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# The Advantages of Utilizing Web-Based Electronic Portfolio Assessment in the English as a Second Language Classroom

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## Abstract

In the field of English as Second Language (ESL) teaching, traditional assessment methods such as multiple choice, gap-fill, or cloze tests have long been the standard for evaluating student performance. However, these methods often fall short in capturing the true abilities and progress of individual ESL learners. Since the transition towards student-centered approaches in ESL teaching highlights the importance of active learning and hands-on experiences, the shift necessitates assessment methods that take into account students' individual comprehension and personal distinctions to provide a comprehensive evaluation of their performance. In this regard, E-portfolios have emerged as an innovative and promising assessment that align with student-centered principles in ESL classes, accommodate diverse learning styles and foster self-regulated learning. However, despite the clear potential of E-portfolios in enhancing self-regulated learning in ESL classrooms, research on this assessment tool is limited. This study aims to fill this gap by exploring the effectiveness of e-portfolio-based assessment in nurturing students' self-regulated learning through literature review. The review's results confirm that e-portfolio-based assessment can boost students' self-regulated learning in the ESL context and underscore its significance as a tool for facilitating personalized and efficient learning experiences.

## I. Introduction

Over the years, the conventional approach to assessing students' performance in schools has predominantly relied on methods like multiple choice tests. However, in the field of ESL education, these assessment techniques fall short in effectively capturing the true language skills of the students as these techniques are primarily rooted in a behaviorist perspective that views education as mere "habit formation." Consequently, the conventional assessment practices are insufficiently reliable in gauging the language skills of ESL learners. In contrast, the constructivist ideology which is centered around students and emphasizes active participation in the learning process underpins modern educational strategies such as problem-solving and project-based learning. As this ideology emphasizes hands-on learning experiences and prioritizes student-centricity, it then necessitates alternative assessment methods that consider students' comprehension, unique traits, and individual accomplishments when evaluating their progress. As a result, innovative methods like e-portfolios have been introduced to evaluate learners' growth and performance.

E-portfolios, also described as digital collections of students' works and reflections, serve as a visual representation of the students' educational journey and achievements (Gülbahar & Tinmaz, 2006). While educators are familiar with utilizing e-portfolios in their teaching practices, there remains a challenge in effectively catering to the diverse learning styles of students. Among these styles is self-regulated learning which empowers students to take charge of their education from inception to completion by setting goals and creating a conducive learning environment tailored to their objectives (Zimmerman, 1990). Moreover, despite the recognized potential of e-portfolios in enhancing self-regulated learning, their application as an assessment tool within the realm of ESL education is an underexplored area of research. Hence, this paper seeks to investigate the viability of e-portfolio-based assessment in enhancing students' self-regulated learning by delving into existing literature on e-portfolios, e-portfolio-based assessment, and self-regulated learning in the context of ESL education. The central inquiry driving this paper is whether e-portfolio-based assessment contribute to the

advancement of students' self-regulated learning in ESL. If so, this study would like to identify the mechanisms that enable e-portfolio-based assessment foster students' self-regulated learning in the domain of ESL instruction.

## **II. E-portfolio: Definition, Characteristics and Advantages**

Rhodes (2011) suggested that e-portfolios could potentially be a groundbreaking innovation in campus technology. The transformative power of electronic portfolios in reshaping higher education surpasses that of any other known technology application. This underscores the significance of integrating e-portfolios in education to enable students to engage in digital work that is structured, searchable, and portable. The essence of e-portfolios revolves around their digital, organized, searchable, and transportable characteristics.

In the definition provided by Lorenzo and Ittelson (2005) an e-portfolio is described as a digitized assortment of artifacts, encompassing demonstrations, resources, and achievements that represent individuals, groups, or institutions. They further elaborate that e-portfolios serve as personalized, web-based compilations of work, responses, and reflections utilized to showcase essential skills and accomplishments across various contexts and timeframes.

Another definition of e-portfolio is that it is a set of works by the learner comprised with digital artifacts that articulate experiences, achievements, and learning. It is depicted as a deliberate aggregation of digital items like ideas, evidence, reflections, and feedback that provide targeted audiences with evidence of an individual's learning and capabilities (Gray, 2008).

Upon examining research on e-portfolios, a set of ten key attributes emerged. Of which, authenticity is the most primary feature of e-portfolios. This authenticity stems from students taking ownership of their learning by organizing their e-portfolios, reflecting on their progress and discoveries, and adapting their learning based on these reflections (Goldsmith, 2007; Reese & Levy, 2009). Furthermore, e-portfolios are characterized by their controllability that allows students to structure, reflect on, and evaluate their learning processes and adjust as needed (Goldsmith, 2007).

