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New Technology, New Literacies, and New Method: How Teachers Implement in Indonesian Language Teaching

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Abstract

This study intends to evaluate how lecturers in various disciplines of language learning and understanding new literacy may effectively use new technology, new literacy, and new techniques. What are the distinctions between instructional techniques employing new technology and new and new literacy to increase the rate at which language learning objectives are met? The research was designed using a qualitative descriptive paradigm that tries to capture and discover the underlying significance of the learning process. The qualitative technique stresses the process of data collection through participant observation and in-depth structured interviews when lecturers teach the Indonesian language and literacy in the classroom. Data analysis employs four phases of qualitative research, including data gathering, classification, filtering, and conclusion drawing. Based on the study and debate, it was determined that introducing new technology, new literacies, and new methodologies can assist lecturers in effectively communicating language-related material to students. Students' capacity to comprehend multimodal language material can be enhanced using these three factors. The learning environment becomes more fun, language skills rise, learning saturation lowers, and learning becomes more efficient.

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Keywords: New literacy, new technology, new methods, Language learning,

Introduction

There have been several periods of dramatic changes in technology and information (Leu et al., 2011); therefore, lecturers at public and religious universities must encourage students to take advantage of various new technologies, new literacy, and new methods in the learning process so that learning processes and outcomes are in line with the requirements of the new millennium (Bittman, Rutherford, Brown, & Unsworth, 2011). In every language education quality enhancement effort, it is assumed that new technologies, literacy, and methodologies would alter the entire social and cultural order (Fabos, 2008).

Specific text structures in modern texts that exist in social networks today are multimodal. The text contains written, illustrated, and authoritative parts that are all contained in a single container employed by the compiler and presented efficiently (Leu et al., 2011). Kids who spend an average of five to six hours a day reading, viewing, listening to, and comprehending diverse texts on social networks or playing various computer games are exposed to a multimodal environment. Therefore, lecturers must have models that illustrate various forms of multimodal literacy following these technological developments (Rosenbaum, 2012).

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To improve the quality of education in tertiary institutions, new technology, literacy, and methods must be implemented (Lenhart, Purcell, A., & Zickuhr, 2010). In other words, instructors must comprehend and implement new technologies, literacy, and methodologies. This is necessary to take advantage of these facets in transforming a new global civilization (Jenkins, Clinton, Purushotma, Robinson, & Weigel, 2006).

Attempts to bring new technology into the language learning process are urgently required (Valadez & Duran, 2007), as the learning process has relied solely on traditional practice methods without adding new technology to date (Modarres, 2011). This is significant because, during the learning process, it is necessary to reconstruct individual empowerment that is more assertive and responsive so that students' thought and reasoning processes regarding issues of discussion themes can mature (Martin, 2003).

Regarding technology, students on and off campus are constantly connected to the realities of the twenty-first century (Jung, 2008). Lecturers must recognize that students are also amidst a technology revolution during the current technological development wave (Conole, 2011). In the era of industrial revolution 4.0., the most dramatic change in the history of world civilization, the entire strategy and way of working of students after graduation will be able to change, as well as how students communicate with the rest of society in all places and times, and how they will spend their free time with advanced language and technology (Greenhow, Robelia, & Hughes, 2009).

The current technological revolution is focused on computer technology, artificial intelligence, information technology, communication, and multimedia (Oblinger, 2010). These advances and transformations are frequently viewed as the beginning of a knowing or well-informed society (Veletsianos, 2012). In the context of evolving technology into the most recent technology (update), education is viewed as playing a central role in all aspects of life so that university graduates are a "net generation" and students majoring in Languages can participate in society by being prepared to take advantage of this professionalism (Kennedy, Judd, Churchward, Gray, & Krause, 2008).

New literacy must also be offered to language-studying pupils so that individuals and groups can obtain reading material that encourages them to continue learning without experiencing boredom (Kennedy et al., 2008). They are constantly tasked with reading, comprehending, retelling, evaluating and coming up with tales that are equally engaging as the new literacy the lecturer brings them (Galguera & Nicholson, 2010).

In this study, the new literacy emphasized in the learning process is print literacy, which seeks to be combined with the development and utilization of media literacy (Fox, Zickuhr, & Smith, 2009), including computer literacy and various information literacy, as well as introducing the expansion of concepts about multiliteracy in helping students reconstruct and democratize education and students to produce students who are highly competitive and prepared to enter the world of work (Smith & Brenner, 2012).

Students must also be taught new approaches to reconstruct the learning and education process actively rather than passively. With the new system, kids can also build more challenging obstacles. With the new method, students must be more democratic and daring while expressing their linguistic abilities grounded in multicultural education (Smolin & Lawless, 2003).

The change of three significant factors, including new technology, new literacy, and new teaching methods, will challenge lecturers in tertiary institutions to rethink the fundamental teaching principles and employ media in innovative and productive ways. By forsaking antiquated technology, failing literacy, and boring approaches that do not serve as a learning foundation for students (Wankel, 2009). Modern study indicates that new technology usage can result in changes in students' language competence after their participation in language learning using new technology medium (Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur, & Sendurur, 2012). Ajjan & Hartshome's (2008) study demonstrates that the educational process can operate well when new literacy is taught adequately, followed by new technology (Molnar, 1997). The new method lecturers implement has numerous advantages, including clear individual instructions (Moran, Seaman, & Tinti-Kane, 2011), more student participation, and the ability for student creativity and invention to rise (Poore, 2011). Student achievement can be enhanced through the development of digital literacy (Lustbader, 2000). According to additional studies, the use of new technology and literacy has the potential to assist the growth of students' adaptive skills. According to research conducted by Smith and Brenner (2012), most Americans (65%) use Twitter daily. According to Kassens-Noor (2012), adults utilize new literacy twice as often as adults. Twitter has enhanced interaction between professors and students (Wankel, 2009), facilitating cooperation, boosting student enthusiasm, and expanding student participation (Ebner, Lienhardt, Rohs, & Meyer, 2010; Hannay & Fretwell, 2011).

Research Question

1. What is an effective strategy for implementing new technology, literacy, and language learning methods in universities?
2. What methods can lecturers use in using new technology, new literacy, and new methods to increase the significance of achieving educational goals and language learning?

Theory

New Technology

Traditional literacy is characterized by using work, pencils, and pens in addition to books (Leu, Kinzer, Coiro, & Cammack, 2004). New literacies are required to aggregate and use information from the internet and extend ICT networks (Leu et al., 2004). Numerous new literacy principles, notably the importance of AI and ICT, have emerged (Leu et al., 2011).

