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UTILIZATION OF SCHOOLOGY: ITS RELATIONSHIP TO SELF-ASSESSMENT OF FIRST YEAR BEED STUDENTS

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Abstract:

Central to this research is the utilization of Schoology as a learning modality and its relationship to self-assessment. This study employed the descriptive-correlational research design to determine the nature and magnitude by which these variables are related to each other. It included as respondents thirty first-year Bachelor of Elementary Education students who were enrolled in Notre Dame of Midsayap College during the second semester of Academic Year 2021-2022. Findings of the study revealed that the respondents had always utilized the learning management system (LMS) for uploading and notification, and monitoring and evaluation, and had oftentimes utilized it for activities and submission. However, they had only occasionally utilized it for the timely submission of their tasks. Meanwhile, the respondents were very good in performing their reflection papers, taking multiple choice types of exams and engaging in class discussions. Nevertheless, they were merely fair in doing poem/song compositions. Results bared that there is a moderately strong direct relationship between utilization of Schoology and self-assessment, and that relationship is highly significant, signifying that the LMS via Schoology had promoted effective learning among the respondents.

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Keywords: Schoology, self-assessment, online learning modality, LMS

1. Introduction

Today's youth are growing up in a time where technology is constantly at their fingertips. The growing world of social media applications and internet sites spike interest in children. Our education as well has shifted to an online system due to the pandemic. Corollarily, educational institutions readily adopt learning management systems to deliver educational courses to their clients.

One of the popular learning management systems gaining popularity nowadays in the field of blended or online learning is Schoology. Masyhudianti, Sutomo, & Suparno (2018) believed that Schoology is an online learning application designed to help improve student skills. This application has made it for teachers to deliver materials easily and fun, monitor the progress of students and assess their performance. With this application, the teacher can keep records of attendance, online textbooks, and quizzes. Sicat (2015) further asserted that Schoology gives students opportunities to engage themselves in the lesson.

However, there are issues regarding the utilization of Schoology. Several studies have shown that technology integration has been affecting academic excellence and the quality of the delivery of instructions by teachers (Francisco & Barcelona, 2020). There is also a skewed perspective that cheating is so easy and can lead to misconceptions about how prevalent cheating really is in the online setting (Online Education, 2022).

Meanwhile, self-assessment is a "wide variety of mechanisms and techniques through which students describe the qualities of their learning processes and products" (Panadero et al., 2016). Self-assessment is vital for online learning since it is an essential skill for distance learners. It has been found that web-based assessment activities and the provision of various forms of feedback are effective in improving the performance and satisfaction of learners (MacFadyen and Dawson 2010; Nachouki & Naaj, 2012; Sun et al., 2018). Early on, Wang (2014) suggested that assessments embedded in an eLearning environment are more effective than those performed via pen and paper, therefore shifting to e-assessment systems and the use of particular assessment strategies carry the potential to improve the performance of the learners. In addition, web-based self-assessments provide rapid or instant feedback directly to the learner, thus learners can be less dependent on the instructor, in turn gaining responsibility for the learning process, potentially enhancing autonomy and self-regulation processes (McDonald & Boud, 2003). Via web-based selfassessments, learners have an opportunity to assess themselves without being dependent on specific learning contexts and specific times, in addition to the advantage of rapid or instant feedback from assessment.

There were a handful of studies conducted before about the utilization of Schoology as a learning management system. Some of these studies employed qualitative research designs (Rosalina, 2018); some researches only included teachers as respondents of the study (Rinenggo and Murdiono, 2019); other researches focused on the perceptions of the students on Schoology (Amalia, 2018); and finally, other researches employed experimental research designs to determine its effectiveness in artistic achievement and creative thinking skills among students (Baharudin et al., 2018). However, to the knowledge of the researchers, there were no studies conducted on the utilization of Schoology and its relationship to the self-assessment of college students using correlational research design. Thus, this study aims to determine the level of utilization of the Schoology platform by college students and find out their self-assessment with respect to assignments, quizzes, performance, projects, participation and exams. Finally, this research strives to ascertain the relationship between the utilization of Schoology and self-assessment.

1.2. Statement of the Problem

- 1) What is the demographic profile of the respondents in terms of age and sex?
- 2) What is the level of utilization by the respondents of the Schoology online learning modality in terms of uploading and notifications, activities and submissions, and monitoring and evaluation?
- 3) What is the self-assessment of the respondents with respect to assignments, quizzes, performances, projects, participation and major exams?
- 4) Is there significant relationship between utilization of Schoology and the selfassessment of the respondents?

