

Development of a Project Assessment Instrument to Measure Skills Using Historical Sources for History Study Program Students at The University of Riau

Asyurul Fikri^{a*}, Aman^b, Suarman^a, Isjoni^a, Sumarno^a

^aUniversitas Riau, Kampus Bina Widya KM. 12,5, Simpang Baru, Kota Pekanbaru, Riau 28293, Indonesia

^bUniversitas Negeri Yogyakarta, Jl. Colombo Yogyakarta No.1, Daerah Istimewa Yogyakarta 55281, Indonesia

asyurul.fikri@lecturer.unri.ac.id*

*corresponding author

ARTICLE INFO	ABSTRACT
Article history Received 16, 3, 2023 Revised 8, 10, 2023 Accepted 6, 21, 2023	<p>The goal of this study is to create a project evaluation tool that can be used to evaluate students' knowledge of how to use historical sources. The three steps of the employed instrument development approach are: (i) need analysis; (ii) development of a framework for project evaluation instruments; and (iii) validation tests, instrument trials, and instrument changes by experts. 54 randomly chosen students from the history education study program at Riau University made up the research subjects. Research data was gathered through surveys and literature reviews. The SPSS version 25.0 application is used to do statistical analysis as part of the data analysis approach. 4.416. This demonstrates the instrument's excellent design and alignment with the intended use of the measurement. With an average score of 4.24, the test results further demonstrate this instrument's capacity to deliver reliable assessments. The instrument's validity and reliability scored highly. Based on these results, it can be said that the project evaluation tool created in this study has strong validity and reliability in assessing students in the University of Riau's History Study Program's capacity to use historical materials.</p>
Keywords Knowledge of history Skills to use historical resources Project evaluation	

This is an open-access article under the [CC-BY](#) license.



I. Introduction.

The University of Riau's history studies program seeks to develop graduates with a thorough understanding of history and the excellent ability to use historical knowledge in a variety of situations. Effective use of historical materials is one of the key abilities in studying history (Barros et al., 2019; Claravall & Irey, 2021; Cowgill II & Waring, 2017). For history students, the ability to use historical sources effectively is crucial because of four essential reasons. First, historical sources are the primary source of information for studying and comprehending historical situations (Puurtinen et al., 2015). Second, making use of historical sources necessitates the capacity to assess historical data (Zachrich et al., 2020). To develop a thorough understanding of historical events, students need to be able to access, examine, and evaluate a variety of historical materials, including documents, artifacts, pictures, and records. Without these skills, historical interpretation may be constrained and unreliable. Besides, to comprehend the meaning of historical sources, history students need to be able to assess the sources' merits and shortcomings,

identify certain biases or points of view and engage in critical analysis. As a result, these skills aid in the development of thorough and unbiased critical thinking in history students. Third, proficiency in the use of historical materials enables students to create historical narratives that are cogent and supported by facts (Ningsih et al., 2019). They can synthesize data from many sources, examine linkages and trends, and spot changes and continuity through time. These skills allow history students to effectively communicate their knowledge through writing, presentations, or discussions. Fourth, aside from the academic setting, the ability to use historical sources is also relevant to numerous applications in daily life (Rantala & van den Berg, 2015). Students of the history department who are adept at analyzing historical materials can use these abilities to comprehend the present social, political, and cultural background. Additionally, to make wise and important judgments, they might also investigate the information resources.

By having the skills to use good historical sources, history students can become skilled historians, critical researchers, effective teachers, and meaningful

contributors to understanding the past and building a better future. Based on the theory, a deep understanding of history and the ability to use historical sources is crucial for history students.

Nonetheless, the challenge encountered lies in the absence of a precise skills assessment tool to evaluate students' potential in this area. The recently adopted assessment instruments do not fully reflect the actual skills required in interpreting and analyzing historical sources. The generally used assessment instruments are inadequate in measuring student abilities comprehensively. As a result, the actual potential, and abilities of students in using historical sources are not optimally revealed (Ibay & Palalisbo, 2020; Janah & Hamami, 2022; Ningsih et al., 2019). Some students may have strong abilities in analyzing historical sources, but the existing assessment instruments are unable to uncover them properly (Alruwais et al., 2018; Box et al., 2015; Ofianto & Suhartono, 2015). Consequently, this issue can hinder the development and recognition of students' full potential.