Literature confirms that applying new technologies to the language learning process in the classroom can enhance students' capacities in all educational settings (Ebner et al., 2010). Several motivating factors for using new information and communication technologies (ICT) in education might alter the degree and efficacy of the learning process, including the emergence of new literacies and methodologies (Junco, Heiberger, & Loken, 2011).

But, this significant push for change in the language-learning process must be promoted through new technologies and data (Schroeder, Minocha, & Schneider, 2010). Kellner (2000) thinks that technology will improve teaching and learning. Modern technology and education are the appropriate resources. These resources are strengthened when supported by lecturers' pedagogical and educational activities, such as leadership, policies, ICT integration plans, training for lecturers and students, and assistance for lecturers and students (Parry, 2008).

Current information and technology in education can catalyze successful language teaching and learning (Richardson, 2009). There are numerous reasons why educators must successfully integrate technology into the classroom (Wankel, 2009). Changing global economic, cultural, and policy demands necessitate a more knowledgeable, participative, and engaged student body (Kellner, 2000).

Because reading on student social media includes multi-modal literacy, naturally becomes a tool for lecturers seeking to improve education's challenges. Numerous impediments exist to the application of modern technologies in the learning process in the real world (Junco et al., 2011). Teacher-level hurdles include lack of time, probable opposition to change, and confidence in using ICT. School-level hurdles include a lack of effective professional learning in using ICT for effective classroom integration, access to resources, and lack of support (Bingimlas, 2009).

The research findings of Lankshear and Knobel (2003) indicate that a person's achievement is proportional to their proficiency in new literacy. Nonetheless, there is a substantial and actual divide between pupils with frequent access to and usage of technology and those without.

According to Leu et al. (2011), there is a significant difference between the percentage of students from low-income households who have internet access at home and the percentage of students from high-income households who have internet access at home, with the percentage of low-income students with regular internet access being significantly higher, fewer opportunities to use the internet (NCTE, 2013). The poorest schools are also under the most pressure to improve state test scores that have little to do with online reading comprehension" (Leu et al., 2011). In a technologically advancing culture, it is essential to have new literacy abilities. Everyone must learn to adopt and implement the new literacy standards (Nicholson & Galguera, 2013). This new literacy is primarily associated with the usage of modern technology. Much of the new literacy concerns the correct use of technology and how to operate technological platforms (Nicholson & Galguera, 2013). In the classroom, instructors of all language courses should emphasize teaching new literacy skills. This is intended to prepare pupils for life following graduation.

New Literacy

New forms of literacy are emerging concurrently with the rapid and reflexive association of new technologies with media formats that extend beyond text and two-dimensional graphics to include audio and video, photos, icons, animated symbols, and varied font color combinations and sizes. The new literacy necessitates a new, unfiltered form on the internet that requires higher-order thought in discovering, assessing, and managing the vast flow of information. Unique literacy benefits from a new digital literacy in information processing and social interaction, cooperation in learning, and shared knowledge-building (Leu et al., 2004).

Bittman et al. (2011); Lankshear and Knobel (2003) assert that the development of digital literacy is becoming increasingly crucial for students to enhance their language abilities in the social, political, cultural, economic, and social spheres.

New literacy from multiple sources is required to establish a robust linguistic notion (Wright, 2010). Most outcomes of reading phenomena, news, internet mass media, and print involve numerous new multisource literacies. With this multi-source, teachers must acquire new literacy from cross-sources that enhance pupils' language proficiency. The new literacy consists primarily of social media, electronic media, videos, and other new media forms. This demonstrates how extensive a new literacy source pupils have read (Warschauer, 2003).

The social community, both on campus and in urban communities and rural areas, requires new forms of literacy that can only be found on the internet. This is essential so that the world of education evolves in tandem with the new millennium. It is crucial to teach the millennial generation new literacy to restructure education to be more responsive to a democratic and multicultural society. As is common knowledge, current education difficulties have highlighted that all students are undergoing one of the most major revolutions in education since the shift from oral-based to print-based learning. Schooling focuses on literacy once more (Reinhart, Thomas, & Toriskie, 2011).

The transformation of book literacy into digital literacy is a revolutionary development in education, particularly in digital literacy. This literacy prepares society for the future. Education and literacy have an age relationship, as is well known. In acquiring new literacies, attaining competence in a context defined by rules and conventions is essential (Miners & Pascopella, 2007).

Literacy is socially created through educational and cultural processes that involve many institutional discourses and social practices. In response to social and cultural shifts and interests, literacy evolves.

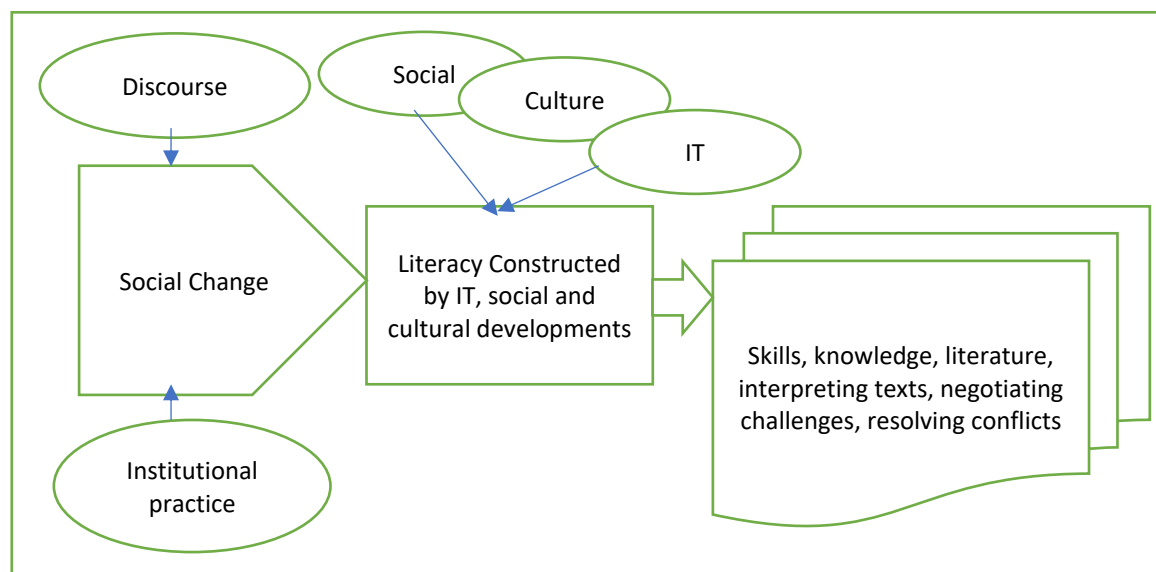


Diagram 1. Background and Role of Literacy in improving language skills

Social change that continues to occur, which is based on discourses on democratization and institutional practices that are all in language, necessitates a comprehensive understanding in the form of new literacy in the IT, social and cultural fields to produce skills, knowledge, and the capacity to interpret texts, negotiate groups, and resolve various conflicts.

