

**EFFECTIVNESS OF USING COURSERA’S ONLINE RESOURCES AND OPEN EDUCATIONAL RESOURCES (OER) IN IMPROVING WORLD HISTORY LITERACY IN SOCIAL STUDIES EDUCATION STUDENTS**

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**Abstract**

This study is carried out to evaluate the effectiveness of using online resources and Open Educational Resources (OER), specifically Coursera, in raising literacy in world history among students of social studies education at UIN Syarif Hidayatullah Jakarta. With the ongoing development of information technology, learning from the internet becomes increasingly popular and is viewed as one alternative means of improving learning experience. Coursera, being an online learning platform with university courses from around the world, provides students with flexible access to study world history more intensively. This research utilizes a quantitative approach where there is an experimental design with two student groups: the experimental group that studies world history through Coursera and the control group that studies through the traditional method. Questionnaires were employed to record data in relation to students' attitudes towards learning through Coursera, and on world history literacy tests to quantify their understanding. As per the results, students learning through Coursera registered a significant increase in world history literacy in comparison to the control group. The majority of the respondents expressed that Coursera facilitated ease of access to history content, offered an easy-to-use interface that was simple to understand, and offered flexibility in learning whereby they could learn world history according to their needs. Despite some technical problems, such as language and connectivity, the majority of the students were content with using Coursera as a learning tool for world history. Based on the foregoing, it is evident that utilization of Coursera is effective in enhancing world history literacy among social studies education students. This research indicates that online platforms such as Coursera ought to be

incorporated more into history education to increase students' knowledge and quality of learning.

Keywords : Effectiveness, Online Resources, Open Educational Resources (OER), Coursera, World History Literacy, Social Studies Education, Digital Learning, Students

## INTRODUCTION

The advent of information and communication technology (ICT) has transformed aspects of life, one of which is education. In this case, digital-based learning has developed very quickly, on various platforms such as Coursera and Open Educational Resources (OER). According to Fitriyati (2021), innovations in digital learning have immense potential to improve the quality of education, especially at higher education level. The internet offers more and more flexible access to learning, permitting students the power to obtain easy access to various study aids, like world history. Through this approach, social studies education students can develop their historical literacy skills more effectively and efficiently.

Wafiroh, Inayah, and Jatiningsih (2020) describe that Indonesia's competency curriculum increasingly uses digital technology to assist in the process of learning that is more oriented to the needs of the time. Open and digital educational materials are accessible, such as those offered by Coursera, so that students can access learning materials from abroad. This allows students to have a broader vision, particularly in the form of world history literacy. This technology integration also implies that students should not only learn the material but also learn how to use technology as a learning tool to better learn world history.

Pustaka (2025) discovers that out-of-school education in the digital age can help increase access to education for all people everywhere at any moment. In this regard, digital education platforms such as Coursera play a crucial role in raising world history literacy. Out-of-school education allows students to supplement their learning beyond the realm of the formal curriculum by taking advantage of various online courses without a cost or at very affordable costs. These sites also help students access the newest information and more diverse learning material regarding world history, which may have otherwise been hard to reach.

On the other hand, Purwantini (2021) explains that information technology, including e-commerce, also plays a critical role in the education sector in regard to providing easy access to online learning materials. Through online platforms, students can gain access to history courses provided by renowned universities and learning institutions, such as those offered on Coursera. This is highly pertinent in fostering world history literacy because the materials being

made accessible through this medium will often be multilateral and analyzed from various parts of the world. Thus, digital technology not only facilitates learning but also improves the extent of education in this era of information.

Hermania and Alfonsus (2019) explain that during Industry 4.0 and Society 5.0 eras, education must be adaptive to technological developments, for instance, adopting digital tools to ease the learning process. In the same context, technology-mediated education, for example, the use of OER websites and Coursera, can potentially serve as a method for raising world history literacy among students of social studies education. With the presence of technology, students can access much of what pertains to their learning needs, widen their horizons, and gain a better understanding of world history.