In addition, the results of interviews with history lecturers and students suggested that the recently used assessment instrument by lecturers to assess student assignments, including skills in using historical sources, is in the form of historical essays. However, according to several studies, this instrument has several weaknesses, including (i) it tends to focus more on conceptual understanding and theoretical analysis rather than practical skills (Hazi, 2020), specifically in the context of using historical sources, practical skills such as the ability to search, select, analyze, and compile information from various historical sources are not always well reflected through essay instruments; (ii) it is limited and cannot illustrate a complete picture of student's ability to use historical sources in a more realistic context (Saeed et al., 2017); (iii) it often involves subjectivity from lecturers which can reduce objectivity and fairness in assessing students' skills in using historical sources; and (iv) it may not provide sufficient in-depth feedback to help students understand their strengths and weaknesses in using historical sources (Jong & Tan, 2021).

Further, inaccurate assessment instruments also negatively impact teaching and learning methods (Astalini et al., 2019; Brew & Saunders, 2020; Ofianto & Suhartono, 2015; Sajjad et al., 2018; Saputri et al., 2018). Lecturers will find it challenging to evaluate and improve the curriculum and teaching methods without appropriate tools to measure student abilities effectively. As a result, it obstructs the learning process and student progress. Therefore, it is essential to address this shortfall by developing accurate and relevant skills assessment instruments (Al-Hattami, 2020; Gazi et al., 2022; Vanderoost et al., 2018).

One of the assessment instruments that can be used as a solution to overcome the weaknesses of the essay instrument is project assessment. Project assessment

provides opportunities for students to work with historical sources in a more concrete context, such as through conducting research, analyzing original documents, or constructing historical reconstructions based on existing evidence (Doppelt, 2005; Fisher, 2021; Hairida & Junanto, 2018; Lubas, 2022). Project appraisals tend to be more objective and provide a clearer assessment framework. It also provides richer and more specific feedback related to the use of historical sources so that students can improve and develop their skills more effectively (Fisher, 2021; Hairida & Junanto, 2018; Nurulwati et al., 2021).

Studies on skills assessment instruments using historical sources have been carried out extensively. For instance, the research by Anis et al. (2020) developed a model of historical thinking that measures cognitive dimensions in learning history in Indonesia. The model included multiple-choice instruments, free-response questions with short answers, document-based questions, and free essays to measure cognitive dimensions. This contrasts with our research which focuses on developing more specific project assessment instruments to measure students' skills using historical sources. Second, the research by Seixas et al. (2015) developed a skills assessment instrument using historical sources called the "One Hour Test." The study involved multiple-choice and short-answer questions to measure students' skills in using historical sources. This is, of course, distinct from our research, which focuses on producing project assessments. Multiple-choice and short-answer tests are not able to accurately diagnose the potential of students because students are only asked to choose answers from the provided alternatives. Third, Ningsih et al. (2019) constructed a portfolio assessment instrument to measure students' skills in using historical sources. However, portfolio assessment has weaknesses, including its inability to assess students' abilities comprehensively because it only assesses the best achievement of students. This research is different from our research which focuses on project assessment instruments to measure students' skills in using historical sources.

Based on several previous studies, this research is essential. So, this study establishes a project assessment instrument for measuring skills using historical sources. With better instruments, students' potential to use historical sources can be identified and developed better. In the long term, this will enable universities and educational institutions to prepare history students with solid skills relevant to the demands of the world of work and complex social contexts.

II. Method

This research adopted a development research approach with research stages consisting of (i) analysis of the needs of instrument development; (ii) construction of a project assessment instrument framework; as well as (iii) expert validation tests, instrument trials, and instrument

revisions. The research subjects consisted of 54 students from the history education study program of Riau University who were randomly selected. The needs analysis was carried out through a literature study and the distribution of questionnaires to 30 students of the history education study program of Riau University. The needs analysis questionnaire outline is presented in Table 1.

Table 1. Needs analysis questionnaire for the development of project assessment instruments

No.	Statement	1	2	3	4	5
1.	Project assessment instruments need to be developed to evaluate the skills of history students.					
2.	The use of historical sources in project assessment can improve students' understanding of history.					
3.	Project appraisal instruments should include historical resource analysis capabilities.					
4.	The importance of project assessment instruments in measuring the ability to construct arguments based on historical sources.					
5.	Relevant project assessment instruments will motivate students to study better.					
6.	Project appraisal instruments should reflect the authentic use of historical sources.					
7.	Project appraisal instruments should include skills in interpreting historical evidence.					
8.	The importance of project assessment instruments to measure students' understanding of the historical context.					
9.	Project appraisal instruments need to involve a critical analysis of historical sources.					
10.	Project assessment instruments must include students' ability to identify the accuracy of information in historical sources.					
11.	The importance of project assessment instruments in measuring students' ability to compose historical narratives.					
12.	The project appraisal instrument should describe the process of developing a logical historical argument.					
13.	Project assessment instruments must include students' ability to interpret historical sources contextually.					
14.	The importance of project assessment instruments in measuring students' ability to identify biases in historical sources.					
15.	Project assessment instruments need to include metacognitive					

No.	Statement	1	2	3	4	5
	reflection on the use of historical sources.					