1.3. Significance of the Study

- **Students.** This study may promote academic integrity through student selfassessment of learning progress, develops self-directed learning, and increase student motivation.
- **Teachers.** The findings of the study may benefit the teachers through upgrading and enhancing their teaching strategies that will optimize the utilization of Schoology and promote independent learning among students.
- **Parents.** The results of the study may help the parents in understanding and supporting the needs of their children in their learning process by using Schoology online modality and other learning management systems.
- School Administrators. The findings of the study may provide them with information as the basis for formulating policies that will institutionalize self-assessment among college students.
- **Future Researchers.** This study may help future researchers by using the results of this study as a ready reference for their studies relating to the topic of Schoology and self-assessment.

1.4. Scope and Delimitations of the Study

This study focused on the relationship between the utilization of Schoology online learning modality and self-assessment. This study was conducted at Notre Dame of Midsayap College during the second semester of the academic year 2021-2022. The participants were composed of first-year Bachelor of Elementary Education students who were enrolled in the college during the conduct of the study.

The main variable utilization of Schoology only considered three specific variables: uploading and notifications, activities and submissions, and monitoring and evaluation. The main variable self-assessment was narrowed down to the specific variables applicable to the Schoology platform: assignments, quizzes, performance, projects, participation and major exams.

2. Theoretical Framework

This study was essentially driven by the online E-learning theory proposed by David (2015) and Wang (2012) as cited by He (2022). E-learning theory is built on cognitive science principles that demonstrate how the use and design of educational technology can enhance effective learning.

This theory explains the cognitive science concepts underlying effective multimedia learning through the use of electronic educational technologies. This theory belongs to the grand theory of Connectivism because it emphasizes how technologies can be used and designed to create new learning opportunities and promote effective learning. This theory is significant in the study because it encompasses more than just guidelines and processes. It is crucial to understand the key concepts of blended learning. The impact of the integrated learning technique on NDMC BEED students' knowledge of learning concepts determines efficacy. It is judged effective if the integrated learning technique supports learners in grasping ideas and concepts.

2.1. Conceptual Framework

This study postulates that the utilization by the respondents of Schoology online learning modality is correlated to their self-assessment. This relationship is featured in Figure 1.

Figure 1: Schematic Diagram of the Conceptual Framework



As shown in the figure, there were two main variables considered: the utilization of Schoology as the first variable and the self-assessment as the second variable. These variables are also called co-variables in correlational researches (Tutor2u, 2022). The first square contains the variable of the utilization of the Schoology platform with respect to uploading and notifications, activities and submission, monitoring and evaluation. The second square contains the variable of self-assessment with respect to assignment, performance, quizzes, projects, participation, and major exam. The double-headed arrow that connects the two boxes illustrates the relationship between the two variables: utilization of Schoology and self-assessment.

2.1. Hypothesis

This proposition was drawn for testing:

Ho1: There is no significant relationship between the utilization of Schoology and self-assessment.

3. Methods

3.1. Research Design

The descriptive-correlation research design was used in this study. It described the personal profile of the respondents, their utilization of the Schoology platform, and their self-assessment. It also determined the strength (magnitude) and nature (direction) of association between the two variables – that is, how much variation is caused by one variable in relation to the variation caused by another variable.

3.2. Locale of the Study

The research was conducted at Notre Dame of Midsayap College, a private and religious education institution which is operated by the Oblates of Mary Immaculate (OMI). It is situated at Poblacion 5, Midsayap, Cotabato. This study took place during the second semester of the academic year of 2021-2022. This research included as respondents thirty first-year Bachelor of Elementary Education who were enrolled in the college during the conduct of the study.

3.3. Sampling Technique

This study made use of a homogeneous purposive sampling design. A homogeneous sample is appropriate when the research question that is being addressed is specific to the characteristics of the particular group of interest (Laerd Dissertation, 2012). Thus, the specific characteristics of the particular group of interest for the researchers in this study were that (1) they were first-year college students and that (2) they were enrolled and taking Bachelor of Elementary Education.

3.4. Instrumentation

This study made use of a self-constructed survey questionnaire. It was comprised of three major parts. Part I requested the personal profile of the respondents in terms of age and sex. Part II drew out information relative to the utilization of Schoology platform. Part III elicited from the respondents their self-assessment of their academic performance in utilizing Schoology platform.

The questionnaire thus constructed consisted of the actual set of structured questions to be answered by the respondents. The responses of the respondents for Part II were expressed in terms of the 5-point Likert scales and descriptions as follows: 1 means "Never", 2 means "Seldom", 3 means "Sometimes", 4 means "Oftentimes", 5 means "Always". The responses of the respondents for Part III were expressed in terms of the 5-point Likert scales and descriptions as follows: 2 means "fair", 4 means "Good", 5 means "Very Poor", 2 means "Poor", 3 means "Fair", 4 means "Good", 5 means "Very Good".