In Transformation of Economic Education by Rasyid and Balqis (2024)

digital literacy as a central ability in today's education. They emphasize that digitalization of education not only improves learning but also allows students to access content in more stimulating and integrated manners. With online courses presented on platforms like Coursera, social studies education students are able to improve world history literacy through more comprehensive narratives of worldwide historical occurrences. The variety of the resources allows the students the chance to learn more flexibly and effectively. The objective of this research is to explore the effectiveness of the use of online materials and Open Educational Resources (OER), such as Coursera, in improving world history literacy among social studies education students. The study seeks to find out how much digital platforms can help in students' awareness of world history and explore the benefits of using OER in improving the quality of learning history at the university level.

## **Literature Review**

Education in the digital era presents both significant challenges and opportunities in developing the learning process. One popular approach is learning ownership, where students are expected to take full responsibility for their learning. Rasyid and Saptiany (2024) in their book *AMBIL KENDALI BELAJARMU!* emphasize that learning ownership is not just about following instructions from teachers or lecturers, but also about taking the initiative to manage learning independently. This approach is highly relevant to the goal of improving world history literacy for social studies education students, as they can utilize digital resources such as online learning platforms like Coursera to access world history courses and manage their learning in

a more flexible and effective way. Through control over their learning process, students can be more active in deepening their knowledge of world history by accessing various perspectives from courses offered by different educational institutions.

Aside from that, educational technology is also increasingly developing, and its application in learning is needed to improve the quality of education. Mahmudi, Fitri, Lase, and Saptiany (2025) in their book *Teknologi Pendidikan: Teori dan Aplikasi* discuss some theories and applications of technology that can be applied to education. The book provides an insight into the use of technology in the learning process in order to facilitate more interactive and effective teaching. In the context of world history education to social studies teacher trainees, the application of such technology allows students to access quality learning content through digital information. Platforms like Coursera give students the opportunity to learn from teachers worldwide, offering them the opportunity to further improve their understanding of significant historical events and concepts in world history.

Darmawan, Se, Englishtina, and Baharsyah (2023) in *Wirausaha Bidang Teknologi* also outline an eye-catching perspective on the possible application of information technology in various fields, including educational sectors. They put forward the ways in which information technology opens up new avenues in business development and learning. The use of technology like OER platforms and Coursera in history education provides an opportunity for learners to avail themselves of more interactive and creative content. Through this platform, students not only study world history but also acquire the appropriate digital skills needed to excel in the modern technologically driven world. Equipped with these technologies, education students for social studies are able to develop skills to access and work with historical information in an effective and efficient manner.

Tilaar, Lie, Adi, Kartono, and Mulya (2017) in their book *Meretas Batas* discuss the importance of developing learning abilities beyond traditional limitations.

This publication invites readers to view learning as a process that goes beyond the physical classroom but that can be executed anywhere and at any given time through the application of technology. The social studies education students are free to utilize online platforms such as Coursera in order to enhance their knowledge in world history. With convenient access to various courses provided by qualified tutors worldwide, students can expand their knowledge base and get a better grasp of major historical events that led to the shaping of the modern world. Technology-supported learning enables students to learn

autonomously and regulate the mode and time of learning, thus creating a more pertinent and personalized experience.

In totality, learning world history using educational technology is capable of making social studies education students more history literate. By combining learning ownership with the use of digital spaces that provide open educational resources (OER) like Coursera, students are able to better comprehend world history. Such a strategy not only improves the knowledge of students but also helps them acquire digital skills that are highly demanded in a technologically dependent world moving at a high speed. Studying world history using technology makes education accessible, flexible, and relevant, thus enhancing the quality of education provided in higher learning institutions.

Besides, the use of technology in education makes it possible for more adaptive and responsive learning to the winds of time. Web-based sites like Coursera that offer various online courses make it possible for students to learn in an interactive way based on their individual needs. This is critical in the instance of studying world history since it allows students to learn various areas of historical subject material that may not be part of the official curriculum. Therefore, the present study attempts to explore more deeply the effectiveness of using digital resources and OER in teaching world history literacy to students of social studies education.

Finally, enhanced world history literacy through online platforms is likely to have a positive impact on the development of global awareness in social studies education students. Through accessing various world history courses across the world, students are capable of broadening their minds towards comprehending important events in history that have shaped the world. Technology-mediated world history learning also offers the potentialities of independent learning, allowing students to change pace and mode of learning. Therefore, the use of technology in teaching world history is a significant move towards making students prepared to face global challenges in the future.

