

DIGITAL MULTI-SENSORY APPROACHES IN ENGLISH LANGUAGE LEARNING: A CASE STUDY OF MIDDLE SCHOOL STUDENTS IN CIREBON

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Abstract:

The decline in the English Proficiency Index (EPI) in Indonesia raises concerns about the outdated ELT pedagogy in Indonesia. This study aims to determine a learning approach using digital learning resources with an innovative multi-sensory approach for grade 8 students by utilizing selected stories from Aesop's Fables which are curated based on the CEFR (Common European Framework of Reference for Languages) level. This study employs a differentiated learning, student-centered approach to learning and uses reading for emotions as a learning tool to facilitate critical and reflective thinking. Based on the work of Lian (2017) and Sudimantara (2021), this study used a multi-sensory load reduction strategy by utilizing nonverbal elements such as rhythm, intonation, movement, emotion, and aesthetics. The research findings show that utilizing digital multi sensory English learning is a practical and diverse method of teaching narrative texts. Innovative learning resources foster students' enthusiasm for learning and enhance their academic engagement and performance. However, the study revealed that teachers are still hesitant to adopt this new approach and continue to rely on traditional teaching methods, while students are increasingly eager to explore new and innovative ways of learning. This study emphasizes the importance of embracing innovative learning strategies to improve the quality of education in Indonesia and equip students with the skills necessary to succeed in today's interconnected world.

Keywords: *Multi-sensory learning, Differentiated learning, Reading for emotions, CEFR, Innovations*

INTRODUCTION

The government has launched a new paradigm curriculum (independent curriculum) as a refinement of the 2013 KTSP. The Merdeka Curriculum gives education management authority to local governments and schools in planning, implementing and evaluating educational programs, with reference to the principles of the Independent Learning policy set by the government in efforts to achieve national education (Nurbani et al., 2020). Although it has often been socialized, this curriculum is still new for some teachers and there are still many academics and practitioners who do not understand the concept. The independent curriculum provides freedom for teachers to choose teaching materials according to students' interests. The goal is for teachers to be creative and innovate in designing learning. However, teachers in Indonesia are not ready with the independence to design lessons because the descriptions of the contents are not clear, so teachers feel confused and need a lot of guidelines and details about the material, time, and purpose (Suryati & Anugerahwati, 2022).

According to Sudimantara (2021), Indonesia is experiencing learning loss which is marked by a decrease in rankings in several international studies such as EPI,TIMSS, PISA, HDI & PIRLS. This fact will be clarified by the researcher by presenting learning data in Indonesia below. The English Proficiency index attempts to rank countries by the equity of English language skills amongst those adults who took EF (English First). The following is a diagram of the EPI (English Proficiency Index) in ASEAN countries. Indonesia has

a low literacy rate and literacy rates in Indonesia have been stagnant for several years. Literacy is a basic skill that must be mastered by students before they can access other types of knowledge (Helyanti et al., 2022).

Although research promotes multi-sensory education, its effective use in many elementary classrooms remains insufficient. Chapter two provides an overview of multi-sensory learning and its correlation with Howard Gardner's theory of multiple intelligences, student-centered classrooms, and Bloom's Taxonomy theory in the Cognitive domain. Research by Spence & Frings (2020) shows that our brain processes visual information more than other senses. Additionally, Lian (2018) explains that multi-sensory perception is crucial to our logical system, engaging all senses and emotions. In language learning, there are two perspectives on the role of technology: one views computers as tutors, while the other considers technology a tool for authentic language and communication opportunities (Hubbard, 2021).

In education, the shift towards student-centered learning reflects a larger societal trend of people seeking more control over their lives (Ivone & Jacobs, 2020). Critical thinking, according to Fletcher & Hanley (2016), can be formulated differently, reflecting learners' perceptions and the influence of surrounding culture. The importance of multi-sensory learning in the classroom and its various forms are discussed, and Lian (2020) notes that it can engage the brain's response to language signals and semantic processes. Incorporating multi-sensory learning into the curriculum is crucial, as supported by research (chapter conclusion). Digital language teaching involves using digital pedagogies and technologies in language instruction, and can be implemented in online, hybrid, and blended environments (Son, 2020).

