INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY: APPLIED BUSINESS AND EDUCATION RESEARCH

2024, Vol. 5, No. 10, 3968 – 3989 http://dx.doi.org/10.11594/ijmaber.05.10.15

Research Article

Authentic Assessment in Flexible Learning Modality and the Learning Outcomes in Readings in the Philippine History Among First-Year College Students

John Bert A. Habagat¹, Jherwin P. Hermosa^{2*}

¹Graduate Studies and Applied Research, Laguna State Polytechnic University-San Pablo City Campus

²San Pablo City, Laguna 4000 Philippines

Article history: Submission 31 September 2024 Revised 07 October 2024 Accepted 23 October 2024

*Corresponding author: E-mail:

0319-3529@lspu.edu.ph

ABSTRACT

The research utilized a descriptive-correlational design. Descriptive design was used to describe the perception of the students. In order to gather the information in the study, In order to determine if there is significant relationship between authentic assessment strategies and tools and learning outcome, correlational research was used. It utilized quantitative approach of research in gathering the necessary data. The survey questionnaire was used to gather data and later on the score of the student after using the authentic assessment. The respondents of this study are twenty-four (24) first year college students from Bachelor of Science in Fisheries and Aquatic Resources and another thirty-two (32) first year college students from Bachelor of Science in Industrial Technology. A total of fifty (56) first year college students are the respondents of the study from Southern Luzon State University, Alabat Campus, Quezon. Each variable has seven statements describing respondents' perceptions on the authentic assessment strategies and tools. The researcher used the weighted mean for the checklist questionnaire part I, II, and III. This study concluded the effectiveness of authentic assessment in flexible learning modality of readings in Philippine History for first year college students of SLSU Alabat, Quezon. Specifically, this study aimed to determine the perception of the respondents on the effectiveness of the developed authentic assessment in terms of: paper and pencil assessment; assessment strategy in communication; performance assessment; observation assessment; and, self-assessment. Also, this study aimed to know the perception of the respondents on the effectiveness of authentic assessment tools such as: checklist; rating scale; learning log; and anecdotal records. The study posited four hypotheses, one of which states that there is no significant relationship between the perception of the respondent on the developed authentic assessment and their level of learning outcomes in Readings in Philippine History. The second hypothesis states that there is a significant relationship between the perception of the respondent on the developed authentic assessment and their level of learning outcomes in Readings in Philippine History. While the third hypothesis states that there is no significant relationship between the perception of the teachers on authentic assessment tool and students' level of learning outcomes in readings in the Philippine History. Finally, the fourth hypothesis states that that there is significant relationship between the perception of the teachers on authentic assessment tool and students' level of learning outcomes in readings in the Philippine History.

Keywords: Authentic Assessment, Readings in Philippine History, Learning Outcomes

Introduction

An authentic assessment may be a method of gathering info by academics regarding students' progress and learning accomplishment that is finished through numerous techniques. This sort of assessment will be categorical, to prove, or to indicate exactly what the educational objectives are fully overcome and achieved. O'Malley & Pierce (1996) as cited in Zaim associate degreed Arsyad (2020) state that authentic assessment is an analysis method that involves multiple kinds of performance measure reflective the student's learning accomplishment, motivation, and attitudes on instructionally-relevant activities. Besides, Taufina (2009) as cited in Zaim and Arsyad (2020) mentions that authentic assessment may be a method to explain the changes in students when the educational method. Thus, the assessment is not any longer simply assessing the accomplishment of learning objectives. However, it's a trial to get a spread of data often, never-ending and thorough method, and students' learning outcomes

Teachers at largely needed to assess their students' progress and accomplishment as a part of an academic system which is why assessment is additionally a region of a teacher's job. Assessment is additionally necessary for college kids. Even if the thought of getting a take a look at typically scares some students (Brown & Abeywickrama, 2010 as cited in Phongsirikul, 2018), most of them additionally wish to be assessed.

Hence, authentic assessment acquired play with the aim of filling up an area wherever ancient forms of assessment leave it empty. Various forms of assessment like journals, logs, portfolios, self-assessment, and peer-assessment facilitate reveal what students will do with language. Most of them are thought-about performance-based forms of assessment. the final options of other assessment embrace requiring students to perform, create, and turn out one thing (Herman, Aschbacher and Winters, 1992 as cited in Phongsirikul, 2018), mistreatment real-world contexts or simulations, specializing in processes additionally as product (Aschbacher, 1991 as cited in Phongsirikul, 2018), and providing info regarding each the strengths and also the weaknesses of scholars (Huerta-Macias, 1995). It is necessary that academics build acceptable selections among the assorted assessment choices so as to facilitate students' learning.

In the workplace of the researcher in Southern Luzon State University in Alabat, Quezon, assessment is considered as pivotal element in teaching and learning. The institution offers courses like Bachelor of Science in Fisheries and Aquatic Resources and Bachelor of Science in Industrial Technology. The first year college students enrolled in these courses are taking Philippine History hence, providing authentic assessment plays a crucial role in improving their learning outcome. Though the learning modality will shift into face-to-face learning, teachers still uses modules as part of their in-

struction. Thus, designing a module with authentic assessment will greatly help the teachers in facilitating learning among their students.

From the premises aforementioned, the researcher becomes curious on the effectiveness of the developed module and authentic assessment strategies in increasing the learning outcome of the tertiary students.

Research Instruments

The questionnaires were divided into three parts wherein part one revealed respondents' perception on authentic assessment strategies described in terms of, pencil and paper, communication, performance, observation, and self assessment. While part two disclosed respondents' perceptions on the effectiveness of using authentic assessment tools and strategies in attaining the learning outcomes in Readings in Philippine History. The third one is the respondents' perception on learning outcomes in Readings in the Philippine History in terms of, evaluating primary and secondary sources, analyzing primary and secondary sources and, developing critical and analytical skills. Each variable has seven statements describing respondents' perceptions on the authentic assessment strategies and tools. All of the questionnaires were self-made by the researcher.

Data Analysis

The researcher asked permission from the Director of Southern Luzon State University – Alabat Campus. Once approved, the researcher handed over to the students the Module in the subject Readings in the Philippine History and administered the Authentic Assessment Activities that is included. By the end of the prelim

term, the researcher retrieved all of the module and started to check the assessment with the use of the different assessment tool. The checklist questionnaire were answered by the first year college respondents to identify their perception on the the effectiveness of using authentic assessment strategies in attaining the learning outcomes in the subject. The first year college respondents were asked to answer the checklist questionnaire regarding their perception on the effectiveness of authentic assessment tools. The result of students' assessment was analyzed by the researcher and he determined the level of learning outcome in terms of evaluating primary and secondary sources; analyzing primary and secondary sources; developing critical and analytical skills. The researcher used transmutation table and descriptive indicator on analyzing the scores of the students. Then, the researcher sought help from the statistician on analyzing the significant relationship between respondents' perceptions on authentic assessment strategies and authentic assessment tools and learning outcome. The data gathered were organized, tabulated, and treated statistically for analysis and interpretation of each result.

Result and Discussion

Part I. Perception of the Respondents on the Effectiveness of the Developed Authentic Assessment

This part discusses the perception of respondents on the effectiveness of the developed authentic assessment in terms of paper and pencil assessment; assessment strategy in communication; performance assessment; observation assessment; and self-assessment.

