	0.016	0.015	0.75624
a. Predictors: (Constant), Student's Digital Competency (X2), Student's Digital Literacy (X1)				
b. Dependent Variable: Student's IELTS Score				

Table 21 explains the correlation or relationship value (R) between the score of the Student's Digital Literacy Variable (X1) and the score of the Student's Digital Competence Variable (X2) on the Student's IELTS Score Variable (Y1) is 0.128. The coefficient of determination (R2) is 0.016, which means the effect of the independent variable (Student's Digital Literacy and Student's Digital Competence) on the dependent variable (Student's IELTS Score) is 12.8%.

Table 22. ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.597	2	0.298	0.522	0.596[b]
	Residual	36.030	63	0.572		
	Total	36.627	65			
a. Dependent Variable: Student's IELTS Score						
b. Predictors: (Constant), Student's Digital Competency (X2), Student's Digital Literacy (X1)						

Table 22 explains whether there is a significant effect on Student's Digital Literacy (X1) and Student's Digital Competence (X2) variables on the Student's IELTS Score (Y1) variable, which is Fcount = 0.522 with a significant level or probability of 0.596 > 0.05, so the regression can be used to predict the IELTS score.

Table 23. Coefficients[a]

Model		Unstandardized Coefficients	Standardized Coefficients			
		B	Std. Error	Beta	t	Sig.
1	Constant	2.798	1.061		2.637	0.011
	Student's Digital Literacy (X1)	0.104	0.257	0.054	0.403	0.688
	Student's Digital Competency (X2)	0.143	0.198	0.097	0.719	0.475

a. Dependent Variable: Student's IELTS Score

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.798	1.061		2.637	.011
	Literasi Digital Mahasiswa (X1)	.104	.257	.054	.403	.688
	Kompetensi Digital Mahasiswa (X2)	.143	.198	.097	.719	.475

a. Dependent Variable: Nilai IELTS Mahasiswa

Table 23 explains that Constanta (a) is 2.798. Student's Digital Literacy Score (X1) is 0.104 and Student's Digital Competency score (X2) is 0.143. So the constant is 2.798 with the X1 regression coefficient of 0.104 and the X2 regression coefficient of 0.143. Furthermore, it was concluded that the Student's Digital Literacy Score (X1) calculated value = 0.403 with the probability of 0.688 > 0.05, meaning that there was no significant effect. For the Student's Digital Competence variable (X2), the calculated value is 0.719 with the probability of 0.475 > 0.05, which means that there is no significant effect.
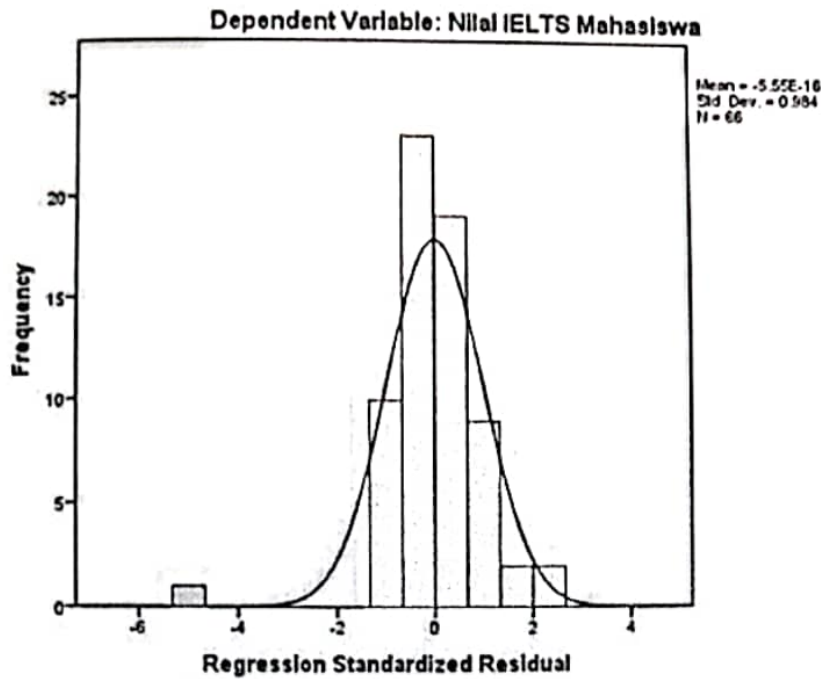
Picture 6. The Student's IELTS Scores

Research Question #6: How does the lecturer's digital literacy and digital competence affect English learning in universities?