The multi-sensory method was invented by physician Orton Gillingham and developed by Gilingham and Fernald. According to Rostan et al. (2021) this method uses all senses of stimulation, such

as sight, touch, hearing, and movement (known as the VAKT method) to enhance learning. This approach can improve abilities in reading, writing, and listening, particularly for junior high school students in grade 8. The sensory cortex receives input from the outside world, and the back integrative cortex is engaged in memory formation and language comprehension (Zull, 2004). Using multiple sensory channels in the learning process can significantly accelerate learning and retention (Ravishankar, 2018). A study by Lian et al., (2023) found that multi-sensory learning approaches, such as rhythm, emotions, and aesthetics, can reduce cognitive load and improve attentional space. Therefore, adapting the learning process to the demands of the current century is essential.

The 21st century learning system is a transition where the curriculum developed today requires schools to change a teachercentered learning approach to a student-centered learning approach where students are involved in the learning process, and are more active in seeking and finding concepts independently. Learning activities that were previously teacher-centered must shift to studentcentered learning (Ikawati, 2020). A study conducted by Montebello et al. (2018) which the title is "Enriching Online Education through Differentiated Learning" shows that with the advancement of technology, personalized learning has become a reality, and students can now learn at their own pace and level of expertise. The principles of differentiated learning allow for more engagement and participation from learners, creating a more effective and enjoyable learning experience. Overall, personalized learning through technology has the potential to revolutionize education and make learning more accessible for all. According to Tian et al. (2020), many cognitive and psychological studies of the brain show that combining disparate sensory data is essential for human perception. However most of the work in science comprehension and important perceptual tasks focus

on visual methods alone ignoring other sensory modalities and the statement that learning is a process that involves students' mental activities that require students to think.

To initiate a reconsideration of language learning and teaching, a new pedagogical approach that aligns with the inherent mechanisms of human learning needs to be introduced (Sudimantara, 2020).In addition, learning is directed at improving and enhancing students' thinking skills, which in turn thinking activities can help students to acquire knowledge that they construct themselves. Thus, learning must be adapted to future demands where students must have skills and competencies in the 21st century. Based on this, which paper will discuss the multi-sensory learning model in English language learning, including the nature, dimensions, and components. According Lian (2017), proposes that personalization should be regarded as the foundation for recognizing learner req uirements, and solutions to address these needs should be more precise and accurate. Meanwhile, Iskandar (2020) highlights the necessity of developing learning strategies, techniques, and models that incorporate multi-sensory stimulation, based on the principles of effectiveness and efficiency, and should be implemented and coordinated accordingly. Advocates for pedagogical development argue that it is crucial for teachers to continuously build their capacity in order to effectively promote sustainable teaching practices. The main finding from the analysis of the data is that a lack of professional development is identified as the key issue (Son, 2019).

For this research, the researcher focuses on a specific problem to enable a more indepth analysis. The problem under study is to increase the level of students' English skills with multi-sensory digital English learning activities for grade eight junior high school students based on their CEFR level ability.

METHOD

Type of Design

This study employs a qualitative methodology. The employed research and development technique (R & D). In developing a digital multi-sensory English learning product, the researcher applies a six-step process. First, researcher collect narrative texts from Aesop's Fables, carefully ascertaining the emotional quality of each text through analysis. Second, the researcher analyses and modifies the text to align with the CEFR A1 and A2 language proficiency levels. Third, researcher create digital learning resources using Google's website, combining illustrations and audio designs produced with special software. Fourth, the research product undergoes evaluation and approval by experts to ensure its quality. Fifth, the researcher tested the product with eighth grade junior high school students who were involved in learning activities that allowed them to explore the product's features. Finally, the researcher collects data by conducting interviews with English teachers and students, which is then analysed.

