



INTEGRATIVE LEARNING E-PORTFOLIO AS ACADEMIC REQUIREMENTS IN NEW NORMAL (I-LEARN) FOR SENIOR HIGH

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Republic of the Philippines
Department of Education
REGION X – NORTHERN MINDANAO
SCHOOLS DIVISION OF EL SALVADOR CITY

APPROVAL SHEET


In fulfillment of the requirements for the Basic Education Research Fund (BERF), this study titled: **Integrative Learning e- Portfolio as Academic Requirements in New Normal (I-LeARN) for Senior High**, is hereby recommended for acceptance and approval


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ABSTRACT

This study explores the benefits of integrating Wakelet, a mobile application, into the academic landscape by assessing the performance task proficiency of Grade 12 Humanities and Social Sciences students across various subjects through a unified thematic e-portfolio. The research investigates the feasibility and practicality of employing Wakelet as a unified assessment tool to minimize redundancy in common competencies across subjects. Participants, initially unfamiliar with the Wakelet app, engaged in this teaching and assessment strategy to identify perceived usefulness, ease of use, behavioral intentions, and attitudes toward Wakelet in the context of integrative learning e-portfolios. Descriptive statistics, derived from survey results, provide insights into learners' perceptions and attitudes towards the app. The total mean scores consistently reveal high agreement among students regarding Wakelet's perceived usefulness (4.40), overall positive perception (4.68), positive behavioral intentions (4.30), and positive attitudes (4.66). The study's findings suggest that integrating Wakelet into the learning process positively influences students' perceptions, attitudes, and intentions, providing a promising avenue for further exploration and integration of technology in education.

Keywords: *Integrative Learning Portfolio, Unified/ Thematic Portfolio, and Wakelet App Technology Integration*

I. Context and Rationale

Senior High School is a two-year program of specialized upper secondary education; students may select a specialization in accordance with their abilities, interests, and educational options. The subjects a student will take in Grades 11 and 12 will depend on the professional track they choose. SHS courses fall into one of two categories: the Core Curriculum or particular Tracks. Under the Core Curriculum, there are seven different Learning Areas. Languages, literature, communication, math, philosophy, the natural sciences, and the social sciences are among them. The SHS curriculum includes up-to-date material from a few General Education areas. There are three tracks available to senior high school students: academic, technical-vocational-livelihood, and sports and the arts. The Academic track includes three strands: Accountancy, Business and Management (ABM); Humanities and Social Sciences (HUMSS); and Science, Technology, Engineering, Mathematics (STEM) (Gazette, 2023).

According to the program's objective, graduates of K–12 should be appropriately skilled in 21st-century core competencies, emotionally mature and competent, globally competitive, legally employable, and equipped for the workforce, entrepreneurship, or higher education. The K–12 curriculum is a measure that improves the Philippine Educational System by bolstering and expanding the curriculum and lengthening the period of basic education. (Republic Act No. 10533)

In El Salvador City National High School at El Salvador City, Misamis Oriental, the Senior High offers Academic Track on Humanities and Social Sciences (HUMSS). This strand is now offered for two years already and sooner the first batch of the future graduates on this track will exit the course. Furthermore, Division Memorandum 259, s. 2021 “Policy on Harmonizing Senior High School Subject Offerings Across the Region” suggested curriculum subjects the same to other school institutions. And for Grade 12 curriculum, there are nine subjects in the first semester composed of Health Optimizing and Physical Education 3; Personal Development; Philippine Politics and Governance; Understanding Culture, Society and Politics; Creative Non- Fiction; English for Academic and Professional Purposes; Practical Research II; and Trends, Network, and Critical Thinking in the 21st Century. Moreover, HUMMS in second semester offers the following subjects, Contemporary Arts From the Region; Media Information Literacy; Pagsulat sa Piling Larangan (Akademik); Physical Education 4;

Community Engagement, Solidarity and Citizenship; Culminating Activity; Entrepreneurship; and research Project. Therefore, in every semester the students are preparing eight to nine portfolios of their performance tasks for all subjects offered every semester. These preparation of students costs more time, effort, and expenses to the learners. Thus, the teachers proposed to have a unified/ thematic portfolio that is integrated, where, there will only be one integrated learning portfolio for eight to nine subjects in every semester.