Table 24. Descriptive Statistics

	Mean	Std. Deviation	N
Lecturer's Score	96.6300	1.09162	7
Lecturer's Digital Literacy (X3)	4.2321	0.63504	7
Lecturer's Digital Competency (X4)	4.2041	0.62611	7

	Mean	Std. Deviation	N
Nilai Dosen	96.6300	1.09162	7
Literasi Digital Dosen (X3)	4.2321	.63504	7
Kompetensi Digital Dosen (X4)	4.2041	.63611	7

Table 24 presents the data for Variable X3 with Mean of 4.232; SD of 0.635; and N of 7. While the variable X2 has Mean of 4.204; SD of 0.636; and N of 7. Furthermore, Variable Y2 has Mean of 96,630; SD of 1,091; and N of 7.

Table 25. Correlation of Lecturer's Digital Literacy (X3) and Digital Competence (X4) to Lecturer's Scores (Y2)

		Student's IELTS Score (Y1)	Student's Digital Literacy (X1)	Student's Digital Competency (X2)
Pearson Correlation	Lecturer's Score	1.000	0.439	0.187
	Lecturer's Digital Literacy (X3)	0.439	1.000	0.904
	Lecturer's Digital Competency (X4)	0.187	0.904	1.000
Sig. (2-tailed)	Lecturer's Score		0.162	0.344
	Lecturer's Digital Literacy (X3)	0.162		0.003
	Lecturer's Digital Competency (X4)	0.344	0.003	
N	Lecturer's Score	7	7	7
	Lecturer's Digital Literacy (X3)	7	7	7
	Lecturer's Digital Competency (X4)	7	7	7

		Nilai Dosen	Literasi Digital Dosen (X3)	Kompetensi Digital Dosen (X4)
Pearson Correlation	Nilai Dosen	1.000	.439	.187
	Literasi Digital Dosen (X3)	.439	1.000	.904
	Kompetensi Digital Dosen (X4)	.187	.904	1.000
Sig (1-tailed)	Nilai Dosen	.	.162	.344
	Literasi Digital Dosen (X3)	.162	.	.003
	Kompetensi Digital Dosen (X4)	.344	.003	.
N	Nilai Dosen	7	7	7
	Literasi Digital Dosen (X3)	7	7	7
	Kompetensi Digital Dosen (X4)	7	7	7

Table 25 presents the correlation matrix data for Lecturer's Digital Literacy Variable (X3) with Lecturer's Scores (Y2) which obtained r = 0.439 with probability of 0.162 > 0.05 which means H0 is accepted and there is no significant correlation/correlation between Lecturer's Digital Literacy (X3) with Lecturer's Score (Y2). Lecturer's Digital Competence Variable (X4) with Lecturer's Value (Y2) which obtained r = 0.187 with probability of 0.344 > 0.05 which means H0 is accepted and there is no significant relationship/correlation between Lecturer's Digital Competence (X4) and Lecturer's Score (Y2)

Table 26. Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.659[a]	0.434	0.151	1.00596

a. Predictors: (Constant), Lecturer's Digital Literacy (X3), Lecturer's Digital Competency (X4)
b. Dependent Variable: Lecturer's Score

Table 26 explains the value of the correlation value or relationship (R) between the score of the Digital Literacy Variable of Lecturers (X3) and the score of the Digital Competence Variable of Lecturers (X4) towards the Lecturer's Value Variable (Y2) is 0.659. The coefficient of determination (R2) is 0.434, which means the influence of the independent variables (Lecturer Digital Literacy and Lecturer Digital Competence) on the dependent variable (Lecturer Value) is 43%.