It is not a secret that new reading skills are essential for student achievement. Pupils will require new literacy abilities. They must be able to work and interact with others (Kirkwood & Price, 2005). They will be needed to understand and synthesize a vast amount of information, most of which will be digital. In both their personal and professional life, they must act ethically and professionally (Leu, O'Byrne, Zawilinski, McVerry, & Everett-Cacopardo, 2009).

New Teaching Methods

The instructor has always used lectures, discussion, question-and-answer methods, and social activities in the language-learning process thus far. A multi-modal language acquisition process, it is built on millennial situations that always intersect with technology (LaBoskey, 2004). Hence, the language-learning process must employ innovative methods that highlight the use of modern technology and literacy. Regarding the student-centered language learning process, the new method is more innovative regarding the teacher. Cooperative language learning is practical, active, innovative, creative, effective, and enjoyable due to learning (PAIKEM). The process of learning a new language emphasizes student participation. Students are the center of learning and the key to successful learning. As facilitators, lecturers place a premium on material mastery by employing novel techniques that bring nature to its fullness (Kirkwood & Price, 2005).

Pupils with a sluggish grasp of the linguistic subject are afforded more opportunities to gain proficiency. Enrichment opportunities are available to students who can swiftly gain mastery (Kellner, 2001).

Teachers are the most limited resource for integrating technology into courses. Instructors must be able to incorporate new technologies and literacy abilities into their lessons (Kist, 2013). Regarding language-learning strategies, educators must restructure schools to respond constructively and gradually to technological and societal developments (Kellner, 2001).

Method

Settings and Participants

The background for this study was the Indonesian Language and Literacy course at the undergraduate level, which included 35 students, 23 male and 12 female. They are between the ages of 19 and 21. 10 receive scholarships, while 25 pay independently. This course aims to develop student's knowledge and abilities in Indonesian and their ability to utilize modern technologies, techniques, and methods in language education in postsecondary institutions. The teaching format combines campus-based face-to-face interactions and online interaction (zoom).

Students are introduced to new technologies, literacy, and learning approaches along the learning process. The significance of these three aspects is highlighted during the learning process to help students address various problems using language (Yin, 2003).

During the first month of the course, students construct social networks and engage in various academic contacts with professors and peers, utilizing social media to apply technology and acquire new literacy through organized assignment teaching methods. Students must review different sent and received professional linguistic information from the second to the fourth month. In addition, after each month, students are expected to submit numerous reflections on the social media they have used and to discuss the literacy skills they have acquired.

Data collection

Five social media platforms utilized by students and five reflections from each student at 14 sessions over one semester constitute the data sources. Using the advantages and disadvantages of literary methodologies, data are coded inductively and deductively (Dunlap & Lowenthal, 2009; Kassens-Noor, 2012; Miles & Huberman, 1994; Strauss & Corbin, 2007). Students serve as the unit of analysis (Yin, 2003). For all phases of the study, researchers analyzed various student reports regarding the use of new internet-based technologies and the utilization of new internet-based literacies through different learning strategies, including discussion methods, individual assignments, and structured groups (Coiro, 2003). Using this approach of data collecting, researchers obtain an overview of the advantages and disadvantages of various learning strategies that may be utilized for language acquisition by employing a variety of new communication technologies to acquire a variety of new literacy in cyberspace. In the process of increasing new literacy through the use of new technology, researchers attempt to gain an understanding (Strauss & Corbin, 2007) of different student perspectives on the functional use of social media, as well as student awareness of the benefits, risks, limitations, and advantages of using various social media in improving language skills by students.

Data analysis

The research relies on cross-case examination of student students due to the numerous components of learning to enhance language abilities that must be addressed. Seeing how language is learned using new technology led to identifying similar developmental patterns through cross-case analysis. This action encouraged involvement through research and discovery to widen student decision-making and interactivity efforts throughout the five social media platforms they employ. During the one-semester research process, the researcher followed this sequence to organize the data and report on students' experiences utilizing social media as a new technology to improve literacy.

Many examples were selected to reflect the diversity of the data in each study theme (Bullough Jr & Pinnegar, 2001) as expressed in research questions such as the functional use of social media. The benefits students receive while using social media and the numerous challenges students experience (Elliott, 1985).

Critical to the group and independent learning in completing organized tasks from lecturers (LaBoskey, 2004) is the ability to provide and receive feedback individually and in groups, recognizing the limitations of analytic interpretation (Bullough Jr & Pinnegar, 2001).

Data analysis on integrating new technology and new literacy in postsecondary institutions employs teaching methods that can promote student professionalism while writing, reading, comprehending, and expressing feedback through social media (Strauss & Corbin, 2007).

Result and Discussion

How and what do students get through social media?

The study of data also centered on the positive and negative sentiments of pupils after receiving a response from communicating with others as a practical means of gaining diverse linguistic experiences. According to [AA],

he had numerous positive experiences using Twitter to obtain current information. Some pupils [BB] are exposed to a fast-paced life that must be experienced to deal with life's issues. Similarly, student [CC] identified himself at the beginning of introducing the new platforms Facebook, Twitter, and WhatsApp, all of which gave a variety of knowledge, self-advocacy, and a shift in perspective about numerous matters.

The opinion of [DD] is then shared with his friends, for instance, by observing social media and paying close attention to what others have said well. Student [EE] explains how social media can be used to determine the interests and activities of his peers.

In the meantime, [FF] utilizes various social media to obtain multiple news sources and supports the learning methods used by the Indonesian Language and Literacy lecturers to acquire various articles, ideas, and other people's perspectives to study thoroughly.

Similar sentiments were expressed by [GG]. I used social media and learned to write polite and warm greetings and how to end interactions respectfully. For instance, reading the WhatsApp group (WAG) enables me to determine which sentences are proper and courteous to send via WAG and which are incorrect and unpleasant. I need to acquire more etiquette, manners, and the correct use of symbols.