3.5. Data Gathering Procedure

The researchers sent messages through electronic mail (e-mail) to the prospective respondents containing the survey link, clicking on which would take them to a secure online survey form created and prepared by the researchers through Google form (QuestionPro, 2022). From there, they could fill in the survey questionnaire and the results were promptly retrieved by the researchers for coding, tabulation, analysis and interpretation.

3.6. Data Analysis

The data collected in this study were treated as numerical data. They were presented, analyzed and interpreted by applying the following statistical tools: frequency (f) and percentage distribution (%) for presenting the personal profile of the respondents; mean (m) for measuring the utilization of Schoology by the respondents and their self-assessment; standard deviation (SD) for computing the dispersion of their responses, Pearson product-moment correlation (Pearson-r) for determining the strength and direction of the relationship between utilization of Schoology and self-assessment, and t-Test for establishing the significance of such relationship.

4. Results and Discussion

4.1. Profile of Respondents

Table 1 shows that the greatest number (f=28 or 93.3%) of the respondents are 18 to 22 years old, and a small number (f=1 or 3.3%) of them are 23 to 27 years old, and 28 years old and above. Most (f=25 or 83.3%) of them are females while a small of number (f=5 or 16.7%) of them are males.

Table 1: Distribution of respondents in terms of age and sex				
Characteristics	F	%		
Age				
18 – 22	28	93.3		
23 – 27	1	3.3		
28 and above	1	3.3		
Total	30	100.0		
Sex				
Male	5	16.7		
Female	25	83.3		
Total	30	100.0		

4.2. Utilization of Schoology

Table 2: Utilization of Schoology by the Respondents				
Item	Mean	SD	Description	Interpretation
On Uploading and Notifications				
1. I see the reminders posted by my teachers.	4.47	0.77	Always	Very High
2. I see the deadlines in the upcoming section.	4.57	0.63	Always	Very High
3. I return to the past lessons posted by our	3.87	0.82	Oftentimes	High
teachers.	0.07	0.02		
4. I open the folders that contain learning	4.63	0.72	Always	Very High
materials.	1100	0=		, ery right
5. I am notified of newly uploaded learning materials.	4.47	0.90	Always	Very High
6. I see announcements posted by school administrators.	4.77	0.50	Always	Very High
Overall Mean / SD	4.46	0.72	Always	Very High
On Activities and Submissions				
7. I participate in class discussions.	4.27	0.83	Always	Very High
8. I collaborate/interact with my classmates.	4.07	0.98	Oftentimes	High
9. I perform my tasks anywhere and anytime.	4.03	0.96	Oftentimes	High
10. I accomplish my tasks/assignments on time.	4.37	0.85	Always	Very High
11. I post comments/reactions in comments section.	4.37	0.85	Always	Very High
12. I send messages to our teachers for queries.	4.50	0.78	Always	Very High
13. I submit my task on time.	3.23	1.25	Sometimes	Moderate
14. I receive the response of my teachers about my queries.	3.53	1.00	Oftentimes	High
15. I enhance my acquisition of knowledge on the course/subject.	3.73	1.11	Oftentimes	High
Overall Mean / SD	4.01	0.96	Oftentimes	High
On Monitoring and Evaluation				
16. I keep track of my grades and performances.	4.17	0.83	Oftentimes	High
17. I am updated of the results of quizzes,	4.07	0.00	A 1	
assignments, major exams.	4.27	0.98	Always	Very High
18. I check my Schoology for the task that I missed.	4.70	0.57	Always	Very High

Table 2: Utilization of Schoology by the Respondents

	9. I check my Schoology for upcoming asks/activities.			0.48	Always	Very High
20. I make sure that all of my activities/tasks are accomplished.		4.83	0.46	Always	Very High	
Overall	Overall Mean / SD			0.67	Always	Very High
Grand Mean / SD			4.32	0.78	Always	Very High
*Scale	Range	Description		Inte	Interpretation	
1	1.00 to <1.80	Never		V	Very Low	
2	1.80 to <2.60	Seldom			Low	
3	2.60 to <3.40	Sometimes		Ν	Moderate	
4	3.40 to <4.20	Oftentimes		Oftentimes High		High
5	4.20 to 5.00	Always		V	Very High	

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The respondents had *Very High* utilization of Schoology (OM=4.46, OSD=0.72) on uploading and notifications. They *Always "see announcements posted by school administrators"* (M=4.77) and *"open the folders that contain learning materials and the deadlines in the upcoming section"* (M=4.63). This implies that in uploading and notification, students can access files without any difficulty. Several researchers (Brett, 2011; Gasaymeh & Aldalalah, 2013; Lim & Mansor, 2011) have argued that the capability of mobile phones to send and receive notifications messages and the growing worldwide popularity and availability has triggered a growing interest in how SMS (Short Message Service) technology can be used in adult education.

