

Impact of Active Methodologies and Critical Pedagogy on History Learning: A Quasi-Experimental Study in University Students

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Abstract

The academic literature highlights that active methodologies and critical pedagogy significantly influence learning and competency development. This quasi-experimental study investigates the impact of these methodologies in the subject of History Didactics, focusing on the simulation of trials of historical figures. Forty-eight third-year Primary Education degree students participated. Learning achievements were measured before and after the implementation of these methodologies. The results showed significant improvements in the achievement of learning objectives, competencies, and values. The historical trials activity was the most valued, standing out for its immersive and participatory nature. This study provides a solid foundation for future research and the development of effective educational programs.

Keywords: Active Methodologies, Critical Pedagogy, Historical Trials, University Education, Mixed Analysis

1. Introduction

Academic literature has extensively supported the premise that education based on active methodologies and critical pedagogy can significantly impact students' learning and competency development. Active methodologies, including strategies such as project-based learning, cooperative learning, and simulations, foster deeper and more active student participation in the educational process [1]. These strategies not only promote the acquisition of knowledge but also the development of critical skills and values, essential aspects in the comprehensive education of students [2].

A particularly effective and appreciated educational activity is the simulation of trials of historical figures. This methodology allows students to assume roles, investigate, and present arguments about historical events, enriching their understanding and reflection on the past [3]. The simulation of trials not only facilitates the learning of historical facts but also develops competencies in

research, argumentation, and oral expression, crucial skills for their academic and professional development [4].

1.1 Research Objectives

1. Evaluate the Impact of Active Methodologies and Critical Pedagogy on Learning: Determine how the implementation of active methodologies and critical pedagogy in the subject of History Didactics influences the achievement of learning objectives, competency acquisition, and values among students.
2. Identify Preferences for Educational Activities: Analyze, after their identification, the educational activities most valued by students and the reasons behind their preferences, focusing on the activity of "Trials of Historical Figures."
3. Evaluate the Effectiveness of Activities in Skill Development: Examine how different activities influence the development of specific skills such as research, argumentation, and oral expression (Figure 1).

