



REFLECTION ON STUDENTS' COMPETENCE AND
CHALLENGES IN ACHIEVING DIGITAL MEDIA LITERACY
IN ENGLISH LEARNING

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ABSTRACT

This study aims to investigate and disclose the students' profiles and the obstacles that stand in the way of obtaining digital media literacy in English instruction for high school students in Ruteng City, Indonesia. This study surveyed 595 students from six Senior High Schools in Ruteng City, Indonesia. The questionnaire served as the primary instrument for data collection, followed by quantitative and qualitative analysis of the findings. The study results indicated that the level of media literacy competence among students falls into the low category (2,84). This category was indicated by eight statements of media digital literacy competence. Moreover, five factors challenged the respondents' digital media literacy achievement, namely lack of students' enthusiasm and initiative in regards to digital media literacy (61,59%), lack of cost for purchasing internet data packages (71,20%), insufficient time allocated for the use of specific English learning software (59,48%), unstable internet network connectivity (58,27%), and lack of available I.C.T. infrastructure in schools (58,33%). Various issues hinder the level at which students might acquire digital media literacy skills, and stakeholders are encouraged to address or overcome these obstacles.

Key Words: challenges; digital media literacy; English learning; high school students

ABSTRAK

Penelitian ini bertujuan untuk menyelidiki dan mengungkap profil kompetensi literasi media digital siswa dan hambatannya dalam pembelajaran bahasa Inggris bagi siswa sekolah menengah di Kota Ruteng, Indonesia. Penelitian survei ini melibatkan 599 siswa dari enam Sekolah Menengah Atas di Kota Ruteng, Indonesia. Angket sebagai instrumen utama dalam mengumpulkan data, lalu temuan penelitiannya dianalisis secara kuantitatif dan kualitatif. Hasilnya mengindikasikan bahwa level kompetensi literasi media digital para responden berada pada kategori rendah (rerata = 2,84). Kategori ini diindikasikan oleh delapan pernyataan tentang kompetensi literasi media digital. Selain itu, terdapat lima faktor penghalang ketercapaian kompetensi literasi media digital para responden, yaitu rendahnya antusiasme dan sikap inisiatif siswa terhadap literasi media digital (61,59%), kurangnya ketersediaan paket data internet (71,20%), kurangnya alokasi waktu untuk menginstal perangkat lunak khusus belajar bahasa Inggris (59,48%), ketidakstabilan koneksi internet (58,27%), dan rendahnya ketersediaan infrastruktur TIK di sekolah (58,33%). Berbagai permasalahan yang menghambat ketercapaian tingkat keterampilan literasi media digital siswa, dan pemangku kepentingan didorong untuk segera mengatasi ragam hambatan ini.

Kata Kunci: literasi media digital; pembelajaran bahasa Inggris; siswa SMA; tantangan

INTRODUCTION

Today's pupils need support from media literacy in order to succeed academically. At every level of education that students pursue, media literacy proficiency promotes changes in the learning culture of those students. Undoubtedly, the demands of advances in digital technology encourage every student to continue the adaption in supporting the fulfilment of various school projects that require competence in mastering I.C.T. or to prepare students for their future in running an ICT-based enterprise or winning various job opportunities that require I.C.T. expertise. According to the premise, each individual is urged to demonstrate acceptable digital media literacy competencies to support the achievement of everyday tasks (Suherman et al., 2020). Digital technology has implications for many aspects of human life, including education. On this basis, each academic unit is intended to supply digital technology infrastructure immediately and consciously to accelerate the attainment of ICT-based learning processes.

The reliability of digital technology infrastructure affects the implementation of learning in each educational unit. That is, the implementation of learning is no longer dependent on the presence of classrooms in schools but rather on dynamic classrooms, such as those based on digital media with stable internet connectivity. Learning based on knowledge of digital media literacy can transform the understanding of the teacher's role, which is no longer the sole source of knowledge received by students because digital media can support students' exploration of more profound and more significant knowledge in their own time (Sukmawati & Nensia, 2019). Every academic unit in Indonesia continues to direct the learning process to take advantage of digital technology improvements to provide outputs with enough digital media insight. Digital media literacy promotes pupils to be more competent, exhibit a high level of initiative, think critically and logically, and engage in self-directed learning.

