

Inquiry-Based Learning Strategy and Learners' Academic Outcomes in History and Government in Secondary Schools in the South Rift Region, Kenya

Winnie Chelang¹ at Cherorot¹, John M. Momanyi², Agumba M. Ndaloh³

¹Department of Curriculum, Instruction and Educational Media, Moi University

²Department of Educational Psychology and Foundations, Bomet University

³Department of Educational Studies, Koitalel Samoei University College

DOI: <https://doi.org/10.47772/IJRISS.2026.100900189>

Received: 16 September 2026; Accepted: 21 September 2026; Published: 06 October 2026

ABSTRACT

Traditional teacher-centered approaches to teaching History and Government often emphasize passive knowledge acquisition, memorisation and limited learner participation. Such approaches may constrain learners' development of analytical, interpretive and higher-order thinking skills required for meaningful learning in History and Government. This study examined whether inquiry-based learning significantly influences learners' academic outcomes compared with traditional teaching strategies in secondary schools in South Rift Region, Kenya. The study was guided by Bruner's theory of constructivism and anchored in the positivist paradigm. A pre-test–post-test non-equivalent quasi-experimental design was employed. The wider study targeted learners and History and Government teachers in public secondary schools in South Rift Region. For the inquiry-based learning comparison reported in this paper, 79 schools participated, comprising 44 schools in the inquiry-based learning group and 35 schools in the traditional teaching group. Data were collected using achievement tests administered as pre-tests and post-tests. Descriptive statistics and paired-samples *t*-test were used to examine changes in learners' scores, while analysis of covariance (ANCOVA) was used to compare post-test outcomes between the inquiry-based and traditional teaching groups after controlling for pre-test scores. Learners exposed to inquiry-based learning obtained a higher post-test mean score ($M = 57.93$, $SD = 7.82$) than those taught using traditional methods ($M = 55.17$, $SD = 9.81$). Within the inquiry-based group, learners' mean score increased from 55.66 in the pre-test to 57.93 in the post-test, representing a mean gain of 2.27 marks. The paired-samples *t*-test indicated that this improvement was statistically significant, $t(43) = 4.720$, $p < .001$. The ANCOVA further showed that, after controlling for pre-test scores, teaching method had a statistically significant effect on post-test academic outcomes, $F(1, 76) = 3.969$, $p = .050$, partial $\eta^2 = .050$. The null hypothesis was therefore rejected. The findings suggest that inquiry-based learning can contribute to improved academic outcomes in History and Government. The study recommends strengthened integration of inquiry-based learning, particularly through questioning, investigation, discussion, analysis of historical evidence and learner-centered activities, supported by teacher professional development and appropriate instructional resources.

Keywords: Academic Outcomes, Constructivism, History and Government, Inquiry-Based Learning, Secondary Schools

INTRODUCTION

History and Government is an important subject in secondary education because it contributes to learners' understanding of society, citizenship, nationalism, patriotism, responsibility, governance and cultural development. The subject is expected to develop more than factual knowledge; learners should be able to analyse historical evidence, interpret events, solve problems, think critically and apply knowledge to contemporary societal issues. Consequently, effective History and Government instruction requires approaches that actively engage learners in constructing and applying knowledge.

The constructivist approach provides an alternative to predominantly teacher-centered instruction. Constructivism views learning as an active process in which learners construct knowledge through experience, interaction, inquiry, reflection and connection with prior knowledge. The teacher assumes the role of facilitator and guide rather than being the sole source of knowledge.

Within this perspective, inquiry-based learning is particularly relevant to History and Government. Inquiry-based learning encourages learners to ask questions, investigate issues, examine evidence, formulate explanations and draw conclusions. The teacher guides the inquiry process rather than simply transmitting predetermined information. The approach is consistent with Dewey's emphasis on learning through inquiry and with Bruner's view that learners construct knowledge through exploration and discovery.