Table 27. ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.102	2	1.551	1.533	0.321[b]
	Residual	4.048	4	1.012		
	Total	7.150	6			

a. Dependent Variable: Lecturer's Score
b. Predictors: (Constant), Lecturer's Digital Competency (X4), (X3)

Table 27 explains whether there is a significant effect on the Lecturer's Digital Literacy (X3) and Digital Competence (X4) on the Lecturer's Score variable (Y2), which is Fcount = 1.533 with a significant level or probability of 0.321 > 0.05, so regression can be used to predict the score of lecturers.

Table 28. Coefficients[a]

Model		Unstandardized Coefficients	Standardized Coefficients			
		B	Std. Error	Beta	t	Sig.
1	Constant	94.169	2.820		33.396	0.000
	Lecturer's Digital Literacy (X3)	2.538	1.512	1.476	1.679	0.168
	Lecturer's Digital Competency (X4)	-1.969	1.509	-1.148	-1.305	0.262

a. Dependent Variable: Lecturer's Score

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	94.169	2.820		33.396	.000
	Literasi Digital Dosen (X3)	2.538	1.512	1.476	1.679	.168
	Kompetensi Digital Dosen (X4)	-1.969	1.509	-1.148	-1.305	.262

a. Dependent Variable: Nilai Dosen

Table 28 describes the Constanta (a) is 94,169. The Lecturer's Digital Literacy Score (X3) is 2.538 and the Lecturer's Digital Competency score (X4) is -1.969. So, the constant is 94,169 with a regression coefficient X3 of 2,538 and a regression coefficient of -1,969 for X4. Furthermore, it was concluded that the Lecturer's Digital Literacy Score (X3) calculated value = 1.679 with the probability of 0.168 > 0.05, meaning that there was no significant effect. For the Lecturer's Digital Competence variable (X4), the calculated value is -1.305 with the probability of 0.262 > 0.05, which means that there is no significant effect.

Dependent Variable: Nilai Dosen

Mean = -2.75E-15
Std Dev = 0.816
N = 7
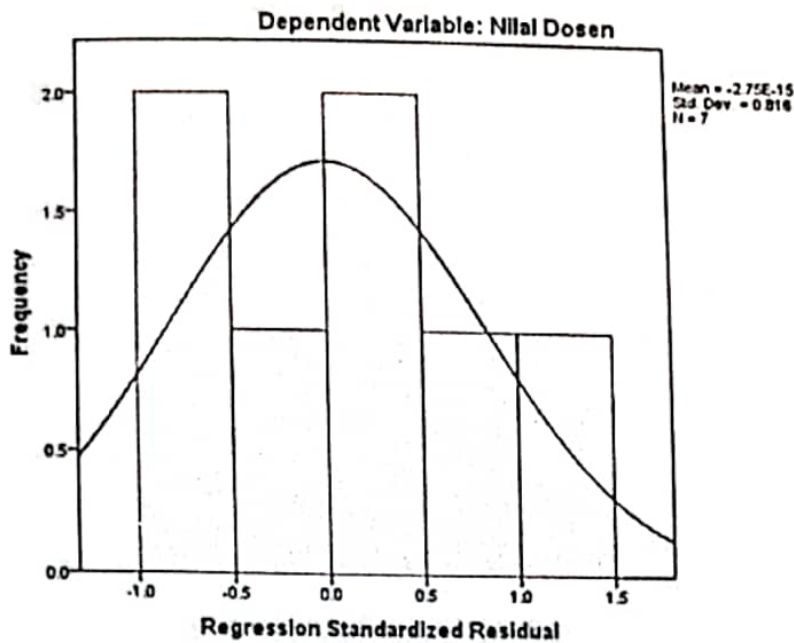
Picture 7. Lecturer's Score

B. Comprehensive Analysis of Digitalization on English Language Education

Research Questions #1 and #3: Lecturer and Student's Digital Literacy on Student's Learning Score and Lecturer's Teaching Score

Table 29. Recapitulation of Lecturer's and Student's Digital Literacy Indicators and Sub-indicators

Digital Literacy Indicators	Student		Lecturer	
	Indicator Order	Sub-Indicator	Indicator Order	Sub-Indicator
Technique	1	1	1	1
Cognitive	3	6	2	6
Social Emotional	2	8	2	8