A contrasting opinion is held by [HH], who is concerned about the surplus information collected through their participation in social media. "There is so much information that I acquire and study that it is difficult for me to have a range of relevant material that I may utilize to expand my linguistic repertoire." Regarding social media knowledge, I will continue to use email, WA, Twitter, Instagram, and tiktok in the hopes that the news and other stuff may enlighten me. Regarding a variety of less informative stuff, I may proceed."

Student [JJ] revealed as one of the research informants, "At first, I was fearful and skeptical of social media except for Facebook and WA, but through various discussions with friends, I became interested and wanted to learn a great deal through social media effectively, of course for academic purposes.

All of the phenomena mentioned above are consistent with the explanation provided by Hemmi, Bayne, and Land (2009), which identifies several social media platforms that are not used for academic purposes but are used to promote scientific frameworks. Veletsianos (2012) discovered that most students could learn a language intensely using social media and can even undertake linguistic research utilizing interview techniques on social media accounts maintained by informants and respondents.

Based on informants' concerns over excessive information, Leu et al. (2004) expected that students would automatically select excessive material. Pupils can choose assignments with academic nuances, linguistic nuances, and others. By interpreting the contextual discourse (e.g., tweets, retweets) encountered, some informants mentioned above exhibit the varied abilities and knowledge required for successful navigation with new literacies. The advantages of modern technology in the form of social media for language development are outlined in Table 1.

Table 1. *The Benefits of Social Media in the Learning Process of Happiness.*

Number	The benefits of social media in language learning	Student Response				
		VA (%)	A (%)	D (%)	DA (%)	VDA (%)
1	Learn to write more politely	70.0	27.4	2.2	0.4	0
2	Begin and end conversations politely	54.2	43.6	2.1	0.1	0
3	Knowing the sentence is suitable for public consumption and not	55.5	43.1	1.2	0.2	0
4	learn language manners,	71.0	27.5	1.4	0	0.1
5	Reveal symbols correctly	72.1	27.9	0	0	0
6	Choose information that explodes and floods the entire contents of social media	67.5	32.5	0	0	0
7	Enrich linguistic repertoire	65.6	34.4	0	0	0
8	Get enlightened	55.3	43.2	1.1	0.3	0.1
9	Know the contents of the talk that educate and not	64.1	34.7	1.2	0	0
10	Media for conducting research	63.1	34.2	2.1	0.4	0.2
11	Discuss with colleagues	56.9	43.1	0	0	0
12	Disseminate the scientific framework	76.6	23.4	0	0	0
13	Get up-to-date information	75.5	24.5	0	0	0
14	Fast and accurate information	75.9	34.1	0	0	0
15	Self-advocacy	76.4	23.6	0	0	0
16	Changes in the orientation of many things	70.7	29.3	0	0	0
17	Identify interests	64.4	34.5	1.1	0	0
18	Identify friend activity	54.6	45.4	0	0	0
19	Get news from various sources	70.5	29.5	0	0	0
20	Get various articles	67.5	32.1	1.0	0.4	0
21	Get ideas	70.6	29.4	0	0	0
22	Get the results of other people's thoughts	67.5	32.5	0	0	0

Source: the results of primary data collection through interviews

Information:
 VA: very agreed
 A: Agree
 D: Doubtful
 DA: I disagree
 VDA: Very don't agree

Table 1 illustrates the tremendous benefits of new technical breakthroughs in the form of social media, which may be used as a vehicle for language learning and have enormous benefits.

Guinee, Eagleton, and Hall (2003) list the abilities necessary to engage in new literacy, including efficiently comprehending how to obtain information relevant to pupils' difficulties. There are also students whose time is limited. Therefore they work with social media without having time outside working hours to develop social media management tactics.

Expanding the use of Social Media

Students make several discoveries regarding social media content that might enrich their vocabulary and the prospect of incorporating it into their regular practice during the second month. Numerous students described their difficulties with social media optimization. Some generic comments were expressed among student students. The following are [KKremarks:]'s "Using social media to learn about 'language, phrases, diction, slang abbreviations, jokes, and satire used by friends' makes me increasingly content and at ease.

Now closely observing the WAG, [LL] exclaims, "Hooray! As a good idea, I can link my social media accounts to my LinkedIn page and filter language-related content and news." According to [MMopinion,]'s social media is a valuable tool for thesis research and completing professors' tasks. I may urge others to talk well, be polite, consistent, honest, committed, have strong integrity, and be able to laugh appropriately. Student [NN] considers the utility, "Social media can be utilized for 'anti-stunting campaigns,' removing trash from the street, Covid-19 immunizations, support for 'whistle blowers' in trials involving police shootings of police, etc. Social media can also be used for philanthropic purposes, such as supporting earthquake-affected towns, elementary school pupils whose buildings have fallen, and communities that receive proper health services.

According to [OO], social media can also be used for societal criticism, such as "thin animals in Kebon, bicycle lanes for auto parking, poorly kept green open spaces, unlawful parking, DPR siding with empty spots, civil servants roaming the mall during work hours, etc."

Nevertheless, [OO] continues to feel that social media can be used for activities that promote nationalism, such as national holidays, students' days, book days, labor days, consumer days, cooperative days, national sports days, mother's day, and other holidays.

Student [PP] explains that he can post videos, experiment with hashtags, link his tweets to Facebook, use his smartphone to access and share fascinating stuff, and write brief articles, all of which instantly connect him with legislators and professionals via # or @. Simple and as straightforward as it gets.

Again, [QQ] wanted to generate creative, educational information that made sense to everyone, but he found it challenging to employ hashtags successfully. The hashtags #endangered animal care and #animal protection policy yielded no results. I tried #policy and #protectedanimals, as well as a handful of tweets. My [RR] students are trying to avoid too much social media. I believe it's only WAG and tweeters, while the others are passive since I spend so much time on them, but I can learn a great deal of English with these two social media accounts. I avoid Instagram, Facebook, and Tiktok because I believe I have not properly absorbed the vital knowledge they contain.

During the previous eight weeks of research, a new way of learning in the form of assignments to record various language learning outcomes according to the typology set by the teacher generated the following % quantitative data. Table 2 displays the advantages of social media literacy for advancing language acquisition in postsecondary institutions.