Another notable aspect of e-portfolio is its communicative and interactive

nature which require students to engage with peers and educators to enhance their learning (Bolliger & Shepherd, 2010; Lin, 2008). The dynamic quality of e-portfolios is highlighted by their continuous evolution through content organization, artifact selection, self-assessment, and improvement based on self-reflection (Goldsmith, 2007). Personalization is also key as students craft their e-portfolios individually (Goldsmith, 2007; Schmitz et al., 2010; Gray, 2008).

E-portfolios serve as integrative tools that can link students' personal experiences with their academic endeavors (Goldsmith, 2007). They are multi-purposed that serve as tools for assessing student performance, educational programs, and even future employment prospects (Goldsmith, 2007; Lin, 2008; Reese & Levy, 2009; Kocoglu, 2008). With feedback loops in place, e-portfolios are multi-sourced, and have the ability to offer students feedback on their learning, the educators insights into student performance, and the institutions the ability to evaluate their educational offerings (Goldsmith, 2007).

The motivational aspect of e-portfolios empowers students to take charge of their learning and enhance their skills (Akçıl & Arap, 2009; Bolliger & Shepherd, 2010; Rhodes, 2011). In addition, e-portfolios promote reflection that prompt students to evaluate their learning processes and progress through self-reflection (Goldsmith, 2007; Reese & Levy, 2009; Lin, 2008).

Goldsmith (2007) emphasized the invaluable benefits that institutions and students can reap from e-portfolios. These digital tools serve as a window into the effectiveness of education by enabling a deep understanding of students' progress and achievements in relation to their personal goals. By bridging the gap between coursework and institutional outcomes, students gain insight into the connections between their academic endeavors and personal growth (Goldsmith, 2007). This necessity for self-assessment and curriculum evaluation underscores the importance of enhancing students' comprehension of themselves and their educational journey (Gray, 2008).

E-portfolios, as highlighted by Goldsmith (2007), play a pivotal role in enhancing the learning experience and providing authentic assessment opportunities for learners. By requiring students to take ownership of their learning, organize their materials purposefully, self-evaluate their work, and reflect on their learning processes and skills, e-portfolios empower students to

drive their educational journey and stay motivated in their studies (Akçıl & Arap, 2009). Additionally, the authentic documentation and facilitation of learners' experiences through e-portfolios contribute to the enhancement of the learning process and assessment authenticity (Reese & Levy, 2009).

Moreover, the use of e-portfolios not only saves time and energy for both students and teachers but also promotes student autonomy. Gonzalez (2009) advocates for the integration of e-portfolios in language education, emphasizing how they can increase students' awareness of the language learning process and foster autonomy in learning. Through the reflective process facilitated by e-portfolios, students can uncover the intricate factors involved in language learning, take ownership of their learning journey, and recognize the significance of learning beyond the classroom setting.

E-portfolios serve as a platform for feedback, reflection, and self-assessment, allowing students to curate digital collections of their work and engage in critical self-reflection. This reflective practice not only aids in evaluating individual achievement but also contributes to the overall effectiveness of educational programs and institutions (Reese & Levy, 2009; Goldsmith, 2007). By fostering a culture of reflection, e-portfolios empower students to showcase their critical thinking skills, analytical reasoning, and integrative learning capabilities (Rhodes, 2011). Through reflection, students can align their artifacts with standards, assess their progress formatively and summatively, and actively engage in the presentation of their learning (Lin, 2008; Rhodes, 2011).

E-portfolios play a crucial role in providing students with personalized feedback, enhancing their learning through reflection, and fostering a continuous learning process. By encouraging feedback, reflection, and autonomy, e-portfolios pave the way for students to overcome challenges and strive for continuous improvement in their educational journey (Akçıl & Arap, 2009; Gray, 2008).

### **III. Self-regulated Learning: Components and Application in ESL Instructions**

According to Zimmerman (2000), self-regulation is a process of orchestrating self-generated thoughts, emotions, and behaviors in a strategic manner to achieve personal objectives. In the academe, this means meticulous planning and management of time, attention, and focus on learning, practice, organization, and leveraging social resources effectively (Schunk & Zimmerman, 1997). Pintrich (1995) emphasized the self-directed nature of academic endeavors that require learners to constantly monitor, regulate, and assess their cognition, actions, and surroundings. Bandura (1986) further highlighted the interconnectedness of personal, behavioral, and environmental factors in the self-regulation process. Psychological elements such as motivation, adaptive strategies, self-awareness of performance outcomes, and responsiveness to different contexts play crucial roles in fostering self-regulation.

