

A Simulation Game-Based Strategy for World History Instruction

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ABSTRACT

The results of this study revealed the competence of students in the process of learning World History, the teaching practices of the teacher in achieving core historical competence, and the relationship between competence in learning World History and the teaching practices of the teacher in achieving the core competence of World History. A quantitative descriptive-correlational research design was used. The study was done in the three public secondary schools of Bunawan, Agusan del Sur namely Bunawan National High School, Libertad National High School, and Bunawan National High School – Consuelo Annex. The respondents included 17 Araling Panlipunan teachers selected through complete enumeration and 136 secondary students selected through purposive sampling. Researcher-developed questionnaires were used to measure students' competence in historical causation, evaluating evidence and sourcing, understanding historical perspective, synthesis and making connections across time and space, and argumentation and deconstruction of claims. The instruments also measured teachers' instructional practices in causation, evidence and sourcing, perspective tasks, synthesis and connection making, and argumentation and historiography. The instruments underwent expert validation and pilot testing, yielding reliability coefficients of 0.94 for the teachers' questionnaire and 0.91 for the students' questionnaire. Weighted mean and correlation analysis were used to analyze the data. Findings revealed that students were generally competent in World History, while teachers' instructional practices were moderately practiced. The relationship between students' competence and teachers' instructional practices was generally not significant, although significant positive relationships were found in synthesis and connection making and selected argumentation-related areas. The study concludes that World History instruction needs more targeted and competency-based strategies that strengthen sourcing, synthesis, and historical argumentation. Since the proposed simulation game-based strategy was developed from baseline and correlational findings, it should be tested in future pre-test and post-test or quasi-experimental studies.

Keywords: Simulation Game-Based Strategy, World History Instruction, Historical Competence, Instructional Practices, Social Science Education

INTRODUCTION

In the modern classroom, it is important to use interactive and responsive teaching techniques that can capture students' attention, respond to their different learning styles, and help them understand abstract ideas. In World History classes, students should not only recall facts, dates and names, but also explain cause/effect, critique sources, share analysis of different perspectives, link events across time and place, and defend historical claims. These skills are not solely taught in a lecture format as it is not enough for students to simply hear about historical situations; they must be given opportunities to analyze, discuss, decide, and reflect on them.

Within this context, the relevance of the simulation games comes about as students can assume roles, make decisions, engage in interactions with other players, and experience the consequences of their decisions within the safe learning environment. It has been found that game-based learning and simulation-based learning can

help to increase engagement, motivation, skill acquisition, and concept development when properly designed and based on learning objectives (Pacheco-Velazquez et al., 2024; Manligoy et al., 2025; Sounthornwiboon et al., 2025). The activities, however, can be distracting and ineffective if they are poorly designed, technology is not readily available, or the game is not explicitly connected with learning outcomes (Nartey, 2024).

The need to strengthen historical thinking is particularly important in the Philippine context. The results of PISA 2022 continue to raise concerns about learners' critical thinking, reading comprehension, and problem-solving abilities in the country compared with the average performance of OECD countries (OECD, 2023). The low Mean Percentage Score and Learner Level Competency in Araling Panlipunan (AP) also indicated the need to consider instructional strategies that would make Araling Panlipunan lessons more engaging and meaningful in Bunawan National High School. Although international literature supports the value of simulation games, localized evidence is still needed on how students' existing competence in World History relates to teachers' instructional practices in actual public-school settings.

This study aimed to fill this gap by examining students' competencies in World History, the level of instructional practices used by Araling Panlipunan teachers, and the relationship between these competencies and practices. The results were used to inform the design of a simulation game-based strategy focused on the actual needs and practices of teaching and learning in the classroom. The study may help enhance World History instruction by identifying the strongest and weakest historical competencies and by determining which teacher practices are meaningfully associated with student competence through a more targeted and learner-centered approach.

Research Questions

This study aimed to determine students' competence in World History and teachers' instructional practices as basis for a simulation game-based strategy. Specifically, it sought to answer the following research questions:

1. What is the level of the students' competence in learning World History in terms of historical causation, evaluating evidence and sourcing, understanding historical perspective, synthesis and making connections across time and space, and argumentation and deconstruction of claims?
2. To what extent do the instructional practices employed by teachers explicitly target the core historical competencies in terms of causation, evidence and sourcing, perspective tasks, synthesis and connection making, and argumentation and historiography?
3. Is there a significant relationship between students' competence in World History and the instructional practices employed by teachers in targeting the core historical competencies?