Table 1. Perceived Effectiveness of Developed Authentic Assessment in Terms of Paper and Pencil Assessment

Pap	er and Pencil Assessment	Mean	SD	Verbal Interpretation
	After answering pencil and paper assess-			
mer	nt about evaluating primary and secondary			
sou	rces, it enables me to			
1.	increase my knowledge in evaluating pri-	3.41	0.50	Agree
	mary and secondary sources.			
2.	practice the concepts I have learned from the	3.38	0.52	Agree
	discussion into given situations			

Pap	er and Pencil Assessment	Mean	SD	Verbal Interpretation	
	After answering pencil and paper assess-				
men	t about evaluating primary and secondary				
sour	ces, it enables me to				
3.	evaluate the primary and secondary sources	3.36	0.52	Agree	
	correctly because the given statements are				
	relatable.				
4.	justify my answer whether it is primary or	3.36	0.52	Agree	
	secondary sources using short explanation.				
5.	answer it in completely in the given time	3.25	0.55	Agree	
6.	get clues from the statement which gives me	3.43	0.50	Agree	
	hint to identify if it is primary or secondary				
	sources.				
7.	challenge my basic knowledge of primary	3.38	0.52	Agree	
	and secondary sources because of the non-				
	traditional instructions.				
Ove	r All	3.36	0.52	Agree	
Lege	<i>nd:</i> 3.50-4.00 = Strongly Agree	1.50-2.49 = Disagree			
	2.50-3.49 = Agree	1.00-1.4	49 = Strong	gly Disagree	

Table 1 shows the respondents' perceived effectiveness of the developed authentic assessment in terms of pencil and paper assessment. It reveals that most of the respondents believed that after answering the pencil and paper assessment it enables them to get clues from the statement which which gives them hint to identify if it is primary or secondary sources which obtains the highest mean of 3.25. However, answering the pencil and paper assessment completely in the given time has the lowest mean which is 3.25. Generally, it can be drawn that the respondents perceived the developed pencil and paper authentic assessment as effective since the general mean is 3.36, it implies that they agree to its effectiveness.

In relation, as posited by Nasab (2015), paper-and-pencil instruments refer to a general

group of assessment tools in which candidates read questions and respond in writing. This includes tests, such as knowledge and ability tests, and inventories, such as personality and interest inventories. With a short-answer response format, a large number of different topic areas/tasks can be covered within the same test and these questions are easy to score. In addition, less time is required to write these questions compared to multiple-choice ones.

Thus, the developed pencil and paper assessment was effective as perceived by the respondents especially in getting the clues from the given statement which leads them with the right answer. However, ample time should be given to the students when administering this kind of assessment for them to complete the answer.

Table 2. Perceived Effectiveness of Developed Authentic Assessment in Terms of Assessment Strategy in Communication

Assessment Strategy in Communication	Mean	SD	Verbal Interpretation
After completing the assessment about ap-			
preciating history, it enables me to			
1. express my opinion regarding the topic given	3.36	0.52	Agree
2. answer it confidently because the situation	3.39	0.53	Agree
given is happening in real-world			
3. communicate my ideas using examples and	3.30	0.50	Agree
personal encounters			

Assessment Strategy in Communication		Mean	SD	Verbal I	nterpretation
Aft	er completing the assessment about ap-				
preciating	history, it enables me to				
4. appre	ciate history through the given situation	3.43	0.57	4	Agree
5. use Er	nglish language in writing my reflection	3.38	0.49	4	Agree
on the	given situation				
6. self-as	ssess my learning through words	3.36	0.52		Agree
7. know	how my professor grade my output be-	3.34	0.48		Agree
cause	there is rubric given				
Over All		3.36	0.51	Agree	
Legend:	egend: 3.50- 4.00 = Strongly Agree 1.50- 2.49 = Disagree		gree		
	2.50- 3.49 = Agree	1.00- 1.49 = Strongly Disagree			ee

Table 2 respondents' perceived effectiveness of the developed authentic assessment in terms of assessment strategy in communication which highlights that majority of them appreciate history through the given situation with a weighted mean of 3.43 which garnered the highest mean. Meanwhile, communicating their ideas using examples and personal encounters got the lowest mean which is 3.30 with verbal interpretation of Agree. The data also shows the overall mean of 3.36 or general interpretation of Agree. Based on the results, it can be concluded that the respondents concurred that the developed assessment is effective in communication since the given situation in the assessment enables them to appreciate history. On the other hand, they are still having difficulty in communicating their ideas with the use of the personal experiences.

With an essay response format, only a few topic areas/tasks can be covered due to the

amount of time it takes to answer questions; however, the content can be covered in greater detail. Essay questions require little time to write but they are very time-consuming to score. Although at first glance a multiple-choice format may seem a relatively easy and logical choice if breadth of coverage is emphasized, it is hard to write good multiple-choice questions and you should only choose this type of response format if one is willing to devote a lot of time to editing, reviewing, and revising the questions. If depth of coverage is emphasized, use an essay response format (Gborsong, Yankah and Essel, 2016).

Hence, as it is claimed by the experts above that essay format in one tool to assess depth coverage of a topic discussed, the students must be taught on how to express opinions and ideas using examples to clearly convey their answers.

Table 3. Perceived Effectiveness of Developed Authentic Assessment in Terms of Performance Assessment
ment

Per	formance Assessment	Mean	SD	Verbal Interpretation
	After submitting my output on the critiqu-			
ing	the message assignment, it enables me to			
1.	enjoy creating my video because it involves	3.45	0.54	Agree
	technology			
2.	practice my critiquing the given message us-	3.32	0.47	Agree
	ing my argument			
3.	justify my argument using personal experi-	3.30	0.54	Agree
	ence			
4.	increase my engagement in the task because	3.36	0.52	Agree
	it is realistic			
5.	use available resources such as cellphone,	3.41	0.50	Agree
	laptop and other gadgets.			

Performance Assessment		Mean	SD	Verbal Interpretation
Aft	er submitting my output on the critiqu-			
ing the me	ssage assignment, it enables me to			
	orize my script because there is a tran- tion needed	3.34	0.51	Agree
	y the required performance because I vare of the rubrics	3.23	0.47	Agree
Over All		3.34	0.51	Agree
Legend:	3.50- 4.00 = Strongly Agree	1.50- 2.49 = Disagree		
	2.50- 3.49 = Agree	1.00- 1.49 = Strongly Disagree		

The table highlights respondents' perceived effectiveness of the developed authentic assessment in terms of performance assessment. The data imply that the respondents claim that they enjoy creating video because it involves technology with the highest weighted mean of 3.45. Among all the indicators, the one stating that it satisfies the requires performance because I am aware of the rubrics got the lowest mean which is 3.23. Overall, this variable got an average of 3.34 with "Agree" verbal interpretation. Thus, it shows that most of respondents who accomplished the performance assessment enjoy it because they were able to apply their skills in technology. However, they believed that rubrics must be properly explained to them for them to be guided on how they will be graded.

As strengthened by Miller (2020) performance assessments require application of knowledge and skills, rather than just rote recall or demonstration of them. They often result in an end-product like a presentation that is informed by more than one subject and crafted by drawing on a range of technology skills. There is generally no single correct answer, but evaluation is done by using a rubric.

In conclusion, rubrics play a vital role in giving effective performance assessment to the students. It must be properly crafted as it must be aligned to the performance being measured and must be well-presented to them as well.