Self-regulated learning enables students to set their own goals, determine personal choices of plans and strategies, and enhance their self-awareness so they can effectively monitor and control their academic journey (Wang, 2004, as cited in Yastibas and Yastibas, 2014). Bandura (1986) and Zimmerman (2000) defined the three pivotal processes or phases of self-regulation. Bandura (1986) underscored self-observation, self-assessment, and self-reaction as key components in regulating one's learning process. Similarly, Zimmerman's model encompasses forethought, performance, and self-reflection phases, each encompassing essential elements like motivation, self-efficacy, goal setting, and reflective practices to optimize learning outcomes (Zimmerman, 2000).

Hirata (2010, as cited in Yastibas and Yastibas, 2014) further expanded on Zimmerman's cyclical approach by explaining the four dimensions of self-regulated learning: cognitive/metacognitive, affective, behavioral, and environmental regulations. These dimensions include a range of activities from setting goals and implementing strategies to monitoring progress and adapting behaviors in response to challenges. Hirata emphasized the

importance of managing motivation, emotions, and learning environments in fostering effective self-regulation.

Based on the multifaceted nature of self-regulated learning, Zimmerman and Martinez-Pons (1986, as cited in Yastibas and Yastibas, 2014) identified a diverse array of strategies employed by self-regulated learners which include self-evaluation, goal setting, seeking assistance, and reviewing materials. Pape and Wang (2003) further elaborated on these strategies and emphasized the role of self-initiation in driving effective learning practices.

Hence, as identified and proven by several studies, self-regulated learning fosters proactive and adaptable learners who take charge of their educational journey. Furthermore, it promotes self-efficacy, motivation, and strategic planning which help develop and strengthen students' abilities to navigate challenges, set meaningful goals, and cultivate a positive attitude towards learning.

Research on self-regulated learning in English language education delves into the intricate connections between self-regulation, self-efficacy, motivation, academic success, and learning tactics. Some studies specifically explore how self-regulated learning impacts writing, reading, listening, speaking, and vocabulary acquisition.

In a dissertation by Wang (2004), the focus was on how self-regulated learning strategies and self-efficacy beliefs intersect among four Chinese students mastering English as a second language. The findings revealed that students' utilization of self-regulated learning strategies, such as seeking social support and information, reviewing materials, and organizing their environment, positively influenced their self-efficacy beliefs, particularly in reading tasks. Koehler (2007, as cited in Yastibas and Yastibas, 2014) emphasized enhancing self-efficacy through self-regulated learning strategies in a secondary English as a Foreign Language (EFL) setting. This study demonstrated that implementing such strategies led to increased self-efficacy levels, consequently boosting student engagement in reading exercises.

Hirata's research in 2010 delved into the correlation between motivation and self-regulated learning in second language acquisition, specifically in relation to Kanji learning. The study unveiled the positive impact of self-regulated learning on motivation. Various motivational aspects, including intrinsic

motivation, self-efficacy, and self-concept, were identified as predictors of different self-regulated learning behaviors. For instance, intrinsic motivation and value were linked to cognitive and metacognitive self-regulated learning, while self-efficacy was associated with behavioral regulation, and self-concept was tied to environmental self-regulation.

In a study explored by Al-Otaibi's (2013), it identified the connection between Saudi EFL learners' future-self vision and their self-regulated learning practices. The study pointed how aspiring towards an ideal self can heightens motivation for self-regulated learning. According to the study, this proactive approach fosters readiness in terms of motivation, metacognition, and behavior and also cultivates self-efficacy and positive learning attitudes among learners.

Lin and Gan (2014) delved into how Taiwanese college students employed English listening strategies and self-regulated learning. The results of the study demonstrated that self-regulated learning motivate the students to plan and evaluate their listening tasks and boost their drive for success and progress towards proficiency. The approach promoted active learning and enabled students to recognize their strengths and weaknesses which paved the way for effective learning strategies and enhancing their listening skills.

In a study by Filate (2012), the impact of self-regulated language learning on the reading achievements of grade nine students was analyzed. The research emphasized the crucial role of cognitive self-regulation strategies in shaping students' reading performance and overall proficiency.

Zarei and Hatami (2012) investigated the correlation between self-regulated learning components and L2 vocabulary knowledge and reading comprehension among Iranian EFL learners. The study highlighted the differential impact of various self-regulated learning components on vocabulary and comprehension and underscored the importance of self-check and effort in improving reading comprehension.