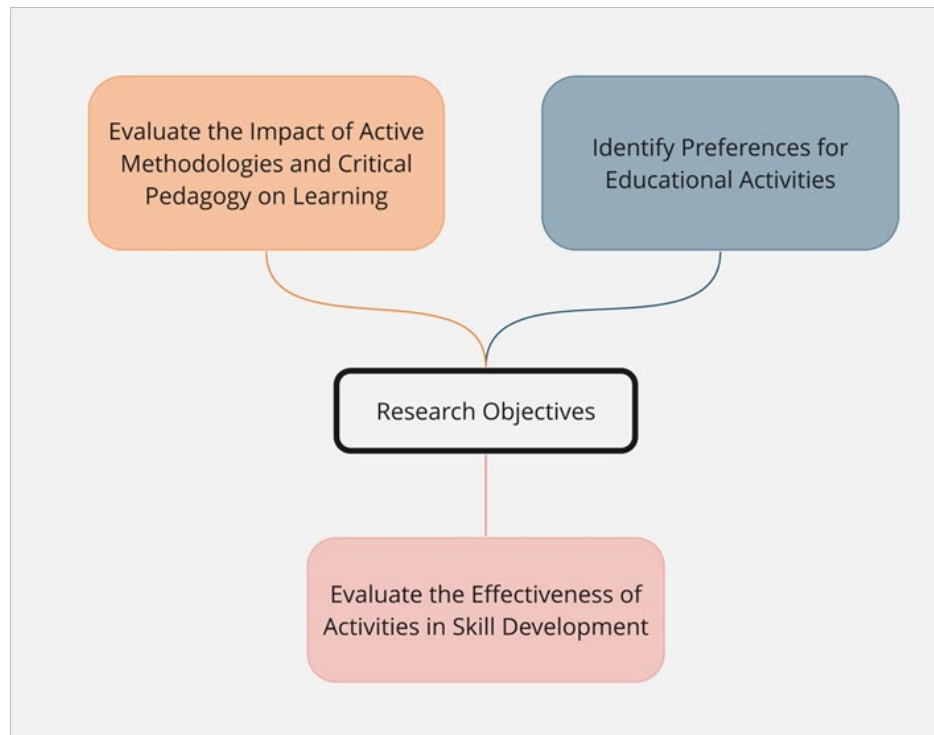


Figure 1: Research Objectives

1.2 Research Hypotheses

- H1: The implementation of active methodologies and critical pedagogy in the subject of History Didactics significantly improves the achievement of learning objectives in terms of content, competencies, and values.
- H2: The activity "Trials of Historical Figures" is valued as the most interesting and educational by students due to its immersive, active, and participatory nature.
- H3: There is a significant positive correlation between students' interest in educational activities and their perception of having achieved learning objectives.
- H5: Active methodologies and critical pedagogy significantly foster the development of research, argumentation, and oral expression skills in students.

2. Methodology

2.1 Research Design

To evaluate the impact of applying active methodologies and critical pedagogy in a specific subject in relation to student learning objectives and strategies, this study was designed. A quasi-experimental repeated measures research design was used, allowing comparison of participants' preferences after exposure to the mentioned methodologies.

2.2 Participants

The sample consisted of 48 students (7 men and 41 women) enrolled in the subject of History Didactics in the third year of the Primary Education degree during the 2023 period. All students enrolled in the subject were included in the sample, so no selection criteria were applied.

2.3 Instruments

The adopted methodology in this study is mixed, combining qualitative and quantitative approaches. This approach is widely supported by academic literature due to its ability to provide a more holistic understanding of historical phenomena. Creswell and Plano Clark emphasize that integrating qualitative and quantitative methods allows for a deeper and multifaceted exploration of data, offering perspectives that could not be achieved in isolation [5,6]. Tashakkori and Teddlie complement this view by stating that the mixed methodology facilitates cross-validation of findings, thereby strengthening the reliability and validity of conclusions [7].

In the field of historical research, Jordanova suggests that the use of mixed methods enables historians to more effectively address the complexity of historical sources and contexts, enriching the narrative with both analytical and empirical depth [8]. These approaches not only expand the scope of research but also promote a more nuanced and evidence-based interpretation of historical processes [9].

Combining qualitative and quantitative analyses is crucial for understanding the dynamics between the different actors involved and their impact on the study themes. This methodological integration provides a more complete and nuanced understanding of the investigated phenomena [10].

For the qualitative phase of our research, case studies were conducted using the WebQDA software, a specialized tool for qualitative data analysis. This software facilitated the organization and systematization of the collected information, allowing the

definition of main themes, establishment of relevant codes, and construction of code trees to categorize and analyze textual data efficiently. The utility of WebQDA in qualitative analysis is supported by authors who highlight its capacity to handle large volumes of textual data, facilitating a richer and more detailed interpretation [11].

To evaluate the hypotheses and analyze the collected data, various quantitative analyses were conducted using SPSS Statistics version 29.0.1.0.

Qualitative analysis of open responses provided by students, generating codes and sub-codes to categorize reasons behind activity preferences.

Descriptive statistics for learning objectives variables ("Acquire Content," "Acquire Competencies," and "Acquire Values") measured on a five-point Likert scale. Means, medians, standard deviations, and variances were calculated for each variable.

Frequencies and percentages to determine how often each learning activity was mentioned in student responses.

Kendall's Tau-b and Spearman's Rho non-parametric correlations between learning objectives variables. These correlations are used when parametric assumptions are not met.

3. Procedure

The study followed an established protocol divided into several stages:

- Selection and Group Assignment: All students enrolled in the subject were included as participants.
- Implementation of Active Methodologies and Critical Pedagogy: The subject was developed over four months, with seven specific activities related to active methodologies and critical pedagogy. These activities included a text commentary on history didactics, archaeological research on a macabre event from the protohistory of the Iberian Peninsula ("History Spies"), a simulation of a "Trial of Historical Figures," creating a "Poster Assignment for an Exhibition/Museum," and a manual activity on "Empowered Women" in history (Table 1). The trial simulation was conducted over five sessions (lecture, evidence study, judicial strategy preparation, and trial practice with two sessions).