The results of the needs analysis were used as a benchmark in developing the project assessment instrument framework. The instrument designs that had been made were subjected to expert validation tests involving two material experts and two assessment instrument experts selected based on their academic backgrounds. Furthermore, an instrument trial involving 54 students was also carried out. The data collection instruments consisted of questionnaire sheets, validation sheets, instrument trial sheets, and project tests. The research data were analyzed using statistical analysis tests through SPSS version 25.0 program.

III. Results and Discussion

A. Needs analysis

Literature studies results show the absence of research on developing project assessment instruments to measure skills using student historical sources (Anis et al., 2020; Ningsih et al., 2019; Seixas et al., 2015). The available instrument had several weaknesses, including not being able to accurately diagnose students' skills in using historical sources, being limited and unable to offer a complete picture of students' abilities in using historical sources in a more realistic context, and not providing in-depth feedback to help students recognize their advantages and disadvantages while using historical materials. Therefore, project evaluation can be the alternative to resolve these flaws as it offers a complete picture of the student's knowledge by using historical sources.

Essentially, students can use their knowledge of understanding, analyzing, and building arguments based on historical sources while evaluating projects (Rini et al., 2020; Suwarno et al., 2020). Students may comprehend the historical background comprehensively if historical materials are used in project assessments (Hairida & Junanto, 2018; Matriano, 2020). Additionally, students can get a greater grasp of historical events, people, and processes through direct contact with historical materials. The ability to analyze historical sources, interpret historical evidence, construct arguments based on historical sources, and be able to metacognitively reflect on the use of historical sources are a few examples of the skills that should be covered by effective project assessment (Cowgill II & Waring, 2017; Martínez-Hita et al., 2021; Oliver & Purichia, 2018; Rantala & van den Berg, 2015). Meanwhile, students must evaluate historical facts for their projects, contextualize their interpretation, and create arguments based on this information. Through those skills, students will gain analytical and critical thinking abilities, which are crucial for studying history. Besides, the literature review results also signified that the establishment of a project evaluation tool to gauge students' proficiency in using historical sources is crucial.

Additionally, by distributing questionnaires to students, we also gathered data for needs analysis. The results of the questionnaire analysis are presented in Table 2.

Table 2. Results of the needs analysis for the development of project assessment instruments

No.	Statement	Score	Information
1.	Project assessment instruments need to be developed to evaluate the skills of history students.	4.2	Strongly agree
2.	The use of historical sources in project assessment can improve students' understanding of history.	4.4	Strongly agree
3.	Project appraisal instruments should include historical resource analysis capabilities.	4.1	Strongly agree
4.	The importance of project assessment instruments in measuring the ability to construct arguments based on historical sources.	4.3	Strongly agree
5.	Relevant project assessment instruments will motivate students to study better.	4.0	Strongly agree
6.	Project appraisal instruments should reflect the authentic use of historical sources.	4.6	Strongly agree
7.	Project appraisal instruments should include skills in interpreting historical evidence.	4.2	Strongly agree
8.	The importance of project assessment instruments to measure students' understanding of the historical context.	4.7	Strongly agree
9.	Project appraisal instruments need to involve a critical analysis of historical sources.	4.0	Strongly agree
10.	Project assessment instruments must include students' ability to identify the accuracy of information in historical sources.	4.0	Strongly agree
11.	The importance of project assessment instruments in measuring students' ability to compose historical narratives.	4.2	Strongly agree
12.	The project appraisal instrument should describe the process of developing a logical historical argument.	3.9	Agree
13.	Project assessment instruments must include students' ability to interpret historical sources contextually.	4.2	Strongly agree
14.	The importance of project assessment instruments in measuring students' ability to identify biases in historical sources.	4.3	Strongly agree

No.	Statement	Score	Information
15.	Project assessment instruments need to include metacognitive reflection on the use of historical sources.	4.2	Strongly agree
	Rate-rate	4.22	Strongly agree

The results of the questionnaire involving 30 respondents suggested that most respondents agreed with the need to develop a project assessment instrument for measuring students' skills in using historical resources. They recognize the importance of project assessment instruments that cover various aspects of skills in using historical sources, such as source analysis, contextual interpretation, logical argument development, and metacognitive reflection. This points to the need to develop relevant project assessment instruments to facilitate a more comprehensive assessment of student's skills in using historical sources.

B. Design stage

The findings from the needs analysis indicate the need to create project assessment tools for evaluating skills related to historical sources among students enrolled in the History Education program at Riau University. Following this result, we constructed instrument outlines, as presented in Table 3.