METHODOLOGY

This study employed a quantitative descriptive-correlational research design. The descriptive component was used to determine students' competence in World History and the extent to which teachers' instructional practices targeted core historical competencies. The correlational component was used to investigate the relationship between students' competence and teachers' instructional practices. Since the design was descriptive-correlational, the findings describe patterns and relationships but do not establish causal effects.

The study was carried out in three public secondary schools in Bunawan, Agusan del Sur, Philippines, namely Bunawan National High School, Libertad National High School, and Bunawan National High School-Consuelo Annex. These schools depicted varied contexts of public secondary schools and served as a meaningful context to examine World History instruction in Araling Panlipunan classes.

The respondents were 17 Araling Panlipunan teachers and 136 secondary students. The teacher respondents were completely enumerated because all qualified Araling Panlipunan teachers in the selected schools were included. The student respondents were purposively sampled because they had been exposed to World History instruction and could provide data on the competencies measured in this study.

The primary instrument used was a researcher-designed questionnaire. Historical causation, evidence and sourcing, historical perspective, synthesis and making connections across time and space, and argumentation and deconstruction of claims, were evaluated as part of the student competence section. The teacher instructional practices section evaluated the following practices: causation, evidence and sourcing, perspective tasks, synthesis and connection making, and argumentation and historiography. In each scale "higher" meant "more competent" or "more often practiced". It was reviewed by experts for content relevance, clarity and consistency with the study indicators, and was pilot tested with a small group. Results of the pilot test were excellent; Cronbach's alpha coefficients were 0.94 for the teachers' questionnaire and 0.91 for the students' questionnaire.

Prior to data collection, permission was secured from the relevant school authorities. The purpose of the study, the voluntary nature of participation, and the confidentiality of responses were explained to the respondents. The completed questionnaires were checked, sorted, coded, and analyzed. Weighted mean was used to determine students' competence level and teachers' level of instructional practices. Correlation analysis was used to examine the relationship between students' competence and teachers' instructional practices at the 0.05 level of significance.

RESULTS

The results are presented according to the three research questions of the study.

Table 1: Level of Students' Competence in Learning World History

Indicators	Teachers Mean	Teachers Verbal Description	Students Mean	Students Verbal Description
Historical causation	3.52	Moderately Competent	3.09	Competent
Evaluating evidence and sourcing	3.40	Competent	3.05	Competent
Understanding historical perspective	3.28	Competent	2.97	Competent
Synthesis and making connections across time and space	3.40	Competent	2.99	Competent
Argumentation and deconstruction of claims	3.25	Competent	2.96	Competent
Overall	3.37	Competent	3.01	Competent

Table 1 shows that students were generally rated Competent in World History. Teachers reported an overall mean of 3.37, while students reported an overall mean of 3.01. Historical causation obtained the highest result among the competencies, indicating that learners were relatively more capable of identifying causes, consequences, and relationships among historical events. Argumentation and deconstruction of claims obtained the lowest result, although it was still described as Competent. This suggests that students need stronger support in constructing, defending, and critiquing historical claims using evidence and logical explanation. The difference between teacher and student means also shows the need to interpret the findings carefully and in relation to the scale descriptors used in the study.

Table 2: Extent of Instructional Practices Employed by Teachers in Targeting Core Historical Competencies

Indicators	Mean	Verbal Description
Causation	3.95	Moderately Practiced
Evidence and sourcing	3.88	Moderately Practiced
Perspective tasks	3.94	Moderately Practiced
Synthesis and connection making	3.97	Moderately Practiced
Argumentation and historiography	4.01	Moderately Practiced
Overall	3.95	Moderately Practiced

Table 2 indicates that teachers' instructional practices were generally Moderately Practiced, with an overall mean of 3.95. Argumentation and historiography obtained the highest mean, showing that teachers gave relatively greater attention to activities that encouraged students to explain events, defend interpretations, and examine historical claims. Evidence and sourcing obtained the lowest mean, suggesting that activities involving source analysis, credibility, bias, and reliability were practiced less often than other instructional areas.

Table 3: Relationship Between Students' Competence in World History and Instructional Practices Employed by Teachers