Learning Situations	Description
Text Commentary	Reading and commentary on a scientific article about the importance of history didactics.
Neolithic Revolution Urbangame	Gamification to empathize with people who lived through the process, understand their problems, concerns, and solutions.
"History Spies"	"Detective" investigation from archaeological evidence and historical sources of an archaeological find in the protohistory of the Iberian Peninsula (collective suicide wells of Iberian natives upon the arrival of the Romans)
"Trial of Historical Figures"	Simulation of a trial on the responsibility of the Catholic Monarchs towards Juana la Loca based on evidence (historical documents).
"Poster Assignment for an Exhibition/Museum"	Design activity of a poster for a museum about a historical moment, comparing it with the current era.
"Empowered Women"	Manual activity from the search for information about an important woman in history, ending with the creation of a cut-out with messages and a figure.
ChatGPT Simulation	Simulation for students based on a prompt prepared by the teacher to interact with characters in a bombed city during the Spanish Civil War.

Source: Own elaboration

Table 1: Learning Situations Developed in the Classroom

During the data collection process, various strategies were implemented to promote active student participation. Active methodologies such as problem-based learning and collaborative work were used, allowing students to critically analyze inequalities and power structures present in society. Additionally, reflection on these issues was encouraged through critical pedagogy, which seeks to question hegemonic narratives and promote historical and social awareness. To ensure the validity of the results, a questionnaire was administered at the end of the subject. Participants completed the questionnaires individually and under controlled conditions, ensuring confidentiality and data comparability.

The data collection aimed to evaluate the impact of active methodologies and critical pedagogy on the development of critical and transformative education. The obtained results will identify possible improvements in the design of future educational programs and provide valuable information for decision-making in the educational field.

3.1 Ethical Considerations

During this study, rigorous adherence to scientific research ethical principles was followed. Informed consent was obtained from all participants, meaning they were provided with clear

and understandable information about the study's objectives and procedures.

Additionally, data confidentiality was ensured, meaning all information provided by participants was treated confidentially and used exclusively for research purposes. Measures were taken to protect participants' identities, using codes or identifiers instead of real names in reports or data analyses.

3.2 Limitations

It is important to recognize that this study presents certain limitations that should be considered when interpreting the results. One limitation is the sample size. Due to time and resource constraints, a relatively small sample was used, which may limit the generalization of findings to the general population. The obtained results may not be fully representative of all individuals.

Another limitation is the lack of representativeness in terms of gender and age. In this study, there was a higher number of female participants compared to males, and most participants were within a specific age range (18-25 years). Therefore, potential gender biases will not be analyzed here.

These limitations should be considered when interpreting the results, and future studies with larger and more representative samples are needed to obtain a complete and more accurate

picture of the studied phenomena. Despite these limitations, this study provides a solid foundation for understanding and analyzing certain aspects and can serve as a starting point for further broader and better-designed research.

4. Results

4.1 General Analysis in the Classroom

After implementing a series of activities in the context of learning situations with active methodologies and critical pedagogy, a survey examined the relationship between various emotions and educational activities regarding content acquisition, competencies, and values, as well as other factors such as interest in activities and learning approaches.

The majority of students (97.9%) belong to the age group (18-25 years) since they study at a specific educational level, the third year of the Primary Education degree. A higher proportion of participants are female (81.3%). This may be relevant in terms of how emotions are perceived and expressed and how they interact with learning objectives.

4.2 Qualitative Analysis

Based on the open responses provided by the students, a list of codes and sub-codes was generated for qualitative analysis (Tables 2 and 3). These codes and sub-codes allowed us to analyze students' responses and understand why they chose certain activities.

Main Codes	Description
Age	Responses can be coded based on students' age, dividing them into groups such as "18-25" and "26-35."
Gender	Responses can be coded according to students' gender, such as "Female" and "Male."
Activity Type	Responses can be coded based on the type of activity mentioned, such as "Trials of Historical Figures," "History Spies," "Poster Assignment for an Exhibition/Museum," and "Empowered Women."
Reasons for Choice	Reasons provided by students for choosing a specific activity can be coded.
<i>Source: Own elaboration</i>	

Table 2 : Main Code Relationship

Sub-Codes	Description
Interest in the Activity	Sub-codes responses mentioning students' interest in the chosen activity.
InnovativeMethodology	Sub-codes responses highlighting the innovative methodology used in the activity.
Learning and Fun	Sub-codes responses mentioning that the activity allowed for fun learning.
Participation and Cooperation	Sub-codes responses emphasizing active participation and cooperation in the activity.
HistoryLearning	Sub-codes responses indicating that the activity helped in effectively learning history.
SkillDevelopment	Sub-codes responses mentioning the development of specific skills such as research and argumentation.
<i>Source: Own elaboration</i>	

Table 3: Sub-Code Relationship under "Reasons for Choice"

To determine the interest scale of activities and the position of "Trials of Historical Figures" on that scale, we can analyze the responses provided in Table 4.