Table 4. Perceived Effectiveness of Developed Authentic Assessment in Terms of Observation

ervation	Mean	SD	Verbal Interpretation
After answering the given tasks on analys-			
the primary sources, it enables me to			
use observation as strategy to accomplish the	3.32	0.54	Agree
task			
look closely on the full script to analyze the un-	3.38	0.52	Agree
familiar words to me			
integrate my background knowledge to draw	3.38	0.49	Agree
conclusions			
express my ideas in English confidently be-	3.27	0.56	Agree
cause I comprehend the full script			
appreciate Philippine history through reading	3.36	0.48	Agree
think further by giving short answer to the	3.36	0.48	Agree
questions			
polish my conclusion because the rubric on	3.29	0.46	Agree
how it will be graded is given			
er All	3.33	0.50	Agree
<i>nd:</i> 3.50- 4.00 = Strongly Agree	1.50-2.4	9 = Disa	gree
2.50- 3.49 = Agree	1.00- 1.4	9 = Stro	ngly Disagree
	use observation as strategy to accomplish the task look closely on the full script to analyze the unfamiliar words to me integrate my background knowledge to draw conclusions express my ideas in English confidently because I comprehend the full script appreciate Philippine history through reading think further by giving short answer to the questions polish my conclusion because the rubric on how it will be graded is given to the policy of the product o	After answering the given tasks on analysthe primary sources, it enables me to use observation as strategy to accomplish the task look closely on the full script to analyze the unfamiliar words to me integrate my background knowledge to draw conclusions express my ideas in English confidently because I comprehend the full script appreciate Philippine history through reading think further by giving short answer to the questions polish my conclusion because the rubric on how it will be graded is given ar All 3.32 3.38 3.39 3.30 3.30 3.30 3.30 3.30 3.30 3.30	After answering the given tasks on analysthe primary sources, it enables me to use observation as strategy to accomplish the task look closely on the full script to analyze the unfamiliar words to me integrate my background knowledge to draw conclusions express my ideas in English confidently because I comprehend the full script appreciate Philippine history through reading think further by giving short answer to the questions polish my conclusion because the rubric on the how it will be graded is given to the strain of the primary of

The table reveals perceived effectiveness of the developed authentic assessment in terms of performance observation. It shows that majority of the respondents believed that the developed assessment is effective since it enables them to look closely on the full script to analyze the unfamiliar words and to integrate their background knowledge to draw conclusions. These indicators garnered the highest mean which is 3.38. While, fourth statement, "express my ideas in English confidently because I comprehend the full script" acquired the lowest weighted mean of 3.27. Moreover, its overall mean is 3.33 which is equivalent to descriptive interpretation of agree.

Marie and Douglas (2021) emphasized the thinking routines effective for students in assessment such as: engage in particular reading processes; depth of thinking about texts and engagement in a text.

Based on the data, it is obvious that the developed assessment is effective since the respondents unlocked unfamiliar words by analyzing the script which leads them to comprehend the text they have read. Also, the assessment was relevant to them for they were able to relate their background knowledge. Though, students need improvement in expressing their ideas using English language.

Table 5. Perceived Effectiveness of Developed Authentic Assessment in Terms of Self-Assessment

Self-Assessment		Mean	SD	Verbal Interpretation
	After answering the comparative analy-			
sis, it e	nables me to			
	nderstand more the primary and second- ry sources by comparing the two articles	3.39	0.49	Agree
	elf-monitor my understanding of the topic writing my own opinion	3.36	0.48	Agree
	eflect on the given questions and justify my aim	3.32	0.47	Agree
	evelop a range of personal and transferra- le skills	3.34	0.51	Agree
5. de	evelop self-directed learning	3.38	0.49	Agree
6. se	elf-study it and accomplish the task	3.34	0.48	Agree
-	romotes academic integrity through stuent self-reporting of learning progress	3.29	0.46	Agree
Over A		3.34	0.48	Agree
Legend	: 3.50- 4.00 = Strongly Agree	1.50- 2.	49 = Dis	agree
_	2.50- 3.49 = Agree	1.00- 1.	49 = Str	ongly Disagree

The table reveals the reveals perceived effectiveness of the developed authentic assessment in terms of self-assessment. It shows that the majority of the respondents agreed they understand more the primary and secondary sources by comparing the two articles. This indicator garnered the highest mean which is 3.39. While, "promoting academic integrity through student self-reporting of learning progress" acquired the lowest weighted mean of 3.29. Moreover, its overall mean is 3.34 which is equivalent to descriptive interpretation of agree.

In connection, self-assessment is often (implicitly or otherwise) conceptualized as a personal, unguided reflection on performance for the purposes of generating an individually derived summary of one's own level of knowledge, skill, and understanding in a particular area. For example, this conceptualization would appear to be the only reasonable basis for studies that fit into what Colliver et al. (2015) has described as the "guess your grade" model of self-assessment research, the results of which form the core foundation for the recurring conclusion that self-assessment is generally poor.

Hence, the assessment enables the students to understand more the topic about primary and secondary sources using comparison as strategy. Although, the developed authentic assessment does not fully make respondents to promote academic integrity through student self-reporting of learning progress.

Part II. Perception of the Respondents on the Effectiveness of the Authentic Assessment Tools

This part discusses the perception of respondents on the effectiveness of the authentic assessment tools in terms of checklist, rating scale, learning log, and anecdotal records.

Table 6. Perceived Effectiveness of Authentic Assessment Tools in Terms of Checklist

Checklist			SD	Verbal	Interpretation
	Checklist questionnaire enables me to				
1.	gather accurate data using numbers	3.34	0.51		Agree
2.	receive transparency, organization and reduction of error	3.34	0.51		Agree
3.	set out specific criteria to gauge skill development or progress and to support the learning process	3.30	0.46		Agree
4.	represent a promising approach to improve the quality of my performance	3.30	0.50		Agree
5.	focus and prevent unnecessary detours in the course information	3.27	0.45		Agree
6.	identify performance traits expected in my work	3.36	0.48		Agree
7.	comprehend the numerical value set to the performance traits expected in my work	3.38	0.49		Agree
Ove	r All	3.38	0.49	Agree	
Legei	<i>nd:</i> 3.50- 4.00 = Strongly Agree	1.50- 2.4	9 = Disag	ree	
	2.50 - 3.49 = Agree	1.00- 1.4	9 = Stron	gly Disagr	ee

2.50 - 3.49 = Agree1.00-1.49 = Strongly Disagree

The table illustrates the perceived effectiveness of authentic assessment tools in terms of checklist. The data highlight that respondents comprehend the numerical value set to the performance traits expected in their work. It has the highest mean which is 3.38. On the other hand, the indicator focus and prevent unnecessary detours in the course information, got a mean of 3.27 which imply that the respondents rarely plan financially. The overall mean is 3.38 with a verbal interpretation of "Agree".

According to Morgan (2020) skills checklists can show a student's progress while in the program. Skills checklists may be part of a goal plan or a stand-alone tool used by teachers and

students to document skills attainment. Checklists provide transparency, organization, and reduction in the risk of human error. They have been successfully implemented in many different processes specifically for these reasons. Surgeons utilize checklists for the health and safety of their parents, pilots for the protection of their planes and passengers, and most of humans for simple "to-do" lists.

In totality, as perceived by the respondents they believe that checklist is effective in giving them the accurate numerical value of what is expected of them in the assessment. However, they do not fully support checklist as an efficient tool in focusing on the topic.

Table 7. Perceived Effectiveness of Authentic Assessment Tools in Terms of Rating Scale

Rat	ing Scale	Mean	SD	Verbal Interpretation
	Rating scale enables me to			
1.	identify the degree or frequency of my dis-	3.38	0.49	Agree
	played behaviours, skills, and strategies.			
2.	record observations which I can use as self-	3.34	0.478	Agree
	assessment tools			
3.	pinpoint my specific strengths and weak-	3.41	0.50	Agree
	nesses			
4.	be involved in the assessment process by	3.34	0.48	Agree
	participating in the creation of a rubric			
5.	get a deeper understanding of the intended	3.39	0.56	Agree
	outcomes and the associated assessment cri-			
	teria			
6.	self-reflect on my work and facilitate the set-	3.34	0.47	Agree
	ting of learning goals for a particular perfor-			
_	mance assessment	0.04	0 = =	
7.	give feedback to the teachers about the cur-	3.34	0.55	Agree
	riculum, satisfaction about specific projects			
_	or how to improve classroom instruction			_
	r All	3.36	0.50	Agree
Lege			.49 = Dis	C
	2.50- 3.49 = Agree	1.00- 1	.49 = Strong	ongly Disagree

Table 7 indicates the perceived effectiveness of authentic assessment tools in terms of rating scale. Majority of the respondents agreed that rating scale enables them to get a deeper understanding of the intended outcomes and the associated assessment criteria which has the highest mean of 3.39. Conversely, 3.34 is the lowest mean which states that the respondents do not fully agree that rating scale enables them to record observations which they can use as self-assessment tools; be involved in the assessment process by participating in the creation of a rubric self-reflect on their work and facilitate the setting of learning goals for a particular performance assessment; and give feedback to the teachers about the curriculum, satisfaction about specific projects or how to improve classroom instruction. Meanwhile, the overall mean is 3.36 with verbal interpretation of "Agree".