Indikator Literasi Digital	Mahasiswa		Dosen	
	Urutan Indikator	Sub-Indikator	Urutan Indikator	Sub-Indikator
Teknik	1	1	1	1
Kognitif	3	6	2	6
Sosial Emosional	2	8	2	8

CS Dipindai dengan CamScanner

Table 29 " Research Question #1: How does the student's digital literacy affect the English Learning in Universities?" and "Research Question #3: How does the lecturer's digital literacy affect the teaching of English in universities?" were found that Student's Digital Literacy (X1) on Student's Score (Y1) and Lecturer's Digital Literacy (X3) on Lecturer's Score (Y2) are (1) the technical indicators and the first sub-indicator were very influential, such as using technology for learning; (2) the cognitive indicators and the sixth sub-indicator, such as the ability to use and analyze text-based, visual or audio-based information, understand the form, location format and method of accessing information sources; and (3) the social emotional indicators and the eighth sub-indicator, such as using a digital environment for learning and communication. So that the technical factor in the context of using technology for learning becomes the dominant reason for the students.

Research Question #2 and #4: How is the student's and lecturer's digital competence toward student's English learning and lecturer's English teaching in universities?

Table 30. Recapitulation of Lecturers and Student's Digital Competency Indicators and Sub-Indicators

Digital Competency Indicators	Student		Lecturer	
	Indicator Order	Sub-Indicator	Indicator Order	Sub-Indicator
Information	1	1	1	2
Communication	5	8 and 9	3	12
Content Creation	3	15	4	13,14,15
Safety	4	20	2	18,21
Problem Solving	2	24	4	23

Indikator Kompetensi Digital	Mahasiswa		Dosen	
	Urutan Indikator	Sub-Indikator	Urutan Indikator	Sub-Indikator
Informasi	1	4	1	2
Komunikasi	5	8 dan 9	3	12
Pembuatan Konten	3	15	4	13,14,15
Keamanan	4	20	2	18, 21
Pemecahan Masalah	2	24	4	23

Table 30 Research Question #2: How is the student's digital competence toward English learning in universities? and Research Question #4: How is the lecturer's digital competence towards English teaching in universities? So that the Student's Digital Competence (X2) against Student's Score (Y1) and Lecturer's Digital Competence (X4) against Lecturer's Scores (Y2) are obtained as follows.

Student Digital Competence: (1) Information indicator with the fourth sub-indicator very influential, which is storing information; (2) problem solving indicator with the twenty-fourth sub-indicator, which is goals and needs; (3) content creation indicator with the fifteenth sub-indicator, which is producing creative expressions, media output, and programming; (4) safety indicator with the twentieth sub-indicator, which is security measures; (5) communication indicators with the eighth and ninth sub-indicators, which is sharing resources through online tools and connecting with others.

Meanwhile the Lecturer's Digital Competence of (1) Information indicator with the second sub-indicator very influential, namely finding information; (2) safety indicator with eighteenth sub-indicator, which is data protection; and twenty-first which is safe and sustainable use; (3) communication indicator with the twelfth sub-indicator, which is participating in communities and networks, and cross-cultural awareness; (4) content creation indicator with the thirteenth sub-indicator, which is creating and editing new content (from word processing to images and videos); fourteenth, which is integrating and describing knowledge and content; and fifteenth, which is producing creative expressions, media output, and programming; (4) problem solving indicator with the twenty-third sub-indicator, which is making the right decisions on the most appropriate digital tools. So that the information factor in the context of storing information for students and finding information for lecturers are the dominant factor in this context.

Research Questions #5 and #6: Student's Digital Literacy and Digital Competence on Student Learning Score and Lecturer's Digital Literacy and Digital Competence on Lecturer Teaching Score.