The use of inquiry-based learning is also consistent with the 5E constructivist instructional model, in which learners engage with a learning problem, explore it, explain their understanding, elaborate on the concepts and evaluate their learning. In such a classroom, the teacher facilitates discussion and inquiry while learners actively participate in constructing meaning.

Despite the potential benefits of learner-centered instruction, the thesis identifies a continuing implementation gap in History and Government. The Kenya National Examinations Council has reported that History and Government learners experience difficulties in discussing and interpreting historical information and are not sufficiently exposed to constructivist pedagogies. Recommendations have included greater use of current affairs, reading, debates and symposia.

Statement of the Problem

History and Government plays an important role in preparing learners to understand society and participate responsibly in national development. Through the subject, learners acquire knowledge and values related to nationalism, patriotism, responsibility, governance and civilization. Effective instruction is therefore necessary to ensure that learners acquire not only factual knowledge but also the ability to analyse evidence, interpret historical events, evaluate information, solve problems and apply knowledge to contemporary issues. The instructional process should consequently provide learners with opportunities to participate actively in learning because learners may learn through hearing but learn more effectively through doing, observing, discussing and engaging with experiences.

However, the continued reliance on teacher-centered and examination-oriented approaches presents a pedagogical concern. Learners may receive information passively, memorise historical facts and reproduce information without adequately developing the higher-order cognitive skills required in History and Government. The thesis notes that KNEC has identified difficulties among learners in handling higher-order questions and associated low academic outcomes with limited exposure to varied instructional techniques and learning experiences.

Although constructivist approaches such as inquiry-based learning provide opportunities for learners to investigate issues, discuss evidence, ask questions and construct knowledge, their actual implementation in Kenyan secondary schools remains uncertain. Teachers face challenges including inadequate preparation, large classes, examination pressure, curriculum demands, limited instructional resources and difficulties in shifting from authoritative to facilitative roles.

More importantly, the existing evidence has not adequately established whether inquiry-based learning produces measurable differences in academic outcomes among History and Government learners in Kenyan secondary schools. Much of the literature has examined constructivist approaches in other subjects, educational levels and national contexts. Consequently, findings from these contexts cannot automatically be generalized to History and Government learners in Kenyan secondary schools. The specific empirical question of whether learners exposed to inquiry-based learning perform differently from those taught using conventional approaches therefore remains important.

It was against this empirical and pedagogical gap that the study examined whether there was a significant difference in academic outcomes between History and Government learners taught using inquiry-based learning and those taught using traditional teaching strategies.

Objective of the Study

The paper is based on this objective:

To determine whether there is a significant difference in academic outcomes between History and Government learners taught using inquiry-based learning strategies and those taught using traditional teaching strategies.

Research Hypothesis

The following hypothesis was tested:

HO₁: There is no significant difference in academic outcomes between History and Government learners taught using inquiry-based learning strategies and those taught using traditional teaching strategies.

THEORETICAL FRAMEWORK

The study was guided by Bruner's theory of constructivism. Bruner conceptualizes learning as an active process in which learners construct knowledge through exploration and discovery rather than merely receiving information from the teacher. The theory emphasizes prior knowledge, discovery learning, scaffolding and the spiral curriculum. The teacher provides appropriate guidance and learning resources while gradually reducing support as learners become more independent.

The theory provides a strong foundation for inquiry-based learning because inquiry requires learners to investigate questions, explore information, analyse evidence and construct explanations. Rather than positioning learners as passive recipients, inquiry-based instruction allows them to become active participants in knowledge construction. The teacher acts as a facilitator who provides direction and support when necessary.

In History and Government, the application of Bruner's constructivist perspective means that learners can engage with historical evidence, formulate questions, investigate events, discuss alternative explanations, and draw conclusions. Such activities are expected to enhance conceptual understanding and higher-order thinking and ultimately improve academic outcomes.

Research Design and Methodology

Research Approach and Design

The study adopted a quantitative research approach guided by the positivist paradigm. A pre-test–post-test non-equivalent quasi-experimental design was employed. The design was considered appropriate because learners were exposed to different teaching approaches without random assignment of individual learners to treatment conditions.