The respondents had *High* utilization of Schoology (OM=4.01, OSD=0.96) on Activity and Submission. They *Always "send messages to their teachers for queries"* (M=4.50), *"accomplish their tasks/assignment on time"* (M=4.37), and "post comment/reactions in comment sections" (4.37). These findings support the study of *Low* (2017) wherein students find that submitting assignments, taking tests, making comments, and asking questions are smooth and intuitive for them, and they retain access to resources in their courses after the semester ends (Wall, 2014). Moreover, Schoology increased students' motivation and developed students' positive attitudes toward learning outside the classroom, increased interaction between teachers and students, and increased students' engagement in learning. However, the respondents only *Sometimes "submit their tasks on time"* (M=3.23).

The respondents had *Very High* utilization of Schoology on Monitoring and Evaluation (OM=4.5, OSD=0.67). They *Always "make sure that all of their activities/tasks are accomplished"* (M=4.83), *"check their Schoology for upcoming tasks/activities"* (M=4.80) and *"check their Schoology for the task that they missed"* (M=4.70). This means that utilizing Schoology can help them be more responsible for they can monitor the uploaded materials. According to Manning et al (2011), Schoology has capitalized on the ability to deliver academic information to students. Access to this information increases communication between teachers and students and holds students accountable for their academic responsibilities.

4.3. Self-Assessment by Respondents

Table 3: Self-Asses Item	Mean	SD	Description	Interpretation
For Assignments			1	I
1. Poem / song composition	3.33	1.03	Fair	Moderate
2. Interviewing of people	3.63	0.67	Good	High
3. Reading article	4.13	0.78	Good	High
4. Reflection paper	4.27	0.64	Very Good	Very High
Overall	3.84	0.78	Good	High
For Performances	0.01	0.70	Good	1.1.811
5. Role playing / drama	3.93	0.69	Good	High
6. Reporting	3.80	0.71	Good	High
7. Demonstration of activities (proper	0.00		Cook	
handwashing, teaching etc.)	4.07	0.58	Good	High
8. Rendering a song (jingle)	3.67	0.80	Good	High
9. Delivering a speech	3.53	0.82	Good	High
Overall	3.80	0.72	Good	High
For Quizzes	0.00	0.72	<u> </u>	111611
10. True or false type	4.10	0.66	Good	High
11. Multiple choice type	4.13	0.73	Good	High
12. Matching type	4.17	0.79	Good	High
13. Essay type	4.03	0.85	Good	High
14. Enumeration type	4.03	0.85	Good	High
15. Identification / fill in the blanks	3.97	0.72	Good	
Overall	4.07	0.81	Good	High High
For Projects	4.07	0.76	Good	Ingn
,	3.60	1.04	Good	Uich
16. Collage-making / slogan / poster	3.60	1.04	Good	High
17. Video-production / photography				High
18. Drawing / painting	3.27	1.08	Fair	Moderate
19. Composition of poem, song and jingle	3.37	1.10	Fair	Moderate
Overall	3.50	1.06	Good	High
For Participation	2.72	0.04	<u> </u>	TT' 1
20. Recitation	3.73	0.94	Good	High
21. Making reaction or comments	4.03	0.72	Good	High
22. Asking question / feedbacking	3.87	0.68	Good	High
23. Group activities	4.03	0.49	Good	High
24. Class discussion	4.20	0.55	Very Good	Very High
Overall	3.97	0.68	Good	High
For Major Exams		0.17		
25. True or false type	4.17	0.65	Good	High
26. Multiple choice	4.23	0.63	Very Good	Very High
27. Matching type	4.17	0.65	Good	High
28. Essay type	3.97	0.81	Good	High
29. Enumeration type	4.13	0.57	Good	High
30. Identification / fill in the blank type	4.07	0.69	Good	High
Overall	4.12	0.67	Good	High
Grand Mean / SD	3.88	0.78	Good	High

*Scale	Range	Description	Interpretation
1	1.00 to <1.80	Very Poor	Very Low
2	1.80 to <2.60	Poor	Low
3	2.60 to <3.40	Fair	Moderate
4	3.40 to <4.20	Good	High
5	4.20 to 5.00	Very Good	Very High

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The respondents had *High* self-assessment for assignment (OM=3.84, OSD=0.78). They were *Very Good* at doing *"reflection paper"* (M=4.27). This result support the study of Costa & Kallick (2008) which found out that learning through reflection is one of the most interesting experiences that students might have. Considered as a very good tool for self-assessing learning, it is believed that teachers who promote reflective classrooms ensure that students are engaged in the process of making meaning.

