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STUDENTS' VOICES ON E-PORTFOLIO-BASED ENGLISH LISTENING ASSESSMENT USING GOOGLE SITES

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ABSTRACT

As assessment becomes more important in education, teachers must be advanced in both assessment and teaching course materials. The most recent way of assessing the performance of students in listening classrooms is value-added assessment using Google Sites as e-portfolios, one of the strongest instruments used to assess the efficacy of teachers as well as recognize growth in students. Nonetheless, the use of e-portfolios in EFL students' listening classrooms and how it influences their learning enjoyment remains undetermined due to neither researchers nor students have addressed these issues in depth, and studies on using Google Sites as an e-portfolio-based assessment for teaching listening comprehensions have also been underutilized. Thus, this research aims to gain insight into EFL students' views on using Google Sites as an e-portfolio-based value-added assessment tool in listening classrooms. It made use of a qualitative case study and included second-year university students. Students' course reflections and semi-structured interviews were both utilized to collect data, which was thereafter analyzed qualitatively using coding and thematic analysis. The results of the study revealed that creating e-portfolios with Google Sites proves helpful in assessing students' learning achievement, tracking and measuring students' progress, and diagnosing deficiencies that need to be addressed. This study renders a recommendation for the use of other well-developed assessment tools in future studies.

Keywords: assessment, e-portfolio, Google Sites, listening, students' voices

INTRODUCTION

Educators have a strong interest in finding effective ways to evaluate students' performances. Assessments are crucial for gauging the success of the learning process, and it's widely acknowledged that learning and assessment are intertwined (Allen & Wright, 2014; McGarr & McDonagh, 2021). The teacher's evaluation of students' learning outcomes has a significant impact because it offers valuable feedback on their comprehension and what they've learned (Granberg et al., 2021; McTighe & Willis, 2019). Therefore, assessments should be capable of accurately interpreting students' actual performance (Harris et al., 2020; Kim et al., 2020; Panadero et al., 2019). According to Sprenger (2021), assessments should go beyond merely testing facts, dates, times, and formulas; they should also provide insights into students' existing understanding and their ability to apply it in real-world situations (Yu et al., 2021). Both teachers and students must demonstrate the process and learning outcomes by presenting

indisputable evidence of what students know and can do as a result of their learning.

Using a well-designed product as an assignment can serve as an effective assessment tool, providing tangible proof of students' learning. Instructors may require students to create, write, or perform tasks related to specific concepts or skills to showcase their comprehension of the subject (Trinidad, 2020). Consequently, this product becomes closely intertwined with both the learning and assessment processes, serving multiple purposes such as tracking students' progress over time (Plucker et al., 2021), monitoring and adjusting instructional support to aid student achievement (Yan, 2020), and evaluating the learning journey of students (Tempelaar, 2020). Simultaneously, students can employ this product to convey their grasp of learning objectives and demonstrate their educational achievements. In the short term, the product offers evidence of learning within a specific timeframe, while in the long term, it encapsulates knowledge, comprehension, and skills acquired over an extended period, such as a semester or a year.

In the past decade, there has been a notable rise in the utilisation of products known as "portfolios," which are structured collections of artefacts demonstrating knowledge, skills, values, or accomplishments, emphasising the organisation and presentation of these artefacts. These portfolios serve as a means to showcase a student's best work as evidence of their proficiency. As technology and communication have advanced, the adoption of digital portfolios, also referred to as "web-portfolios" or "e-portfolios," has provided greater flexibility and dynamism in portfolio management. This allows students to contribute to and modify their e-portfolios in real-time. Furthermore, e-portfolios can serve as a valuable tool for promoting self-reflection, recognizing that many students may not naturally engage in reflective thinking. In light of this, educators should dedicate time to instruct their students on how to cultivate reflective thinking skills (Buzetto-

More, 2010).