Learning based on the use of digital media gives students a more exciting and meaningful learning atmosphere, and digital media follows the expectations of today's improvements in information and communication technology (I.C.T.). Therefore, every student must possess digital media literacy competence to accelerate the achievement of the desired learning outcomes. Digital media-based learning contributes positively to the learning process, the form of assessment, and the expected output (Amin et al., 2020). The government of Indonesia has approved the use of various forms of digital media in educational settings, including educational television programs, electronic books, video conferences, Webex, Zoom, YouTube, TeacherTube, Moodle, and other website-based digital media (Kemendikbud, 2020). These digital media provide more flexible learning alternatives (in terms of time and place), attractive, not left behind in terms of I.C.T. development, easily accessible, and at affordable costs (Miño-puigcercós & Sancho-Gil, 2015).

Learning that is centred on digital media brings the student to the centre of the learning process, promotes them as a source of knowledge and information, provides better accessibility, fosters learners who can self-regulate and improves digital skills (Anggrasari, 2020; Yazon et al., 2019). Based on this premise, digital form learning is an

appropriate solution since it can improve students' language knowledge, accommodate different learning styles, and keep up with the requirements of developing digital media. Based on this, learning through digital media is favorable for the level at which students acquire their competencies, including English language skills.

Earlier research demonstrates convincing evidence that competency in digital media literacy accelerates the rate at which learners obtain language knowledge, fosters language student engagement and changes in learning cultures, and encourages students to take personal initiative on digital skills (Al Kandari & Al Qattan, 2020; Giovanni & Komariah, 2020; Jannah, 2019). Students with a competent knowledge of digital media literacy could bridge the gap between the need for creative thinking skills, English vocabulary knowledge, and the opportunity to reflect on shortcomings in their grammatical and writing abilities (Mantiri et al., 2019; Maryatun, 2020).

However, scholars have yet to do much research on topics linked to digital media and the challenges of teaching high school students in rural areas of Indonesia the skills necessary to be literate in digital media. In order to fill this knowledge gap, this research was carried out. Studying the abilities required for digital media literacy is by no means new. Three earlier studies have observed things important to this research's theme: proficiency in digital media literacy enables students to become autonomous, proactive, and creative English language learners (Jumino, 2019; Murtafi & Putro, 2019; Yuan et al., 2019). However, what makes this research stand out is its description of the challenges students in remote regions encounter while attempting to achieve their digital media literacy and English language proficiency goals, particularly during COVID-19. The ability to be literate in digital media can change the way students think to achieve the learning goals they set for themselves. Students who live in rural locations benefit from digital media literacy skills because it makes them more self-motivated and confident and allows them to adapt their learning strategies to improve their English language skills (Soto & Gutierrez, 2018).

The researcher has posed the two research questions based on the descriptions and arguments presented previously, namely (1) What is the digital media literacy competency profile for students from six schools in Ruteng? and (2) What challenges do high school students in remote areas face in achieving digital media literacy competence in learning English?

Based on these two research questions, this research aims to reveal scientific data on students' digital media literacy competency profile and their achievement challenges, spread across six high schools in Ruteng City, Indonesia.

Literacy derives from the Latin word for letter, *litter*, and refers to the capacity to read and write (Counihan et al., 2022; Mohammadkhah et al., 2022; Tsagari, 2021). Moreover, Lankshear and Knobel (2016) said that literate persons can read and write; "literate" refers to any of these groups of individuals. Literacy can be interpreted from a larger perspective as a person's ability to process and understand the meaning of something, whether it be literate or something else's meaning. Literacy encompasses various concepts depending on the context of the field in which it is used; for example, financial literacy, entrepreneurship knowledge, health literacy, environment and sustainability, etc.

Today, digital literacy is an integral component in various aspects of modern society life, including education. The process of literacy transformation is obvious, as English language learning increasingly integrates digital media applications to enhance the intended language outcomes. Thus, digital media literacy is the ultimate expression of the transformation of the meaning of literacy itself.