The non-differentiation of the rating scale model makes it less useful when trying to narrow the information. For instance, if one is attempting to discover what the survey takers preferred as a breakfast item, a rating question would not necessarily work. It does not allow the person taking the survey to be specific outside of the questions listed on the rating scale assessment. Another drawback to this general type of survey is that it can be general. They can offer information that can be misperceived by the researcher (Morgan, 2020).

Thus, students use the rating scale for school projects in order to collect data that is relatively easy to understand, record and report. The rating scale is easily applied to many situations with good, solid data results. Although rating scales is much appealing to teachers than students.

Table 8. Perceived Effectiveness of Authentic Assessment Tools in Terms of Learning Log

Lea	Learning Log		SD	Verbal Interpretation
	It enables me to			
1.	write my thoughts, feelings, and questions about what I am studying.	3.43	0.50	Agree
2.	deepen my learning in any class, no matter the subject area	3.46	0.54	Agree
3.	respond best in learning log activities because there is no pressure to get it perfect.	3.39	0.53	Agree
4.	be on track on the day's lesson	3.34	0.51	Agree
5.	to think about thinking or do metacognition	3.34	0.58	Agree
6.	reveal my perceptions (and misperceptions) of the information, as well as reveal how I react to the way the material is being taught	3.34	0.55	Agree
7.	record my reflections about what I am learning and how I am going about learning it.	3.32	0.58	Agree
Ove	r All	3.38	0.54	Agree
Lege	3.50- 4.00 = Strongly Agree 2.50- 3.49 = Agree	1.50- 2.49 = Disagree 1.00- 1.49 = Strongly Disagree		

Table 8 shows the perceived effectiveness of authentic assessment tools in terms of learning log. It reveals that most of the respondents believe this assessment tool is effective to deepen their learning in any class, no matter the subject area which shows the highest mean of 3.46. However, the indicator "record my reflections about what I am learning and how I am going about learning it" has the lowest mean which is 3.32. Generally, it can be drawn that learning log is a supplementary tool which intensifies their acquired knowledge in any subject. On the other hand, they believe learning log is no longer applicable in their level

since it involves writing or putting down their reflections.

Learning Logs are like diaries students keep that record their reflections about what they are learning and how they are going about learning it. Learning Logs are useful because they promote metacognition. They are also useful tools for teachers because they can reveal students' perceptions (and misperceptions) of the information, as well as reveal how they are reacting to the way the material is being taught (Rowan, Jacob, & Correnti, 2019; Rowan & Correnti, 2019).

Table 9. Perceived Effectiveness of Authentic Assessment Tools in Terms of Anecdotal Record

Anecdotal Records		Mean	SD	Verbal Interpretation
	It enables me to			
1.	understand my behavior inside the class-room.	3.39	0.49	Agree
2.	improve my language proficiency from the observation of my teacher	3.36	0.59	Agree
3.	be informed about specific observations my behaviors, skills and attitudes as they relate to the outcomes in the program of studies.	3.36	0.52	Agree
4.	accumulate information on my learning and direction for further improvement.	3.34	0.55	Agree
5.	get information regarding my development over a period of time	3.34	0.48	Agree

Anecdotal Records		Mean	SD	Verbal Interpretation	
It e	enables me to				
-	re observations of significant behav-	3.32	0.58	Agree	
iors that might otherwise be lost		2 20	0.40	Асто	
7. keep track on my learning when my teacher shares it with me		3.39	0.49	Agree	
Over All		3.36	0.53	Agree	
<i>Legend:</i> 3.50- 4.00 = Strongly Agree		1.50- 2	1.50- 2.49 = Disagree		
	2.50-3.49 = Agree $1.00-1.49 = Strongly Disagree$		ongly Disagree		

The table reveals the perceived effectiveness of authentic assessment tools in terms of anecdotal record. It shows that the majority of the respondents believe that anecdotal record is effective in understanding their behavior inside the classroom and keeping track on their learning when the teacher shares it with them. Theses indicators both garnered the highest mean which is 3.39. On the other hand, the indicator of capturing observations of significant behaviors that might otherwise be lost acquired the lowest mean of 3.32. Moreover, its overall mean is 3.36 which is equivalent to verbal interpretation of Agree. Based on the data respondents agree that anecdotal record would be an effective assessment tool if the recorded information by teacher is shared with them and it is also a good way for them to understand how they behave inside the classroom. Conversely they do not think that anecdotal record is as efficient in obtaining negative behavior that must be transformed into positive one.

Baumann and Duffy-Hester (2012) state that a fundamental purpose of assessment is to communicate what the child knows and is able to do. Teacher-generated, anecdotal records provide an insider's perspective of the students' educational experience.

Hence, anecdotal record would serve its purpose when shared to students and must not remain as teacher's record.

Part III. Respondents' Perception on Learning Outcomes in Readings in the Philippine History

This part discusses the respondents' perception on learning outcomes in readings in the Philippine History in terms of evaluating primary and secondary sources, analyzing primary and secondary sources, developing critical and analytical skills.

Table 10. Respondents' Perception on Learning Outcomes in Readings in the Philippine History in Terms of Evaluating Primary Sources and Secondary Sources

Eva	luating Primary and Secondary Sources	Mean	SD	Verbal Interpretation
	On the assessment of evaluating primary			
and	secondary sources, I was able to			
1.	understand the difference between primary and secondary sources	3.36	0.48	Agree
2.	d. identify whether the statement is primary or 3.38 0.49 Agree secondary sources			
3.	3. circle the words that indicate whether the 3.39 0.49 Agree statement is primary or secondary			
4.	4. justify my answer by writing the explanation 3.32 0.51 Agree in a complete sentence			Agree
5.	apply my acquired knowledge from the discussion to the activity	wledge from the dis- 3.38 0.49 Agree		
0ve	r All	3.36	0.49	Agree
Legend: 3.50- 4.00 = Strongly Agree		1.50- 2.49 = Disagree		
	2.50- 3.49 = Agree	1.00- 1.49 = Strongly Disagree		

Table 10 displays the respondents' perception on learning outcomes in readings in the Philippine History in terms of evaluating primary sources and secondary sources. It indicates that the highest mean is 3.39 which stated that on the assessment of evaluating primary and secondary sources, they were able to circle the words that indicate whether the statement is primary or secondary. However, the indicator justify my answer by writing the explanation in a complete sentence garnered weighted mean of 3.32, the lowest mean which has a verbal interpretation of "Agree". Based on the given data, it clearly shows that the students were able to follow the instructions and accomplish the activity. However, they are not confident in writing a complete sentence to defend their answer.

Trioa (2013) suggests that the problems experienced by students in writing effectively are attributable, in part, to their difficulties in executing and regulating the processes which underlie proficient composing, planning and revisions of their work. Another important element in achieving excellence in writing is the reflective process – the ability to critique one's own work as well as the work of peers.

Thus, when teaching writing skills, instructors must avoid any complexity and try to help learners express their ideas in straightforward ways. So, it is better to apply every strategy that pays attention to more practice through copying, dictation, words/sentences reordering, sentence completion, and other available simple techniques and integrated method.