Teacher evaluations of student performance should possess authenticity (Pollock & Tolone, 2020), serve as a source of motivation (Law et al., 2019), and offer encouragement (Seifert & Feliks, 2019). They should also facilitate students' self-reflection (Nückles, 2021). In educational settings, the most prevalent form of traditional assessment involves pen and pencil-based methods (Lokollo & Arman, 2021). However, this approach tends to assess lower-order thinking skills and falls short in evaluating more advanced abilities such as innovation, problem-solving, critical thinking, and collaboration—key components of twenty-first-century skills (Care et al., 2018). A relatively novel approach for assessing these skills is the use of value-added assessments through e-portfolios, a highly effective tool for gauging teacher effectiveness and tracking student growth (Kennedy et al., 2011). E-portfolios present a more promising avenue for measuring learners' development over time, emphasising their role as an authentic instrument for showcasing progress (Pike, 2011). E-portfolios are currently widely employed for both formative and summative assessments, as a means for self-reflection, and as a platform for periodically showcasing student development. Furthermore, adopting Google Sites as a platform for e-portfolio-based assessment of learning processes and outcomes can encourage students to reflect on their learning practices, identify strengths and weaknesses, establish connections between their achievements and the professional world, and offer various other benefits.

Numerous research findings, including the study conducted by Rezai et al. (2022), indicate that e-portfolios have the potential to foster a positive attitude among students towards learning because they can clearly grasp their capabilities and potential achievements. According to the research by Sultana et al. (2020), e-portfolios create reflective platforms where students and educators can exchange ideas and feedback,

stimulating students to think in new and critical ways and produce high-quality work that aligns with specific standards and outcomes. Furthermore, as suggested by the findings of Mapundu and Musara (2019), e-portfolios can enhance students' confidence in their employability by enabling them to showcase evidence of their competence and experience. Career centres can view e-portfolios as a valuable tool for assisting students in their job search efforts by providing employers with access to an e-portfolio resume link showcasing students' best work (Ciesielkiewicz, 2019).

However, there is limited clarity regarding the use of e-portfolios in EFL (English as a Foreign Language) students' listening classrooms and its impact on their engagement in learning. Both researchers and students have not extensively explored these issues. Similarly, there is a lack of research on the application of Google Sites as a platform for e-portfolio-based assessment in teaching listening comprehension. Most previous studies in this domain have predominantly focused on reading (Fathali & Okada, 2016; Wang, 2010) or writing classrooms (Barrot, 2021; Ngui et al., 2020). There is a need for more comprehensive information to enhance the integration of e-portfolio-based assessment in English listening classrooms.

Consequently, this study seeks to investigate students' perceptions regarding the use of Google Sites as a value-added assessment tool based on e-portfolios in listening classrooms. Drawing from the existing literature and recognizing the call for further empirical research in local contexts, such as Indonesian higher education, the overarching research question is as follows: What are students' perspectives on the use of Google Sites as an e-portfolio-based assessment method in English listening classrooms?

REVIEW OF THE LITERATURE

Formative Assessment

The term formative assessment was coined by Michael Shriven in 1967 in relation to curriculum program evaluation 50 years ago. Then, Harlen et al. (2003) indicated formative assessment contributes to lower level learners' learning in that it enables lower-achieving students to make progress step by step. It not only works out in endowing equal learning opportunities to all parts of the community, but also diminishes special need placements. Formative assessment weighs understanding along the process of learning and directs teacher decision making about future instruction. It also provides feedback to students so they can improve their performance.

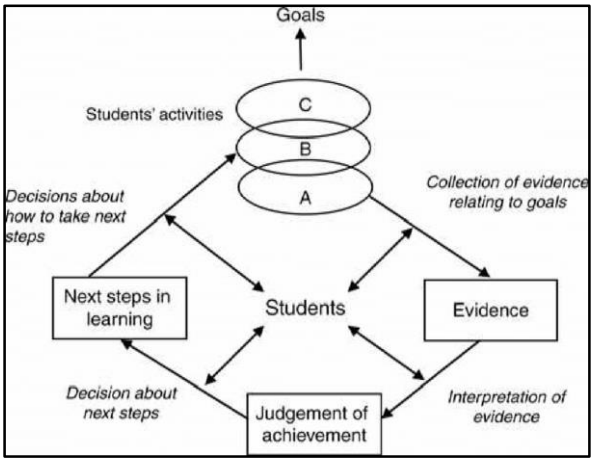

Fig. 1 - Assessment for formative purposes cycle (Harlen, 2007).

Rea-Dickins (2004) has described a formative class in which learners try to form a picture of success and to use each assessment to learn how to improve their learning. Shohamy (2001) believes that the least quantity use of formative assessment enables teachers to evaluate the process of learning in their classes both qualitatively and quantitatively. Teachers will also be able to check their learners' development and decide on what they need to develop their mastery. Formative assessments allow the learner to

judge their own learning achievement. Formative assessments are administered throughout the learning process as an effort to inform both teacher and learner during the learning process.