Age	Gender	Interest in a Broad Sense
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	HistorySpies (suicide wells)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	Poster Assignment for an Exhibition/Museum
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	EmpoweredWomen
18-25	Female	HistorySpies (suicide wells)
18-25	Male	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	HistorySpies (suicide wells)
18-25	Female	HistorySpies (suicide wells)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Male	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Male	Urbangame
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	EmpoweredWomen
18-25	Female	HistorySpies (suicide wells)
18-25	Female	Urbangame
18-25	Female	HistorySpies (suicide wells)
18-25	Female	HistorySpies (suicide wells)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	HistorySpies (suicide wells)
18-25	Male	HistorySpies (suicide wells)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Male	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	HistorySpies (suicide wells)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	HistorySpies (suicide wells)
18-25	Male	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Male	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Male	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
26-35	Female	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)
18-25	Female	HistorySpies (suicide wells)
18-25	Male	Trials of Historical Figures (Isabella the Catholic, Juana la Loca)

Source: Own elaboration based on form data

Table 4: Relationship of Responses on Interest in Students' Learning Situations

First, we will identify how many times each activity appears in the responses and then evaluate the interest level based on the frequency of appearance (Table 5):

Learning Situation	Responses
Trials of Historical Figures	31
History Spies	12
Poster Assignment for an Exhibition/Museum	1
Empowered Women	2
Urbangame	2
<i>Source: Own elaboration based on form data</i>	

Table 5: Number of Times Learning Situations are Cited by Students

To determine the position of "Trials of Historical Figures (Isabella the Catholic, Juana la Loca)" on the interest scale, we can classify activities into three categories (Table 6):

Learning Situation	Very Interesting	Interesting	Less Interesting
Trials of Historical Figures			
History Spies			
Poster Assignment Empowered Women			
<i>Source: Own elaboration based on form data</i>			

Table 6: Sub-Code Relationship under "Reasons for Choice"

According to this classification, "Trials of Historical Figures" falls into the "Very Interesting" category, receiving the highest number of positive mentions in the responses.

From the comments obtained from student responses in the form, it appears that the most interesting activity for students, mostly women aged 18-25, was "Trials of Historical Figures." Several students mentioned that this activity was innovative, fun, and educational. They highlighted that it allowed them to learn about history in a dynamic and participatory way, as well as fostering class involvement. Other activities that generated interest, such as "History Spies (suicide wells)" and "Empowered Women," received praise for being interesting and motivating. However, it seems that the historical trials activity was the most prominent in terms of participation and learning.

4.3 Quantitative Analysis

"Trials of Historical Figures" was the most popular, with 31 of the 48 participants (64.6%) selecting it. This indicates a high interest in activities involving critical evaluation and reflection on historical figures. It seems evident that students find the analysis of historical characters and events from a modern perspective appealing, which can facilitate a deeper connection with the material and foster critical thinking skills.

"History Spies" (Suicide Wells) appears to have been selected second (25% or less), which might indicate a more specialized interest. "Poster Assignment for an Exhibition/Museum" was

selected by a smaller percentage of participants, suggesting that creative and visual activities like poster design are less attractive or prioritized for most students in this context. The simulation through "Urbangame" chosen by 4.2% of participants indicates limited interest. This type of activity may not be as appealing to most students. The "Empowered Figure" activity is similar to "Urbangame" in terms of popularity. Finally, the "Text Commentary" does not seem to have been popular among participants, suggesting a lower preference for more traditional text-based activities compared to more interactive or novel approaches.

4.4 Descriptive Statistics and Frequency Analysis

From these initial data, focusing on the historical trial's activities, a series of quantitative analyses were conducted to deepen the understanding of all the raised issues, seeking relationships between them.