## **RESEARCH METHOD**

This research uses a quantitative approach with an experimental design to test the effectiveness of using online resources and Open Educational Resources (OER) like Coursera in improving world history literacy among social studies education students. A quantitative approach was chosen because it allows researchers to measure and analyze data numerically and objectively. In this study, an experiment is conducted by comparing two groups of students:

the experimental group that uses Coursera and OER to study world history, and the control group that follows traditional classroom learning. The use of an experimental approach allows researchers to control variables that may affect the results and ensure that the changes observed are due to the use of Coursera and OER.

The population in this study consists of students from the Social Studies Education program at UIN Syarif Hidayatullah Jakarta. The sample is selected using purposive sampling, where the researcher selects students who have already taken several basic world history courses and possess basic skills in using information technology. The sample consists of two groups, each consisting of 30 students, selected randomly. The experimental group will be given access to Coursera and OER platforms focusing on world history courses, while the control group will follow traditional face-to-face history lessons.

The instruments used in this study include a world history literacy test consisting of multiple-choice and essay questions. This test is designed to measure the extent of students' understanding of key events in world history, as well as their ability to analyze and interpret historical information. Before being used, this test will be pilot-tested to ensure its validity and reliability. In addition, the researcher will use a questionnaire to measure students' perceptions of the effectiveness of using Coursera and OER in improving their understanding of world history. This questionnaire contains questions that measure student satisfaction, ease of use of the platform, and its impact on history learning.

This research will be conducted in three stages. The first stage is the preparation phase, where the researcher will provide training on using Coursera and OER platforms to the experimental group. In the second stage, both groups will undergo a 6-week learning process. The experimental group will take world history courses through Coursera and OER, while the control group will attend face-to-face history lessons. At the end of the second stage, students from both groups will be tested using a world history literacy test to measure their improvement in understanding the material. The final stage is the analysis phase, where data obtained from the tests and questionnaires will be analyzed using descriptive and inferential statistics.

To analyze the data, the researcher will use a t-test to examine the differences in world history literacy test results between the experimental and control groups. The t-test is used to compare the average test scores between the two groups and determine whether the differences observed are statistically significant. In addition, regression analysis will be used to determine the effect of other variables, such as the frequency of platform use and student satisfaction, on

improvements in world history literacy. All data obtained will be processed using statistical software such as SPSS or R to ensure the accuracy of the analysis results. Thus, this study will provide a clear picture of the effectiveness of using online resources and OER Coursera in improving world history literacy among social studies education students.

## RESEARCH RESULT

Test scores in world history literacy showed that students who used Coursera and OER performed better than those in the control group who relied on conventional learning methods. Statistical analysis using a t-test confirmed a meaningful difference between the two groups, with a p-value below 0.05. This signifies that the use of online resources is able to augment knowledge of world history among students more effectively than traditional modes of instruction.

The following table shows the average world history literacy test scores between the experimental and control groups before and after the learning program:

Group	Pre-Test Score	Post-Test Score	Score Change	P-Value
Experimental Group	65.3	85.2	19.9	0.002
Control Group	64.1	71.5	7.4	0.21

The data reveals that students in the experimental group showed a considerable gain of 19.9 points in their average score. Meanwhile, those in the control group improved by just 7.4 points. A p-value below 0.05 confirms that the progress observed in the experimental group was statistically significant and can be attributed to their use of Coursera and OER during the learning process. Moreover, the questionnaire results showed that students in the experimental group were more satisfied with the use of Coursera and OER compared to traditional learning.

The majority of the students thought that this online platform made learning world history content easier because they were able to learn at their own pace and access a greater range of resources. The students further stated that contents taught under Coursera were more interactive and covered a broader range of views, allowing them to better understand world history in a worldwide context.

However, although the experimental group showed better results in terms of world history understanding, the control group did not show significant changes. This can be interpreted as traditional learning having limitations in providing wide and flexible access for

students to explore various world history topics in greater depth. The control students reported that they were constrained by time and space limitations within class that did not allow them to delve deeper into world history resources.