Students' Competence in World History	Instructional Practices Employed by Teachers	Correlation	p-value	Interpretation
Historical Causation	Causation	0.3450	0.1750	Not Significant
Historical Causation	Evidence and sourcing	-0.1076	0.6809	Not Significant
Historical Causation	Perspective tasks	0.0455	0.8625	Not Significant
Historical Causation	Synthesis and connection making	0.0867	0.7407	Not Significant
Historical Causation	Argumentation and historiography	0.1221	0.6405	Not Significant
Evaluating evidence and sourcing	Causation	0.3063	0.2319	Not Significant
Evaluating evidence and sourcing	Evidence and sourcing	0.0168	0.9489	Not Significant
Evaluating evidence and sourcing	Perspective tasks	0.0763	0.7710	Not Significant
Evaluating evidence and sourcing	Synthesis and connection making	-0.0143	0.9566	Not Significant
Evaluating evidence and sourcing	Argumentation and historiography	0.0919	0.7258	Not Significant
Understanding historical perspective	Causation	0.4568	0.0653	Not Significant
Understanding historical perspective	Evidence and sourcing	0.0925	0.7240	Not Significant
Understanding historical perspective	Perspective tasks	0.0105	0.9681	Not Significant
Understanding historical perspective	Synthesis and connection making	-0.0563	0.8300	Not Significant
Understanding historical perspective	Argumentation and historiography	0.0612	0.8155	Not Significant
Synthesis and making connections across time and space	Causation	0.7620	0.0004	Significant
Synthesis and making connections across time and space	Evidence and sourcing	0.7712	0.0003	Significant
Synthesis and making connections across time and space	Perspective tasks	0.6188	0.0081	Significant
Synthesis and making connections across time and space	Synthesis and connection making	0.6112	0.0091	Significant
Synthesis and making connections across time and space	Argumentation and historiography	0.7278	0.0009	Significant
Argumentation and deconstruction of claims	Causation	0.4438	0.0744	Not Significant
Argumentation and deconstruction of claims	Evidence and sourcing	0.5542	0.0210	Significant
Argumentation and deconstruction of claims	Perspective tasks	0.5155	0.0342	Significant
Argumentation and deconstruction of claims	Synthesis and connection making	0.4226	0.0910	Not Significant

Argumentation and deconstruction of claims	Argumentation and historiography	0.6251	0.0073	Significant
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Table 3 shows that the overall relationship between students' competence in World History and teachers' instructional practices was generally not significant, although selected competency-practice pairings were significant. Historical causation, evaluating evidence and sourcing, and understanding historical perspective had mostly non-significant relationships with instructional practices. In contrast, synthesis and making connections across time and space showed significant positive relationships with all areas of instructional practices. Argumentation and deconstruction of claims also showed significant relationships with evidence and sourcing, perspective tasks, and argumentation and historiography. The significant correlations ranged from moderate to strong, suggesting that specific historical competencies are more meaningfully associated with teacher practices when the activities are directly aligned with the skills being developed.

DISCUSSION

The results indicate that students' competence was generally adequate, with historical causation emerging as the strongest competency and argumentation and deconstruction of claims as the weakest. This pattern suggests that students were more able to understand cause and effect in history, particularly when events were presented through timelines, narratives, and guided discussion. Constructing and defending historical claims, however, was more challenging because it requires evidence analysis, organization of ideas, reasoning, and consideration of alternative viewpoints. This result supports the view that historical thinking develops gradually and requires long-term scaffolding (Hamblin, 2020; Borchers et al., 2025; Lin & Yu, 2025).

The results on instructional practices show that teachers were already using some historical thinking practices, although not at a high or uniform level across all competencies. The greater focus on argumentation and historiography indicates that teachers were aware of the need for interpretation and reasoning in World History instruction. The lower rating for evidence and sourcing, however, points to a continuing need for document-based tasks, source analysis, and activities that help students evaluate credibility, bias, and context. This is consistent with research showing that source evaluation is one of the more challenging but essential aspects of history teaching (Gomez-Carrasco et al., 2025; Miralles-Sanchez et al., 2025).

The correlation results are important as a basis for developing a simulation game-based strategy, but they should be interpreted carefully. The generally non-significant relationship suggests that general exposure to instructional practices may not be enough to strengthen students' competence in World History. Students' competence may also be influenced by other factors, including prior knowledge, reading comprehension, access to historical sources, task difficulty, class size, and the amount of scaffolding provided. However, the significant relationships involving synthesis and connection making suggest that when teaching practices consistently require students to make connections, compare contexts, and explain relationships across place and time, students show stronger competence in this area.

The significant relationships involving argumentation also suggest that higher-order historical skills are more evident when teachers ask students to use evidence, interpret perspectives, and construct historical explanations as part of classroom practice. These findings provide a basis for proposing a simulation game-based strategy, but they do not prove that simulation games will improve student competence because the strategy was not experimentally tested in this study. Instead, the strategy should be viewed as a proposed instructional response to the competencies and instructional gaps identified in the results.