Literacy is not understood in simple terms; the individual's ability to read and write is only understood after understanding this concept (Jannah, 2019). Additionally, literacy is interpreted as the individual's ability to develop knowledge and potential and overcome various problems in real life at any time (Mantiri, Hibbert, & Jacobs, 2019).

Literacy is something that is required of students since it has a simultaneous effect on the learning process that they are engaged in. Literacy improves one's vocabulary, accelerates brain performance because it is so frequently employed for reading and writing activities, opens one's eyes to new ideas, transforms one's mindset, and sharpens analytical power, all of which help a person break free from all kinds of forms of mental impairment (Sumiati & Wijonarko, 2020). Recognition of the importance of literacy as a variable in day-to-day living is therefore necessary. Literacy education aids students in maximizing their potential while also benefiting society as a whole. This idea enables individuals to take an active role in various aspects of life, which adds to the student's potential growth.

The learning process will probably result in the development of new technology for digital media. This concept is a certainty. This idea affects people's mindsets and job routines (Yazon et al., 2019). Because it is useless and wasteful in terms of both time and costs and in acquiring language expertise, the pattern of work that relies on non-digital media technology will eventually be left behind. This viewpoint is because the shift towards digital media technology is unavoidable. Disruption in this era of digital technology motivates all stakeholders to be creative, proactive, and adaptable to capitalize on the multiple options that emerge due to the advancement of technology, which continues to impact the lives of the larger society positively. Digital technology is a platform that can facilitate human working practices to produce more optimal results. Because of this, students need to take ownership of their digital literacy if they want to be capable of accomplishing instructional goals or establishing digital media-based businesses after they leave school.

A person is considered to have digital literacy if they can search for information, interpret it, analyze it, evaluate it, and then spread that information utilizing modern digital technology that is always connected to the Internet (Lankshear & Knobel, 2016).

Therefore, digital media refers to media encoded in a machine-readable format and accessed through the Internet. Literacy in digital media refers to the ability of students or teachers to know various types of digital technology media and comprehend the goal of its use to assist successful learning. In the context of learning English, this ability is highly relevant (Wahidin, 2018). This understanding has direct repercussions for educators, as they are expected to be able to incorporate learning technology into every process they perform. As a result, the learning process will be more effective and efficient in attaining the learning goals that have been set.

Literacy in digital media is a priority that students of today need to be able to master since these competencies play an essential part in the learning process at every level of the school, including learning English (Chan et al., 2017). Literacy in digital media is also required for English teachers because several English knowledge sources are directly connected to digital media. Based on this perspective, various stakeholders in the education sector are encouraged to establish students' digital media literacy competence as the primary concentration of their efforts in learning (Menggo & Darong, 2022).

Literacy in digital media is one of the many components that make up digital literacy, one of the many skills that today's students are expected to possess. Students

are expected to demonstrate proficiency in three primary areas in order to meet the requirements of this digital literacy competency (Trilling & Fadel, 2009). These areas include information, media, and information and communication technology literacy (Anggeraini et al., 2019; Maryatun, 2020). Students are expected to have a certain level of proficiency in the English language, and these three forms of literacy work together to facilitate that proficiency (Anggeraini et al., 2019; Menggo & Darong, 2022). In this study, digital literacy competence focuses only on media literacy (Trilling & Fadel, 2009). Students must demonstrate that they can comprehend the primary operations of the hardware components of their computer media to be proficient in digital media literacy.

The extent to which pupils are literate in digital media affects how quickly they acquire English language skills (Afrilyasanti & Basthomi, 2023; Lushchik et al., 2024; Sèna & Etienne, 2022). During the COVID-19 period in Indonesia, the digitization of learning in every academic unit has altered student learning culture from one based on paper to one based on digital multimedia (Amri et al., 2020). This platform change challenges students attending schools needing relevant information and communication technology (I.C.T.) infrastructure, unpredictable internet connections, or a low student initiative. Having digital media abilities benefits the online learning process on the many computing devices students have. Students are expected to be able to access the information, discuss it with teachers or peers, ask questions, provide assignments, verify participation, conduct evaluations, and other similar activities as part of the aforementioned online learning process. Those students and teachers who have not yet mastered digital media literacy face a problem as a result of this change in the system.