The Department of Education Division of El Salvador City Curriculum Implementation Division headed by Chief Ninian A. Alcasid, Ph.D., conducted online training of teachers on unified/ thematic portfolio last school year 2021. The division encourage and imposed the use of portfolio assessment in the curriculum instruction and assessment.

Assessing students' ability in this time of pandemic to solve problems creatively and critically as well as to effectively present and communicate their ideas is an increasingly important part of today's global curriculum. Phothongsunan (2020) stated that authentic measures such as presentations, reflections, projects, and portfolios are becoming increasingly important in assessing students' ability to do so. "Portfolio is a purposeful, systematic process of collecting and evaluating student products to document progress toward the attainment of learning targets" (McMillan, 2011, p. 257).

A portfolio serves as an informative collection of student work that shows students' efforts, development and achievement (Snaveley and Wright, 2003). Since these assessments engage students in learning and call for thinking skills, they are consistent with cognitive theories of learning and motivation as well as societal needs to prepare students for an increasingly complex workplace (Maeroff, 1991). Portfolios require students to collect and reflect on examples of their work; thus, they can provide an effective means for helping students become more self-reflective and involved in their own learning (Zollman & Jones, 1994). To show the progression of the student's performance, portfolios can be both a process and a product. One of the most important aspects of this approach is the constant self-reflection that helps the student become more confident and encourages him or her to learn on his or her own.

A number of studies have shown that assessing students' progress and learning through portfolios is an effective method in teaching-learning process. As studied by Phothongsunan (2020), students and teachers' perceptions of portfolio assessment was conducted as part of the study. Both a portfolio attitude survey from the students and a teacher questionnaire were used. Most students had a clear understanding of how a portfolio was created and admitted that the portfolio could help them learn how to write better in a variety of ways.

Integrative learning is a cognitive outcome that reveals students making intellectual connections, bringing sources together, and integrating them into one. When it comes to understanding integrative learning, the term itself has not yet been defined or operationalized. In the words of Huber and others (2007), "the concept is still evolving as educators reinvent its meaning within specific contexts."

Advantages of Integrative Portfolio versus non-Integrative Portfolio

The push for integrative and lifelong learning is accompanied by the need for greater accountability in organizations and institutions across the world. In order to be successful in today's workplace, leading educational scholars believe that today's college students must be taught the ability to be highly flexible, integrative, and adaptive life-long learners (Newell, 1999). When it comes to keeping up with the fast-paced changes in knowledge and work roles, they must be people who can adapt (Stuart & Dahm, 2006). Today's students must develop a variety of capacities to integrate what they learn in various situations and over time in order to meet these requirements (Huber & Hutchings, 2004; Newell, 1999). Higher education institutions around the world are spending a lot of money developing new curricula and technologies to promote integrative learning in response to these challenges (Huber & Hutchings, 2004). By using e-Portfolios, students can connect their various experiences, make sense of what they've learned and develop meaningful digital identities (Barrett, 2007; Cambridge, 2008; Clark and Eynon, 2009).

Integrative Learning e- Portfolio Using Wakelet App

Wakelet according to Ramasamy and Mani 2022, it assists in sharing and organizing information in this case. It is very accessible and user-friendly. Users may come together, plan, online content, including articles, pictures, videos, and social media network postings made using Wakelet, a free service. Users may include numerous website connections. shared based on their need. Sign up for a Wakelet account by clicking the "Sign Up" button. home page before to starting. Utilize a social media account such as Google, Facebook, or another to instead of using simply your email address and password, create an account. Wakelet is the recognized a Google for Education partner. Moreover, Wakelet has a mobile application that Users are able to create and distribute their works. In this study, both teachers and students with Wakelet account can assess the performance tasks integrated portfolio of learners anytime and anywhere. Thus, this study aims to know the effectiveness and effect of integrative learning e- portfolio using Wakelet App to the students and teachers' teaching and learning.

Action Research Question

This study intends to:

1. Identify students perceived usefulness, perceived ease of use, and behavioral intentions towards Wakelet for Integrative Learning E-Portfolio on Grade 12 Humanities and Social Sciences students.
2. Identify students' attitudes towards the use of Wakelet App for Integrative Learning E-Portfolio on Grade 12 Humanities and Social Sciences students.