A central premise to formative assessments is the goal of assisting the learner in establishing an index to their own learning. Probably the most common and almost intuitive form of formative assessment is that of question-and-answer during the teaching of a lesson. This allows a teacher and a student to gain instant feedback on understanding and learning. In this sense formative assessment is obviously not a new concept. Formative assessment as an instructional method enables learners to contribute to their own process of learning by providing a quick index to their learning during the instruction process. Students in this situation are then enabled to ask questions and express non understanding of the lesson while the teacher is still discussing the topic.

E-portfolio as Formative Assessment

Electronic portfolios (e-portfolios) has become popular today as a tool for assessing learning since traditional assessment such as traditional assessment are not normally assessed the core competency of twenty century skills such as critical thinking, cooperative learning, scientific reasoning, and problem-solving skills Thus, a shift toward the use technology that best respond to have students demonstrate their competencies becomes essential to balance traditional assessments.

The theory of portfolio was firstly initiated in 1952 by Harry Markowitz in a financial journal article which was later widely referenced, quoted, and reissued once Markowitz was awarded the Nobel prize (Francis & Dongcheol, 2013). Referring to Timmins (2008), the term portfolio is derived from the Italian phrase "portare fogliou," which signifies "bringing paper," and has been widely employed in a wide range of specialties for decades, including arts, photography, architecture, and music. More

comprehensively, a portfolio is a rich, contextual, and highly personal document from someone's learning journey that intentionally includes documentation that clearly demonstrates the knowledge of skills, behaviours, and special accomplishments attained from time to time (Jones & Shelton, 2011). Additionally, it symbolises the connection shaped between actions and beliefs, actions and thoughts, evidence and requirements (Cusack & Smith, 2020), and serves as a form of media for reflection by constructing meaning, allowing the learning process more transparent, crystallising insight, and foreseeing future path (Kozinets, 2019). This implies that the portfolio concept evolves over time in alongside with the advancement of information and communication technology, as evidenced by the use of various terminologies in the literature, such as electronic portfolios, e-portfolios, e-portfolios, e-folios, digital portfolios, webfolios, web-based portfolios, online portfolios, and so on.

The primary function of the portfolio is to monitor students' performance and progress during the learning process (Syzdykova et al., 2021; Mapundu & Musara, 2019). A portfolio can also be used by the teacher to generate a participant's profile in order to gain a better understanding of the students during the learning process. Portfolio-based learning is used not only by teachers to evaluate students, but also by students to develop themselves and as a means of self-evaluation (Yastibas & Yastibas, 2015). Thus, apart from being an assessment tool, portfolios can serve as an incentive for students to alter their passive attitude toward obtaining lecture material to become more active in collecting and organising their learning materials as they acquire a sense of ownership of their own portfolios.

Barrett (2005) highlighted that with e-portfolio, teachers and students can start embedding portfolio artefacts from a variety of media, such as audio and video clips, graphical illustrations, and a wide range of text options. E-portfolio allows the use of hypertext links to present the relevant contents, apart from displaying clear correlations

between evidence, standards or goals, artefacts, and reflections. Generally, the e-portfolio is composed of personal details, self and educational philosophies, transcripts, course learning outcomes, artefacts of competence, fieldwork observations, and reflection. The development of an e-portfolio incorporates a whole process of collection, selection, reflection, direction, and celebration or presentation (see Figure 2):

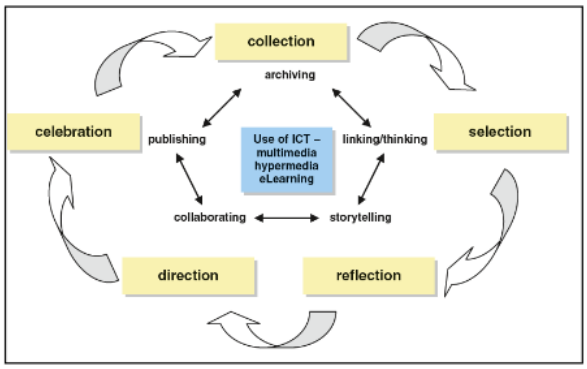

Fig. 2 - The e-portfolio process with the use of Information and Communications Technology (ICT).