Table 3. Project appraisal instrument grid

No	Rated aspect	Indicator	Assessment Rubric	Score
1	Content Quality	Students are skilled in describing an accurate understanding of historical facts that are relevant to the topic being worked on	Very Unskilled- Very Skilled	1-5
2	Linkage with Learning Materials	Skilled students explain in detail the relation of the chosen topic to the historical concept being studied, including the context of time, place, and relevant historical factors.	Very Unskilled- Very Skilled	1-5
3	Use of Sources and References	Students are skilled at using and critically	Very Unskilled- Very Skilled	1-5

No	Rated aspect	Indicator	Assessment Rubric	Score
		evaluating primary and secondary historical sources, including analyzing the reliability, relevance, and accuracy of the use of sources in compiling a comprehensive historical narrative.		
4.	Creativity and Innovation	Students are skilled at applying new approaches or unique points of view in the interpretation, analysis, and presentation of relevant historical material.	Very Unskilled- Very Skilled	1-5
5	Presentation and Communication	Students are skilled at presenting the results of historical analysis in a clear, structured, and persuasive manner, and are able to explain causal relationships, impacts, and the relevant historical context.	Very Unskilled- Very Skilled	1-5

$$\text{Score} = \frac{\text{Score Acquisition}}{\text{Shoes Maximum}} \times 100$$

As summarized in Table 3, the assessment project of history learning involves several aspects, which include content quality, linkage with learning materials, use of sources and references, creativity, and innovation, as well as presentation and communication. Each aspect has specific assessment indicators to evaluate the skills in using historical sources. For the rating scale, we used a 1-5 scale, with the higher scores reflecting students' more excellent abilities in each assessment aspect. In general, the developed project assessment provides an overview of the extent to which students can accurately describe historical facts, connect topics with historical concepts

being discussed, use historical sources critically, apply creativity and innovation in interpreting historical material, present analytical results clearly, and being persuasive with a deep understanding of the relevant historical context. The total score will reflect the student's overall score on the history learning project being evaluated.

C. Expert validation test results

In this validity test, we involved two material experts and two assessment experts. Each expert assessed the content, clarity of instruction, relevance to the material, level of difficulty, transparency of assessment rubric, and reliability of instruments in evaluating students. The results of the expert assessment are presented in Table 4:

Table 4. Expert validation test results

No	Assessment criteria	Average Score (Material Expert)	Material Expert Comments	Average Score (Evaluator)	Assessment Expert Comments
1	Content Validity	4.5	The instrument has high content validity.	4.2	The instrument needs a little improvement to increase content validity.
2	Clarity of Instructions	4.8	The instructions are very clear and easy for students to understand.	4.5	Instructions need some tweaking for better clarity.
3	Material Relevance	4.3	Assessment material is very relevant to learning history.	4.6	Assessment material has high relevance to learning history.
4	Degree of difficulty	4.6	Instruments are capable of covering appropriate levels of difficulty.	4.4	The difficulty level of the instrument needs a slight adjustment to ensure that students'

No	Assessment criteria	Average Score (Material Expert)	Material Expert Comments	Average Score (Evaluator)	Assessment Expert Comments
5	Clarity of Assessment Rubric	4.7	The scoring rubric is very clear and provides specific scoring criteria.	4.5	Understanding is measured properly. The assessment rubric is clear enough, but some refinements are needed to provide more rigorous assessment guidelines.
6	Instrument reliability in measuring skills using historical sources	4.4	The instrument has high validity and reliability in measuring skills using historical sources	4.3	The validity and reliability of the instrument need further attention to ensure consistent assessment results.

Based on the average obtained and expert comments, some improvements on the instrument were performed, including the adjustment on the difficulty level of the instrument to match the level of student understanding and adjustments to the scoring rubric to provide more stringent assessment instructions. In addition, the expert also suggests adjustments to the validity and reliability of the instrument to ensure the consistency of the assessment results.

After conducting expert validation analysis, the developed instruments were then tested on 54 students. The trial results are presented in Table 5.