First, descriptive statistical analyses and frequency tables were performed for three variables (learning objectives) measured on Likert scales: "Acquire Content," "Acquire Competencies," and "Acquire Values."

All variables have the same number of observations (N=48) with no missing data. The means for all three variables are high, indicating a general tendency towards higher scores on the Likert scales (Table 7).

Likert Scales	Acquire Content	AcquireCompetencies	AcquireValues
2		1 (2.1%)	
4	5 (10.4%)	9 (18.8%)	8 (16.7%)
5	43 (89.6%)	38 (79.2%)	40 (83.3%)

Table 7: Likert Scale Evaluation Percentage for Learning Objectives Variables

Most respondents rated the three variables (Content, Competencies, and Values) with the highest possible score (5.00), indicating a generally positive perception in these areas. There is greater variability in responses for "Acquire Competencies," with a significant minority rating this variable lower (even 2.00), which

might indicate specific areas for improvement or differences in the perception of competencies. High scores in "Acquire Values" and "Acquire Content" indicate positive perception, providing a solid foundation for building or reinforcing educational initiatives (Table 8).

Statistics	Acquire Content	AcquireCompetencies	AcquireValues
N	48	48	48
Valid	48	48	48
Missing	0	0	0
Mean	4.8958	4.7500	4.8333
Median	5.0000	5.0000	5.0000
Std. Deviation	0.30871	0.56493	0.37662
Variance	0.095	0.319	0.142

Table 8: Frequency Analysis

Most respondents rated the three variables (Content, Competencies, and Values) with the highest possible score (5.00), indicating a generally positive perception in these areas. There is greater variability in responses for "Acquire Competencies," with a significant minority rating this variable lower (even 2.00), which might indicate specific areas for improvement or differences in the perception of competencies. High scores in "Acquire Values" and "Acquire Content" indicate positive perception, providing a solid foundation for building or reinforcing educational initiatives.

Non-Parametric Correlations (Kendall's Tau-b and Spearman's Rho) between Learning

5. Objectives

Non-parametric correlations (Kendall's Tau-b and Spearman's Rho) were conducted for three variables measured on a Likert scale. These correlations are useful when parametric assumptions (like Pearson's correlation) are not met, as in the case of ordinal scale data like ours (Table 9).

Correlations	Acquire Content	AcquireCompetencies	AcquireValues
Kendall'sTau_b			
Acquire Content	1.000	0.315*	0.579
		0.029	<0.001
N	48	48	48
AcquireCompetencies	0.315*	1.000	0.573
		0.029	<0.001
N	48	48	48
AcquireValues	0.579	0.573	1.000
	<0.001	<0.001	
N	48	48	48
Spearman's Rho			
Acquire Content	1.000	0.318*	0.579
		0.028	<0.001
N	48	48	48
AcquireCompetencies	0.318*	1.000	0.578

	0.028		<0.001
N	48	48	48
AcquireValues	0.579	0.578	1.000
	<0.001	<0.001	
N	48	48	48
* The correlation is significant at the 0.05 level (two-tailed).			
. The correlation is significant at the 0.01 level (two-tailed).			

Table 9: Non-Parametric Correlations

All correlations are positive, indicating that an increase in one variable tends to be accompanied by an increase in the other. The strongest and most statistically significant relationships are observed between "Acquire content" and "Acquire values," and between "Acquire competencies" and "Acquire values." The relationship between "Acquire content" and "Acquire competencies" is weaker but still significant.

This implies that educational approaches integrating these elements may be more effective than those focusing on a single aspect, suggesting that curricula should be designed to incorporate content (what is taught), competencies (how knowledge is applied), and values (ethical and moral aspects of education) in a balanced

manner. For the same reason, evaluations should be holistic, not only focusing on content knowledge but also on how students apply this knowledge (competencies) and their understanding and manifestation of associated values.

Often, teaching focuses on content; however, these results suggest the importance of equally focusing on the development of competencies and the inculcation of values. Additionally, the strong correlation between values and other areas suggests that a school environment promoting positive values can also have a beneficial impact on content learning and competency development (Figure 2).