Table 2. *Several aspects of utilizing new literacy in the realm of language learning*

No	Aspect	Sub-aspect	intensity		
			Always (%)	Sometimes (%)	Never (%)
1	Campaign	Anti-stunting	55,1	34,3	10,6
		Throwing garbage is not on the street	65,2	33,6	1,2
		Support for honesty in court	66,5	22,1	1,4
		Rare animal protection	66,7	22,0	1,2
		Support for people affected by the earthquake	86,5	11,4	2,1
2	Vilanthropy	Support for elementary school students whose schools collapsed	86,2	11,5	2,3
		Support for the community support that does not receive adequate health services	84,6	12,2	3,2

No	Aspect	Sub-aspect	intensity		
			Always (%)	Sometimes (%)	Never (%)
3	Critics	Skinny animals in the zoo	86,9	13,0	1,1
		Green open space is not well maintained	87,1	12,1	0,8
		Bike path for car parking	91,2	8,4	1,4
		Illegal parking that forces users	89,6	9,2	1,2
		DPR session with an empty room	86,6	11,3	2,1
		Civil servants in uniform roaming the mall	84,5	12,3	2,2
4	Cultivating a spirit of nationalism	Flayer Religious holidays	84,7	12,2	3,1
		Santri Day, Labor Day, Kartini's Day,			
		Mother's Day, Cooperative Day, Sports Day, Consumer Day,	74,8	24,2	1,0
5	Uploaded content	Videos	85,6	14,3	1,1
		Picture	83,8	16,2	0,0
		Videos, songs and pictures	92,9	16,0	1,1
		Write short articles,	76,7	18,1	5,2
		legislative	81,7	16,2	2,1
6	target party	regional leader	82,6	14,2	3,2
		Professional group	78,6	21,3	1,0
		alumni group	85,4	13,4	1,2
		Family,	87,7	12,3	0,0

Source: The results of the distribution of questionnaires

According to the findings presented in Table 2, most social media users employ language for constructive purposes rather than to inflame the conversation climate.

According to Vaughan (2017), the digital divide necessitates three elements, namely skills, motivation, and ownership, for pupils to utilize social media. Similarly, according to Martin (2003), students will always strive to understand elements of reading and watching various things on social media that are not required by the instructor, as well as to become better.

Application of New Technology

Technology implementation in schools must be accompanied by proper teaching and technology policy training. Adopting computers and new media in education has produced excellent results, notwithstanding the occasional resistance from educators. Computers and information technology in modern language teaching and the need for a new methodology to enhance the quality of language education will be of great use.

Acquiring a new language by applying new technologies cannot be isolated from internet technology based on multimedia, social media, video, or a mix of these technologies.

Table 3. Utilization of New Technology for students

New dimension	Indicator	taking advantage (%)	not taking advantage (%)
Media social	Facebook	98,1	1,9
	Instagram	96,5	3,5
	WhatsApp	100	0
	Twitter	97,2	2,8
Video	Video of Learning	95,1	4,9
	You tube	100	0
Audiovisual	Education via TV	100	0
Average		98,2	1,8

Source: Survey Results

The majority of students have made effective use of social media, video, and audio-visual media, according to Table 3. All students use WhatsApp, while 1.9% do not use Facebook, 3.5% do not use Instagram, 2.8 students do not use Twitter, and 4.9% do not utilize educational videos.

In this instance, the teacher assigns the students to view, read, and listen to the dialogue to determine their multimodal language proficiency. The observed video is a method for enhancing MSME performance. Next, prepare a group report on the language MSME actors to use to improve performance.

Table 4. Students' ability to apply new technology

Number	Skills	Competence		
		High (%)	Medium (%)	low (%)
1	Ability to develop fluency with technological tools	80	18	2
2	Ability to develop proficiency with specialized tools	82	14	4
3	Technology-based relationship-building skills	86	15	1
4	The speed of making various information to meet multiple information technology-based goals	82	15	3
5	The ability to manage different information that comes together	92	7	1
6	The ability to analyze various pieces of information that comes together	91	8	1
7	The ability to synthesize various information that comes together	77	18	5
8	Creating text-based multimedia,	73	25	2
9	Ability to criticize multimedia texts	78	20	2
10	Ability to evaluate multimedia texts	83	11	6
11	Ability to use cell phones in class	81	14	5
12	Ability to use technology productively	79	20	1

Source: The results of extracting primary data research 2022

Table 4 demonstrates that students' language-related abilities when utilizing 'new technology' are extremely diverse, thus providing these students with a unique experience.

This study's findings are consistent with those of Guinee et al. (2003), who found that the new technologies that are currently evolving make it extraordinarily convenient for students to learn foreign languages. Because they are supported by modern, fast-paced, and simple-to-use advanced technology, language skills resulting from technological advancements, have become a magnet for students to learn languages from various sources. According to the findings of another study (Hague & Williamson, 2009), technological advancements have occurred so rapidly that lecturers must adapt to the process of utilizing technology and not be resistant to these changes.

Application of New literacy

Literacy can serve as a practical learning tool that contributes to the production of students who are more democratic and egalitarian and who not only have the skills and tools for students and their groups but can also increase their cultural capital and social strengths without sacrificing others. Literacy can be prepared them to overcome class, gender, and racial barriers that separate students from new, better literacy-based classrooms through language instruction, individuals, and resources.

Table 5. Various literacy skills that are measured

Number	Skills	Competence		
		High (%)	Medium (%)	Low (%)
1	Problem identification skills	86	12	2
2	Problem framing skills for guidance in reading on the internet	86	14	0
3	Student capacity to identify information that is relevant to student needs	82	16	2
4	Proficiency in pronouncing text with the help of technology	92	8	0
5	Ability to evaluate information online,	74	24	2
7	Ability to summarize information from various multimedia sources	79	20	1
8	The ability to understand how to communicate with others in an information context is learned and read collectively	82	12	6
9	Ability to compose sentences well, politely and not arrogantly	89	11	0
10	The ability to give credit to others who provide input	87	12	1
11	The ability to learn, adapt and use new literacy	79	19	2
12	Ability to compose questions to guide the search	82	16	2

Source: Results of descriptive data analysis

Table 5 demonstrates that the new literacy taught to pupils can assist them in overcoming a variety of challenges they confront and can reflect the experiences they gather during the learning process.

The findings above reflect studies (Cervetti, Damico, & Pearson, 2006; Hannay & Fretwell, 2011) which show that when kids are given an intriguing new literacy, their enthusiasm for reading and acquiring it will naturally improve. Additional research (Coddington, 2010; Hemmi et al., 2009) indicated that the combination of new literacies and technology challenges students to acquire the competencies required by the professor continually. Additional research (DiMaggio & Hargittai, 2001; Kist, 2013) showed that technology that helps literacy delivers benefits and broadens and expands pupils' conceptual horizons. There are no spatial or temporal constraints on the opportunities available to students for language study and application in daily life.