Table 5. Results of project appraisal instrument trials

No	Trial Indicator	Rata-Rata Skor
1	Suitability of the instrument with the learning objectives of learning history	4.2

No	Trial Indicator	Rata-Rata Skor
2	Student understanding of instrument instructions	4.5
3	Readiness of students in answering questions	3.8
4	The relevance of the material to the historical concepts being studied	4.3
5	Students' ability to apply skills using historical sources	4.1
6	Clarity of the assessment rubric	4.4
7	Achievement of learning objectives	4.0
8	Appropriateness of the difficulty level of the instrument with student understanding	4.2
9	Reliability of assessment instruments	4.3
10	Ease of use of the instrument by the appraiser	4.6

Table 5 presents the results of the assessment's evaluation. The average score obtained from the tryout indicated the instrument's level of success in several aspects. In the first indicator, namely the suitability of the instrument with the objectives of learning history, we obtained an average score of 4.2, indicating a good level of practicality. Furthermore, the indicator of students' understanding of instrument instructions gets an average score of 4.5, signifying students' good knowledge of the instructions. However, in the indicator of student readiness in answering questions, we attained an average score of 3.8, indicating the potential for improvement in terms of student readiness. Other indicators such as the relevance of the material to the historical concepts being studied, the ability of students to apply skills using historical sources, the clarity of the assessment rubric, the achievement of learning objectives, the suitability of the difficulty level of the instrument with student understanding, the reliability of the assessment instrument, and the ease of use of the instrument obtain an average score ranging between 4.0 to 4.6. These findings illustrate a general idea of how well the evaluation instrument performed in assessing students' essential skills in learning history.

D. Validity Test and Reliability Test

The developed instruments also underwent the reliability and validity test in measuring students' skills in using historical sources. The results of the item validity test are presented in Table 6.

Table 6. Item Validity Test Results

No	Item	R Count	R Table	Significance Value
1	Content Validity	0.75	0.35	0.000
2	Clarity of Instructions	0.62	0.35	0.001
3	Material Relevance	0.68	0.35	0.000
4	Degree of difficulty	0.43	0.35	0.000
5	Clarity of Assessment Rubric	0.57	0.35	0.001
6	Instrument reliability in	0.81	0.35	0.001

No	Item	R Count	R Table	Significance Value
	measuring skills using historical sources			

The obtained validity scores were computed to find the R values, with higher than the R table's cutoff (0.35). Additionally, all of the attained p-values were less than 0.05, indicating significant validity for every item. Therefore, the constructed instrument may be used to assess students' proficiency with historical materials. Additionally, an instrument reliability test was also conducted. Table 6 displays the outcomes of the instrument reliability test.

Table 7. Instrument Reliability test results

Test type	Number of Items	Number of Respondents	Alpha Cronbach
Instrument Reliability	6	54	0.82

Table 7 presents the obtained Cronbach alpha, which illustrates the instrument's reliability. According to the tryout results involving 54 respondents, six of the instrument's items were found to be reliable. With a Cronbach's alpha score of 0.82, the data findings show that the instrument has high dependability. A reliability score close to 1 indicates that the instrument's items are associated with and produce reliable findings. Therefore, it is safe to proclaim that the established instrument is trustworthy in measuring the construct under study.

The goal of this study is to create a project evaluation instrument to evaluate students' knowledge in using historical materials in the History Study Program of the University of Riau. Two material experts and instrument experts participated in assessing the validity of this test. The instrument expert validation generates a score of 4.416, while the material expert validation results in a score of 4.55. These two scores represent a high level of instrument validity, proving that they can accurately assess students' abilities related to the materials being discussed. Furthermore, 54 students participated in the tryout of this project assessment instruments. The test results reveal a 4.24 average value. This suggests that this instrument can give students in the University of Riau's History Study Program an accurate and consistent portrayal of their ability to use historical materials.

To assess the validity of each item in the project assessment instrument, the item validity test was also carried out. The findings reveal that every item has a higher r count than the r table. This demonstrates the central validity of every item in the instrument. The project assessment tool's components precisely examine students' knowledge of using historical sources. Additionally, with a Cronbach's alpha value of 0.82, this instrument had a

high level of dependability. This score shows that the instrument's elements are associated with one another and produce reliable results. Linearly, previous studies have demonstrated that the constructed project assessment instrument can be utilized to examine students' abilities in the context of history learning (Fisher, 2021; Hairida & Junanto, 2018). Therefore, our findings demonstrate compatibility and consistency with pertinent prior studies. Besides, our results are highly relevant to earlier studies developing evaluation tools and historical education. The previous studies have also emphasized the significance of employing project assessment tools to gauge students' abilities about history teaching.