For the comparison reported in this paper, the experimental group was taught using inquiry-based learning while the control group was taught using traditional teaching methods. Pre-test scores were obtained before the instructional intervention and post-test scores after the intervention. The pre-test was used as a covariate in the ANCOVA to control for initial differences in learners' academic achievement.

Study Area

The study was conducted in public secondary schools in Kericho and Bomet Counties, Kenya. The two counties are located in the South Rift region of Kenya. The study focused on History and Government because of concerns regarding learners' academic outcomes and the use of constructivist instructional strategies in the subject.

Target Population and Sampling

The study targeted 494 public secondary schools offering History and Government in Kericho and Bomet Counties. Using the Krejcie and Morgan (1970) sample-size determination procedure, a sample of 79 schools was determined for inclusion in the study. The sample was then proportionately distributed between Kericho and Bomet Counties based on the number of eligible schools in each county. For purposes of the experimental comparison, the sampled schools were categorized according to the instructional approach implemented. Forty-four (44) schools were assigned to the inquiry-based learning group, which constituted the experimental group, while thirty-five (35) schools were assigned to the traditional teaching group, which served as the comparison/control group. Thus, the study involved a total of 79 participating schools, comprising 44 experimental schools and 35 comparison schools.

Data Collection Instrument

Learners' academic outcomes were measured using an achievement test administered as a pre-test and post-test. The achievement test was used to establish learners' baseline achievement and subsequent performance following the instructional intervention.

The reliability of the achievement test was assessed using the Kuder-Richardson Formula 20 (KR-20) because the test items were dichotomously scored. The thesis reports a KR-20 coefficient of .80, which was considered acceptable.

Data Analysis

Data were analysed using SPSS version 30. Descriptive statistics were used to summarize learners' pre-test and post-test scores using means and standard deviations. A paired-samples t-test was used to determine whether there was a significant change between pre-test and post-test scores among learners exposed to inquiry-based learning.

A one-way analysis of covariance (ANCOVA) was then conducted to compare post-test academic outcomes between learners taught using inquiry-based learning and those taught using traditional methods while controlling for pre-test scores. The significance level was set at $\alpha = .05$. A p-value of .05 or less was considered statistically significant.

Results and Data Analysis

Pre-Test and Post-Test Performance of Learners Exposed to Inquiry-Based Learning

The first analysis examined whether learners exposed to inquiry-based learning demonstrated improvement between the pre-test and post-test.

Table 1 Pre-Test and Post-Test Scores of Learners Exposed to Inquiry-Based Learning

Assessment	Mean	N	Standard Deviation	Standard Error
Pre-test	55.66	44	8.42	1.27
Post-test	57.93	44	7.82	1.18

Source: Field Data (2026).

The results in Table 1 show that the mean score increased from 55.66 in the pre-test to 57.93 in the post-test. The mean gain was therefore approximately 2.27 marks. The reduction in the standard deviation from 8.42 to 7.82 also indicates slightly less variation in learners' post-test scores.

Table 2 Paired-Samples *t*-Test of Pre-Test and Post-Test Scores

Comparison	Mean Difference	SD of Difference	SE	<i>t</i>	df	<i>p</i>
Post-test – Pre-test	2.27	3.19	0.48	4.720	43	<.001

Source: Field Data (2026).

The paired-samples *t*-test in Table 2 shows that the improvement from pre-test to post-test was statistically significant, $t(43) = 4.720$, $p < .001$. The finding indicates that learners taught using inquiry-based learning performed significantly better after the instructional intervention than before it.

Comparison of Inquiry-Based Learning and Traditional Teaching

Although the improvement within the inquiry-based group is important, the central question of the objective was whether learners taught using inquiry-based learning performed significantly differently from learners taught using traditional teaching methods.