Source and Type of Data

The data source is the subject from which the data are obtained and to obtain the data, the researcher used two qualitative descriptive data, namely words and actions. Sources of data will be taken from the results of observations, surveys and interviews in the form of primary data and secondary data. The types of data that researcher used in this study were primary data and secondary data. Primary data is data obtained directly from the main data source. While secondary data sources are data from researchers who successfully collected from sources that have been available so that the data are referred to as complementary data. In this study, the researchers obtained primary data from interviews, while the secondary data used by researchers

were from documents, observations, and also previous relevant research

Data Collection and Instruments

This research uses Documentation and Interview as its methods. In this study, the researcher employed two data collection methods, which will be described below: 1) Documentation The researcher chose documentation as a technique to collect data because documentation can record and can combine collection of the data. According to Ary et al. (2010), documentation encompasses a variety of written, physical, and visual materials, including what other authors may refer to as artifacts. The researcher uses written documents or other artifacts to comprehend the phenomenon under investigation. As an instrument for data collection, researchers collect documentation from observation, interviews, field notes, and institution files. According to Arikunto (2016), documentation is the process of locating information about things or variables in the form of notes, 59 transcripts, books, newspapers, magazines, inscriptions, meeting minutes, etc. In this study, the researcher is aware of writing-related teaching and learning activities.

The researcher will process the data by combining multiple observations, interviews, field notes, and institution files. The complete data collection instrument will be described in the appendix 2) Interview The reason for choosing the interview as the research method was that the researcher had to communicate directly with teachers and students as the subjects of this study in order to collect specific data. According to Nazir (2005) an interview is used to gather information for research purposes. Through face-to-face question-and-answer sessions, a tool called an interview guide is used to compare the questionnaire or interview with the respondent or subject. Interviewing is the process of gathering information for research target setting through face-to-

face interviews with the target employee leader. This method is used to determine how teachers think about digital literacy In this study, the researcher conducted personal interviews with students to gather necessary information. A complete data collection tool is described in the appendix.

Data analysis

The process of data analysis techniques aims to answer the problem formulation or test hypotheses. According to Miles and Huberman as cited in Sugiyono (2018), activities in qualitative data analysis are carried out interactively and continuously until completion, so the data is saturated. The data analysis used in this research were thematic analysis and Word Cloud analysis 1) Thematic Analysis According to Braun & Clarke (2012), thematic analysis is a method of analysing qualitative data in which reading data sets and looking for significant patterns in the data to find themes. It is an active reflexivity process in which the researcher's subjective experience is critical to understanding the information. Typical thematic analysis of qualitative research It emphasizes the identification, analysis, and interpretation of qualitative data patterns. This analysis allows us to look at qualitative data in a certain way. It is usually used to describe a group of texts, interviews or 60 duplicate copies.

This study used thematic analysis to explore the perceptions of English language teachers in Indonesian secondary schools regarding the implementation of the "Merdeka Curriculum". The researcher collected data through semi-structured interviews and analyzed it through a rigorous process of data familiarization, initial coding, developing themes, reviewing themes, defining and naming themes, and producing the report. Thematic analysis was carried out in this study by coding each transcript, and evaluating which codes were relevant in the study. after the code is obtained then the researcher looks

for the appropriate theme in the study 2) Word Cloud Word Cloud is a system that visualizes words highlighting the frequency of words used in written text. Using Word Cloud as an additional tool for conducting discourse analysis can help researchers gain in-depth insights into critical ideas in a short period of time. The word cloud was carried out in this study by showing a list of words used in the text, the more words used the bigger the word size in the image (Atenstaedt, 2017).

FINDINGS AND DISCUSSION

The researcher has developed a "Digital Multi-sensory English Learning" product that employs a student-centered and differentiated learning approach. This product utilizes various tools such as reading for emotions and CEFR, with the help of illustrative images, and sounds made through applications. Aesop's Fables are used as learning materials, and the product has eight features designed to promote critical thinking and exploration in learning. The creative process was conducted by the researcher as part of their role as a curriculum engineer in their teacher agency institution. By utilizing vocabulary that ranges from basic to the most difficult, this transformative pedagogy caters to students with different abilities and characters. Through this approach, the learning process becomes easier, and students become more active and enthusiastic in their learning. The researcher's efforts to develop new digitalization have resulted in a product that can enhance the English language skills of students in an engaging and interactive way.