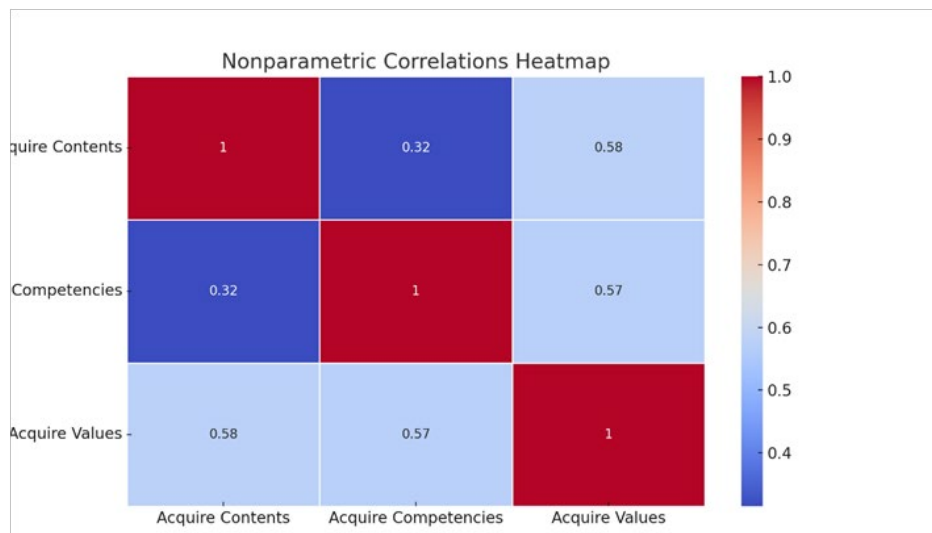


Figure 2: NonparametricCorrelationsHeatmap

6. Discussion

The "Historical Trial" learning situation was considered the most comprehensive of all activities, highlighting its ability to integrate multiple dimensions of learning. Inspired by a previously proposed model this activity adopted approaches from critical pedagogy as well as historical, political, and sociological perspectives [12]. Through this methodology, the teacher explained and the students reflected on the different perspectives and motivations of the involved characters, the social and political dynamics of the time, and the role of women in medieval society, emphasizing gender inequality and structural domination.

The trial simulation focused on the dynastic conflict between Isabella of Castile and Ferdinand of Aragon and the marriage of

their daughter Juana I of Castile (known as "the Mad") to Philip the Handsome. This episode, rich in historical and sociopolitical complexity, provided an ideal scenario for interdisciplinary analysis, allowing students to apply the principles of critical pedagogy. Critical pedagogy focuses on questioning dominant narratives and making silenced voices visible, which was reflected in the learning objectives of this activity [13,14].

A study demonstrated that historical trial simulations can significantly improve students' understanding of historical events and the development of critical skills [15]. In this research, a trial simulation on the French Revolution was conducted, where students assumed roles as lawyers, witnesses, and jurors. The results showed that students not only acquired deeper knowledge

about the historical event but also developed argumentation and critical analysis skills.

Applying critical pedagogy in history teaching allows students to question power structures and dominant narratives [16]. In his work, Giroux highlighted how critical pedagogy can foster a deeper and more critical understanding of history by allowing students to explore different historical perspectives and contexts. This methodology, when applied to an analysis of the history of slavery in the United States, resulted in greater awareness of the social and political implications of the studied historical events [16 -20].

In the "Trial of Historical Figures" activity, students were divided into groups that assumed specific roles (prosecutors, defense lawyers, witnesses, journalists, and the public) and were provided with historical documents and evidence to prepare their arguments. This preparation and execution of the trial allowed students to develop a series of key skills:

- **Research Skills:** Students had to investigate and analyze historical documents, improving their search and information analysis abilities.
- **Critical Analysis and Argumentation:** The need to prepare arguments based on historical evidence promoted critical thinking and argumentation skills.
- **Oral Expression:** Presenting their arguments in the trial allowed students to practice and improve their oral expression skills.

These learning objectives were not only achieved but also exceeded in some cases, as demonstrated by the results obtained in the evaluation questionnaires and qualitative observations. Students expressed that the activity was highly motivating and provided them with an interactive and engaging way to learn history.

The "Trial of Historical Figures" simulation proved to be a powerful pedagogical tool in history teaching. By integrating critical pedagogy and active learning methods, students not only acquired historical knowledge but also developed essential skills and a greater critical awareness of power dynamics and social structures. This approach, supported by previous research, underscores the effectiveness of active methodologies in historical education and their potential to transform students' learning experiences.