However, they were merely *Fair* in "*poem/song compositions*" (M=3.33). According to Ollila & Jantas, poetry consists of structured written expressions and is able to describe someone's ideas, expressions, and opinions writing, and that poetry is one of the important basic competencies that have to be mastered by students. Shakerian et al. (2016) discovered that increasing the motivation of students to learn can be achieved by creating a multi stimulant environment. By using song, this multi-stimulant environment can be established in the class because of its context in a pleasant way.

The respondents had *High* self-assessment for Performances (OM=3.80, OSD=0.72). They were good in *"demonstration of activities (proper handwashing, teaching etc."* (M=4.07), *"role playing/drama"* (M=3.93), and *"reporting"* (M-3.80). Horgan (2015) found that demonstrations encourage generalization because they promote active participation on the part of the students. Similarly, role-play has been touted as a tool better suited for the needs of today's college students than more traditional teaching methods (Rosa, 2012, and Bobbit et al., 2001). According to Rao & Stupans (2012), role-play is a pedagogy that has been used in a wide variety of contexts and content areas. Likewise, group reporting is a form of cooperative learning. Here, students are responsible for their own learning and for helping others to learn. As a form of cooperative learning technique, it maximizes the diversity of the people who are part of the group to foster dynamic and creative learning and demonstration of activities (Skalicky and Brown, 2010). Encouraging students to learn cooperatively will not only support their academic success but will also equip them for life-long learning as well.

The respondents had *High* self-assessment for quizzes (OM=4.07, OSD=0.76). They were *Good* in *"matching type"* (M=4.17) and *"multiple choice type"* (M=4.13) of quizzes. Matching type and multiple-choice type of assessments are the most widely used selection type test, perhaps because these questions can be used to test such a wide range of instructional objectives, are easy to conduct and score, and are less prone to bias and subjectivity (Laprise, 2012).

The respondents had *High* self-assessment for projects (OM=3.50, OSD=1.06). They were *Good* in *"video-production/photography"* (M=3.77). Videography can be used by both

teachers and students as complementary or even a substitution for written term papers, reflections, reporting and evaluation of learning. However, they were only *Fair* in *"composition of poem, song and jingle"* (M=3.37). Manurung et al. (2019) argue that a basic level of composition in terms of poems must satisfy the constraints of grammaticality, meaningfulness and potencies.

The respondents had *High* self-assessment for participation (OM=3.97, OSD=0.68). They were *Very Good* in class discussion (M=4.20, SD=0.55). According to Smith et al., (2009), class discussion is very useful when teachers want their students to exchange their ideas and show their understanding of the topic because accordingly class discussion can enhance students' understanding by talking with other classmates, especially in a lecture class. It means that the teachers were effective.

However, the respondents were *Good* in "group activities" (M=4.03) and in "making reactions or comments" (M=4.03). Recitation is a method of teaching by requiring students to make resumes with their own sentences. With this method of recitation, students will dare to write in their own way, be responsible for the results of their writing and will always remember the material that is taught. So, recitation means students quote or take their own parts of the lesson from certain books, then self-study and practice until it is ready as it should be.

The respondents had *High* self-assessment for major exams (OM=4.12, OSD=0.67). They were even Very Good in *"multiple choice type"* of exams (M=4.23). Multiple-choice items were both easier and less discriminating than constructed-response items, and produced a markedly different pattern of answering strategies. The respondents were *Good* in *"true and false type"* (M=4.17) and *"matching type"* (M=4.17) of exams.

However, they had relatively low, but still good, self-assessment for "essay type" of the exam. According to Toba et al. (2019), essay type is crucially essential for EFL (English as a Foreign Language) learners, particularly for the students at the tertiary level. In an academic setting, enhancing writing skills for students is the primary objective of education. For students to develop their writing competence, they are expected to produce a well-structured piece of writing. Moreover, mastering how to organize, regulate writing behaviour, review the composition, and provide readers awareness have also become the crucial aspect of creating a well-produced piece of writing.