II. Research Methods

Instrument and Strategy

Instrument

The pilot group was composed of five (5) senior high school teachers and Ninety- Four (94) grade 12 students for next school year 2023- 2024 based on current Learners Information System records. The utilized research tool was a questionnaire

that had been adjusted and revised based on prior studies (Davis, 1989; Dizon, 2016; Douglas & Miller, 2006; Umbit & taat, 2016; Quah, W. B.2023).

The questionnaire utilized in this study was structured into five sections (Quah, 2023; Ramasamy & Mani, 2022). The first section gathered information about the demographic background of the respondents. In the second section, Students' perceived usefulness towards the use of Wakelet for Integrative Learning E—Portfolio was measured using a set of five items, adapted from Quah (2023) and Davis (1989). The third section gauged the perceived ease of use of Wakelet with 10 items, drawing from the work of Umbit and Taat (2016). The fourth section focused on students' attitudes toward the use of Wakelet, comprising six items derived from Douglas and Miller (2006). The fifth section addressed students' behavioral intentions with two items, based on Dizon (2016). The questionnaire employed a five-point Likert scoring scale, where 5 = strongly agree, 4 = agree, 3 = not sure, 2 = disagree, and 1 = strongly disagree. Demographic data were analyzed using frequency and percentage statistics, while means and standard deviations were used for quantitative analysis of perceptions related to Wakelet's usefulness, usability, attitudes, and behavioral intentions. The analysis used the following ranges: low/negative (1.00-1.67), moderate (1.68-3.33), and high/positive (3.34-5.00)

Strategy

A graphical presentation is shown below on how the strategy is being implemented:

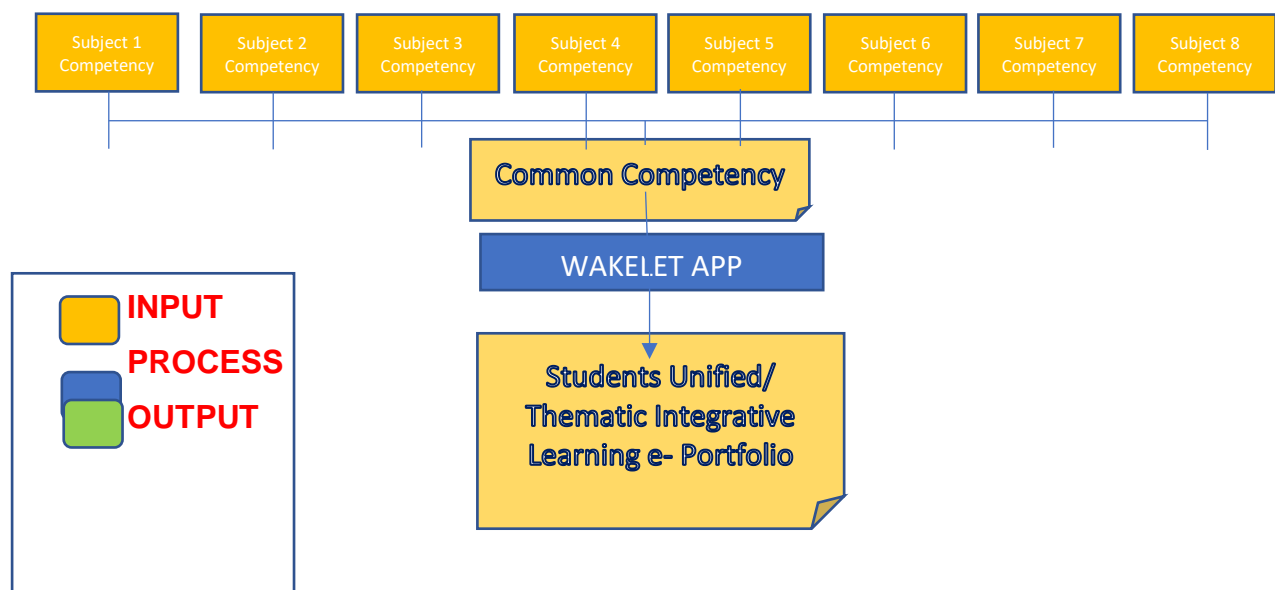


Figure 1. Graphical Presentation of Strategy for Implementation

Process and design are used to maximize the common competencies across all subjects into one Integrative Learning E- Portfolio.