Utilisation of technology tools like e-portfolio software allow teachers for collecting evidence for students' learning as many e-portfolio platforms are web-based, which makes possible the use of multimedia elements. Slade and Downer (2020) found that learning with e-portfolio not only gives students foundations for using a technology tool that will support their practice, it also provides a structure for planning their career progression in the future, professional competency requirements and basis for lifelong learning. It also revealed that using e-portfolios promote learners' autonomy (Thibodeaux et al., 2017), foster self-directed learning (Song, 2021), and develop students' reflective thinking (Gikandi, (2019). In addition, e-portfolios promote collaboration among peers while simultaneously collecting evidence of a student's academic accomplishments (Polka et al., 2021).

Google Sites as E-portfolio-based Students' Individual Assessments

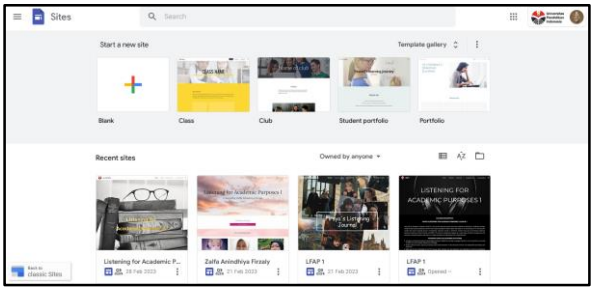

Fig. 3 - Google Sites

Referring to Kompen et al. (2019), Google Sites is one of the products offered by Google as a tool for creating a personalised website. Google Sites can be used for classroom activities in the learning and teaching context. Students, for example, can use Google Sites to submit assignments, and lecturers can view the submitted work on the website. Furthermore, Google Sites can store and display various types of information, such as text, images, links, or videos, all in one location (Lange & Costley, 2020). As a result, the primary distinction between Google Sites compared to the other Google tools such as Google Classroom is that Google Sites gives learners more freedom to customise their site.

Besides that, Google Classroom serves as a virtual extension of traditional classrooms (Sudarsana et al., 2019). Then again, Google Classroom provides teachers and students with online learning tools that allow them to ask questions, discuss topics, and create assignments in the same way that they would in a physical classroom. However, Google Sites includes a section for students to customise their websites based on their preferences and creativity. The statement is supported by the fact that Google

Sites allows users to combine various media into a single site that can be shared based on the needs of the user (Kompen et al., 2019). To rephrase it in another way, Google Sites give learners more control over their learning process.

How Google Sites is Utilised in the Academic Listening Classrooms

Constructivism

The constructivist learning theory provides a foundation for the utilisation of Google Sites as students' e-portfolio assessments. According to this theory, learning is an active process in which learners construct their own knowledge and understanding through interactions with their environment. By creating their e-portfolios on Google Sites, students actively engage in organising, reflecting, and presenting their learning experiences, fostering a deeper understanding of the subject matter.

Authentic Assessment

Google Sites allows for the creation of authentic assessments, aligning with the principles of authentic assessment theory. Authentic assessment emphasises the evaluation of students' real-world skills and abilities rather than their ability to recall information. By using Google Sites as an e-portfolio platform, students can showcase their listening skills through various multimedia elements, such as audio recordings, video clips, and written reflections, providing a holistic view of their learning progress.

Self-Regulated Learning

Google Sites supports self-regulated learning, a crucial aspect of students' development and success. Self-regulated learners take control of their learning process by setting goals, monitoring their progress, and reflecting on their achievements. Through the creation of e-portfolios on Google Sites, students can track and document their listening skills improvement over time, fostering a sense of ownership and empowerment in their learning journey.

Digital Literacy

Utilising Google Sites as e-portfolio assessments promotes the development of digital literacy skills. Digital literacy encompasses the ability to navigate, evaluate, and create digital content effectively. By creating and managing their e-portfolios on Google Sites, students enhance their digital literacy by learning how to organise information, integrate multimedia elements, and present their work in a visually appealing and accessible manner.