The Innovative Procedures were Incorporated in the Research and Development of this Study

The following is the process of making digital multi-sensory English learning of product prototype. Namely analysis of lesson plans, analysis of reading for emotions, and analysis of CEFR Levels.

Lesson Plan Analysis

The lesson plan analysis in a school showed that the lesson plan used by the teacher for English learning was centered on traditional learning and lacked clear references and exploratory learning. The teacher relied on books as the primary learning element and did not use many media or different types of text. This approach does not provide a rich learning experience for students and contributes to their low ability in English literacy. The schools have yet to fully embrace multimodal learning, which is proven to be more effective in enhancing students' literacy skills from different backgrounds. Hence, a digital multi-sensory project has been developed as an alternative to improve the English learning experience by increasing the material variety, especially in narrative text lessons.

In conclusion, the lesson plan used in schools for English learning is ineffective as it does not meet good learning standards. The monomodal approach used by teachers and the lack of multimodal learning hinder students' literacy skills development. Therefore, a digital multi-sensory project has been developed as an alternative to provide a rich learning experience for students by using various media and text types in English learning, especially in narrative text lessons. This project aims to enhance students' literacy skills and overcome the limitations of traditional teaching methods in schools.

Analysis the Story Using Reading for Emotion

The use of Aesop's Fables in the digital multi-sensory English learning project has been found to be an effective method for teaching English literacy and skills. Through the careful analysis of 50 fables, the researcher was able to select six stories that best aligned with the components of reading for emotions. These six key reading for emotions components include focus, disturbance, dialogue, development, resolution, and moral. By incorporating these stories into the project, the researcher was able to create an engaging learning experience for

students that effectively incorporates reading for emotions elements. This approach to teaching English literacy and skills can be a valuable resource for educators and students alike.

Analysis the of Text Using the CEFR Levels

In the next step of the project, the researcher analyzed several stories using the CEFR framework and determined which stories were appropriate for CEFR Levels A1, A2, B1, B2, C1, and C2. However, not all of the collected stories were suitable for the students' level, so some stories required modifications to fit the students' abilities. The researcher simplified some stories by changing the vocabulary using synonyms, maintaining the meaning of the text while making it easier to understand. Additionally, the researcher used Sketch Up to design illustrations for each scene of the story and Note-vibes.com to create a unique voice for each character, which required a significant amount of time and attention to detail.

Finally, after completing the sound and design of each story, the researcher uploaded them to Google sites for easy access by users. It is essential to use specific language, active voice, and concise sentences to ensure clarity and coherence in the writing. Additionally, utilizing parallel structure and transitions can help enhance the reading experience and make it more engaging. By incorporating these elements, the researcher aimed to improve students' reading skills and engage them in the learning process through an immersive and multi-sensory experience.

The Creative Process Shape the Product Prototype

The following are the characteristics of each text level A1 to C2. The characteristics of this text have different levels and different vocabulary from simple basic to advanced. Text as follows.

Characteristics Text level A1-C2

Based on the information provided, it can be concluded that each of the texts mentioned has been written and adapted to specific literacy levels and the reading for emotions approach. The researcher has used the Common European Framework of Reference (CEFR) to determine the appropriate level and has also taken into account the readability of the texts using the consensus readability formula. The vocabulary used in each text is tailored to the targeted literacy level, making it easier for students to comprehend the text. Overall, these texts serve as useful tools for language learners to improve their reading skills while also experiencing emotional connections with the stories.

Learning Activities

The activities used in product prototype development include diagnostic tests, careful reading, coding the original text, rewriting stories, and evaluation tests. In the process of careful reading, students read a story with an emphasis on the emotions felt at each stage. They then code the original text based on the emotions present, and rewrite the story accordingly. The rewriting involves changing certain parts of the story, while keeping the ending intact or improving it to make it more memorable. Evaluation tests are also conducted to assess the increase in students' abilities after trying the prototype product.

The Profile of the Product Prototype

The researcher will explain a brief profile of the digital learning resources that the author has developed. From this profile, you can see what features are in this digital learning resources. The picture is as follows.