Table 3 Post-Test Descriptive Statistics for Inquiry-Based Learning and Traditional Teaching Groups

Teaching Method	N	Mean	Standard Deviation
Inquiry-based learning	44	57.93	7.82
Traditional teaching	35	55.17	9.81
Total	79	56.71	8.80

Source: Field Data (2026).

As seen in Table 3 the inquiry-based learning group recorded a higher mean post-test score ($M = 57.93$, $SD = 7.82$) than the traditional teaching group ($M = 55.17$, $SD = 9.81$). The difference in the observed group means was approximately 2.76 marks.

The descriptive results provide preliminary evidence that inquiry-based learning was associated with better academic outcomes than traditional teaching. However, because the two groups were non-equivalent, it was necessary to control for differences in pre-test achievement before drawing an inferential conclusion.

Table 4 ANCOVA Results for Inquiry-Based Learning and Traditional Teaching

Source	Type III SS	df	Mean Square	<i>F</i>	<i>p</i>	Partial η^2
Corrected Model	4515.706	2	2257.853	112.258	<.001	.747
Pre-test	4367.169	1	4367.169	217.130	<.001	.741
Teaching method	79.831	1	79.831	3.969	.050	.050
Error	1528.598	76	20.113	—	—	—
Corrected Total	6044.304	78	—	—	—	—

Dependent variable: Post-test academic outcome

$R^2 = .747$; Adjusted $R^2 = .740$

Source: Field Data (2026).

The ANCOVA results in Table 4 indicates that the overall model was statistically significant, $F(2, 76) = 112.258$, $p < .001$, and explained 74.7% of the variance in learners' post-test scores. Pre-test achievement was a significant covariate, $F(1, 76) = 217.130$, $p < .001$, partial $\eta^2 = .741$. This demonstrates that learners' initial academic achievement was strongly associated with their subsequent post-test performance.

Most importantly, after controlling for pre-test scores, teaching method had a statistically significant effect on learners' post-test academic outcomes, $F(1, 76) = 3.969$, $p = .050$, partial $\eta^2 = .050$. The thesis interprets the partial eta squared of .050 as a meaningful/moderate practical contribution of teaching method to learners' academic outcomes.

Since the obtained p-value was equal to the predetermined significance level of .05, the null hypothesis was rejected. Thus, there was a statistically significant difference in academic outcomes between learners taught using inquiry-based learning and those taught using traditional teaching methods.

DISCUSSION OF FINDINGS

The findings demonstrate that inquiry-based learning was associated with improved academic outcomes among History and Government learners. Learners exposed to the inquiry-based strategy increased their mean performance from 55.66 in the pre-test to 57.93 in the post-test, with the improvement being statistically significant. More importantly, the comparison with the traditional teaching group showed that inquiry-based learning produced a significantly different post-test outcome after controlling for learners' initial achievement.

The findings are consistent with the constructivist position that learning is strengthened when learners actively participate in constructing knowledge. Inquiry-based learning moves learners beyond simply receiving information and requires them to formulate questions, investigate evidence, discuss alternative explanations and develop conclusions. The thesis specifically describes inquiry as an approach in which learners ask questions, explore answers and construct understanding through investigation while teachers facilitate rather than directly transmit knowledge.

The findings also support Bruner's constructivist theory. Bruner emphasized discovery learning, active exploration, prior knowledge and teacher scaffolding. Inquiry-based learning operationalizes these principles by allowing learners to discover and organize knowledge while receiving guidance from the teacher.

The results are also consistent with previous studies cited in the thesis. Kim (2005) reported that learners taught through constructivist inquiry-based methods achieved significantly higher academic performance than those taught using traditional teacher-centred approaches. Hmelo-Silver, Duncan and Chinn (2007) similarly associated inquiry-based instruction with deeper conceptual understanding and critical thinking. The thesis further cites Etuk (2012), who found higher examination scores among learners exposed to constructivist instructional strategies, while Demir and Kaya (2022) reported positive effects of inquiry-based learning across educational settings.