4.4. Relationship between Utilization of Schoology and Self-Assessment

Variables	r-value	Indication	p-value	Indication	Decision
Utilization of Schoology	*0.57	Moderately strong direct	**0.00 (2-tailed)	The relationship is highly significant	Reject Null (H₀) hypothesis
Self-Assessment		relationship			54

Table 4: Relationship between Utilization of Schoology and Self-Assessment by Respondents

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*Correlation r-index	
r-value	Indication
0	No relationship
>±0.0 to <±0.20	Very weak direct / Inverse relationship
±0.20 to <±0.40	Weak direct / Inverse relationship
±0.40 to <±0.60	Moderately strong direct / Inverse relationship
±0.60 to <±0.80	Strong direct / Inverse relationship
±0.80 to <±1.00	Very strong direct / Inverse relationship
±1.00	Complete direct / Inverse relationship

**Significant at p-value ≤ 0.01 (2– tailed).

Results reveal that the r-value for the variable Utilization of Schoology in relation to the variable Self-assessment is 0.57. This result indicates that there is a moderately strong direct relationship between the said variables. Moreover, the absolute computed p-value is 0.00 which is less than the set p-value of ≤ 0.01 (2–tailed), this indicates that such relationship is significant. It implies that the respondents who had relatively higher utilization of Schoology are also those who had a relatively higher level of self-assessment; while those who had relatively lower utilization of Schoology are also those Fassessment. This relationship is visualized in Figure 2.





This finding parallels the study of Heo & Han which found that self-assessments are highly correlated with Learning Management Systems (LMS). This result substantiates the observation of Wang (2014) that self-assessments embedded in an eLearning environment are more effective than those performed via pen and paper. Wang (2014) further contented that via web-based self-assessments, learners have an opportunity to assess themselves without being dependent on specific learning contexts and specific times, in addition to the advantage of rapid or instant feedback from assessment.

5. Conclusion

The results of this study provided information that substantiates the E-learning theory of David (2015) and Wang (2012) that technologies can be used and designed to create new learning opportunities and promote effective learning (as cited in He). Schoology provided the respondents with learning opportunities by having access to the learning materials uploaded by their teachers and the announcement posted by the school administrators, by participating in class discussions, posting comments/reactions in the comments section and sending messages to their teachers for queries, and by checking their Schoology the task that they missed, checking their Schoology for an upcoming task/activities and making sure that all of their activities/tasks are accomplished. Schoology also promoted effective learning as revealed by the findings that there is a moderately strong direct relationship between utilization of Schoology and self-assessment of the respondents.

5.1. Recommendations

- 1) The teachers shall assign students appropriate numbers of tasks per week, give clear and simple instructions, encourage students to submit the requirements on time through rewarding early submissions, and motivate students to engage in song and poem composition.
- 2) Students shall give priority to submitting their tasks on time, preparing their gadgets (cellphones, laptops) for upcoming activities, and returning to the past lessons posted by their teachers.
- 3) The school administrators may formulate policies that will institutionalize selfassessment by the students of their academic performances to make the evaluation process more engaging and learner-centered.
- 4) A parallel study about the utilization of Schoology and its relationship to the selfassessment of students may be conducted that will cover a wider scope of locale and more diverse types of respondents.

Conflict of Interest Statement

The authors declare no conflicts of interest.

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References

- Abidin, N. S. Z. (2022). Can the sample used for pilot testing be included in the final research sample? Retrieved from <u>https://www.researchgate.net/post/Can-the-sample-used-for-pilot-testing-be-included-in-the-final-research-sample</u>
- Akram, A., Fu, C., Li, Y., Javed, M. Y., Lin, R., Jiang, Y., & Tang, Y. (2019). Predicting students' academic procrastination in blended learning course using homework submission data. IEEE Access, Access, IEEE, 7, 102487–102498 https://doi.org/10.1109/access.2019.2930867
- Atchley, W., Wingenbach, G., & Aners, C. (2013). Comparison of Course Completion and Student Performance through Online and Traditional Courses. International Review of Research in Open & Distance Learning, 14(4), 104-116. Retrieved from <u>http://www.irrodl.org/index.php/irrod</u>
- Baharudin, H., Nasir, M. K. M., Yusoff, N. M. R. N., & Surat, S. (2018). Assessing Students' Course Satisfaction with Online Arabic Language Hybrid Course. Advanced Science Letters, 24, 350-352. <u>https://doi.org/10.1166/asl.2018.12005</u>
- Bell, S., (2010). Project-based learning for the 21st century: Skills for the future. The Clearing House, 83: 39-43 Retrieved from <u>https://eric.ed.gov/?id=EJ872047</u>
- Bobbit, L. M., Inks, S. A., Kemp, K. J. & Mayo, D. T. (2000). Integrating marketing courses to enhance team-based experiential learning. Journal of Marketing Education, 22(1), 15-24.
- Brown, G. T., and Harris, L. R. (2013). "Student self-assessment," in Sage Handbook of Research on Classroom Assessment, ed J. H. McMillan (Los Angeles, CA: Sage), 367– 393. DOI: 10.4135/9781452218649.n21
- Carey, P. (2013). Student as co-producer in a marketised higher education system: A case study of students' experience of participation in curriculum design. Innovations in Education and Teaching International, 50(3), 250–260. DOI: 10.1080/14703297.2013.796714