This competency in digital media literacy affects students' practices while learning English. Someone forms a habit when they repeatedly engage in the same pattern of behavior, to the point where it achieves accuracy and becomes part of the routine. Getting data with care, being knowledgeable about the fundamental capabilities of various computers and other devices, and using several different software applications in the learning process all increase the student's English knowledge. This idea includes the students' vocabulary, pronunciation and grammar accuracy, and ability to use punctuation when writing in English correctly (Hajebi et al., 2018). The computer devices contain only English versions of the instructions for the various software applications. Students can quickly determine the meanings of words that first confused them; however, this strategy needs to be recognized as a tool to alter the students' routines for learning English to improve their reading and writing skills. Therefore, students' command of the English language will improve according to the extent to which they are proficient in using digital media.

The premise implies that learners who have a higher level of digital media literacy also possess a deeper knowledge of English, particularly in areas such as phonology, vocabulary, syntax, and pronunciation. This gap can be discovered through this research analysis. Furthermore, the data in this study validate the originality of the novelty that digital media literacy skills can enhance the vocabulary and pronunciation proficiency of English as a Foreign Language (EFL) learners. Digital media can be used to assess the correctness of pronunciation for various words, phrases, or sentences that EFL learners previously comprehend. In addition to obtaining the teacher's confirmation of the correctness of pronunciation and diction in different contexts, EFL learners can also verify these aspects using various computer tools.

METHODS

A survey with a cross-sectional design was used for this given study. In June 2022, it was conducted at six different high schools in the Ruteng area of West Flores, Indonesia. The primary objective of this design is to determine the educational service requirements of the community in terms of the programs, classes, and construction projects related to school facilities, as well as any involvement in the school or community empowerment (Creswell, 2008). In the case of this article, this design was decided upon to enhance and extend the digital media facilities at the six senior high schools selected to serve as the primary focus of this research.

The population of the research was 14,724 students. Five hundred ninety-five students were selected as a sample using a multistage cluster random sampling technique. This sample was taken from students attending six different Senior High Schools in Ruteng City. The distribution of the sample can be found in Table 1 below.

Table 1. Sample Total

No	School	Sex		Sample Numbers
		Female	Male	
1	S.1 L.R	67	33	100
2	S.2.L.R	71	29	100
3	S.K.S.B. R	76	27	103
4	S. F.X. R	58	43	101
5	S. K. R	54	39	93
6	S.T. Q. R	63	35	98
Total				595

A questionnaire was used for data collection. The concept presented by Trilling and Fadel (Trilling & Fadel, 2009) regarding digital media literacy was addressed in the questionnaire. It addressed fourteen items dealing with digital media literacy issues and competencies. They were in the form of closed-ended questions with five possible answers each. The students were given four choices, and they needed to select one. Before distributing the questionnaire to the respondents, each item was examined by three rounds of expert evaluation to determine whether or not it was relevant or irrelevant to the overall content validity.

In this study, a score table was employed, which was utilized to demonstrate the level of digital media literacy competency of the respondents based on the response options supplied in the questionnaire, which was used after receiving a score for each of the answers provided. In addition, a category is provided to classify the level of digital media literacy competence the respondents possess. Four classifications are available: high, medium, low, and very low. The range of possible scores for each category is presented in the following Table 2.

Table 2. Score category table

Score	Category
1,1 – 2,1	Very low
2,2 – 3,1	Low
3,2 – 4,1	Medium
4,2 – 5,0	High

The data from the questionnaire allowed for the determination of the percentage

using numerical methods. After analyzing this percentage with the help of the Excel chart data series software tool, the results were then presented for qualitative interpretation.

FINDINGS AND DISCUSSION

Findings

The findings of the digital media literacy competencies and the obstacles they provide are the primary emphasis of the description in this section. Excel's chart data series software measures each component of the studied variable. Table 3 below describes a summary of the media digital literacy competency.