Table 11. Respondents' Perception on Learning Outcomes in Readings in the Philippine History in Terms of Analyzing Primary and Secondary Sources

Ana	llyzing Primary and Secondary Sources	Mean	SD	Verbal Interpretation
	On the assessment of analyzing primary			
and	secondary sources, I was able to			
1.	work individually and in groups to analyze critically historical sources	3.41	0.53	Agree
2.	focus carefully on the reading passage without any distractions	3.41	0.50	Agree
3.	comprehend the text easily with the help of listing down unfamiliar words encountered	3.38	0.52	Agree
4.	write my first impression on the text with minimal error to grammar and organization of ideas	3.25	0.48	Agree
5.	draw conclusion by integrating my back- ground knowledge of the context of the speech with the content of the speech and by following the rubrics to be guided.	3.32	0.58	Agree
0ve	r All	3.35	0.52	Agree
Legend: 3.50- 4.00 = Strongly Agree		1.50- 2	.49 = Dis	sagree
	2.50- 3.49 = Agree	1.00- 1.49 = Strongly Disagree		

The table illustrates the respondents' perception on learning outcomes in readings in the Philippine History in terms of analyzing primary and secondary sources. The data highlight that respondents believe they work individually and in groups to analyze critically historical sources and they focus carefully on the reading passage without any distractions while doing the activity. Both have the highest mean

which is 3.41. On the other hand, the indicator that got a mean of 3.25 implies that the respondents they somehow write their first impression on the text with minimal error to grammar and organization of ideas. The overall mean is 3.35 with a verbal interpretation of "Agree". Based on the data gathered, it shows that the respondents their knowledge of grammar and organization of ideas in expressing

their answer in analysis of primary and secondary sources is problematic.

This finding is in agreement with Yemez and Dikilitaş (2022) that the most challenging aspect for novice writers in English is a verb in the sentence. Students also find it challenging to understand the difference between 'is' and 'are' as main and helping verbs. For most of them, these verbs cannot be main verbs. The

most difficult challenge can be concluded in tense, number, pronoun, preposition, capitalization, spelling, punctuation, and subject-verb agreement.

Thus, it is the instructors' duty to highlight this situation and help them solve these common mistakes especially in analyzing during assessment.

Table 12. Respondents' Perception on Learning Outcomes in Readings in the Philippine History in Terms of Developing Critical and Analytical Skills

Deve	eloping critical and analytical skills	Mean	SD	Verbal	Interpretation		
	On the assessment of developing critical and						
analy	ytical analysis, I was able to						
1.	decide whether to agree, disagree or argue to	3.39	0.49		Agree		
	the message.						
2.	establish my position on the topic by integrating	3.34	0.48		Agree		
	facts and my personal experiences.						
3.	create the video conveniently since I am digi-	3.32	0.47		Agree		
	tally literate						
4.	synthesize the comparison of primary and sec-	3.34	0.51		Agree		
	ondary sources of historical records in an essay.						
5.	present a comparative analysis of the given pri-	3.39	0.49		Agree		
	mary and secondary sources in a tabular form						
Over	· All	3.36	0.49	Agree			
Legen	<i>id:</i> 3.50- 4.00 = Strongly Agree	1.50- 2.49	= Disagr	·ee			
	2.50- 3.49 = Agree	1.00- 1.49	= Strong	gly Disagro	ee		

The table illustrates the respondents' perception on learning outcomes in readings in the Philippine History in terms of developing critical and analytical skills. The data highlight that respondents believe that on the assessment of developing critical and analytical analysis, they were able to decide whether to agree, disagree or argue to the message and present a comparative analysis of the given primary and secondary sources in a tabular form. It has the highest mean which is 3.39. On the other hand, the indicator that got a mean of 3.32 implies that the respondents believe that there still room for improvement in creating the video conveniently. The overall mean is 3.36 with a verbal interpretation of "Agree". Based on the data gathered, it shows that the respondents are competent in critical and analytical skills but not in being digitally literate.

As strengthened by Costley (2019) technology has a positive impact on student learning.

Technology causes students to be more engaged; thus, students often retain more information. Because of the arrival of new technologies rapidly occurring globally, technology is relevant to the students. Technology provides meaningful learning experiences. Technology also provides hands-on learning opportunities that can be integrated into all school curricular areas, including mathematics, reading, science, and social studies as well as other academic subjects.

In conclusion to develop critical and analytical skills of the students technology must be integrated in assessment since it gives students opportunities to collaborate with their peers resulting in learning from each other. These factors combined can lead to a positive impact on student learning and motivation.

Part IV. Level of Learning Outcomes in Readings in the Philippine History

This part discusses the respondents' level of learning outcomes in readings in the

Philippine History in terms of evaluating primary and secondary sources, analyzing primary and secondary sources, developing critical and analytical skills.

Table 13. Respondents Level of Learning Outcomes in Readings in the Philippine History.

Learning Outcomes	Mean	SD	Remarks
Evaluating Primary and Secondary Sources	89.43	5.10	Very Satisfactory
Analyzing Primary and Secondary Sources	93.51	3.35	Excellent
Developing critical and analytical skills	90.24	4.94	Excellent

Legend: 74 below (Poor); 75-79 (Unsatisfactory); 80-84 (Satisfactory); 85-89 (Very Satisfactory); 90 above (Excellent)

Table 13 discloses the students' level of learning outcomes in readings in the Philippine History. It is noticeable that the students acquired mean of 89.43 with the remarks of very satisfactory in evaluating primary and secondary sources. While in analyzing primary and secondary sources and in developing critical and analytical skills the students acquired excellent remarks with 93.51 and 90.24 means.

The result implies that the students perform excellently in the assessment in analyzing primary and secondary sources and in developing critical and analytical skills. Also, they perform very satisfactorily in evaluating primary and secondary sources. It only means that their level of learning outcomes is very high. Likewise, the developed assessment helped a lot in attaining this level of learning outcome.

Part V. Relationship between Perception of the Respondents on Authentic Assessment and their Level of Learning Outcomes in Readings in Philippine History

This part discusses the significant relationship between between the perception of the respondent on authentic assessment and their level of learning outcomes in Readings in Philippine History. The following variables used in the perception of respondents on authentic assessment are pencil and paper assessment, assessment strategy in communication, performance assessment, observation assessment and self-assessment. While indicators used in the level of learning outcomes in Readings in Philippine History are evaluating primary and secondary sources, analyzing primary and secondary sources, and developing critical and analytical skill.

Table 14. Test of Correlation between Developed Authentic Assessment and Learning Outcomes in Readings in the Philippine history

Davidoned Authoritis As	Learning Outcomes in Readings in Philippine History					
Developed Authentic Assessment	Evaluating Primary and	Analyzing Primary and	Developing critical and			
Sessifient	Secondary Sources	Secondary Sources	analytical skills			
Paper and Pencil Assessmen	.703**	.677**	.740**			
Assessment Strategy in Communication	.702**	.712**	.783**			
Performance Assessment	.601**	.698**	.650**			
Observation Assessment	.689**	.795**	.722**			
Self-Assessment	.603**	.658**	.734**			

^{**}Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).

Verbal Interpretation of r-values: +1.0 Perfect positive +/- association +0.8 to +1.0 Very strong +/- association +0.6 to +0.8 Strong +/- association +0.4 to +0.6 Moderate +/- association +0.2 to +0.4 Weak +/- association +0.0 Very weak +/- or no association

Table 14 demonstrates the obtained r-values for perception of the respondents on the effectiveness developed authentic assessment and their level of learning outcomes in readings in Philippine History. The results imply that there is a significant relationship between their perception on the effectiveness of pencil and paper assessment and learning outcomes in terms of evaluating primary and secondary sources, analyzing primary and secondary sources and developing critical and analytical skills. Specifically, the result has r-value of .703**, .677**, .740** respectively, all fall under strong positive (+) association. This means that the developed pencil and paper assessment is effective in assessing the learning outcomes for the reason that most of the students acquired high or passing score in this activity.