Based on these results, the proposed simulation game-based strategy may use either a low-tech or technology-assisted format. The prototype will focus on historical scenario cards, role cards, source-evidence cards, decision making points, and claim-defending tasks. Learners might need to recognize cause and effect, identify sources of credibility and bias, argue from a historical perspective, link events across time and place, and defend/revise a historical claim during each game round. Questions can be included in the debriefing process that are led by the teacher, for example: What evidence affected your decision? Which voice(s) were/weren't heard? What were

the reasons and results that arose? How did your claim change after discussion? This is a way of ensuring the game is focused on historical thinking and not simply enjoyment or competition.

CONCLUSION

The study revealed that students' competence in World History was generally good. Historical causation was identified as the strongest competency, while argumentation and deconstruction of claims was the weakest. This indicates that students could grasp some of the basic relationships between historical events but required further assistance in making sense of interpretations and in evaluating historical arguments.

Teachers' instructional practices for core historical competencies were found to be moderately practiced. There was a comparatively higher emphasis on argumentation and historiography and a lower emphasis on evidence and sourcing. This indicates that World History instruction already incorporated historical thinking skills but these skills need to be more systematic, balanced and consistent in relation to its competencies.

In general, the relationship between students' competence and teachers' instructional practices was not significant. Synthesis, connection building, and some aspects of argumentation, however, produced meaningful relationships. The results suggest that teacher practices might be more useful in relation to specific historical thinking competencies. Therefore, a simulation game-based strategy may be developed as a learning aid to make World History learning more interactive, inquiry-based, and competency-based, but its actual impact should still be tested in future intervention studies.

RECOMMENDATIONS

Araling Panlipunan teachers could enhance World History teaching by employing more structured activities for evidence and sourcing, perspective taking, synthesis, and argumentation. These activities may include source analysis, role-based discussion, guided debate, claim-making tasks, and reflective questioning.

The proposed simulation game-based strategy should be designed not only for enjoyment and competition but also for historical thinking. It should require students to investigate causes, review evidence, consider different perspectives, make connections across time and place, and defend historical claims through guided decision-making and debriefing.

School administrators and curriculum planners may support teachers by providing training, instructional resources, and time to design learner-centered World History activities. Teacher training may include simulation game mechanics, historical scenario writing, source-card preparation, role assignment, assessment rubrics, and debriefing protocols. Low-tech alternatives, such as printed role cards, source cards, maps, timelines, board-game templates, and classroom discussion guides, should also be provided for schools with limited technology access.

Future studies may test the simulation game-based strategy using experimental, quasi-experimental, or mixed methods designs to determine its impact on students' historical thinking, engagement, collaboration, and learning outcomes in various school environments. Future research may also use larger samples, include more divisions, apply random sampling where feasible, and consider control variables such as prior grades, prior knowledge, class size, and socioeconomic background.

Limitations Of the Study

This study was conducted only in selected public secondary schools of Bunawan, Agusan del Sur, and focused on students' competence in World History, teachers' instructional practices, and the relationship between the two. The sample was small and localized, with 17 teachers and 136 students from three schools; therefore, the findings may not be generalized beyond the study context without further testing. Complete enumeration was used for teacher-respondents and purposive sampling was used for student-respondents, which may have introduced sampling bias. The study used researcher-developed questionnaires, and while these underwent expert

validation, pilot testing, and reliability testing, the manuscript did not include full construct validity evidence, item analysis, scoring rubrics, or sample items. The exact scale ranges and cut-off points for verbal descriptions also need clearer presentation in future reporting. Results were obtained from questionnaires and may represent respondents' perceptions rather than directly observed classroom practice. The study did not use an experimental pre-test and post-test design, did not test the proposed simulation game-based strategy, and did not control for prior knowledge, socioeconomic background, class size, or prior grades. Since the design was descriptive-correlational, the findings show relationships but do not establish causation. Despite these limitations, the research provides useful evidence for developing a simulation game-based strategy that responds to identified instructional needs in World History.

Ethical Considerations

The researcher observed ethical guidelines in the conduct of the study. Prior to data collection, permission was sought from the appropriate school officials. The respondents were briefed on the aim of the study, the voluntary nature of their participation, and the confidentiality of their responses. In the presentation and interpretation of findings, no information was released that could identify the respondents. The researcher also ensured that sources were properly cited and that the findings were interpreted objectively. Artificial intelligence tools were used only to help refine, organize, and format the language; they were not relied upon for analysis, interpretation, or scholarly responsibility.

Data Availability

The data used for this study are not publicly available to protect the privacy and confidentiality of the respondents. The manuscript includes aggregated results, and related data may be provided by the corresponding author upon reasonable request, subject to applicable ethical and institutional restrictions.

Conflict Of Interest

The authors declare that there is no conflict of interest in the conduct and reporting of this study.

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