- Costa, A. L. & Kallick, B. (2008). Learning and leading with habits of mind: 16 essential characteristics for success. Retrieved from <u>https://eric.ed.gov/?id=ED509125</u>
- Deno, S. L. (2003). Developments in curriculum-based measurement. The Journal of Special Education, 37(3), 184–192.
- Dumova, T. (2012). The usability of online quizzes: Evaluating student perceptions. In S. Kelsey, & K. St. Amant (Eds.), Computer-mediated communication: Issues and approaches in education (pp. 50–61). Hershey, PA: IGI Global.
- Educational Technology Division, (2010). Ministry of Education Communications and Training Sector Smart Pesiaran Bukit Kiara 50604 Kuala Lumpur Malaysia. Retrieved from <u>https://sekolah21.files.wordpress.com/2010/05/project-based-learning-handbook.pdf</u>
- Egbert, J. and Roe, M. (2022). E-learning theory. *PressBook*. Retrieved from <u>https://opentext.wsu.edu/theoreticalmodelsforteachingandresearch/chapter/e-learning-theory/</u>
- Epstein, R. M., Siegel, D. J., and Silberman, J. (2010). Self-monitoring in clinical practice: a challenge for medical educators. J. Contin. Educ. Health Prof. 28, 5–13. DOI: 10.1002/chp.149 Retrieved from https://scholar.google.com/scholar_lookup?author=J.+Dunlosky&author=K.+A.+ Rawson+&publication_year=2012&title=Overconfidence+produces+underachieve ment%3A+inaccurate+self+evaluations+undermine+students%27+learning+and+r etention&journal=Learn.+Instr.&volume=22&pages=271-280#d=gs_qabs&t=1654442180296&u=%23p%3Dmew64Wyy8HYJ
- Falkner, N. J., & Falkner, K. E. (2012). A fast measure for identifying at-risk students in computer science. In Proceedings of the ninth annual international conference on international computing education research (pp. 55–62). ACM. https://dl.acm.org/doi/10.1145/2361276.2361288
- Francisco, C. D. C. & Barcelona, M. C. (2020). Effectiveness of an online classroom for flexible learning. <u>https://files.eric.ed.gov/fulltext/ED607990.pdf</u>
- Gasaymeh, A. M., & Qablan, B. M. (2013). SMS as out-of-class, student-instructor interaction tool: A case study of Jordanian graduate students' perceptions and usage. International Education Studies, 6(8), 147-160.
- He, H. (n.d.). E-learning theory. Theoretical models for teaching and research. *Pressbooks*. Retrieved from <u>https://opentext.wsu.edu/theoreticalmodelsforteachingandresearch/chapter/e-</u>learning-theory/
- Heo, J. C. & Han, S. (2021). The mediating effect of literacy of LMS between selfevaluation online teaching effectiveness and self-directed learning readiness. Retrieve from <u>https://link.springer.com/article/10.1007/s10639-021-10590-4</u>
- Kovalik, C. L., & Hosler, K. A. (2010). Text messaging and the community of inquiry in online courses. MERLOT Journal of Online Learning and Teaching, 6(2), 380- 387. Retrieved 28 Aug, 2016 from <u>http://jolt.merlot.org/</u>