New Teaching Method

The teacher tries to apply new methods that can make students creative while utilizing new technology and new literacy. Table 6 shows a new method of learning a language

Table 6. Students' abilities with new teaching methods

Number	Skills	Competence		
		High (%)	Medium (%)	Low (%)
1	The ability to make students focus on language lecture material	72	28	0
2	The ability of teachers to prepare students ready to develop in today's society	84	16	0
3	Language teaching methods that are sufficient to cope with the new demands that technology places on students	89	11	0
4	Teaching methods that can help students to communicate with technology	92	7	1
5	Language teaching method with a pleasant atmosphere	76	23	1
7	Student ability in compiling content (Language; photos, videos, stories, and works of art)	79	20	1
8	Developing language teaching methods that can involve students participating in language learning	85	15	0
9	Teaching methods that can increase the amount of information consumption	90	10	0
10	Language teaching methods that can increase the amount of information production	87	11	2
11	A language teaching method that can unite students' attention	87	13	0
12	Language teaching methods that can increase motivation, subject ownership, and language skills	86	12	2

Source: the result of primer data collection

The data in Table 6 demonstrate that the new method implemented by lecturers in Indonesian and literacy courses provides significant benefits for students, particularly when combined with new technology and new literacy, thereby enhancing the future distinctiveness of language learning for students.

Considering the findings mentioned above, one may also consider the findings (Barton, Hamilton, & Ivanic, 2005; Cheney, 2011; Leu et al., 2015) stating that new approaches, along with the use of new technology and new literacy, will result in a strong comprehension during the language acquisition process. Other research (Gee, 2003) indicates that when the teacher can provide unique learning methods in the language learning process, the process of mastering the language will be accelerated, and students will even be able to learn independently when confronted with modern technology because all generations have genes that adapt quickly.

Conclusion

Based on the results of the analysis and discussion, it can be concluded with absolute certainty that the process of implementing new technology, new literacy, and new methods delivered by lecturers in Indonesian and Literacy courses, particularly in tertiary institutions, can aid lecturers in conveying language subject matter to students more efficiently. These three factors can improve students' capacity to comprehend multimodal language content, provide a more fun learning environment, boost language skills, reduce learning saturation, and make learning more efficient.

The combination of new technology and new literacy is illustrated by the use of social media by students, as well as the use of new teaching methods, in this case, the student-centered innovation method in the form of individual assignments, small groups, and other assignments that have a significant impact on student performance. Positive for all aspects of language learning, including information, comprehension, and the ability to create a masterpiece.

The incorporation of new technology into language instruction has resulted in the development of new literacies and methodologies that have the potential to significantly improve the standard of education in Indonesia. In order to effectively engage their pupils and prepare them for the rigors of the modern world, it is essential for language instructors to keep pace with technological advancements. This paper's findings illustrate the different ways in which teachers are using new technology and establishing new literacies and approaches in their Indonesian language classrooms. Teachers are embracing new methods to make language instruction more engaging, dynamic, and relevant to students' lives, such as online materials and digital storytelling. Yet, there are still obstacles to be overcome, such as access to technology and teacher training.

It is imperative that policymakers and educators collaborate to ensure that students have access to the most advanced technology and that teachers are equipped with the skills necessary to effectively integrate technology into their teaching practices. The integration of new technologies, new literacies, and new methods into language instruction has the potential to significantly enhance the quality of education and better prepare students for success in the 21st century.

References

- Ajjan, H., & Hartshorne, R. (2008). Investigating faculty decisions to adopt Web 2.0 technologies: Theory and empirical tests. *The internet and higher education*, 11(2), 71-80. doi: <https://doi.org/10.1016/j.iheduc.2008.05.002>
- Barton, D., Hamilton, M., & Ivanic, R. (2005). Researching literacy practices. In *Situated literacies* (pp. 183-194). Routledge. Retrieved from <https://www.taylorfrancis.com/chapters/edit/10.4324/9780203984963-19>
- Bingimlas, K. A. (2009). Barriers to the successful integration of ICT in teaching and learning environments: A review of the literature. *Eurasia Journal of Mathematics, science and technology education*, 5(3), 235-245. doi: <https://doi.org/10.12973/ejmste/75275>
- Bittman, M., Rutherford, L., Brown, J., & Unsworth, L. (2011). Digital natives? New and old media and children's outcomes. *Australian journal of education*, 55(2), 161-175. doi: <https://doi.org/10.1177/000494411105500206>
- Bullough Jr, R. V., & Pinnegar, S. (2001). Guidelines for quality in autobiographical forms of self-study research. *Educational researcher*, 30(3), 13-21. doi: <https://doi.org/10.3102/0013189X030003013>
- Cervetti, G., Damico, J., & Pearson, P. D. (2006). Multiple literacies, new literacies, and teacher education. *Theory into practice*, 45(4), 378-386. doi: https://doi.org/10.1207/s15430421tip4504_12
- Cheney, P. (2011). *Twitter is an information network, not a social network*. Retrieved from <http://www.practicaledge.com/blogs/post/818-Twitter-is-an-Information-Network-Not-a-Social-Network>
- Coddington, R. (2010). *Professors' use of technology in teaching*. The Chronicle of Higher Education. Retrieved from <http://chronicle.com/article/article-content/123682>
- Coiro, J. (2003). Exploring literacy on the internet: Reading comprehension on the internet: Expanding our understanding of reading comprehension to encompass new literacies. *The reading teacher*, 56(5), 458-464. Retrieved from <https://www.jstor.org/stable/20205224>
- Conole, G. (2011). *Designing for learning in an open world*. Springer New York, NY. doi: <https://doi.org/10.1007/978-1-4419-8517-0>
- DiMaggio, P., & Hargittai, E. (2001). From the 'digital divide' to 'digital inequality': Studying Internet use as penetration increases. *Princeton: Center for Arts and Cultural Policy Studies, Woodrow Wilson School, Princeton University*, 4(1), 4-2. Retrieved from <https://policycommons.net/artifacts/2062390/from-the-digital-divide-to-digital-inequality/2815481/>
- Dunlap, J. C., & Lowenthal, P. R. (2009). Instructional uses of Twitter. In *The CU Online Handbook* (Vol. 8, pp. 45-50). CU Online, University of Colorado Denver. Retrieved from <https://www.researchgate.net/profile/Patrick-Lowenthal/publication/292751651>
- Ebner, M., Lienhardt, C., Rohs, M., & Meyer, I. (2010). Microblogs in Higher Education—A chance to facilitate informal and process-oriented learning? *Computers & Education*, 55(1), 92-100. doi: <https://doi.org/10.1016/j.compedu.2009.12.006>
- Elliott, J. (1985). Facilitating action research in schools: Some dilemmas. In R. Burgess (Ed.), *Field methods in the study of education* (pp. 235-262). London, UK: Falmer Press.
- Ertmer, P. A., Ottenbreit-Leftwich, A. T., Sadik, O., Sendurur, E., & Sendurur, P. (2012). Teacher beliefs and technology integration practices: A critical relationship. *Computers & education*, 59(2), 423-435. doi: <https://doi.org/10.1016/j.compedu.2012.02.001>
- Fabos, B. (2008). The price of information. In *Handbook of research on new literacies* (pp. 839-870). Routledge. doi: <https://doi.org/10.4324/9781410618894-35>
- Fox, S., Zickuhr, K., & Smith, A. (2009). *Twitter and Status Updating, Fall 2009*. Pew Research Center. Retrieved from <https://www.pewresearch.org/internet/2009/10/21/twitter-and-status-updating-fall-2009/>
- Galguera, T., & Nicholson, J. (2010). Computer mediated communication and scaffolding toward new literacy in preservice teacher education courses. *MERLOT Journal of Online Learning and Teaching*, 6(1), 306-317. Retrieved from https://jolt.merlot.org/vol6no1/galguera_0310.pdf
- Gee, J. P. (2003). *What video games have to teach us about learning and literacy*. New York: Palgrave Macmillan. Retrieved from <https://blog.ufes.br/kyriafinardi/files/2017/10/What-Video-Games-Have-to-Teach-us-About-Learning-and-Literacy-2003.-ilovepdf-compressed.pdf>
- Greenhow, C., Robelia, B., & Hughes, J. E. (2009). Learning, teaching, and scholarship in a digital age: Web 2.0 and classroom research: What path should we take now? *Educational researcher*, 38(4), 246-259. doi: <https://doi.org/10.3102/0013189X09336671>
- Guinee, K., Eagleton, M. B., & Hall, T. E. (2003). Adolescents' Internet search strategies: Drawing upon familiar cognitive paradigms when accessing electronic information sources. *Journal of Educational Computing Research*, 29(3), 363-374. doi: <https://doi.org/10.2190/HD0A-N15L-RTFH-2DU8>
- Hague, C., & Williamson, B. (2009). *Digital participation, digital literacy, and school subjects: a review of the policies, literature and evidence*. National Foundation for Educational Research. Retrieved from <https://www.nfer.ac.uk/publications/FUTL08/FUTL08.pdf>