7. Conclusions

7.1 Results of Qualitative Analysis

From the responses provided by students on why the "Trial of Historical Figures" activity was so appreciated, several key reasons can be identified:

- **Immersion in History:** Many students mentioned that this activity allowed them to immerse themselves in history in a different and more exciting way. They could live history instead of simply studying it passively.
- **Active Learning:** Several students highlighted that through the trials, they could learn about historical facts more actively and practically. Researching and preparing for the trials helped them understand and remember the content better.
- **Diverse Perspectives:** The trials allowed students to see history

from different perspectives. They had to defend or accuse historical figures, making them consider multiple viewpoints and better understand historical events.

- **Teamwork:** The activity fostered collaboration and teamwork, as students had to prepare and participate in the trials with their peers.
- **Motivation:** Many mentioned that this activity was highly motivating. They found it interesting and entertaining, contributing to their active participation and a positive classroom environment.
- **Focus on Orality:** Some students highlighted that the trials helped them develop oral expression skills, which they considered important for their future teaching profession.
- **Demystification of Historical Figures:** Some students pointed out that the trials allowed them to demystify historical figures like Isabella the Catholic and Juana la Loca, questioning popular beliefs and delving into their stories.
- **Dynamism:** The dynamic of the trials, where they had to assume roles and present arguments, made the activity exciting and engaging.
- **In short,** students valued the "Trial of Historical Figures" activity for its immersive, active, and motivating nature, as well as its ability to foster learning from multiple perspectives and oral communication skills. This feedback suggests that this pedagogical strategy was effective in engaging and educating students in a unique and attractive way.
- **Students also provided reasons for appreciating other activities besides the "Trial of Historical Figures."** A summary of some of the reasons argued for the different activities would be as follows:
 - **Poster Assignment for an Exhibition/Museum:** This activity was valued because it allowed students to compare past inventions with current advances. It provided them with an opportunity to understand the evolution of technology and innovation.
 - **Empowered Women:** Many students mentioned that this activity was important because it highlighted historical women who are often overlooked in history books. They considered it essential to give visibility to these women.
 - **History Spies (Suicide Wells):** Students expressed interest in this activity due to its focus on research and solving historical mysteries. They liked the opportunity to formulate hypotheses and reflect on historical events.
 - **Urbangame:** Some students appreciated this innovative and playful methodology, which they had never experienced before. They found it interesting and fun, contributing to their enjoyment and learning.
- **In general,** the reasons for appreciating these activities varied from the opportunity to learn about interesting and little-known topics to the ability to experience history practically and participatively. These activities seem to have stimulated students' interest and provided a different and engaging way to learn about various aspects of history.
- **There are no significant differences in students' arguments based on age in the provided responses.** The reasons students gave for appreciating the activities seem more related to their personal preferences and individual experiences rather than their age. Each student valued the activities according to what interested or motivated them most, regardless of their age range.
- **It is possible to observe some trends in comments and preferences**

based on gender. Although these trends may vary widely and not apply to all individuals of a particular gender, here are some general observations that could be made:

- **Favorite Activities:** In general, both women and men seemed to enjoy activities related to historical trials. These activities were frequently mentioned by students of both genders as the most interesting. Other activities were also mentioned positively, but the trials seemed to be especially popular.
- **Thematic Interests:** Some comments suggest that women appreciated activities focused on empowered women or aspects of history involving women. This might indicate an interest in gender and female empowerment themes.
- **Group Dynamics:** Some students mentioned that activities involving group work or interaction with peers were particularly attractive. This can apply to both men and women, indicating that social dynamics and collaboration may be valued aspects in activities.
- **Interest in Research:** Some comments, especially from women, highlighted their interest in activities involving research and problem-solving, such as the "History Spies" activity. This might indicate an affinity for critical thinking and solving puzzles.
- **Variety of Tastes:** It is important to note that, in general, there was a variety of tastes among students of both genders. Not everyone had the same preferences, and specific activities also received positive comments from students of both genders.

7.2 Results of Statistical Analysis

The statistical analyses provide a comprehensive view of the impact of active methodologies and critical pedagogy on students. The results indicate a positive perception in terms of achieving learning objectives, competencies, and values.