Figure 1.1 The Profile of the Product Prototype https://sites.google.com/view/koniah-learning-tool/home

This product consists of several features as follows:

Home; The contains a project profile that explains the process of project creation, as well as the researcher profile along with the first and second supervisors.

CEFR; It contains a brief explanation of CEFR and its level of ability.

Diagnostic; Test It is a link for students to conduct a diagnostic test aimed at measuring their literacy level.

Product Prototype; It contains six stories that have been analyzed using Reading for Emotions and CEFR levels A1 to C2, along with illustrated pictures and a voice link. In addition to the stories, the researcher also includes a Creative Movement feature in the product prototype, which contains a YouTube link for language learning through movement.

Evaluation; the researcher has included a test link that will take users directly to a Quizzes quiz created with 20 questions for students to evaluate.

Certificate; it contains an achievement certificate that can be downloaded after completing the evaluation.

Additional Resources; It contains additional websites or applications that can help support user needs, including Cambridge Dictionary, Grammarly, Virtual Writing Tutor, Google Translate, and Canva.

References; It contains a list of references from various sources that underlie the creation of this product, including websites, journals, articles, e-books, theses, and social media. The researcher will explain a brief profile of the digital learning resources that have been developed.

DISCUSSION

In this chapter, the first, researcher analysed the lesson plans used

by English teachers in the school. The second, researcher chose stories from Aesop's Fables that were adapted for the Common European Framework of Reference (CEFR) level. The third researcher using reading for emotions, analysed these stories to help develop the CEFR level. By applying emotion reading techniques, the researcher aimed to enhance students' emotional engagement with the stories and improve their language skills. Overall, this analysis provided valuable insights into how teacher can use emotionally engaging materials to support language learning and development in the classroom. First, Researcher have analysed the Lesson Plan and discovered that teachers in schools tend to rely heavily on a single element of learning - books.

They often do not incorporate a variety of other media or teaching tools, and the type of text used in their lesson plans tends to be limited. This lack of diversity and richness in the learning experience can indicate that the educational standards in schools are not being met to the fullest extent. To further elaborate on this point, it's important to note that a well-rounded education requires exposure to a variety of learning materials and strategies. A study conducted by Fraga Vinas (2021) shows that The main goal of CEFR is to offer a thorough and clear foundation for developing and designing language syllabuses and curriculum guidelines. This includes the creation of teaching and learning materials such as textbooks, worksheets, assignments, and assessment tools, all with a focus on foreign language competency. By relying solely on books, teachers may be limiting their students' potential for growth and development. Therefore, it is crucial for educators to incorporate different types of media, such as videos, audio recordings, interactive tools, and real-life examples, into their lesson plans.

This will not only enhance the learning experience for students but also help them retain information more effectively. In conclusion, it is imperative that teachers in schools prioritize a diverse and engaging learning experience for their students. By doing so, they can ensure that they are meeting the highest educational standards and providing their students with the tools they need to succeed. As an engineer curriculum, the researcher created a digital learning resource that leverages a multisensory approach to teach English skills. The resource was designed to be engaging and interactive, using stories from Aesop's Fables that had been adapted to suit learners of different levels according to the Common European Framework of Reference (CEFR).

This approach is transformative pedagogy is a teaching method aimed at achieving moral goals and involves the act of teaching and discussion of ideas, values, and principles. It is based on an interpretive perspective that recognizes extraordinary human qualities such as self-awareness, language and planning. The latest academic writing pedagogy developed by Sudimantara (2021) includes language learning as a complex system, thereby incorporating other bio-psychological components such as rhythm, intonation, movement, emotion, and aesthetics in the learning process. This perspective highlights the importance of understanding the importance of people's actions in certain situations to gain insight and understanding (Farran et al., 2020). Learning resources aim to provide an immersive experience for 69 learners, using various multimedia elements such as audio, video, images, and interactive activities to attract different learning styles. Stories are presented in a way that allows learners to practice their language skills, including listening, speaking, reading, and writing, in a contextual and meaningful way.