Action Research Methods

a. Participant

Research participant are purposively selected eleven (5) Senior High School Teachers and randomly selected fifty (50) out of one hundred twenty- seven (127) grade 12 students of Humanities and Social Sciences Strand.

b. Data Gathering Procedures

- Survey will be conducted to determine students perceived usefulness, perceived ease of use, and behavioral intentions towards Wakelet on Integrative Learning E-Portfolio for Grade 12 Humanities and Social Sciences students.
- Survey will be conducted to Identify students' attitudes towards the use of Wakelet App for Integrative Learning E-Portfolio for Grade 12 Humanities and Social Sciences students

c. Data Analysis

1. Mean response and standard deviation will be used from the results of the survey conducted.

III. RESULTS AND DISCUSSIONS:

Table 1. Mean and Standard Deviation of Students' Perceived Usefulness of Wakelet on Integrative Learning E- Portfolio for Grade 12 Humanities and Social Sciences Students.

ITEM	Mean	S.D.	Level
1 Wakelet improved my learning performance.	4.33	.471	High
2 Wakelet increase my level of understanding.	4.23	.559	High
3 Wakelet improved my learning effectiveness.	4.30	.737	High
4 I found Wakelet very useful for me.	4.40	.712	High
5 Through Wakelet, E- Portfolio content is easier to learn.	4.73	.442	High
TOTAL MEAN	4.40	.584	High

The results from Table 1 reveal that Grade 12 Humanities and Social Sciences students perceive Wakelet as highly useful in the context of integrative learning e-portfolio. The high mean of 4.33 in item 1 indicates a strong consensus that Wakelet positively impacts learning performance. This suggests that students believe Wakelet contributes significantly to their academic achievements.

Meanwhile, the mean of 4.23 in item 2 demonstrates a high level of agreement that Wakelet increases students' understanding of the subject matter. Although there is slightly more variability in opinions (indicated by the higher standard deviation), the overall sentiment remains positive. Furthermore, the Enhanced Learning Effectiveness (Item 3) despite a higher standard deviation of 0.737, the mean of 4.30 suggests that students, on average, agree that Wakelet improves the effectiveness of their learning. The variability may indicate diverse perceptions among students.

The mean of 4.40 in item 4, Overall Usefulness for the statement "I found Wakelet very useful for me" indicates a high level of perceived usefulness. The standard deviation of 0.712 suggests some variability, but the majority of students hold a positive view. On the other hand, Easier Learning through Wakelet (Item 5), the highest mean of 4.73 suggests a very strong consensus that Wakelet makes E-Portfolio content easier to learn. The low standard deviation of 0.442 indicates a high level of agreement among students, emphasizing the positive impact of Wakelet on content accessibility.

The total mean of 4.40 reflects a consistently high overall agreement among students regarding the perceived usefulness of Wakelet. While there is some variability in individual responses, the majority of students express a positive perception of Wakelet's contribution to their integrative learning e-portfolio.

In conclusion, the results from Table 1 affirm that Grade 12 Humanities and Social Sciences students find Wakelet to be a valuable tool that positively influences their learning performance, understanding, and overall learning effectiveness. The platform is perceived as very useful, and students believe that it facilitates easier learning of E-Portfolio content. The overall positive sentiment is evident, supporting the integration of Wakelet into the learning process.

Table 2. Mean and Standard Deviation of Perceived Use of Wakelet on Integrative Learning E- Portfolio for Grade 12 Humanities and Social Sciences Students.