Table 31. Recapitulation of The Student and Lecturer Variables

Variable	Correlation Percentage
Student's Digital Literacy and Digital Competency towards Student's Score	12,8%
Lecturer's Digital Literacy and Digital Competency towards Lecturer's Score	43%
Other Variable which has not been found from the student (Digital Literacy and Competency)	87,2%
Other Variable which has not been found from the lecturer (Digital Literacy and Competency)	57%

Variabel	Persentase Korelasi
Literasi Digital Mahasiswa dan Kompetensi Digital Mahasiswa terhadap Nilai Mahasiswa	12, 8%
Literasi Digital Dosen dan Kompetensi Digital Dosen terhadap Nilai Dosen	43%
Variabel lain yang belum terdeteksi dari mahasiswa (Literasi dan Kompetensi Digital)	87,2 %
Variabel lain yang belum terdeteksi dari dosen (Literasi dan Kompetensi Digital)	57%

Table 31 shows that the percentage of correlation between student's digital literacy and digital competence on student's score is 12.8% and there are still other variables that have not been affect it (87.2% of other variables have not been found). Furthermore, the correlation between students' digital literacy and digital competence towards the lecturers is 43% and there are still other variables that have not been found and affect it (57% of other variables have not been found).

CHAPTER 5
CORRELATION AND DIGITAL LITERATURE CAPACITY

A. The Correlation of Digital Literacy

The correlation between the student's digital literacy on student's score is: First, the relationship between the two variables has a Pearson coefficient of 0.091 close to 1 which means that there is a correlation between student digital literacy and student grades. Second, the significance of the two variables is 0.469 > 0.01, which means that both variables are not significant. Third, the correlation value is positive, and has a score of 0.469 which means that it is correlated in the same direction. So, if students' digital literacy increases, the student's value also increases. With the conclusion 0.469 > 0.05, then H0 is accepted and Ha is rejected.

The correlation between the student's digital competence on student's score is: First, the relationship between the two variables has a Pearson coefficient of 0.11 close to 1 which means there is a correlation between student's digital competence and student's score. Second, the significance of the two variables is 0.348 > 0.01, which means that both variables are not significant. Third, the correlation value is positive, that has a score of 0.348, which means that there is a unidirectional correlation. So that if the digital competence of students increases, then the value of students also increases. With the conclusion 0.348 > 0.05, then H0 is accepted and Ha is rejected.

The correlation between the lecturer's digital competence on lecturer's score is: First, the relationship between the two variables has a Pearson coefficient of 0.439, close to 1, which means it has a correlation between lecturer's digital literacy and lecturer's grades. Second, then the significance of the two variables is 0.324 > 0.01,

which means that both variables are not significant. Third, the correlation value is positive, which is 0.324, which means that there is a unidirectional correlation. So, if the lecturer's digital literacy increases, the lecturer's value also increases with the conclusion 0.324 > 0.05, then H0 is accepted, Ha is rejected.

The correlation between the lecturer's digital competence to lecturer's score is: First, the relationship between the two variables has a Pearson coefficient of 0.18 approaching 1 which means that it has a correlation between lecturer's digital competence and lecturer's score. Second, the significance of the two variables is 0.688 > 0.01, which means that both variables are not significant. Third, the correlation value is positive, which has a score of 0.688, which means that it is correlated in the same direction. So, if the lecturer's digital competence increases, the lecturer's value also increases. With the conclusion 0.688 > 0.05, then H0 is accepted and Ha is rejected.

The Student's Digital Literacy and Student's Digital Competence towards Student's Score is the correlation value or relationship (R) between the score of the Student's Digital Literacy Variable (X1) and the score of the Student's Digital Competence Variable (X2) on the Student's IELTS Score Variable (Y1) is 0.128. The coefficient of determination (R2) is 0.016, which means the effect of the independent variable (Student's Digital Literacy and Student's Digital Competence) on the dependent variable (Student IELTS Score) is 12.8%.

The Lecturer's Digital Literacy and Lecturer's Digital Competence to Lecturer's Score is the correlation value or relationship (R) between the score of the Lecturer's Digital Literacy of Variable (X3) and the score of the Lecturer's Digital Competence Variable (X4) to the Lecturer's Score Variable (Y2) is 0.659. The coefficient of determination (R2) is 0.434, which means the influence of the independent variables (Lecturer's Digital Literacy and Lecturer's Digital Competence) on the dependent variable (Lecturer Value) is 43%.