As far as the relationship between respondents' perception on the effectiveness of pencil and paper assessment and learning outcome in evaluating primary and secondary sources, one literature is conclusive. As stated in Ecole Globale (2023) pencil and paper assessment evaluates the learning and retaining capacity of a child. It analyses how much of the provided material or syllabus has been acquired by the student. It also helps educators or teachers to compare the performances of different students. Students develop their retaining and understanding capabilities. They also learn to recognize and reconstruct their intellect and build their cognitive abilities. This approach is overall more simple, straightforward and time-saving. It does not require extra tools and hence is very economical. A simple pen and paper can be used in the procedure.

While in terms of assessment strategy in communication and level of learning outcome there is significant relationship found at the 0.01 level of significance in terms of evaluating primary and secondary sources, analyzing primary and secondary sources and developing critical and analytical skills with the scores of .702**, .712**, and .783** respectively. It means that the developed assessment in communication is effective in students' learning outcome since they have strong positive (+) association.

Although, Gborsong, Yankah and Essel (2016) emphasized that with an essay response format, only a few topic areas/tasks can be covered due to the amount of time it takes to answer questions; however, the content can be covered in greater detail. Essay questions require little time to write but they are very timeconsuming to score. Although at first glance a multiple-choice format may seem a relatively easy and logical choice if breadth of coverage is emphasized, it is hard to write good multiplechoice questions and you should only choose this type of response format if one is willing to devote a lot of time to editing, reviewing, and revising the questions. If depth of coverage is emphasized, use an essay response format.

Moreover, between respondents' perception of performance assessment and level of learning outcome there is significant relationship with scores of .601**, .698**, and .650** respectively. The result implies that there is strong positive association between the two. The developed performance assessment is effective since the students acquired passing scores in the activities.

As strengthened by Miller (2020) performance assessments require application of knowledge and skills, rather than just rote recall or demonstration of them. They often result in an end-product like a presentation that is informed by more than one subject and crafted by drawing on a range of technology skills. There is generally no single correct answer, but evaluation is done by using a rubric.

Meanwhile, between respondents' perception on the effectiveness of observation assessment and level of learning outcome there is significant relationship with the scores of .689**, .795**, and .722** respectively. This implies that there is strong positive (+) association between the two. The developed observation assessment is effective in assessing evaluating primary and secondary sources, analyzing primary and secondary source and developing critical and analytical skills.

Marie and Douglas (2021) emphasized the thinking routines effective for students in assessment such as: engage in particular reading processes; depth of thinking about texts and engagement in a text.

Finally, the developed self-assessment has strong positive association in the respondents level of learning outcome with the scores of .603**, .658**, and .734**. The result means that the effectiveness of developed assessment is in congruent with the level of learning outcome of the respondents.

The result is inconsistent with the findings of Colliver et al. (2015) that self-assessment is often (implicitly or otherwise) conceptualized as a personal, unguided reflection on performance for the purposes of generating an individually derived summary of one's own level of knowledge, skill, and understanding in a particular area. For example, this conceptualization would appear to be the only reasonable basis for studies that fit into what has described as the "guess your grade" model of self-assessment research, the results of which form the core foundation for the recurring conclusion that self-assessment is generally poor.

In totality, all the respondents' perception on the developed authentic assessment is congruent or has strong positive association with the respondents' level of learning outcome. It means that the developed authentic assessments are effective in increasing the students learning outcomes in Philippine History. Between the perception of the respondent on Authentic Assessment Strategies and their level of learning outcomes in Readings in the Philippine History, there is a significant relationship among variables. Strong relationship was seen among variables.

Part VI. Relationship between Perception of the Respondents on Authentic Assessment Tools and Their Level of Learning Outcomes in Readings in Philippine History

This part discusses the significant relationship between between the perception of the respondents on the effectiveness of authentic assessment tools and their level of learning outcomes in Readings in Philippine History. The following variables used in the perception of respondents on authentic assessment tools are checklist, rating scale, learning log and anecdotal record. While indicators used in the level of learning outcomes in Readings in Philippine History are evaluating primary and secondary sources, analyzing primary and secondary sources, and developing critical and analytical skills.

Table 15. Test of Correlation between Authentic Assessment Tools and Learning Outcomes in Read-	
ings in the Philippine history	

Developed	Learning Outco	Learning Outcomes in Readings in Philippine History				
Authentic	Evaluating Primary and	Analyzing Primary and	Developing critical and			
Assessment	Secondary Sources	Secondary Sources	analytical skills			
Checklist	.578**	.695**	.799**			
Rating Scale	.466**	.560**	.648**			
Learning Log	.637**	.736**	.693**			
Anecdotal Records	.541**	.566**	.646**			

^{**.} Correlation is significant at the 0.01 level (2-tailed).

15 shows the test of relationship between perceived authentic assessment tools and level of learning outcome in readings in Philippine History. It reveals there is significant relationship between perceived authentic assessment tools and all level of learning outcome at 0.01 level of significance. This infers that checklist, rating scale, learning log and anecdotal records directly affect or influence the level of learning outcomes of students.

Between checklist and evaluating primary and secondary sources there is moderate positive association with a score of .578**. While checklist in analyzing primary and secondary sources and developing analytical and critical skills has strong positive association with the score of .695** and .799**. This implies that respondents perceived that checklist is effective in enhancing their learning outcome in both analyzing primary and secondary sources and developing critical and analytical skills. Though,

checklist is not so effective in evaluating primary and secondary sources.

Miller (2020) claimed that checklists provide transparency, organization, and reduction in the risk of human error. They have been successfully implemented in many different processes specifically for these reasons.

On the other hand, between rating scale and evaluating primary and secondary sources and analyzing primary and secondary sources there is moderate positive association with the score of .466** and .560**. However, between rating scale and developing critical and analytical skills there is strong positive association with the score of .648**. This implies that rating scale is very effective in developing analytical and critical skills.

Students use the rating scale for school projects in order to collect data that is relatively easy to understand, record and report. The rating scale is easily applied to many situations with good, solid data results. Teachers may use the rating scale to get feedback from students about the curriculum, satisfaction about specific projects or how to improve classroom instruction (Morgan, 2020).

Consequently, learning log has strong positive association with all the students' level of learning outcome and has the scores of .637**, .736**, and .693** respectively. This means that learning log is effective in acquiring the level of learning outcome of the students.

By documenting classroom practices, such as how students were grouped, what materials they used, which types of activities were used to engage students, what the teachers were doing, and how the content was presented, they could form general insights as to the typical practices employed in the classroom. In studying the use of logs to determine the quality of instruction. Rowan, Jacob, and Correnti (2019) identified four dimensions of teacher-student interplay that were important to assessing the quality of an educational setting. Learning Logs are useful because they promote metacognition. They are also useful tools for teachers because they can reveal students' perceptions (and misperceptions) of the information, as well as reveal how they are reacting to the way the material is being taught.

Finally, between anecdotal record and evaluating primary and secondary sources and analyzing primary and secondary sources there is moderate positive association with the scores of .541** and .566**. However, between anecdotal record and developing critical and analytical skills there is strong positive association with the score of .646**. This means that anecdotal records is very effective in developing critical and analytical skills.

Among many observation tools, anecdotal record keeping is the best tool to observe students' progress in studies. The American Association of School Administrators define an anecdotal record as, "a written record kept in a positive tone of a child's progress based on milestones peculiar to that child's physical, social, economic, aesthetic and cognitive development." (AASA, 1992). Anecdotal records provide a longitudinal qualitative picture of the behavioral changes in the life of each student and this systematic recording is carried out overtime. Anecdotal records give cumulative information regarding progress, skills acquired by a student and directions for further instruction.

Overall, only learning log is very effective in enhancing the students' learning outcome in developing analytical and critical skills. While checklist, rating scale and anecdotal records is somehow effective or has indirect association in the students' level of learning outcome.