In 2008, Pratontep and Chinwonno focused on self-regulated learning in Thai university students participating in an EFL extensive reading program. Their study demonstrated that targeted self-regulated learning training, with a focus on metacognitive and performance strategies, significantly enhanced students' reading comprehension abilities.

Also, Al Asmari and Ismail (2012) explored the predictive power of self-



regulated learning strategies on reading comprehension proficiency among English as a foreign language students. Their findings emphasized the role of strategies such as rehearsal, self-talk, and elaboration in boosting reading comprehension skills.

Mizumoto (2013) delved into enhancing self-efficacy in vocabulary learning through a self-regulated learning framework. The study highlighted the pivotal role of self-regulated learning in increasing participants' self-efficacy in vocabulary acquisition which led to improvements in vocabulary knowledge.

A study by Hamedani (2013, as cited in Yastibas and Yastibas, 2014) examined the intricate relationship between self-efficacy and self-regulation in the context of vocabulary acquisition among Iranian EFL learners. The study underscored the strong connection between self-efficacy and self-regulation and how this synergy facilitated enhanced vocabulary acquisition among learners.

#### **IV. Assessments Using E-portfolio Approach**

Yastibaş (2013) discussed a theory on the efficacy of e-portfolios in oral communication course. According to the study, utilizing e-portfolios for assessment purposes enhanced students' self-assessment abilities by allowing them to track their learning journey, identify strengths and weaknesses, and actively address areas of improvement. E-portfolio based assessment instilled a sense of ownership and accountability in students which fostered self-confidence, motivation, and deeper engagement in the learning process. Moreover, students exhibited increased participation as they gained autonomy over the organization, selection, and customization of their e-portfolios.

In a separate investigation, Tonbul (2009) (as cited in Yastibas and Yastibas, 2014) focused on crafting an e-portfolio model tailored for university settings. The findings underscored the value of e-portfolios in promoting reflective practices among students which enabled them to recognize their competencies and areas that need improvement. The e-portfolio assessment also nurtured collaboration and interaction between educators and learners which consequently facilitated a more enriched learning environment. Students, in turn, assumed greater responsibility for their academic journey, honed their

self-assessment skills, and found renewed motivation for learning.

Abbaszad Tehrani (2010) (as cited in Yastibas and Yastibas, 2014) explored the use of net-folios, a synonym for e-portfolios, to enhance writing skills. The study revealed that net-folios empowered students to steer their learning process by taking charge of the content that ultimately fostered a culture of self-assessment and peer feedback. This dynamic environment encouraged students to learn from one another, identify strengths and weaknesses, and monitor their progress effectively.

Delving into the impact of e-portfolios in writing classes, Erice (2015) (as cited in Yastibas and Yastibas 2014) highlighted how these tools empower students to drive their learning experiences. By enhancing self-assessment skills, fostering motivation, and facilitating progress tracking, e-portfolios emerged as instrumental assets in nurturing students' academic growth.

The studies presented above collectively underscored the manifold benefits of e-portfolio-based assessment, aligning with the insights presented in "Assessing with ePortfolios" (n.d.). The article underscores the role of e-portfolios in fostering independent, self-directed learning, enabling students to reflect on their academic journey, and fostering personalized learning spaces. On the other hand, Chang (2008) categorizes the contributions of e-portfolio assessment to emphasize its role in student organization, self-learning development, peer interaction, and overall enhancement of learning outcomes. Hence, ultimately, e-portfolios can serve as catalysts for student empowerment, creativity, and technological proficiency.

## **V. Conclusion**

The combination of e-portfolios and self-regulated learning is a powerful synergy that could revolutionize ESL education. E-portfolios offer students a platform to showcase their learning journey, achievements, and growth through digital organization and reflective capabilities. By using e-portfolios, students can engage in self-regulated learning practices like goal setting and self-assessment, enhancing their autonomy, motivation, and metacognitive awareness.

Integrating e-portfolios and self-regulated learning promotes continuous

improvement, personalized learning, and student empowerment. Students can leverage the motivational and reflective aspects of e-portfolios to enhance ESL skills, drive their educational progress, and take ownership of their learning. This approach benefits individual learners and improves educational programs by encouraging student engagement, critical thinking, and collaboration between students and educators.

As educators explore the potential of e-portfolios and self-regulated learning in the field of ESL education, it becomes evident that these tool and learning approach can unlock student potential, foster creativity, and improve learning outcomes. Embracing this holistic approach to ESL education allows institutions to create a supportive environment that nurtures student growth, motivation, and success, and shape the future of learning and teaching in the digital age.

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