Student and Lecturer's Digital Literacy Digital Literacy towards Student and Lecturer's Score are Student Digital Literacy (X1) towards Student Scores (Y1) and Lecturer Digital Literacy (X3) toward Lecturer Scores (Y2). It is found that (1) the technical indicator with the first sub-indicator are very influential, which is using technology for learning; (2) the cognitive indicator with the sixth sub-indicator, which is the ability to use and analyze text-based, visual or audio-based information, understand the form, location format and method of accessing information sources; and (3) the social emotional indicator with the eighth sub-indicator, which is using a digital environment for learning and communication. So that the technical factor in the context of using technology for learning becomes the dominant reason for students.

Student and Lecturer's Digital Competence toward Student and Lecturers' Score are Student Digital Competence (X2) against Student Values (Y1) and Lecturer Digital Competence (X4) against Lecturer Scores (Y2) obtained as follows:

Student Digital Competence (1) the information indicator with the fourth sub-indicator very influential, which is storing information; (2) the problem solving indicator with the twenty-fourth sub-indicator, which is goals and needs; (3) the content creation indicator with the fifteenth sub-indicator, which is producing creative expressions, media output, and programming; (4) the safety indicator with the twentieth sub-indicator, which is safety measures; (5) the communication indicators with the eighth and ninth sub-indicators, which sharing resources through online tools and connecting with others. Furthermore, the Lecturer's Digital Competence is (1) the information indicator with the second very influential sub-indicator, which is finding information; (2) the safety indicator with eighteenth sub-indicator, which is data protection; and twenty-first which is safe and sustainable use; (3) the communication indicators with the twelfth sub-indicator, which is participating in communities and networks, cross-cultural awareness; (4) the content creation indicator with the thirteenth sub-indicator, which is creating and editing new content (from word processing to images and videos); fourteenth,

which is integrating and describing knowledge and content; and fifteenth, which is producing creative expressions, media output, and programming; (4) the problem solving indicator with the twenty-third sub-indicator, which is making the right decisions on the most appropriate digital tools. So that the information factor in the context of storing information for students and finding information for lecturers is the dominant factor in this context.

The correlation percentage of student's digital literacy and digital competence to student's scores is 12.8% and there are still other variables that have not been found and affect this (87.2% of other variables have not been found). Furthermore, the correlation between students' digital literacy and digital competence towards lecturers is 43% and there are still other variables that have not been found and affect this (57% of other variables have not been found).

B.   **Digital Literacy Capacity**

Digital literacy and digital competence are variables that correlate with student and lecturer scores but do not have a large significant value, so that there are variables that have not been found by researchers and have a significant influence. Furthermore, students and lecturers already have an excellent digital literacy and digital competence but this is not a determining factor in getting good scores on student scores (IELTS) and lecturer scores (lecturer index). Digitalization is very necessary but cannot replace the direct learning and teaching process because being a teacher/lecturer is just a transfer of knowledge, there will be a time when technology is smarter and knows more things than teachers/lecturers. But, if the teacher or lecturer transfers *adab* (how to behave well), piety and sincerity then the teacher/lecturer will always be needed because technology does not have all of that (KH. Dimyati Rois).

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She started teaching at the Islamic University of Riau in 2007 and actively writes since she was in junior high school until now with several achievements and dozens of writings.

As the eldest of 3 siblings, she likes to observe his surroundings. Her concern to the surrounding environment, becomes the reason for her writing and reading habit to become productive in writing books.

Monograph
Digitalization
on
English Language Education:
Literacy and Competence

Miranti Eka Putri is an Associate Professor of English Education and Deputy Dean for Academic Affairs at the Faculty of Teacher Training and Education, Universitas Islam Riau. She started teaching at the Universitas Islam Riau in 2007 and actively writes since she was in junior high school until now with several achievements and dozens of writings. As the eldest of 3 siblings, she likes to observe her surroundings. Her concern to the surrounding environment becomes the reason for her writing and reading habit to become productive in writing books.

This book is an academic study with the concept of digitalization by presenting literacy and competence. This problem comes from the real environment in the world of education. This book explains that students and lecturers have digital skills in the context of digital literacy. In addition, it also conveys that there are several factors that strengthen the statement of digitalization is very necessary but it cannot replace the courtesy, piety, and sincerity of a teacher or lecturer in the world of education.