According to the available studies, project assessment has various advantages. First, project assessment allows students to work with historical sources in a more realistic context. Accordingly, students can conduct research, analyze original documents, compile historical reconstructions based on existing evidence, or create products that involve historical sources. Therefore, this helps students to develop the required practical skills to use historical sources effectively (Mayilyan, 2019). Second, project assessment encourages active and collaborative learning since students can work in teams, discuss, and share knowledge and skills in dealing with challenges related to the use of historical sources (Aula et al., 2019). This collaborative process helps students to learn from one another's experiences and ideas. Third, project assessment can facilitate the integration of cross-disciplinary skills relevant to the use of historical sources. In addition to historical skills, students can also develop research, data analysis, presentation, and critical thinking skills through projects that involve historical sources (Handayani et al., 2019). Fourth, project assessment allows lecturers to provide more extensive and specific feedback related to the use of historical sources. Further, lecturers can give in-depth feedback regarding students' strengths and weaknesses in analyzing historical sources, interpreting evidence, and constructing arguments based on these sources. This helps students to refine and develop their skills more effectively (Suwarno et al., 2020). Fifth, project assessment can help students develop transferability, such as the ability to apply the skills they learn in historical contexts to relevant situations or problems in real life (Mayilyan, 2019). Consequently, students can understand the connection between the use of historical sources and their application in a larger context by explicitly addressing historical sources in project assessments.

Previous studies have reported that project assessment techniques have been found to be useful for assessing abilities in several sectors, including history education. Research by Gomez et al. (2021) and Reisman et al. (2019), for instance, discovered that the project assessment tool might give a thorough and in-depth view of students' capacity to study and comprehend historical materials. These results confirm the efficiency of the project

assessment instrument in assessing students' knowledge by using historical sources.

Additionally, earlier studies have examined the reliability and validity of evaluation tools in the context of history teaching. Examples of studies that analyze the validity and reliability of evaluation tools in gauging comprehension of historical ideas include those carried out by, (Biasutti & Frate, 2017; Schaufeli et al., 2020; Shrotryia & Dhanda, 2019). Their findings suggest that the evaluation instrument has sufficient reliability and good validity in assessing historical concept knowledge. This is consistent with the obtained validity scores from the instrument and material experts, which demonstrate that the produced project evaluation instruments have high levels of validity and reliability.

As a consequence, the findings of this study confirm and add to those of other studies that establish the evaluation tools and investigate historical teaching. This study adds new knowledge by evaluating the validity and dependability of project evaluation instruments in illustrating students' proficiency in using historical materials at the University of Riau's History Study Program. The findings of this study can serve as a foundation for future research in this area and offer useful information for creating efficient and dependable evaluation tools in history education, specifically for practitioners.

In general, we have successfully designed a project evaluation tool to evaluate students in the history study program of the University of Riau on their ability to use historical materials. Through the validation involving the instrument and material experts, as well as from the outcomes of trials involving 54 students, the validity of the instrument has been demonstrated. All the items in the instrument exhibit substantial validity. According to the item validity test, the instrument's dependability is further shown by Cronbach's alpha, which is 0.82. The findings of this study provide a significant contribution to the creation of project assessment tools in the history education sector and may be used as a guide to creating a more effective and efficient history curriculum.

IV. Conclusion

Based on the study's findings, it can be said that a project evaluation tool for evaluating students in the University of Riau's history program's proficiency in using historical sources has been successfully developed. Expert validation of the content yielded a score of 4.55, and expert validation of the instrument yielded a score of 4.416, demonstrating the validity of the instrument. The test group consisted of 54 students, and the instrument produced a high average score of 4.24, demonstrating consistent and reliable evaluation. The computed correlation (r), which was larger than the table value, further proved the validity of the individual components.

Additionally, the instrument exhibited good reliability, as evidenced by Cronbach's alpha coefficient of 0.82. Based on these results, recommendations include expanding the implementation of project assessment instruments in history education settings across various institutions. Additionally, future research should aim to involve a larger and more diverse sample to strengthen the generalizability of the findings. Comparative studies comparing the effectiveness of this project assessment instrument with other assessment tools for measuring skills in using historical sources would also be beneficial. Lastly, further exploration of the relationship between the utilization of this project assessment instrument and the improvement of students' skills in effectively utilizing historical sources would be valuable.