METHODOLOGY

This study employed a qualitative case study methodology. In this current research, the case study was specifically focused on exploring a single instance related to the utilisation of Google Sites as an assessment method based on e-portfolios in English listening classrooms. This approach aligns with the definition of a case study, which involves an in-depth investigation of the application of a specific theory or method that may not be well-known in a particular context (Goodrick, 2020). The adoption of Google Sites as an e-portfolio-based assessment method has not yet gained widespread recognition or implementation in English listening classrooms. Consequently, the case study was carried out to illustrate how Google Sites are employed as assessments based on students' e-portfolios.

The research utilised the following data collection methods: (1) a student course reflection, which captured participants' experiences throughout the course, served as the primary data source, and was the central focus of the analysis; (2) semi-structured individual interviews aimed at obtaining more detailed insights into students' perceptions of the use of Google Sites as a method for e-portfolio-based assessment in listening classrooms. Specifically, the primary question addressed in this study was, "What are your views regarding the use of Google Sites as an e-portfolio-based assessment tool in

English listening classrooms?" This question was further broken down into four key themes: one for students' perspectives on the implementation of Google Sites, another for the challenges they encountered, a third for their self-reflection before and after using Google Sites throughout the semester, and a fourth for their views on the sustainability of Google Sites as a continued e-portfolio-based assessment method in English listening classrooms. Importantly, it should be noted that both the course reflections and individual interviews were conducted in Bahasa Indonesia, and therefore, all transcripts from these sources will be translated into English.

This research project commenced in February 2023 and concluded in May 2023, spanning a single semester. The study took place within the English Language Education Department at a public state university located in West Java, Indonesia. The selection of this location was carefully considered due to the fact that all members of the research team were affiliated with the department, facilitating convenient access to the research site. The present study, titled "Students' feedback on e-portfolio-based English listening assessment using Google Sites," was integrated into the curriculum of the Listening III course, specifically focusing on academic listening skills.

The research involved students in their fourth semester as participants. In adherence to ethical principles, aimed at safeguarding the confidentiality of all participants (McLain & Kim, 2018), they were assigned pseudonyms in the article, consisting of combinations of numbers and letters, such as S (student), R (reflection), and I (interview). Out of the two classes available, one with approximately 35 students, aged between 19 and 22 years, was selected. This specific course was chosen because the lecturer teaching it was also the author's supervisor, which facilitated easy access to approach the students. Each student was required to create their course reflections; however, not all of them participated in the semi-structured interview component. Only

five out of the 35 participants were thoughtfully selected for further interviews to provide more detailed explanations and additional insights. This decision was made as their submissions were deemed questionable and required additional background information to enhance the data collected from students' reflections. From the outset, all research participants provided written consent and were fully informed about the study's scope and details. It was explicitly stated that there was no pressure to participate, and their decision to participate or not would not impact their course grades.

The data collected in this study underwent qualitative analysis using Microsoft Word, employing a thematic analysis approach. Thematic analysis is a valuable method for exploring the perspectives of various research participants (Braun & Clarke, 2022). This method was chosen not only to describe the data but also to engage in interpretation during the processes of code selection and theme development. Furthermore, data analysis involves coding as a technique to identify and generate codes in conjunction with the emerging themes present within the dataset. This coding procedure organised all the study's data into specific codes or patterns corresponding to the themes, from which the relevant data were extracted.

FINDINGS AND DISCUSSION

As per the results of the data analysis, students developed a favourable attitude toward the integration of Google Sites as an assessment tool based on e-portfolios in their listening classroom. Throughout the learning process, the majority of students agreed that Google Sites proved to be an engaging and motivating method of learning. Google Sites was suggested as a means to offer authentic assessments for learners, enabling students to engage in self-reflection after achieving their best performance by the end of the course. While some students held a negative opinion about the use of Google Sites in English listening classrooms and encountered various challenges during their self-

directed learning, they maintained that incorporating Google Sites into listening activities in the classroom was essential in aiding their understanding of English. The following summarises the findings:

The implementation of Google Sites as e-portfolio-based assessment in listening classrooms

Drawing from Abdulrahman et al. (2020), the utilisation of technology is geared toward enhancing the learning process and is delivered through electronic or digital media formats. When applied to language learning, technology brings a wealth of information, surpassing that found in traditional textbooks. In the context of higher education, the incorporation of electronic media, such as Google Sites, is associated with an emphasis on exploring innovative approaches to foster students' creativity and autonomy during the learning process (Kozlova & Pikhart, 2021). Consequently, it serves as an alternative that empowers students to take a more active role in their learning journey.