- Hannay, M., & Fretwell, C. (2011). The higher education workplace: Meeting the needs of multiple generations. *Research in Higher Education Journal*, 10, 1-12. Retrieved from <https://search.proquest.com/openview/4db16ce2f27249052c9209eb7a68afbc>
- Hemmi, A., Bayne, S., & Land, R. (2009). The appropriation and repurposing of social technologies in higher education. *Journal of computer assisted learning*, 25(1), 19-30. doi: <https://doi.org/10.1111/j.1365-2729.2008.00306.x>
- Jenkins, H., Clinton, K., Purushotma, R., Robinson, A., & Weigel, M. (2006). *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*. The MIT Press. doi: <https://doi.org/10.7551/mitpress/8435.001.0001>
- Junco, R., Heiberger, G., & Loken, E. (2011). The effect of Twitter on college student engagement and grades. *Journal of computer assisted learning*, 27(2), 119-132. doi: <https://doi.org/10.1111/j.1365-2729.2010.00387.x>
- Jung, J.-Y. (2008). Internet connectedness and its social origins: An ecological approach to postaccess digital divides. *Communication Studies*, 59(4), 322-339. doi: <https://doi.org/10.1080/10510970802467387>
- Kassens-Noor, E. (2012). Twitter as a teaching practice to enhance active and informal learning in higher education: The case of sustainable tweets. *Active Learning in Higher Education*, 13(1), 9-21. doi: <https://doi.org/10.1177/1469787411429190>
- Kellner, D. (2000). New technologies/new literacies: Reconstructing education for the new millennium. *Teaching Education*, 11(3), 245-265. doi: <https://doi.org/10.1080/713698975>
- Kellner, D. (2001). New technologies/new literacies: Reconstructing education for the new millennium. *International Journal of Technology and Design Education*, 11, 67-81. doi: <https://doi.org/10.1023/A:1011270402858>
- Kennedy, G. E., Judd, T. S., Churchward, A., Gray, K., & Krause, K.-L. (2008). First year students' experiences with technology: Are they really digital natives? *Australasian journal of educational technology*, 24(1). doi: <https://doi.org/10.14742/ajet.1233>
- Kirkwood, A., & Price, L. (2005). Learners and learning in the twenty-first century: what do we know about students' attitudes towards and experiences of information and communication technologies that will help us design courses? *Studies in higher education*, 30(3), 257-274. doi: <https://doi.org/10.1080/03075070500095689>
- Kist, W. (2013). New literacies and the common core. *Educational Leadership*, 70(6), 38-43. Retrieved from https://pdo.ascd.org/LMSCourses/PD13OC011M/media/WR_CCSS_6-12_M4_Reading3.pdf
- LaBoskey, V. K. (2004). The Methodology of Self-Study and Its Theoretical Underpinnings. In J. J. Loughran, M. L. Hamilton, V. K. LaBoskey, & T. Russell (Eds.), *International Handbook of Self-Study of Teaching and Teacher Education Practices* (pp. 817-869). Springer Netherlands. doi: https://doi.org/10.1007/978-1-4020-6545-3_21
- Lankshear, C., & Knobel, M. (2003). *New literacies: Changing knowledge in the class-room*. Buckingham, UK: Open University Press. Retrieved from <http://eprints.jcu.edu.au/1796>
- Lenhart, A., Purcell, K. A., S., & Zickuhr, K. (2010). *Social media and mobile Internet use among teens and adults*. Retrieved from <https://www.researchgate.net/publication/286376855>
- Leu, D. J., Forzani, E., Rhoads, C., Maykel, C., Kennedy, C., & Timbrell, N. (2015). The new literacies of online research and comprehension: Rethinking the reading achievement gap. *Reading Research Quarterly*, 50(1), 37-59. doi: <https://doi.org/10.1002/rrq.85>
- Leu, D. J., Gregory McVerry, J., Ian O'Byrne, W., Kiili, C., Zawilinski, L., Everett-Cacopardo, H., . . . Forzani, E. (2011). The new literacies of online reading comprehension: Expanding the literacy and learning curriculum. *Journal of adolescent & adult literacy*, 55(1), 5-14. doi: <https://doi.org/10.1598/JAAL.55.1.1>
- Leu, D. J., Kinzer, C., Coiro, J., & Cammack, D. (2004). Toward a theory of new literacies emerging from the Internet and other Information and Communication Technologies. In R. Ruddell & N. Unrau (Eds.), *Theoretical models and processes of reading* (5th ed., pp. 1570-1613). Washington, DC: International Reading Association. Retrieved from [http://newcenturynewreaders.pbworks.com/f/article\(3\).pdf](http://newcenturynewreaders.pbworks.com/f/article(3).pdf)
- Leu, D. J., O'Byrne, W. I., Zawilinski, L., McVerry, J. G., & Everett-Cacopardo, H. (2009). Comments on Greenhow, Robelia, and Hughes: Expanding the new literacies conversation. *Educational researcher*, 38(4), 264-269. doi: <https://doi.org/10.3102/0013189X09336676>
- Lustbader, P. (2000). The Right Tool for the Job: Best Practices in Enhancing Teaching and Learning with Instructional Technology. Available at SSRN 1861338. doi: <https://dx.doi.org/10.2139/ssrn.1861338>
- Martin, S. P. (2003). Is the digital divide really closing? A critique of inequality measurement in a nation online. *IT & society*, 1(4), 1-13. Retrieved from <https://www.yumpu.com/en/document/view/41473271>
- Miles, M., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage. Retrieved from <https://methods.sagepub.com/book/the-qualitative-researchers-companion/d6.xml>
- Miners, Z., & Pascopella, A. (2007). *The new literacies*. Reading Rockets. Retrieved from <http://www.readingrockets.org/article/new-literacies>
- Modarres, A. (2011). Beyond the digital divide. *National Civic Review*, 100(3), 4-8. doi: <https://doi.org/10.1002/ncr.20069>
- Molnar, A. (1997). Computers in education: A brief history. *The journal*, 24(11), 63-68. Retrieved from <https://thejournal.com/articles/1997/06/01/computers-in-education-a-brief-history.aspx>