References

- Al-Hattami, A. A. (2020). E-Assessment of students performance during the E-Teaching and learning. *International Journal of Advanced Science and Technology*, 29(8s), 1537–1547.
- Alruwais, N., Wills, G., & Wald, M. (2018). Advantages and challenges of using e-assessment. *International Journal of Information and Education Technology*, 8(1), 34–37. <https://doi.org/10.18178/ijiet.2018.8.1-1008>
- Anis, M. Z. A., Putro, H. P. N., Susanto, H., & Hastuti, K. P. (2020). Historical thinking model in achieving cognitive dimension of Indonesian history learning. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(7), 7894–7906.
- Astalini, A., Kurniawan, D., Sulistiyo, U., Perdana, R., & Susbiyanto, S. (2019). E-assessment motivation in physics subjects for senior high school. *International Journal of Online and Biomedical Engineering*, 15(11), 4–15. <https://doi.org/10.3991/ijoe.v15i11.10-843>
- Aula, M. F. R., Suyitno, H., & Rosyida, I. (2019). Mathematical literacy ability viewed from studentTM's learning style based on gender differences on PBL assistance project assessment. *Unnes Journal of Mathematics Education Research*, 8(1), 96–103.
- Barros, A., Carneiro, A. D. T., & Wanderley, S. (2019). Organizational archives and historical narratives: Practicing reflexivity in (re)constructing the past from memories and silences. *Qualitative Research in Organizations and Management: An International Journal*, 14(3), 280–294. <https://doi.org/10.1108/QROM-01-2018-1604>
- Biasutti, M., & Frate, S. (2017). A validity and reliability study of the attitudes toward sustainable development scale. *Environmental Education Research*, 23(2), 214–230. <https://doi.org/10.1080/13504622.2016.1146660>
- Box, C., Skoog, G., & Dabbs, J. M. (2015). A case study of teacher personal practice assessment theories and complexities of implementing formative assessment. *American Educational Research Journal*, 52(5), 956–983. <https://doi.org/10.3102/0002831215587754>
- Brew, A., & Saunders, C. (2020). Making sense of research-based learning in teacher education. *Teaching and*

- Teacher Education*, 87(January), 102935. <https://doi.org/10.1016/j.tate.2019.102935>
- Claravall, E. B., & Irey, R. (2021). Fostering historical thinking: The use of document based instruction for students with learning differences. *Journal of Social Studies Research*, xxx, 1–16. <https://doi.org/10.1016/j.jssr.2021.08.001>
- Cowgill II, D. A., & Waring, S. M. (2017). Historical thinking: An evaluation of student and teacher ability to analyse sources. *Journal of Social Studies Education Research*, 8(1), 115–145.
- Doppelt, Y. (2005). Assessment of project-based learning in a Mechatronics context. *Journal of Technology Education*, 16(2), 7–24. <https://doi.org/10.21061/jte.v16i2.a.1>
- Fisher, D. (2021). The effect of project-based assessment with value clarification technique in improving students' civics learning outcomes by controlling the family environment. *European Journal of Educational Research*, 11(1), 69–81.
- Gazi, F., Atan, T., & Kılıç, M. (2022). The assessment of internal indicators on the balanced scorecard measures of sustainability. *Sustainability (Switzerland)*, 14(14), 1–19. <https://doi.org/10.3390/su14148595>
- Hairida, H., & Junanto, T. (2018). The effectiveness of performance assessment in project-based learning by utilizing local potential to increase the science literacy. *International Journal of Pedagogy and Teacher Education*, 2(July), 17. <https://doi.org/10.20961/ijpte.v2i0.25722>
- Handayani, F., Hartono, H., & Lestari, W. (2019). Need analysis in the development of hots-oriented study project assessment instrument in android-based science learning. *Journal of Educational Research and Evaluation*, 8(1), 57–64. <https://doi.org/10.15294/jere.v8i1.31799>
- Hazi, H. (2020). On instructional improvement: A modest essay. *Journal of Educational Supervision*, 3(3), 90–103. <https://doi.org/10.31045/jes.3.3.7>
- Ibay, S. B., & Pa-alisbo, M. A. C. (2020). An assessment of the managerial skills and professional development needs of private catholic secondary school administrators in Bangkok, Thailand. *World Journal of Education*, 10(1), 149–163. <https://doi.org/10.5430/wje.v10n1p149>
- Janah, S. M., & Hamami, T. (2022). The effectiveness of self-assessment to improve metacognitive ability in Islamic religious education. *Ta'dib*, 25(2), 247. <https://doi.org/10.31958/jt.v25i2.5911>
- Jong, B., & Tan, K. H. (2021). Using padlet as a technological tool for assessment of students' writing skills in online classroom settings. *International Journal of Education and Practice*, 9(2), 411–423. <https://doi.org/10.18488/journal.61.2021.92.411.423>
- Lubas, K. (2022). Research-based learning model for senior high school science instruction research questions. *Psychology and Education: A Multidisciplinary Journal*, 2(4), 316–328. <https://doi.org/10.5281/zenodo.6727906>
- Martínez-Hita, M., Gómez-Carrasco, C. J., & Miralles-Martínez, P. (2021). The effects of a gamified project based on historical thinking on the academic performance of primary school children. *Humanities and Social Sciences Communications*, 8(1), 1–10. <https://doi.org/10.1057/s41599-021-00796-9>
- Matriano, A. (2020). Ensuring student-centered, constructivist and project-based experiential learning applying the exploration, research, interaction and creation (Eric) learning model. *International Online Journal of Education and Teaching (IOJET)*, 7(1), 214–227.
- Mayilyan, H. (2019). Augmented reality in education, AR globe project assessment in actual teaching-learning environment. *International Journal of Learning, Teaching and Educational Research*, 18(3), 1–14. <https://doi.org/10.26803/ijlter.18.3.1>
- Ningsih, T. Z., Sariyatun, & Agung, S. L. (2019). Development of portfolio assessment to measure the student's skill of using primary source evidence. *New Educational Review*, 56(2), 101–113. <https://doi.org/10.15804/ner.2019.56.2.08>
- Nurulwati, N., Herliana, F., Elisa, E., & Musdar, M. (2021). The effectiveness of project-based learning to increase science process skills in static fluids topic. *AIP Conference Proceedings*, 2320(March). <https://doi.org/10.1063/5.0037628>
- Ofianto, O., & Suhartono, S. (2015). An assessment model of historical thinking skills by means of the RASCH model. *Research and Evaluation in Education*, 1(1), 73. <https://doi.org/10.21831/reid.v1i1.4899>
- Oliver, K., & Purichia, H. (2018). Analysing historical primary source open educational resources: A blended pedagogical approach. *Contemporary Issues in Technology and Teacher Education (CITE Journal)*, 18(2), 392–415.
- Puurtinen, M., Nivala, M., & Virta, A. (2015). Visual sources and historical thinking in higher education. *Nordidactica: Journal Of Humanities And Social Science Education*, 2015(4), 1–20.
- Rantala, J., & van den Berg, M. (2015). Finnish high school and university students' ability to handle multiple source documents in history. *Historical Encounters*, 2(1), 70–88.
- Reisman, A., Brimsek, E., & Hollywood, C. (2019). Assessment of historical analysis and argumentation (AHAA): a new measure of document-based historical thinking. *Cognition and Instruction*, 37(4), 534–561. <https://doi.org/10.1080/07370008.2019.1632861>
- Rini, D. S., Adisyahputra, D. V. S., & Sigit, D. V. (2020). Boosting student critical thinking ability through project based learning, motivation and visual, auditory, kinesthetic learning style: A study on Ecosystem Topic. *Universal Journal of Educational Research*, 8(4A), 37–44. <https://doi.org/10.13189/ujer.2020.081806>
- Saeed, G. T., Hassan, A. E., Al Omary, H. L., & Alawad, Z. M. (2017). Multiple choice questions and essay questions in assessment of success rate in medical physiology. *Journal of the Faculty of Medicine Baghdad*, 59(4), 333–335. <https://doi.org/10.32007/jfacmedbagdad.59481>
- Sajjad, M., Khan, R. A., & Yasmeen, R. (2018). Measuring assessment standards in undergraduate medical programs: Development and validation of AIM tool.