Throughout the implementation phase, the students in the study exhibited favourable attitudes toward Google Sites as e-portfolios, as indicated by the responses from the participants:

> "I first got to know Google Sites in semester 1 of the Listening for General Communication I course. It was clearly explained to us about what Google Sites is, how to make it, what are its functions, and so on." (S23 - SCR)

> "...From there, we started to become familiar with G-Sites, and since then, I have used Google Sites as a platform for submitting assignments, especially for listening courses." (S17 - SSI)

> "…Before that, I only knew and had used Google Forms, Google Classroom, Google Drive, and Google Meet without ever hearing about them or even knowing that people can make websites with Google Sites." (S19 - SSI)

Based on the aforementioned findings, students initially got introduced to Google Sites as an effective tool for managing and structuring their learning journey, notably in the context of listening classrooms. The instructor provided guidance until all students became proficient in using it for submitting their assignments. This aligns with prior research by Zunaidah (2022), who conducted similar studies on this subject, indicating that Google Sites, as an assessment tool, holds significant potential for implementation in listening classrooms right from the first year of a study program.

Considering the students' perspective on the incorporation of Google Sites, the majority of them enthusiastically shared how Google Sites has transformed their practices. Google Sites effectively boosts their engagement and motivation by enabling them to customise their e-portfolios and showcase their work in a creative and interactive manner. A previous study by Kompen et al. (2019) elucidated that Google Sites is among the tools that can be employed to create personalised websites. This personalization instils a sense of ownership and pride in their educational accomplishments. Given the array of features and adaptability offered by Google Sites, it emerges as an ideal platform for implementing e-portfolios and conducting value-added assessments.

The challenges faced by the students and the strategies they use to encounter the challenges while utilising Google Sites as their e-portfolios

Adopting technology in language education is essential for boosting student engagement, enhancing learning results, and equipping students with the skills needed in the digital era. However, it's nearly certain that when specific technologies are introduced into language education, teachers and students will encounter various challenges. They are

also expected to explore methods and tactics to address these challenges. The analysed results are presented as follows:

Time consumption, design & customisation, portfolio accessibility

"At the beginning of a course where I have to create new Google Sites, I usually spend quite a long time thinking about how I will design my Google Sites, such as what theme to use, how to organise the elements, whether the design is attractive or not, whether the design makes it easy for lecturers or other friends to check assignments or view my Google Sites or not, and so on." (S21 - SSI)

Lack of features

"Google Sites has not yet provided easy editing features via mobile phones. So, I have to always use a laptop to do it. This became one of the obstacles I experienced regarding the accessibility and flexibility of Google Sites." (S09 - SCR)

Students' unfamiliarity with the tool

"Sometimes I also find it complicated because Google Sites requires us to publish and change the access of tasks to the public first so that our site can be seen by everyone. This can make it difficult for people who are not familiar with Google Sites techniques." (S05 - SCR)

Despite their advantages, employing Google Sites as students' e-portfolios can pose challenges for both teachers and students. These difficulties may encompass navigating the platform, addressing formatting issues, and integrating multimedia content. Many students may lack advanced technical skills, which can lead to frustration and hindered progress in creating their e-portfolios. For instance, students' level of tech-savviness can negatively influence the e-portfolio process. As indicated by Chang and

Kabilan (2022), students' perceptions of technology play a role in the adoption of e-portfolios, as their familiarity with technology can shape their decisions about its usefulness. These decisions can impact the efficiency and effectiveness of e-portfolios. Additionally, how students assess and comprehend technology affects their utilisation of the e-portfolio system. For instance, Barrot (2021) and Syzdykova et al. (2021) highlighted the importance of flexibility in an e-portfolio system. Without flexibility, it may have an adverse impact on the learning process. Flexibility is what makes e-portfolios more engaging (Boholano et al., 2022), grants learners greater control (Namaziandost et al., 2020), and encourages students to take a more active role in their own learning (Uijil & Filius, 2022).

Concerning the time investment required for creating and designing e-portfolios using Google Sites, students expressed that they needed a substantial amount of time due to the unfamiliarity with Google Sites features. Initially, most of them encountered challenges in navigating Google Sites but gradually became proficient with it as they worked towards fulfilling the assignment's objectives. This underscores the significance of content management when utilising Google Sites for their e-portfolios. As highlighted in a study by Clarke and Boud (2018), maintaining an updated e-portfolio can indeed be time-intensive and demands consistent effort, potentially leading to procrastination and incomplete portfolios. Nevertheless, it is vital for students to thoughtfully curate and keep their content current to accurately reflect their recent achievements, skills, and experiences. In light of these challenges, students must recognize the importance of maintaining a well-kept e-portfolio and take the requisite measures to ensure its accuracy and relevance.