The stories are also designed to teach important moral lessons that promote critical thinking and foster empathy, which are valuable skills for learners to develop. Overall, the digital learning resources that the researcher created provide a practical and engaging way for learners to improve their English skills using a multi-sensory approach tailored to their respective CEFR levels. I have developed a digital

multi-sensory English learning product that promotes differentiated learning, holistic learning, and student-centeredness. The researcher has leveraged free digital tools to develop English multi-sensory digital learning. One source I often use is the fairy tale Aesop' Fables which has been around for over 1,700 years. With about 500 stories available, I selected 50 fables and analysed them using the Reading for Emotions technique to improve proficiency according to the level of the Common European Framework of Reference (CEFR). After a careful analysis, the researcher identified the six best stories among the 50 fairy tales. Four of these stories are appropriate for CEFR levels B1 through C2. However, I had to slightly modify the two stories to match the A1 and A2 levels. To achieve this, researcher simplified the vocabulary used in the story.

Overall, researcher found that using Aesop's Fables' fairy tales in my English learning journey was helpful. By analyzing the story and modifying it to fit the student's skill level, the student can improve his language skills and move up through the CEFR level. This section has provided valuable insights into the creative process behind developing digital multi-sensory English learning products. Throughout the development process, researchers skillfully manage each step, including conceptualizing products, analyzing English teachers' lesson plans, selecting Aesop's Fables that are suitable for the Common European Framework of Reference (CEFR) level, and using reading techniques to help improve CEFR levels

The discussion of this chapter yields three main characteristics. (1), each text (A1 to C2) has a different vocabulary level. A1 uses simple vocabulary, A2 uses basic words, B1 displays more enhanced vocabulary, and C1 and C2 have higher level vocabulary covering spontaneous topics. (2) The learning process in this product includes four stages, namely asking, investigating, discussing, and reflecting.

This approach allows students to learn actively, which is important in the learning process. (3) The Digital Multi-sensory English learning profile is focused on enhancing students' language skills and helping them advance in their learning journey. By incorporating a multi-sensory approach, this product enables students to learn through multiple senses, thereby making learning more interesting. Taken together, these three characteristics highlight the uniqueness of the product and the benefits it offers students in improving their English skills.

Using texts with different vocabulary levels and readability indices in language learning is a research-supported approach that aligns with the Common European Framework of Reference for Languages (CEFR) and enhances language learning outcomes. The CEFR recommends exposure to materials that match learners' proficiency level to facilitate their learning and progression, and research supports the use of appropriate materials to improve language learning outcomes. By incorporating texts with varying vocabulary levels, learners can expand their vocabulary and comprehension skills, regardless of their proficiency level. Therefore, the use of this approach has the potential to benefit language learners at all levels and facilitate their language learning and progression.

The product described incorporates a learning activity that promotes student-centered and differentiated learning, as well as a rhizomatic approach that fosters critical thinking, problem-solving, and emotional development. This approach creates an engaging, challenging, and supportive learning environment that empowers students to take control of their learning journey and achieve their language learning goals. Additionally, the product aligns with the CEFR assessment system, which allows for tailored digital learning resources to meet the individual needs of learners. While the article suggests a digital student agency framework that takes into account

multiple factors that influence agency, it is still under development and requires further assessment (Stenalt, 2021). Overall, this product offers innovative pedagogical approaches and technology to enhance language learning outcomes.

The system described in this section offers a structured and engaging approach to language learning that is focused on the needs and abilities of individual learners. By incorporating differentiated learning methods, the CEFR assessment system, and multi-sensory learning techniques, this system promotes a student-centered learning environment that enhances motivation and confidence. Through the use of this approach, learners can become more active and enthusiastic about the learning experience, leading to increased focus and language learning success in the long-term. Ultimately, this system offers valuable insights into how language learning can be approached in a more effective and engaging manner, and has the potential to improve learners' language skills and confidence.