Table 3. The rating of media digital literacy competence

No	Item	Mean
1	Ability to understand the main functions of computer hardware components	3,1
2	The capability of using the Microsoft Word program	3,06
3	Capacity for using M.S. Excel program	2,7
4	Capacity for using M.S. PowerPoint program	2,8
5	Capacity for using Microsoft Office Publisher program	2,47
6	Capacity for using keyboard shortcuts on the computer	3,21
7	Ability to adjust brightness and contrast settings for computer media	2,71
8	Capability to use features/programs to minimize, maximize, and reposition windows on the computer monitor	2,58
	Average	2,84

The skills of 595 respondents from six high schools in Ruteng City, Flores, Indonesia, regarding media literacy are represented in Items 1 to 8 in Table 3 above. Based on the data analysis, the digital media literacy competency level of the 595 respondents is categorized as low, with an average total score of 2.84. The relevant indicators of digital media literacy competence are presented in Table 4 below.

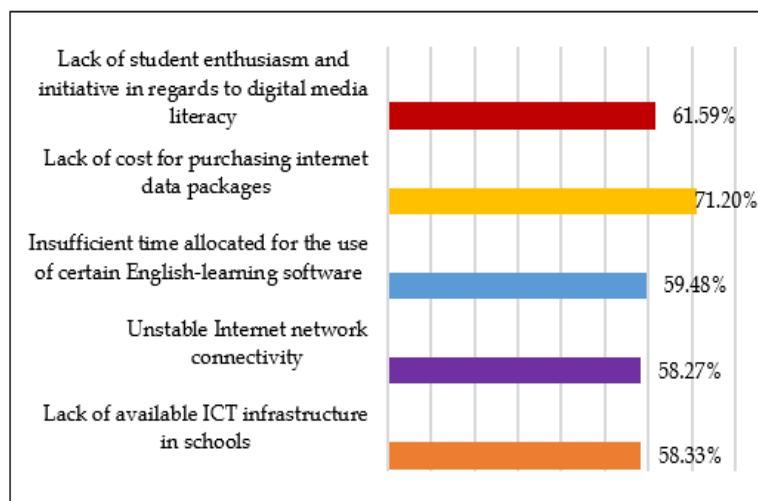
Table 4. Digital literacy competence

Literacy type	Indicator	N	Mean	Category
Media digital literacy	The students have a fundamental comprehension of the primary purpose of their computer media devices	595	2,84	low

Based on the findings in Table 4, it can be assumed that the level of digital media literacy competency possessed by 595 students who attend six different high schools in Ruteng City, Flores, East Nusa Tenggara province falls into the low category (2.84). This study also revealed several hindering factors that contributed to the respondents' lack of digital media literacy, such as ownership of a digital media Laptop, lack of I.C.T. infrastructure in schools, unstable internet network, lack of time allocated for using specific applications in English learning, purchase costs of internet data packages, and students' enthusiasm and initiative in developing digital media literacy skills. This study emphasizes the six criteria discussed, even though many other things still stand in the way of high school students' competence in digital media literacy. These six inhibiting factors were evaluated using the Guttman scale, in which the researcher offered only two possible answer choices: yes and no. An answer that is "yes/positive" receives a score of 1 (one), whereas an answer that is "no/negative" receives a score of 0 (zero). In

addition, Diagram 1 explains the average percentage of all questions for the six inhibiting factors.

Diagram 1. Digital media literacy challenge.



Discussion

The student's competency levels in media literacy fall under the low category (See Table 4 above). The students' lack of excitement and initiative was the factor with the second-highest presentation rate, coming at 61.59%. The cost of internet data packages was the highest (71.20%). According to this research, a poor level of competency in media literacy, which is reinforced by factors that hinder learning, affects enhancing students' English proficiency and changing their learning practices. In an ideal world, mastery of media literacy serves as a bridge for students to independently explore and study other areas of English knowledge in their way (Bilotserkovets et al., 2021; Hattani, 2016).