ITEM	Mean	S.D.	Level
1 Wakelet will save time in compiling performance tasks.	4.47	.718	High
2 I feel comfortable using Wakelet.	4.53	.763	High
3 I feel Wakelet easy to use.	4.90	.300	High
4 Wakelet is very useful to me.	4.70	.458	High
5 Wakelet provides accurate information	4.73	.442	High
6 Wakelet provides good information	4.67	.471	High
7 Wakelet provides timely information	4.70	.458	High
8 Wakelet provides relevant information	4.67	.471	High
9 Wakelet provides easy-to-understand information	4.73	.442	High
10 Wakelet provides detailed information	4.70	.458	High
TOTAL MEAN	4.68	.498	High

The results from Table 2 suggest that Grade 12 Humanities and Social Sciences students have a positive perception of various aspects related to the use of Wakelet in integrative learning e-portfolio: The mean in item 1 of 4.47 suggests that students believe Wakelet will save time in compiling performance tasks. The variability (indicated by the higher standard deviation) may suggest individual differences in perceptions, but the overall sentiment is positive. Meanwhile, The high mean of 4.53 in item 2, user comfort suggests that students feel comfortable using Wakelet. The slightly higher standard deviation may indicate varied comfort levels among students, but the overall trend is positive.

Item 3, Ease of Use with the highest mean of 4.90 indicates a very strong agreement that students find Wakelet easy to use. The low standard deviation suggests a high level of consensus among students, highlighting the platform's user-friendly nature. Furthermore, items 4 to 10 which includes overall usefulness and information quality, the high mean scores (ranging from 4.67 to 4.90) for items related to usefulness, accuracy, timeliness, relevance, understandability, and detail of information suggest a positive perception of Wakelet in providing valuable and reliable content for the e-portfolio.

The total mean of 4.68 reaffirms the overall positive perception of Wakelet among students. While some variability exists in individual responses, the majority of students express a favorable view of Wakelet's contribution to integrative learning e-portfolio. In conclusion, the findings from Table 2 indicate that Grade 12 Humanities and Social Sciences students perceive Wakelet as a useful and user-friendly tool for compiling performance tasks. The positive attitudes extend to various aspects, including the platform's ease of use, timeliness, relevance, and quality of information provided. These positive perceptions contribute to a high overall agreement regarding the perceived use of Wakelet in the context of integrative learning e-portfolio.

Table 3. Mean and Standard Deviation of Student Behavioral Intentions Towards the Use of Wakelet on Integrative Learning E- Portfolio for Grade 12 Humanities and Social Sciences Students.

ITEM	Mean	S.D.	Level
1 I intend to compile E- Learning Portfolio with Wakelet in the Future	4.23	.559	High
2 If I am offered, I intent to do E-Portfolio compilation through Wakelet	4.47	.605	High
TOTAL MEAN	4.30	.582	High

The results from Table 3 indicate that Grade 12 Humanities and Social Sciences students have a positive inclination towards using Wakelet for E-Portfolio compilation. The high mean scores for both items suggest a strong agreement with the idea of incorporating Wakelet into their future learning practices.

Intent to Compile E-Learning Portfolio with Wakelet in the Future (Item 1): The mean of 4.23 suggests that students are generally open to the idea of using Wakelet for compiling E-Learning Portfolios in the future. This positive intention may be attributed to the perceived benefits and ease of use identified in previous tables, fostering a favorable attitude towards integrating Wakelet into their learning practices.

Intent to do E-Portfolio Compilation through Wakelet (Item 2): The mean of 4.47 indicates a higher level of intention when students are specifically offered the opportunity to use Wakelet for E-Portfolio compilation. This suggests that if provided with the resources and support, students are likely to actively choose Wakelet as a tool for this purpose.

The total mean of 4.30 reaffirms the overall positive behavioral intentions of students towards the use of Wakelet in the context of integrative learning e-portfolio. This cumulative measure reflects a consistent positive attitude towards adopting Wakelet for future educational activities.

In conclusion, the results from Table 3 suggest that students not only perceive Wakelet as useful but also express a strong intention to incorporate it into their future learning practices, particularly in the context of E-Portfolio compilation. The findings align with the positive perceptions identified in Tables 1 and 2, indicating a comprehensive acceptance of Wakelet as a valuable tool for integrative learning among Grade 12 Humanities and Social Sciences students.

Table 4. Mean and Standard Deviation Student's Attitudes Towards the Use of Wakelet on Integrative Learning E- Portfolio for Grade 12 Humanities and Social Sciences Students.