To overcome the challenges, some strategies were done by the students, which explained as follows:

> "I usually look for references on other platforms like Canva, Pinterest, Instagram, and Notion. I also try to implement the creativity that I have." (S11 - SCR)

> "I asked my friend to help me handle my Google Sites so that they could be seen and accessed by everyone. It took me a while to understand the technicalities." (S17 - SSI)

> "The solution I took to facing these obstacles was to follow the suggestions or feedback that had been given to me. These suggestions were very useful for me to identify where I went wrong." (S02 - SCR)

The findings outlined above suggest that, prior to commencing the creation of an e-portfolio on Google Sites, students found it necessary to invest time in exploring and comprehending the features and functionalities of the platform. This approach enabled the majority of students to navigate the interface more effectively and make optimal use of the available tools. Nicholson (2018) further elaborated that making students aware of both what they need to know and what they don't know is a strategy that can enhance their educational engagement. Beyond addressing technical challenges, students emphasised the importance of carefully planning and organising the content they intended to include before embarking on the creation of their e-portfolios. This preparation aided them in presenting their work in a lucid and coherent manner. Additionally, they considered creating an outline or a storyboard to ensure that their e-portfolio flowed logically and effectively conveyed their accomplishments.

Furthermore, students exhibited a tendency to collaborate with their peers who could provide them with advice and recommendations regarding the design and customization aspects to craft visually attractive e-portfolios. This encompassed ideas related to colour palettes, font selections, and layout alternatives. Encouraging students

to explore supplementary resources, such as design tutorials and inspirational websites, can augment their design proficiency and bolster their confidence in tailoring their e-portfolios to their preferences.

Students' reflection about their performances before and after utilising Google Sites as their e-portfolios

The reviewed studies have critically incorporated reflective activities (e.g., Cleveland, 2018; Kakhramonovich, 2022; McGregor, 2020; Xiao & Yang, 2019). Reflection plays a fundamental role within e-portfolios as it enables students to reassess their learning in a professional manner, acquire new knowledge, enhance soft skills, structure their activities (Chang, 2019), and shape their beliefs and identities (Colomer et al., 2020). These reflective activities prompt students to engage in analytical thinking about their surroundings as they contemplate their experiences, analyse them, and approach what they have encountered and perceived from a different perspective (Silver et al., 2023). Utilising reflective journal writing as a constructive guidance and assessment strategy enhances learning, contributing to profound personal and professional growth (McDonagh, 2019). Consequently, the true value of an e-portfolio lies in the reflection and learning it contains—not solely in the collection of work—where students derive meaning from disparate and diverse information originating from various reflections (Prokopetz, 2022). Below are the perspectives of the students on their self-reflection:

Initial Perceptions and Expectations

> "…With Google Sites, I can stay on track with the courses I'm currently taking. I can also see and re-evaluate my performance during this lecture through the assignments I have done and the feedback that has been given. That way, I can see how far my abilities have progressed and what things I need to fix, maintain, and improve." (S01 -SCR)

The results indicated that most students had limited prior exposure to e-portfolios. A portion of them conveyed concerns regarding the use of technology for their academic

tasks, while others were enthusiastic about the chance to present their advancements. Students articulated their hopes that adopting e-portfolios would improve their organisational abilities, foster self-reflection, and furnish a platform for receiving feedback from both peers and instructors.

Organisation and Documentation

> "Besides that, I feel that Google Sites is here to make assignment submission easier. Indirectly, I also feel that I can manage a website to be as aesthetic as possible and make it easier for anyone who reads or visits it." (S03 -SCR)

One significant discovery was that students considered Google Sites as a valuable resource for arranging and recording their academic listening resources. They valued the platform's adaptability, enabling them to classify and display their materials in an aesthetically pleasing way. Students also mentioned that creating their e-portfolios aided them in contemplating the various course topics and enhanced their grasp of the subject matter.