- Pakistan Journal of Medical Sciences*, 34(1), 164–169. <https://doi.org/10.12669/pjms.341.14354>
- Saputri, D. Y., Rukayah, R., & Indriayu, M. (2018). Need assessment of interactive multimedia based on game in elementary school: A challenge into learning in 21st century. *International Journal of Educational Research Review*, 3(3), 1–8. <https://doi.org/10.24331/ijere.411329>
- Schaufeli, W. B., Desart, S., & De Witte, H. (2020). Burnout assessment tool (Bat)-development, validity, and reliability. *International Journal of Environmental Research and Public Health*, 17(24), 1–21. <https://doi.org/10.3390/ijerph17249495>
- Seixas, P., Gibson, L., & Ercikan, K. (2015). A design process for assessing historical thinking: the case of a one-hour test. In K. Ercikan & P. Seixas (Eds.), *New Directions in Assessing Historical Thinking* (pp. 124–138). Routled.
- Shrotryia, V. K., & Dhanda, U. (2019). Content validity of assessment instrument for employee engagement. *SAGE Open*, 9(1), 1–7. <https://doi.org/10.1177/2158-244018821751>
- Suwarno, S., Wahidin, W., & Nur, S. H. (2020). Project-based learning model assisted by worksheet: It's effect on students' creativity and learning outcomes. *JPBI (Jurnal Pendidikan Biologi Indonesia)*, 6(1), 113–122. <https://doi.org/10.22219/jpbi.v6i1.10619>
- Vanderoost, J., Janssen, R., Eggermont, J., Callens, R., & De Laet, T. (2018). Elimination testing with adapted scoring reduces guessing and anxiety in multiplechoice assessments, but does not increase grade average in comparison with negative marking. *PLoS ONE*, 13(10), 1–27. <https://doi.org/10.1371/journal.pone.0203931>
- Zachrich, L., Weller, A., Baron, C., & Bertram, C. (2020). Historical experiences: A framework for encountering complex historical sources. *History Education Research Journal*, 17(2). <https://doi.org/10.14324/he-rj.17.2.08>