Conclusion

This study concluded the effectiveness of authentic assessment in flexible learning modality of readings in Philippine History for first year college students of SLSU Alabat, Quezon. Specifically, this study aimed to determine the perception of the respondents on the effectiveness of the developed authentic assessment in terms of: paper and pencil assessment; assessment strategy in communication; performance assessment; observation assessment; and, selfassessment. Also, this study aimed to know the perception of the respondents on the effectiveness of authentic assessment tools such as: checklist; rating scale; learning log; and anecdotal records. Moreover, this study aimed to determine respondents' perception on learning outcomes in Readings in the Philippine History in terms of: evaluating primary and secondary

sources; analyzing primary and secondary sources; and developing critical and analytical skills. Further, this study also aimed to determine the level of learning outcomes in Readings in the Philippine History in terms of: evaluating primary and secondary sources; analyzing primary and secondary sources; and developing critical and analytical skills. Likewise, the study wanted to test if there is a significant relationship between the perception of the respondent on the developed authentic assessment and their level of learning outcomes in Readings in Philippine History. Lastly, this study wanted to know if there is significant relationship between the perception of the respondents on Authentic Assessment tools and their level of learning outcomes in Readings in Philippine History.

In line with the questions presented above, the study posited four hypotheses, one of which states that there is no significant relationship between the perception of the respondent on the developed authentic assessment and their level of learning outcomes in Readings in Philippine History. The second hypothesis states that there is a significant relationship between the perception of the respondent on the developed authentic assessment and their level of learning outcomes in Readings in Philippine History. While the third hypothesis states that there is no significant relationship between the perception of the teachers on authentic assessment tool and students' level of learning outcomes in readings in the Philippine History. Finally, the fourth hypothesis states that that there is significant relationship between the perception of the teachers on authentic assessment tool and students' level of learning outcomes in readings in the Philippine History.

The research employed a descriptive-correlational design wherein the researcher crafted checklist questionnaires which were validated by the adviser, the panel, subject specialist, and external validators. The survey was done through google forms due to the current situation.

The instruments have undergone pilot testing before administering to the actual respondents. The respondents consisted of the fifty-six (56) first year college students from Southern

Luzon State University, Alabat Campus, Quezon. The data obtained from the checklist questionnaire were presented, tabulated, compared, and interpreted. Variables of the study were perceived using mean, weighted mean, and correlated using Pearson correlation coefficient.

References

- Academ. (2022). The importance of student self-assessment. Retrieved from: https://academ.com.au/importancestudentselfassessment/#:~:text=Student%20self%2Dassessment%20occurs%20when,for%20their%20own%20learning%20process.
- Adams, T. & Hsu, J.(2018). *Classroom assessments*: Teachers' conceptions and practices in mathematics. School Science and Mathematics, 98(4), 174-180.
- Ali, R., Ghazi, S. R., Khan, M. S., Hussain, S., & Faitma, Z. T. (2010). *Effectiveness of modular teaching in biology at the secondary level*. Asian Social Science, 6(9). https://doi.org/10.5539/ass.v6n9p49.
- Aman, M. (2015). The correlation of student achievement at basic education in mathematics by applying authentic assessment tools: Performance-based strategy, Unpublished Master Thesis, University of Bahrain.
- Ayer, A. J. (1968). *The origins of pragmatism*: Studies in the philosophy of Charles Sanders Peirce and William James. San Francisco: Freeman, Cooper.
- Azim, S., & Khan, M. (2012). Authentic assessment: An instructional tool to enhance students learning. Academic Research International, 2(3), 314–320. https://ecommons.aku.edu/pakistan ied pdcc/11/.
- Bagood, J. B. (2020). *Teaching-learning modal-ity under the new normal*. Philippine Information Agency. https://pia.gov.ph/features/articles/1055584.
- Bell, B. and Cowie, B. (2012). *The characteristics* of formative assessment in science education. Science Education, 85(5): 536–553.
- Bhamani, S., Makhdoom, A. Z., Bharuci, V., Ali, N., Kaleem, S., & Ahmed, D. (2020). *Home learning in times of COVID: Experiences of*

- parents. Journal of Education and Educational Development, 9-26. https://eric.ed.gov/?q=Home+learn-ing+in+times+of+COVID%3a+Experiences+of+parets&ft=on&id=EJ1259928.
- Blomeke, S., Gustafsson, J.-E., & Shavelson, R. (2015). *Beyond dichotomies: Competence viewed as a continuum*. Zeitschrift fu"r Psychologie, 223(1), 3–13.
- Boud, D. (2015). *Implementing Student Self-Assessment, 2nd Edn.* Australian Capital Territory: Higher Education Research and Development Society of Australasia.
- 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
- Butler, Y. G. (2019). How do teachers observe and evaluate elementary school students' foreign language performance? A case study from South Korea. TESOL Quarterly, 43, 417-444.
- Candra, O., Islami, S., Syamsuarnis, S., Elfizon, E., Hastuti, H., Habibullah, H., & Eliza, F. (2019). Validity of development on authentic assessment tool of curriculum 2013 based in information technology. International Journal of Scientific and Technology Research, 8(12), 265-267. https://www.researchgate.net/profile/SyaifulIslami/publication/341600583 Validity Of Development On Authentic Assesment_Tool_Of_Curriculum 2013 Based In Information Technology/links/5ec99335299bf1c09ad97f33/.
- Carrillo, C., & Flores,M. A. (2020). COVID-19 and teacher education: A literature review of online teaching and learning practices. European Journal of Teacher Education, 466-487. https://www.tandfonline.com/doi/full/10.1080/02619768.2020.1821184.
- Cizek, G. (2009). Reliability and validity of information about student achievement: Comparing large-scale and classroom testing contexts. Theory into Practice, 48(1), 63-71.

- Colliver, J., Verhulst, S, and Barrows, H. (2015). Self-assessment in medical practice: a further concern about the conventional research paradigm. Teach. Learn. Med. 17, 200–201. doi: 10.1207/s15328015tlm1703 1.
- Cos, F.L., Duero, M.C., & Paguia, R.S. (2021). The viability of DepEd textbooks as the primary material for the modular distance learning modality of carrascal national high school. Journal of Innovations in Teaching and Learning, 2021, Vol. 1, No. 2, 69-75. Published by Science and Education Publishing. DOI:10.12691/jitl-1-2-2 https://www.researchgate.net/profile/Matt-Paguia/publication/352256345.
- Cullinane, C., & Montacute, R. (2020). *COVID-19* and social mobility impact brief #1: school shutdown. Sutton Trust. https://dera.ioe.ac.uk/35356/1/COVID-19-Impact-Brief-School-Shutdown.pdf.
- Dame, B., & Lea, K. (2020, May 29). *Using universal design to create better assessments*. Edutopia. https://www.eduto-pia.org/article/using-universal-design-create-better-assessments.
- Dangle, Y. R. P., & Sumaoang J. D. (2020). The implementation of modular distance learning in the Philippine secondary public schools. 3rd International Conference on Advanced Research in Teaching and Education https://www.dpublication.com/abstract-of-3rd-icate/27-427/.
- Elwood, J. & Klenowski, V. (2012) *Creating communities of shared practice*: assessment use in learning and teaching, Assessment and Evaluation in Higher Education, 27(3), 243–256.
- Fritz, C. A. (2014). The level of teacher involvement in the Vermont mathematics portfolio assessment process and instructional practices in Grade 4 Classrooms. Dissertation abstracts, Ph.D., University of New Hampshire, USA. UMI 3006136.
- Frank, J. (2012). *The roles of assessment in lan*guage teaching. Retrieved from: http://files.eric.ed.gov/.

- Gao, X., & Grisham-Brown, J. (2011). The use of authentic assessment to report accountability data on young children's language, literacy and pre-math competency. International Education Studies, 4(2), 41–53.