CONCLUSION

The development of digital multi-sensory English learning resources for secondary schools in this study was originated from the need for innovation. This innovation in the development of digital multi-sensory English is characterized by: (1) the use of reading learning tools for emotions as a support for learning that is compatible with the brain in a multi-sensory approach, (2) the use of diagnostic tests to measure the level of ability of students that is compatible with the CEFR, and (3) the use of stories as learning materials. First, the use of emotion reading as a multi-sensory brain-compatible learning tool, his learning is basically used to promote the concept of centralized learning. Students are encouraged to review what they have learned and think critically to solve each of these problems and processes, without relying on the teacher of course. Second, the use of diagnostic

tests to measure student performance is in accordance with the CEFR.

Recognising the different skill levels and CEFR frameworks used to promote learning in this product that can be applied in a school context as long as the teacher is someone who wants to innovate teaching. This is demonstrated in how students learn through digital multi-sensory English learning and reading for emotions they use as learning tools. Third, the use of stories in this product is an innovative learning material in digital multi-sensory English learning. The brain is five times more active when reading stories. Well-told stories affect students. It means that the human brain loves stories. What stories do is that they provide a storyline from some negative emotions to positive emotions so that they can understand them faster.

In transformative pedagogy that adopts technology not all understandings in learning can be digitized, the role of the teacher himself is also important in pedagogy. 102 These conclusions have brought a wealth of insight into how innovation can happen, starting at the school context level. Strengthening in pedagogy itself is more important and foremost than digital learning resources. Students' understanding of any material will be achieved if their learning works well. Learning Reading for emotions in a multi-sensory way is part of transformative pedagogy because it is differentiated learning which is multimodal which makes it easier for students in the learning process and they become more active, enthusiastic, and more focused in learning. It will certainly increase students' abilities and in the end can help students build a better mental world.

REFERENCES

- Arikunto, S. (2016). Prosedur Penelitian: Suatu Pendekatan Praktik. Jakarta: Rineka Cipta.
- Ary, D., Jacobs, L. C., Sorensen, C., & Razavieh, A. (2010). Introduction to Research in Education (8th ed.). Wadsworth: Cengage Learning, Inc.
- Atenstaedt, R. (2017). Word Cloud Analysis of the PJGP: 5 Year on. British Journal of General Practice, 67(658), 231–232.
- Braun, V., & Clarke, V. (2012). Thematic Analysis. Salt Lake City: American Psychological Association.
- Farran, E. K., Silverstein, P., Ameen, A. A., Misheva, I., & Gilmore, C. (2020). Open Research: Examples Of Good Practice, And Resources Across Disciplines. Washington DC: OSF Preprints.
- Fletcher, H. L., & Hanley, C. (2016). The Us of Critical Thinking in Higher Education in Relation to the International Student-Shifting Policy and Practice. British Educational Research Journal, 42(6), 978–992.
- Fraga Vinas, L. (2021). Implementation of the CEFR in the Rubrics of Two Main English Certificates: Cambridge FCE and Trinity ISE-II. El Guiniguada, 30(1), 193–206.
- Helyanti, N. D., Bumela, L., & Ikawati, L. (2022). Kurikulum Merdeka Reimagined: Adopting Story Science For English Literacy Learning In Indonesian Middle School. ELT Echo: The Journal of English Language Teaching in Foreign Language Context, 7(2), 1–5.
- Hubbard, P. (2021). An Invitation to CALL. Foundations of Computer-Assisted Language Learning. Retrieved May 7, 2023, from https://www.apacall.org/research/books/6/
- Ikawati, L. (2020). Scaffolding in Teaching Writing. The Educational Journal, 30(1), 48–58.
- Iskandar, M. N. (2020). Efektivitas Strategi Pembelajaran Practice Rehearsal Pairs Dalam Meningkatkan Pretasi Belajar Mata Pelajaran Al-qur'an Hadits Di Kelas Viii Mts Shofa Marwah Sowan Lor Kedung Jepara Tahun Ajaran 2019/2020. Jepara: Thesis UNISNU Jepara.
- Ivone, F. M., & Jacobs, G. M. (2020). Learner Autonomy And Cooperative Language Learning. Singapore: Kampung Senang Charity and