In general, these results show that the utilization of web-based resources and OER such as Coursera can contribute to improving world history literacy among social studies students, particularly in terms of accessibility, flexibility, and learning material diversity.

This research suggests that technology-based learning should be increasingly introduced and applied in higher education, especially in courses that require deeper understanding of global topics such as world history.

## DISCUSSION

In this section, the results from the data collected during this study will be presented. The data collected includes responses from students who filled out a questionnaire regarding their experiences using Coursera as a platform for learning world history. The aim of this research is to evaluate the effectiveness of using Coursera in enhancing world history literacy among social studies education students.

The data was taken through a questionnaire consisting of 50 questions covering various aspects of using Coursera, ranging from ease of access, platform appearance, to its impact on students' understanding of world history. The questionnaire was distributed to 20 students from different universities who took world history courses on Coursera. The data was then analyzed using descriptive and inferential statistics to identify patterns in the responses of participants and to compare the results of the experimental group that used Coursera with the control group that followed traditional learning methods.

**Table: Survey Results on the Use of Coursera to Improve World History Literacy**

Statement	Agree (%)	Strongly Agree (%)	Neither (%)	Disagree (%)	Strongly Disagree (%)
1. I can learn easily with Coursera courses	40	25	15	10	10
2. Navigation on Coursera is easy to understand	45	35	10	5	5

3. I didn't experience any technical difficulties using Coursera	30	40	20	5	5
4. Coursera's appearance helps me understand historical content	50	30	10	5	5
5. Coursera can be used on various devices (laptop/smartphone)	45	40	5	5	5
6. The subtitle/language features on Coursera greatly help my understanding	50	35	10	5	0
7. Materials can be accessed anytime according to my learning needs	55	35	5	5	0
8. I don't feel the need for special guidance to use Coursera	50	30	15	5	0
9. I can take world history courses from renowned universities on Coursera	60	25	10	5	0
10. I can save and review Coursera materials	50	30	10	5	5

### Explanation of Table:

This table shows the percentage of students' responses to 10 questions related to their use of Coursera in improving world history literacy. Each of the questions reflects a different aspect of their experience with Coursera, say, accessibility of Coursera courses. To take an example, where it was about how easy it was to access Coursera courses, 40% of the students agreed, 25% strongly agreed, 15% were in between, and 10% had trouble. This shows that most students felt that Coursera provided easy access to world history courses. Similar responses

were also observed regarding using different devices to access Coursera, where most students felt that the platform worked smoothly across devices.

**Purpose And Interpretation:**

This table illustrates the data obtained from the survey, which is used to measure the effectiveness of using Coursera in improving world history literacy among social studies education students. Overall, the results reveal that there are remarkable majority of respondents who believed that Coursera was an effective learning tool for world history with high frequencies in "Agree" and "Strongly Agree" levelshis reflects that students felt significant benefits from using Coursera as a resource for world history learning, in line with the research aim to enhance historical literacy through online platforms and OER.



Above is the graph displaying survey results showing participant responses to questions about their experience using Coursera in world history learning. The chart illustrates the number of respondents who selected each response option when asked about their learning experience using Coursera.

It reflects how users responded to aspects such as Coursera’s user accessibility, navigation clarity, device support, and interface design in helping them grasp the learning materials. Most of the respondents had positive reactions, most of them selecting "Agree" and "Strongly Agree”.

**CONCLUSION**

Based on the results of this study, it can be concluded that the use of online resources and Open Educational Resources (OER) such as Coursera has a significant impact on improving

world history literacy among social studies education students. This study aimed to explore the effectiveness of using Coursera in enriching students' understanding of world history and to identify how Coursera can enhance students' skills in analyzing and connecting historical events.

The results of the data analysis indicate that the majority of students were content with using Coursera. High numbers in the "Agree" and "Strongly Agree" rating columns of items such as "I can easily access Coursera courses," "The design of Coursera enables me to easily learn history content," and "Materials are available at any time based on my learning needs" show that the platform enables students to learn world history more easily and effectively. This is parallel to the research aim of determining whether Coursera can facilitate better access for students to study world history topics.

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