 <a href="https://eric.ed.gov/?q=].+The+use+of+authentic+assessment+to+report+accountability+data+on+young+children%e2%80%99s+language%2c+liter-acy+and+pre-math+competency&ft=on&id=EJ1066453.
- Goodman. Y. (2015). Kid watching. In a Jaggar and M.T.Smith Burke (Eds.), Observing the language learner. Newark, DE: International Reading Association.
- Grounlund, N. (2015). *Measurement and evaluation in teaching*, 5th ed. New York: Macmillan.
- Guido, R. M. D. (2014). Evaluation of a modular teaching approach in materials science and engineering. American Journal of Educational Research, 2(11), 1126-1130. https://doi.org/10.12691/education-2-11-20.
- Karthikeyan, K., & Kumar, A. (2014). *Integrated modular teaching in dermatology for undergraduate students: a novel approach.* Indian Dermatology Online Journal, 5(3), 266. https://doi.org/10.4103/2229-5178.137774.
- Lanting, A. Y. (2015). An empirical study of district-wide k-2 performance assessment program: Teacher practices, Information Gained, and use of Assessment Results. Dissertation Abstracts. Ph.D., the University of Illinois At Urbana Champaign, USA.
- Lapada, A. A., Miguel, F.F., Robledo, D. A. R., & Alam, Z. F. (2020). *Teachers' covid-19 awareness, distance learning education experiences and perceptions towards institutional readiness and challenges*. International Journal of Learning, Teaching and Educational Research, 19(6). https://doi.org/10.26803/ijlter.19.6.8.
- Malipot, M. H. (2020, August 4). *Teachers air problems on modular learning system*. Manila Bulletin. https://mb.com.ph/2020/08/04/teachers-air-problems-on-modular-learning-system/.

- Martineau, M. D., Charland, P., Arvisais, O., & Vinuesa, V. (2020). *Education and COVID-19: Challenges and opportunities*. Canadian Commission for UNESCO. https://en.ccunesco.ca/idealab/education-and-covid-19-challenges-and-opportunities.
- Masten, A. S., & Coatsworth, J. D. (2018). *The development of competence in favorable and unfavorable environments*. American Psychologist, 53(2), 205–220.
- Mataac, J. (2021). Impact of modular distance learning and the reading development of the beginning readers. International Journal of Research Publication. IJRP 2021, 75(1), 90-104; doi:.10.47119/IJRP100751420211869 file:///C:/Users/John%20Bert/Downloads/100751420211869.pdf.
- Menand, L. (2001). *The metaphysical club: A story of ideas in America*. New York: Farrar, Straus, and Giroux.
- Mikre, F. (2010). The roles of assessment in curriculum practice and enhancement of learning. Ethiop Journal of Education & Science. 5(2) 101-114. Retrieved from: https://www.ju.edu.et/.
- Miller, A. (2020, April 7). Formative assessment in distance learning. Edutopia. https://www.edutopia.org/article/formative-assessment-distance-learning.
- Moon, T., Brighton, C., Callahan, C. & Robinson, A. (2015). *Development of authentic assessments for the middle school classroom*. XVI,2/3, 119-133.
- Moore, E. (1961). *American pragmatism*: Peirce, James, and Dewey. New York: Columbia University Press.
- Nardo, M. T. B. (2017). Modular instruction enhances learner autonomy. American Journal of Educational Research, 5(10), 1024-1034. http://pubs.sciepub.com/education/5/10/3/index.html.
- Nasab.G., F. (2015). *Alternative versus traditional assessment*. Journal of Applied Linguistics and Language Research.2(6) 165-178. Retrieved from http://www.jallr.ir.
- 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/s10648-015-9350-2.
- Phongsirikul, M. (2018). Traditional and alternative assessment in ELT: *Student's and teachers' perceptions*. Vol 25, No.1. reflections. https://eric.ed.gov/?q=Traditional+and+alternative+assess-ment+in+ELT%3a+Student%e2%80%99s+and+teachers%e2%80%99s+perceptions&ft=on&id=EJ127163
- Sabri, M., Retnawati, H., & Fitriatunisyah. (2019). *The implementation of authentic assessment in mathematics learning.* Journal of Physics: Conference Series, 1200(1), 1–6. https://doi.org/10.1088/1742-6596/1200/1/012006/ https://iopscience.iop.org/article/10.1088/1742-6596/1200/1/012006/meta.
- Sadiq, S., & Zamir, S. (2014). Effectiveness of modular approach in teaching at the university level. Journal of Education and Practice, 5, 103-109
 https://www.iiste.org/Journals/in-dex.php/JEP/article/view/13916.
- Sax, G. (2018). *Principles of educational and psy-chological measurement and evaluation*, 2nd ed. California: Wadsworth.
- Sejpal, K. (2013). *Modular method of teaching*. International Journal for Research in Education. Vol. 2,(2), Feb. 2013 (IJRE) ISSN: 2320-091X. https://raijmronlineresearch.files.word-
 - press.com/2017/07/29 169-171-dr-kandarp-sejpal.pdf.
- Syaifuddin, M. (2020). Implementation of authentic assessment on mathematics teaching: Study on junior high school teachers. European Journal of Educational Research, 9(4), 1491-1502. https://doi.org/10.12973/eu-jer.9.4.149 https://eric.ed.gov/?q=Implementation+of+authentic+assessment+on+mathematics+teaching%3a+Study+on+junior+high+school+teachers&ft=on&id=EJ1272387.
- Tortor, E. (2016). Aspects of the written English of University of Ghana students. Unpublished Masters Dissertation.

- Quine, W. V. (1992). *Pursuit of truth* (Rev. ed.). Cambridge, MA: Harvard University Press. Rogers, R. R. (2001). Reflection in higher education: A concept analysis. Innovative Higher Education, 26(1), 37-57.
- Richards, J. & Renandya, W. (2014). *Methodology in language teaching*. Cambridge: Cambridge University Press.
- Rorty, R. (1991). *Objectivity, relativism, and truth*. Cambridge, MA: Harvard University
- Rowan, B. & Correnti, R. (2009). Studying reading instruction with teacher logs: Lessons from the Study of Instructional Improvement. Educational Researcher, 38(2), 120-131. Retrieved from http://edr.sagepub.com/cgi/content/abstract/38/2/120.
- Thayer, H. S. (1968). *Meaning and action: A critical history of pragmatism*. New York: Bobbs-Merrill.
- Troia, G.A. (2013). Effective writing instruction across the grades: What every educational consultant should know. Journal of Educational and Psychological Consultation, 14 (1), 75-89.
- Tuscano, J. (2017). Design for authenticity: Authentic assessments in online distance learning. Retrieved from: https://francis-jimtuscano.com/2020/04/19/design-for-authenticityauthenticassessmentsinonlinedistancelearning/#:~:text=In%20an%20authentic%20assessment%2C%20teachers,improve%20their%20performances%20and%20products.
- Valencia, M. R. (2020, April). *Modular approach in teaching science 10*. International Journal of Trend in Scientific Research and Development (IJTSRD). https://www.ijtsrd.com/other-scientific-research-area/other/30318/modularap-proach-in-teaching-science-10/marsha-r-valencia.
- World Education. (2013). *Drivers of persistence:* Competence. World Education. https://edtechbooks.org/-QFC.
- Zaim, M., Refnaldi, & Arsyad, S. (2020). Authentic assessment for speaking skills: Problem and solution for english secondary school

teachers in Indonesia. International Journal of Instruction, 13(3), 587-604 https://eric.ed.gov/?id=EJ1259521.

Zlatkin-Troitschanskaia, O., Jitomirski, J., Happ, R., Molerov, D., Schlax, J., Ku^{*}hling-Thees, C., Forster, M., & Bruckner, S. (2019).

Validating a test for measuring knowledge and understanding of economics among university students. Zeitschrift fur Padagogische Psychological, 33(2), 119– 133.