- Education Foundation.
- Lian, A. (2018). Differentiated Learning And Evidence From Neuroscience: Some Implications For Computer-assisted Language-learning (CALL) Pedagogies. Văn Hiến University of Journal of Science, 6(1), 5–16.
- Lian, A. (2020). What Axioms Inform Your Research? Dialogizing for Innovation in English Language and Literacy Pedagogy. 3rd International Conference on Innovative Research Across Disciplines (ICIRAD 2019), 440–448. Atlantis Press.
- Lian, A. B. (2017). Reading For Emotion with ICT Tools. Proceedings of the 25th International Conference on Computers in Education, 1–10.
- Lian, A., Lay, N., & Lian, A. (2023). Secondary Pre-service English Teachers' Response to CALL Innovation in Cambodia. In Handbook of CALL Teacher Education and Professional Development: Voices from Under-Represented Contexts (pp. 49–63). New York: Springer.
- Montebello, M., Pinheiro, P., Cope, B., Kalantzis, M., Haniya, S., Tzirides, A., ... Searsmith, D. (2018). Enriching Online Education through Differentiated Learning. 4th International Conference on Higher Education Advances, 489–496.
- Nazir, M. (2005). Metode Penelitian. Jakarta: Ghalia Indonesia.
- Nurbani, R. I., Kartawijaya, Christiantara, S., & Rahmayati. (2020). Studi Diagnostik Pembelajaran Pendidikan Dasar di Kabupaten Lombok Utara Provinsi Nusa Tenggara Barat. Jakarta: The SMERU Research Institute.
- Ravishankar, R. A. (2018). An Oscillatory Neural Network Model That Demonstrates The Benefits Of Multisensory Learning. Cognitive Neurodynamics, 12(5), 481–499.
- Rostan, N. N. A., Ismail, H., & Jaafar, A. N. M. (2021). The Practice Of Multisensory Technique Towards Reading Skills Of Open Syllables By Preschoolers. Jurnal Pendidikan Awal Kanak-Kanak Kebangsaan, 10(1), 55–65.
- Son, J.-B. (2019). Context-Specific Computer-Assisted Language Learning: Research, Development And Practice. Queensland: Asia-Pacific Association for Computer-Assisted Language Learning (APACALL).
- Son, J.-B. (2020). Technology-Enhanced Language Teaching In Action.

- Queensland: Asia-Pacific Association for Computer-Assisted Language Learning (APACALL).
- Spence, C., & Frings, C. (2020). Multisensory Feature Integration In (And Out) Of The Focus Of Spatial Attention. Attention, Perception, & Psychophysics, 82(1), 363–376.
- Stenalt, M. H. (2021). Researching Student Agency In Digital Education As If The Social Aspects Matter: Students' Experience Of Participatory Dimensions Of Online Peer Assessment. Assessment & Evaluation in Higher Education, 46(4), 644–658.
- Sudimantara, Lala Bumela. (2021). Transformative Learning and Student Agency in Academic Writing in Undergraduate English Language Teacher Education Degree Programs in Indonesia. Charles Darwin University, Australia. Darwin: Thesis Charles Darwin University.
- Sudimantara, Lala Bumela. (2021). Learners'agency In Focus: Introducing The 21st Century Academic Writing Pedagogy In Indonesia. ELT Echo: The Journal of English Language Teaching in Foreign Language Context, 6(2), 155–167.
- Sudimantara, L.B. (2020). Designing 21st century language learning scenario in Indonesia: A Perspective from computer-assisted language learning. Indonesian Journal of Arabic Studies, 2(1), 1-30.
- Sugiyono. (2018). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta.
- Suryati, N., & Anugerahwati, M. (2022). PBIS4204 Speaking I (2nd ed.). Jakarta: Universitas Terbuka.
- Tian, Y., Li, D., & Xu, C. (2020). Unified Multi Sensory Perception:weakly-Super Vised AudioVisual Video Parsing. Computer Vision-ECCV 2020: 16th European Conference, 436–454. Springer.
- Zull, J. E. (2004). The Art of Changing the Brain. Educational Leadership, 62(1), 68–72.