ITEM	Mean	S.D.	Level
1 like to use Wakelet	4.67	.471	High
2 Wakelet is fun to use	4.63	.482	High
3 Comfortable interacting with other students.	4.40	.712	High
4 Improved the quality of course compared to others.	4.63	.482	High
5 Wakelet provided an interesting learning environment	4.80	.400	High
6 I enjoy myself learning in this environment.	4.80	.400	High
TOTAL MEAN	4.66	.491	High

The results from Table 4 indicate that Grade 12 Humanities and Social Sciences students hold positive attitudes towards the use of Wakelet in their learning environment. Enjoyment and Likability in Items 1 and 2, The high mean scores for "I like to use Wakelet" and "Wakelet is fun to use" suggest that students not only find

Wakelet enjoyable but also express a liking for the platform. This positive attitude contributes to a favorable overall perception of the tool.

Comfortable Interaction in item 3. Despite a slightly lower mean, the high score of 4.40 indicates that students generally feel comfortable interacting with their peers on Wakelet. The variability in responses, as indicated by the higher standard deviation, may suggest individual differences in comfort levels.

The mean in item 4, Quality Improvement of 4.63 suggests that students believe Wakelet has improved the quality of the course compared to other methods. This positive perception aligns with the findings from other tables, reinforcing the platform's positive impact on the learning experience.

The highest mean scores of 4.80 for items 5 and 6 for both "Wakelet provided an interesting learning environment" and "I enjoy myself learning in this environment" highlight a very strong agreement among students regarding the positive and enjoyable learning experiences facilitated by Wakelet.

The total mean of 4.66 reaffirms the overall positive attitudes of students towards using Wakelet in the integrative learning e-portfolio context. Despite some variability in responses, the consistently high mean scores indicate a strong positive sentiment. In conclusion, the findings from Table 4 suggest that Grade 12 Humanities and Social Sciences students not only find Wakelet useful but also enjoy using it, perceive it as fun, and believe it enhances the quality of their learning experience. These positive attitudes contribute to the overall acceptance and satisfaction with the use of Wakelet in the context of integrative learning e-portfolio.

IV. Summary and Conclusion

In summary, the comprehensive analysis of Tables 1 to 4 indicates that Grade 12 Humanities and Social Sciences students have a highly positive perception of the integration of Wakelet into their integrative learning e-portfolio experiences. Table 1 reveals the platform's significant impact on learning performance, understanding, and overall effectiveness, with students finding it very useful and enhancing the accessibility of E-Portfolio content. Similarly, Table 2 emphasizes positive perceptions of Wakelet's time-saving capabilities, user comfort, and overall usefulness in providing accurate and timely information.

Table 3 demonstrates students' strong inclination to use Wakelet for future E-Portfolio compilation, indicating a sustained positive attitude toward integrating the platform into their learning practices. Finally, Table 4 highlights students' positive attitudes and enjoyment in using Wakelet, emphasizing the platform's role in creating an interesting and enjoyable learning environment. The consistently high mean scores across all tables, despite some variability, affirm the overall positive sentiment and acceptance of Wakelet as a valuable tool for integrative learning among Grade 12 Humanities and Social Sciences students. These findings strongly support the integration of Wakelet into the learning process, indicating its effectiveness, user-friendliness, and potential to contribute to a positive and engaging learning environment for students.

V. Recommendations

Based on the comprehensive analysis of the results and discussions across Tables 1 to 4, several research recommendations emerge for further investigation and improvement of the integrative learning e-portfolio using the Wakelet app. Firstly, a qualitative study can be conducted to delve deeper into students' perceptions and experiences, allowing for a richer understanding of their perspectives and uncovering nuanced insights that quantitative measures may not capture. Additionally, a longitudinal study could be employed to track the long-term impact of Wakelet on students' academic performance and learning outcomes. Understanding the sustainability of the positive attitudes and intentions expressed in Tables 1 to 3 over an extended period would provide valuable insights. Furthermore, exploring potential variations in the perceived usefulness of Wakelet across different subjects or courses within the Humanities and Social Sciences can offer tailored insights for curriculum design. Finally, incorporating feedback mechanisms within the Wakelet app and assessing the impact of continuous updates or modifications on user satisfaction and engagement could contribute to refining the platform for optimal educational utility. These research recommendations aim to enhance the depth of understanding and contribute to the ongoing improvement of the integrative learning e-portfolio using the Wakelet app in the academic context.

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