Frequency and qualitative analyses suggest that the "Trials of Historical Figures" activity was particularly effective in capturing interest and fostering active learning among students. Correlations and regression analyses indicate that a balanced educational approach integrating content, competencies, and values can be more effective in critical and transformative education.

7.3 Results of Research Hypotheses

The study results show that the proposed hypotheses have been significantly fulfilled, providing a solid foundation for implementing active methodologies and critical pedagogy in history teaching.

H1: The implementation of active methodologies and critical pedagogy significantly improves the achievement of learning objectives in terms of content, competencies, and values, has been validated with the high means obtained in the measured variables. The high scores in "Understand Content" (mean of 4.8958), "Acquire Competencies" (mean of 4.7500), and "Acquire Values" (mean of 4.8333) indicate a significant improvement in achieving these objectives. Additionally, significant positive correlations between these variables reinforce the conclusion that these methodologies are effective for students' comprehensive learning.

H2: The activity "Trials of Historical Figures" is valued as the

most interesting and educational due to its immersive, active, and participatory nature has also been confirmed. This activity was the most popular among students, with 64.6% selecting it as their favorite. Qualitative comments underscore that students found this activity innovative, fun, and educational, highlighting its ability to foster dynamic and collaborative learning.

H3: There is a significant positive correlation between students' interest in educational activities and their perception of having achieved learning objectives was supported by the correlation analysis results. The non-parametric correlations conducted between the learning objectives variables showed significant positive relationships, particularly between "Acquire Content" and "Acquire Values" (Kendall's Tau-b coefficient = 0.579, $p < 0.001$) and between "Acquire Competencies" and "Acquire Values" (Kendall's Tau-b coefficient = 0.573, $p < 0.001$). This implies that greater interest in educational activities is associated with a more positive perception of achieving learning objectives.

H5: Active methodologies and critical pedagogy significantly foster the development of research, argumentation, and oral expression skills in students, was also fulfilled. Qualitative analyses reveal that students highly valued activities involving research, argumentation, and oral expression, particularly the "Trials of Historical Figures" activity. Students mentioned that this activity allowed them to develop key skills such as research and analysis of historical documents, preparation and presentation of arguments based on evidence, and improvement of their oral expression skills.

In conclusion, the research hypotheses have been significantly validated through the results obtained in this study. Active methodologies and critical pedagogy not only improve the achievement of learning objectives in terms of content, competencies, and values but are also highly valued by students for their immersive and participatory nature. Additionally, there is a positive correlation between interest in educational activities and the perception of achieving learning objectives, and these methodologies foster the development of essential skills in students.

Author Contribution Statement

Dr. Pablo Rosser:

- **Conceptualization:** Developed the original concept and research framework for the study on the impact of active methodologies and critical pedagogy on learning in university students.
- **Methodology:** Designed the study methodology, including the selection of mixed analysis methods such as qualitative case studies and quantitative analysis using SPSS.
- **Data Analysis:** Conducted the primary data analysis using statistical tools such as SPSS Statistics, ensuring the accuracy and reliability of the findings.
- **Supervision:** Supervised the overall research project, ensuring the integrity of the research process and outcomes.
- **Writing - Original Draft:** Wrote the initial draft of the manuscript, including the introduction, methodology, results, and discussion

sections.

- Visualization: Created the graphs and charts presented in the manuscript to illustrate the statistical findings and thematic categorizations.

Dr. Seila Soler:

- Literature Review: Conducted a comprehensive literature review to support the theoretical framework and context of the study.

- Data Collection: Assisted in organizing and systematizing the data collection process from students enrolled in the History Didactics course at the University of Alicante.

- Statistical Analysis: Collaborated in the statistical analysis and interpretation of the results, particularly in the application of non-parametric correlations and frequency analysis.

- Writing - Review & Editing: Contributed to the critical revision of the manuscript, enhancing its clarity and overall quality.

- Project Administration: Managed the logistical aspects of the research project, including coordination between institutions and communication with stakeholders.

- Funding Acquisition: Secured funding and resources necessary for the completion of the research project. Both authors have read and approved the final version of the manuscript and agree to be accountable for all aspects of the work.

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