- Kumari T. A., Hemalatha C., Ali M. S., Naresh R. (2020). Survey on impact and learning of the online courses on the present era. Procedia Comput. Sci. 172, 82–91. 10.1016/j.procs.2020.05.167
- Laerd Disseration. (2012). Purposive sampling. Retrieved from <u>https://dissertation.laerd.com/purposive-sampling.php</u>
- Laprise, S. L. (2012). Afraid not: Student performance versus perception based on exam question format. Retrieved from <u>https://www.jstor.org/stable/23247612</u>
- Lim, T., Fadzil M., & Mansor N. (2011). Mobile learning via SMS at Open University Malaysia: Equitable, effective, and sustainable. International Review of Research in Open and Distance Learning, 12(2), 122-137.
- Linn, R. L., & Gronlund, N. E. (2010). Measurement and assessment in teaching. Upper Saddle River, NJ: Merrill
- McDonald, B. P. & Boud, D. (2003). The impact of self-assessment on achievement: The effects of self-assessment training on performance in external examinations. DOI:10.1080/0969594032000121289
- Macfadyen, L. P., & Dawson, S. (2010). Mining LMS data to develop an "early warning system" for educators: A proof of concept. Computers & Education, 54, 588-599.
- Manurung, R., Ritchie G., Thompson, H. (20012). Using genetic algorithms to create meaningful poetic text. Retrieved from <u>https://www.researchgate.net/publication/220080332_Using_genetic_algorithms_to_create_meaningful_poetic_text</u>
- Manning, C. et al. (2011). Tech tools for teachers, by teachers: bridging teachers and students. Retrieved on May 20, 2014 from <u>http://journals.library.wisc.edu/index.php/wej/article/viewFile/379/444</u>
- Masyhudianti, U. K., Sutomo, N., & Suparno, S. (2018). The Effectiveness of Schoology to Teach Writing Viewed from Students' Creativity. Retrieved from <u>https://eric.ed.gov/?id=EJ1250551</u>
- Mehrens, W. A., & Lehmann, I. J. (2016). Measurement and evaluation in education and psychology (3rd ed.). New York, NY: Holt, Rinehart and Winston.
- Nachouki, M. & Naaj, M. A. (2012). Evaluating student satisfaction with blended learning in a gender-segregated environment. Retrieved from http://www.jite.org/documents/Vol11/JITEv11p185-200AbouNaaj0979.pdf
- Online Education. (2022). Cheating in online education: Myth vs. reality. Retrieved from <u>https://www.onlineeducation.com/features/cheating-in-online-education</u>
- Panadero, E., Brown, G. L., and Strijbos, J. W. (2016). The future of student self-assessment: a review of known unknowns and potential directions. Educ. Psychol. Rev. 28, 803–830. DOI: 10.1007/s10648-015-93502 https://www.sciencedirect.com/science/article/abs/pii/S0191491X13000126
- QuestionPro. (2022). Quantitative data collection: Best 5 methods. Retrieved from <u>https://www.questionpro.com/blog/quantitative-data-collection-methods/</u>

- Rao, D. and Stupans, I. (2012). Exploring the potential of role-play in higher education: development of a typology and teacher guidelines. *Innovations in Education and Tea.* Retrieved from <u>https://kipdf.com/exploring-the-potential-of-role-play-in-higher-education-development-of-a-typolo_5b17ec9a7f8b9a7c268b456f.html</u>
- Rinenggo, A. & Murdiono, M. (2020). Utilization of Schoology for the development of PPKn teaching materials based on E-learning. DOI: <u>https://doi.org/10.2991/assehr.k.200130.004</u>
- Rosa, J. A. (2012). Marketing education for the next four billion: Challenges and innovations. Journal of Marketing Education, 34(1), 44-54. Ching International, Vol. 49 No. 4, pp. 427-436.
- Rosalina, M. (2018). Analysis The use of Schoology E-Learning towards students' learning motivation enhancement in STKIP Surya. Retrieved from <u>https://jurnal.untidar.ac.id/index.php/ijose/article/view/614</u>
- Shakerian, P., Rezaei, O., Murnani, Z. T., and Moeinmanesh, H. (2016). Investigating the role of pop songs on vocabulary recall, attitude and retention of Iranian EFL learners: The case of gender. Advances in Language and Literary Studies, 7(2): 121-128.
- Sicat, A. S. (2015). Enhancing college students' proficiency in business writing via Schoolog. Retrieved from <u>https://www.ijern.com/journal/2015/January-2015/14.pdf</u>
- Skalicky, J. and Brown, N. (2009). "Peer learning framework: a community of practice model", discussion paper, Centre for Advancement of Learning and Teaching, University of Tasmania, Hobart, TAS, November 9.
- Smith, M., Wood, W., Adams, W., Wieman, C., Knight, J., Guild, N., & Su, T. (2013). Why peer discussion improves student performance on in-class concept questions. Science, 323(5910), 122-124. DOI: 10.1126/science.1165919
- Sun, J. C.-Y. (2018). Influence of polling technologies on student engagement: An analysis of student motivation, academic performance, and brainwave data. Computers & Education, 72, 80–89. <u>https://doi.org/10.1016/j.compedu.2013.10.010</u>
- Toba, R., Noor, W. N., Sanu, L. O. (2019). The current issues of Indonesian EFL students' writing skills: Ability, problem, and reason in writing comparison and contrast essay. DOI: 10.21093/di.v19i1.150
- Tutor2u.(2022).Correlations.Retrievedfromhttps://www.tutor2u.net/psychology/reference/correlations
- Wall, A. (2014). Schoology in higher education: embracing the Facebook factor. Retrieved on May 21, 2014 from <u>http://sloanconsortium.org/conference/2014/et4online/schoology-</u> highereducation-embracing-facebook-factor
- Wang, T. H. (2014). Developing an assessment-centered e-Learning system for improving student learning effectiveness. <u>https://doi.org/10.1016/j.compedu.2013.12.002</u>

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