- Moran, M., Seaman, J., & Tinti-Kane, H. (2011). *Teaching, learning, and sharing: How today's higher education faculty use social media for work and for play*. Boston: Pearson Learning Solutions. Retrieved from <http://tinyurl.com/pearsonstudy>
- NCTE. (2013). *The NCTE definition of 21st century literacies*. National Council of Teachers of English. Retrieved from <http://www.ncte.org/positions/statements/21stcentdefinition>
- Nicholson, J., & Galguera, T. (2013). Integrating new literacies in higher education: A self-study of the use of Twitter in an education course. *Teacher Education Quarterly*, 40(3), 7-26. Retrieved from <https://www.jstor.org/stable/43684698>
- Oblinger, D. G. (2010). From the campus to the future. *Educause Review*, 45(1), 42-44. Retrieved from <https://www.learnstechlib.org/p/107991>
- Parry, B. (2008). *Twitter for academia*. Retrieved from <http://academhack.outsidethetext.com/home/2008/twitter-for-academia>
- Poore, M. (2011). Digital literacy: Human flourishing and collective intelligence in a knowledge society. *Literacy learning: The middle years*, 19(2), 20-26. Retrieved from <https://search.informit.org/doi/10.3316/aeipt.187377>
- Reinhart, J. M., Thomas, E., & Toriskie, J. M. (2011). K-12 teachers: Technology use and the second level digital divide. *Journal of Instructional Psychology*, 38(3), 181-193. Retrieved from <https://www.proquest.com/openview/9ef3ca4e40a587f77c2393737dbec221>
- Richardson, W. (2009). *Blogs, wikis, podcasts and other powerful web tools for classrooms*. Thousand Oaks, CA: Corwin Press. Retrieved from <https://us.corwin.com/en-us/nam/book/blogs-wikis-podcasts-and-other-powerful-web-tools-classrooms-1>
- Rosenbaum, S. (2012). *5 Tips for great content curation*. Mashable. Retrieved from <http://mashable.com/2012/04/27/tips-great-content-curation/>
- Schroeder, A., Minocha, S., & Schneider, C. (2010). The strengths, weaknesses, opportunities and threats of using social software in higher and further education teaching and learning. *Journal of computer assisted learning*, 26(3), 159-174. doi: <https://doi.org/10.1111/j.1365-2729.2010.00347.x>
- Smith, A., & Brenner, J. (2012). *Twitter Use 2012*. Pew Research Center. Retrieved from <https://www.pewresearch.org/internet/2012/05/31/twitter-use-2012/>
- Smolin, L. I., & Lawless, K. A. (2003). Becoming literate in the technological age: New responsibilities and tools for teachers. *The reading teacher*, 56(6), 570-577. Retrieved from <https://www.jstor.org/stable/20205249>
- Strauss, A., & Corbin, J. (2007). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage.
- Valadez, J. R., & Duran, R. (2007). Redefining the digital divide: Beyond access to computers and the Internet. *the high school journal*, 90(3), 31-44. Retrieved from <https://www.jstor.org/stable/40364198>
- Vaughan, P. (2017). *10 Habits of Top-Notch Content Creators*. HubSpot, Inc. Retrieved from <https://blog.hubspot.com/blog/tabid/6307/bid/30559/10-habits-of-top-notch-content-creators.aspx>
- Veletsianos, G. (2012). Higher education scholars' participation and practices on Twitter. *Journal of computer assisted learning*, 28(4), 336-349. doi: <https://doi.org/10.1111/j.1365-2729.2011.00449.x>
- Wankel, C. (2009). Management education using social media. *Organization Management Journal*, 6(4), 251-262. doi: <https://doi.org/10.1057/omj.2009.34>
- Warschauer, M. (2003). Demystifying the digital divide. *Scientific American*, 289(2), 42-47. Retrieved from <https://www.jstor.org/stable/26060401>
- Wright, N. (2010). Twittering in teacher education: Reflecting on practicum experiences. *Open Learning: The Journal of Open, Distance and e-Learning*, 25(3), 259-265. doi: <https://doi.org/10.1080/02680513.2010.512102>
- Yin, R. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage. Retrieved from <https://pesquisa.bvsalud.org/portal/resource/pt/pah-15330>