The findings are particularly relevant to History and Government because the subject requires learners to interpret historical evidence and develop explanations rather than merely recall facts. Inquiry-based learning can provide opportunities for learners to examine primary and secondary sources, formulate historical questions, compare evidence, debate interpretations and draw evidence-based conclusions. Such activities correspond closely with the cognitive demands of the subject and address the concern that learners have difficulties interpreting historical information and answering higher-order questions.

The finding should nevertheless be interpreted with some caution because the teaching-method effect was marginal at the conventional .05 threshold ($p = .050$). The effect size, partial $\eta^2 = .050$, indicates that approximately 5% of the variation in post-test outcomes was attributable to teaching method after controlling for pre-test achievement. Thus, inquiry-based learning appears beneficial, but its contribution should not be interpreted as explaining learners' achievement by itself. Learners' prior achievement and other contextual factors may also influence academic outcomes.

CONCLUSION

Based on the findings of the study, inquiry-based learning significantly improved learners' academic outcomes in History and Government compared with traditional teaching methods.

Learners exposed to inquiry-based learning demonstrated a statistically significant improvement between pre-test and post-test performance. Their post-test mean score was also higher than that of learners taught using traditional methods. After controlling for pre-test achievement through ANCOVA, teaching method had a statistically significant effect on post-test academic outcomes, $F(1, 76) = 3.969$, $p = .050$, partial $\eta^2 = .050$. The null hypothesis was therefore rejected.

The evidence suggests that inquiry-based learning provides a more productive instructional alternative to predominantly teacher-centered teaching for History and Government. Its emphasis on questioning, investigation, active participation, analysis and construction of knowledge makes it particularly suitable for a subject requiring interpretation of historical evidence and development of higher-order thinking skills.

However, the results also indicate that inquiry-based learning should not be viewed as a stand-alone solution to poor academic outcomes. Effective implementation requires adequate teacher preparation, sufficient instructional time, appropriate learning resources and supportive classroom environments.

RECOMMENDATIONS

(1) Recommendation for History and Government Teachers

History and Government teachers should increase the use of inquiry-based learning during classroom instruction. Lessons should provide learners with opportunities to formulate questions, investigate historical events, analyse evidence, discuss alternative interpretations and draw conclusions rather than relying predominantly on lecture method and memorisation.

(2) Use of Historical Evidence and Learning Resources

Teachers should make greater use of primary sources, historical documents, maps, photographs, newspapers, current affairs materials and other relevant learning resources to support inquiry. Such resources can provide learners with evidence from which they can develop and defend historical explanations.

(3) Teacher Professional Development

Teacher professional development programmes should strengthen teachers' competence in inquiry-based and other constructivist pedagogies. Particular attention should be given to lesson planning, questioning techniques, scaffolding, classroom discussion, management of group inquiry and assessment of higher-order thinking.

REFERENCES

1. Bruner, J. S. (1961). The act of discovery. *Harvard Educational Review*, 31(1), 21–32.
2. Demir, M., & Kaya, H. (2022). Effects of constructivist learning models on student outcomes: A second-order meta-analysis. *International Journal of Curriculum and Instruction*.
3. Duran, M., & Dökme, İ. (2018). The effect of inquiry-based learning approach on conceptual understanding level and some learning outcomes. *Trakya Journal of Education*, 8(3), 545–563.
4. Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.
5. Kenya Institute of Curriculum Development. (2017). *Basic Education Curriculum Framework*. Nairobi: KICD.
6. Kenya National Examinations Council. (2024). *Kenya Certificate of Secondary Education Examination Report*. Nairobi: KNEC.
7. Sarı, K., & Şaşmaz-Ören, F. (2020). The effect of the inquiry-based learning strategy on academic achievements of the students: A meta-analysis. *Hacettepe University Journal of Education*, 35(3), 540–555.
8. Şaşmaz-Ören, F., & Sarı, K. (2019). The effect of inquiry-based learning strategy on students' higher-level thinking skills: A meta-analysis study. *PAU Journal of Education*, 46, 328–348.