Self-Reflection and Goal Setting

> "If I compare the quality of my performance in the listening course before and after implementing Google Sites, in my opinion, the quality of my performance has improved better after implementing Google Sites. This is probably because I feel more organised and disciplined when using Google Sites, whether it's in terms of submitting assignments or something else." (S21 -SSI)

Employing e-portfolios motivated students to participate in self-examination and objective establishment. While constructing their e-portfolios, students had to engage in a rigorous self-assessment of their listening task performance and pinpoint areas that needed enhancement. Numerous students conveyed that this introspective approach increased their awareness of their strengths and weaknesses, ultimately resulting in the development of attainable and practical learning objectives for their future endeavours.

Peer Interaction and Feedback

> "I want to do my best work and make my Google Sites as attractive as possible because I realise my work can be seen by many people, especially my friends." (S27 -SCR)

Another notable discovery highlighted the beneficial influence of peer engagement and input on students' educational journeys. Google Sites facilitated the sharing of e-portfolios among students, affording them the opportunity to observe and offer constructive feedback on one another's work. According to student reports, this collaborative dimension not only enriched their comprehension of various viewpoints but also heightened their enthusiasm and involvement in the course material.

The sustainability of Google Sites as e-portfolio-based assessment in listening classrooms

In the realm of education, there is an urgent demand for sustainable assessment approaches. As educators work towards creating valuable learning opportunities and ensuring student achievements, it is crucial to embrace assessment techniques that are both efficient, impartial, and environmentally responsible.

Creating e-portfolios to evaluate students' performance has the potential to enhance their ability to engage in lifelong learning. In this scenario, the responsible utilisation of e-portfolios can greatly influence students' future professional endeavours and career prospects.

> "...In addition to providing the value of effectiveness in collecting and organising assignments, students can also practise independence and a sense of responsibility and be able to evaluate their own strengths and weaknesses." (S23 -SCR)

> "In my opinion, Google Sites can be used for a long time as a student's e-portfolio because they are automatically saved in Google Drive, where they can be stored safely and used for a long time. In addition, Google Sites can be designed according to each individual's creativity, with the possibility of its features being updated in the future according to the times and technology." (S17 -SSI)

> "…It can be used as a student's e-portfolio for a long time because this platform itself can properly store the progress experienced by its users. Another reason is because I think the space or storage provided by Google Sites for its users is quite large, and because of this, it can help users store various files easily." (S19 -SSI)

The fundamental objective in ensuring the sustainability of students' creation and sharing of e-portfolios is to ignite and sustain their enthusiasm. Students should discern the significance of e-portfolios in their professional growth and career path, and they must receive assistance while crafting their individual e-portfolios.

To guarantee the long-term integration of Google Sites as an e-portfolio assessment tool, it is crucial to offer extensive professional development and training initiatives for educators. These initiatives should prioritise acquainting teachers with the platform's functionalities, resolving technical issues, and advocating for efficient teaching approaches.

CONCLUSION

This study has illustrated the application of e-portfolios, with a focus on students' attitudes regarding their use of Google Sites as an assessment tool in English listening classrooms. The study is divided into four main themes: one addressing students' opinions on the integration of Google Sites, another discussing the challenges they encountered, a third exploring how their self-reflection changed before and after using Google Sites throughout the semester, and a final theme examining their views on the

sustainability of Google Sites as an ongoing assessment tool in English listening classrooms.

Future research endeavours could consider investigating this topic over an extended period or tracking student development throughout an entire program. Long-term studies could help uncover potential changes and capture other impacts that might otherwise go unnoticed. While this study primarily focused on the learners' experiences and perceptions, it would be beneficial to explore how instructors utilise e-portfolios in their teaching. Such research could shed light on alternative approaches to employing e-portfolios. Additionally, conducting comparative studies across different educational institutions could reveal further insights, strengths, and challenges related to the use of e-portfolios.

This study holds implications for instructors and curriculum designers aiming to develop technology-integrated assessments that align with the preferences of Generation Z students, who are digital natives and technologically proficient. Instructors should consider incorporating digital alternative assessments, as they offer more flexible and engaging testing methods. Moreover, providing accessible and mobile learning experiences beyond traditional classroom settings can foster greater student autonomy. Consequently, we strongly endorse the use of e-portfolios as a valuable educational tool within Indonesian learning institutions and believe that their adoption will further drive the digital transformation of higher education.

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