Speaking English is the key to achieving students' digital media literacy competence. Students unconsciously learn English due to digital media competence literacy (Yuan et al., 2019). Students must comprehend the primary operations of their computer media hardware to be media literate. In order to comprehend the functions of the numerous aspects of these computing devices, students require English proficiency (Custodio-Espinar & López-Hernández, 2023; Yeh & Mitric, 2020). Since students need to have a working knowledge of English vocabulary to comprehend how to operate the various elements of the digital media they use in everyday demand, based on this logic, it is reasonably evident that proficiency in media literacy affects pupils' command of the English language (Eisenlauer & Sosa, 2022; Vaishnavi, 2023). If there is a poor level of media literacy, there is also a low probability that people will be able to master English (Rusydiyah et al., 2020).

The ability of students to understand functions or use various features of their computer media and mastery of media literacy affects strengthening students' English knowledge, such as listening comprehension, speaking skills, writing skills, grammar, and vocabulary. Media literacy is understood as the ability of students to understand functions or use various features of their computer media (Kim, 2018). This scholar views

that media literacy encourages students to be able to evaluate weaknesses and strengths in learning English, both language skills, such as listening, speaking, reading, and writing, as well as language components, such as grammar, vocabulary, or pronunciation, which students do not directly realize. Kim (2018) believes that this occurs because media literacy encourages students to evaluate their learning of English.

Literacy in the media also affects changes in students' learning culture, such as the development of independent learning and self-evaluation, as well as the emergence of innovative and creative skills to support the rapid acceleration of the achievement of competencies chosen by the students (Budiman & Syafrony, 2023; Megasafitri et al., 2023). Implementing a continuous change in the culture of reading and writing literacy can help overcome various obstacles that stand in the way of reaching a sufficient level of digital media literacy competency. Learners, in response to the need for optimum digital media literacy skills, develop numerous breakthroughs by themselves in order to be able to fulfil these demands. The learners can investigate digital knowledge, analyze and evaluate it, and develop or make their findings if they have personal initiative and are enthusiastic. This conclusion is something to be proud of since it is entertaining, powerful, and done independently. Therefore, learning autonomy is a crucial factor in achieving the goals for digital media literacy competence (Chekhratova et al., 2022; S Kim, 2018).

The transformation in the learning culture among students also needs to be separated from the increasing emphasis placed on developing competencies in media literacy. The English-learning process of students with a learning culture based on digital media literacy would look different from that of students whose learning is not mediated by digital media. Based on this concept, all stakeholders must comprehend and investigate the reasons that slow the rate at which media literacy competence can be achieved (Bunnag, 2012). Six factors hinder the percentage at which students' media literacy competence can be achieved in the context of this research, including the limited number of students who have laptops, the limited availability of I.C.T. infrastructure in schools, unstable internet networks, the absence of policies on the use of specific applications in English learning, and data package budgets as well as the pupils' interests and initiatives on digital media. It is recommended that stakeholders address or find solutions to several factors that slow down the rate at which students' digital media literacy competencies can be obtained.

The researcher expected that all stakeholders in the field of educational endeavors, particularly educators, parents, and pupils, would use the findings of this study as a basis for a holistic reflection. Although media literacy competency is inadequate, and there are six obstacles to attaining this competency, enhancing media literacy competency encourages changes in the culture of independent English language learning among students.

CONCLUSIONS AND SUGGESTION

The ability to be literate in the media and the reasons that slow down the process of becoming literate are two interrelated variables. The ability to comprehend media can aid in mastering the English language and assist pupils in comprehending the numerous functions of digital media components. Students are advised to enhance their proficiency in digital media literacy as a way to accelerate their acquisition of the English language. The results of this study indicated that the literacy level of the respondents was unsatisfactory or fell under the low category. The results of this low category are

consistent with the six factors that impede the achievement of media literacy, namely the limited ownership of laptops, the limited availability of I.C.T. infrastructure in schools, unstable internet networks, the absence of policies on the use of specific applications in English learning, and internet data package budgets, as well as the student's interests and initiatives.

This finding arouses the moral obligation of all parties involved to collaborate to solve the problems encountered by these respondents. Parents, schools, and local governments are responsible for taking right away based on these findings so that respondents can succeed in their ICT-based English learning process. Enable stakeholders, particularly educators, to engage in collaboration with students in order to effectively choose, assess, adapt, or generate suitable and relevant digital media resources that will facilitate the attainment of language skills goals defined by students.

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