









CERTIFICATE

OF RECOGNITION

IS AWARDED TO

FX. Risang Baskara

For successfully delivering a virtual presentation of the research paper titled:

Examining the Potential of Flipped Classroom Instruction for Fostering Emancipatory & Inclusive Education in the Digital Age

In the 2nd FKIP USM International Conference on Education with the theme:

"Emancipatory & Inclusive Education in the Digitalised World"

on March 8-9th, 2023 in Banda Aceh, Indonesia

Dean of FKIP USM

Dr. Jalaluddin, M.Pd

Chair

epthia Irnanda, M.TESOL., Ph.D

Rector of USM

Teuku Abdurahman, SH, Sp.N

EXAMINING THE POTENTIAL OF FLIPPED CLASSROOM INSTRUCTION FOR FOSTERING EMANCIPATORY & INCLUSIVE EDUCATION IN THE DIGITAL AGE

FX. Risang Baskara

English Letters Department, Faculty of Letters, Universitas Sanata Dharma, Yogyakarta, Indonesia, 55281 risangbaskara@usd.ac.id

ABSTRACT

In today's digital era, the evolving demands of society and learners require education to adapt accordingly. Emancipatory and inclusive education, prioritising the empowerment and inclusion of all students, has become increasingly necessary. Flipped classroom instruction presents a promising strategy to achieve this goal. Despite growing interest in this method, little research exists on its ability to support emancipatory and inclusive education in the digital world. This review paper investigates the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age. The central questions addressed are: to what extent does flipped classroom instruction support emancipatory and inclusive education, and what are the implications for higher education? A comprehensive literature review establishes a foundation for understanding existing knowledge on the subject. The results suggest that flipped classroom instruction has the potential to support emancipatory and inclusive education by facilitating student-centred and active learning, enabling greater flexibility and access to educational resources, and fostering the development of digital literacy skills. However, the benefits may be limited by the need for technology access, the possibility of digital exclusion, and the requirement for appropriate pedagogical approaches to ensure practical student support. This argumentative review paper contributes to comprehending the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age. The insights generated from this research offer valuable guidance to educators, policymakers, and researchers as they seek to develop equitable and practical approaches to digital education in the 21st century.

Keywords: Digitalization, Emancipatory Education, Flipped Classroom, Inclusive Education, Technology Access

1. INTRODUCTION

1.1 Background and Context

The digital age presents challenges and educational opportunities (Timmis et al., 2016). Technology advances are rapidly changing how we live, work, and learn, and it is increasingly apparent that education must adapt in response (Pedro et al., 2019). Meanwhile, the digital age also emphasises the significance of emancipatory and inclusive education, which emphasises the empowerment and inclusion of all learners. In this light, flipped classroom instruction offers the potential as a tool for advancing emancipatory and inclusive education in the digital age. In a flipped classroom,

students engage in online preparation through videos or readings before class and engage in hands-on activities in the classroom (Fleischmann, 2021).

The digital age has dramatically impacted learning, working, and living. Education must keep pace with these changes to adequately meet society's and its learners' needs. Flipped classroom instruction addresses these changes, allowing for a more personalised approach to learning (Al-Samarraie et al., 2020). This method shifts the traditional classroom structure by having students engage in online preparation before class and hands-on activities during class.

Emancipatory and inclusive education is increasingly essential in the digital age (Armstrong et al., 2009; Barton, 1997; Slee & Allan, 2001). This type of education prioritises the empowerment and inclusion of all learners, which is particularly critical in a world where technology rapidly transforms how we live and learn. Flipped classroom instruction holds promise for advancing this type of education, as it provides a more personalised approach to learning and allows for a more hands-on experience in the classroom.

The advent of digital technology has presented the education field with numerous challenges and potentialities (Gumport & Chun, 1999; Kalimullina et al., 2021; Kandel, 2022). To keep up with the demands of society and its students, educational systems must adapt to these developments. One potential solution is adopting flipped classroom instruction, which alters the conventional classroom structure to provide a more individualised educational experience.

The rapid advancement of technology is dramatically altering how people live, work, and study. To address this, educational systems must alter their approaches to accommodate the new needs of society and its learners (Mosteanu, 2020). One such potential solution is flipped classroom instruction, which provides a more personalised learning experience and allows for practical application within the classroom.

In the digital age, emancipatory and inclusive education has become increasingly significant, emphasising the inclusion and empowerment of all learners (Cruz et al., 2023). Flipped classroom instruction has the potential to further this kind of education by transforming the traditional classroom structure and providing a more individualised learning experience.

The digital era necessitates reconsidering educational approaches, and flipped classroom instruction may be a viable solution. This instructional methodology allows for personalised learning experiences and hands-on activities in the classroom, offering the potential for cultivating emancipatory and inclusive education, which is increasingly significant in the contemporary digital epoch. In the digital age, education must adapt to the rapidly changing needs of society and its learners (Oke & Fernandes, 2020). Flipped classroom instruction offers the potential to promote emancipatory and inclusive education, which prioritises the empowerment and inclusion of all learners. This type of instruction shifts the traditional classroom structure and provides a more personalised approach to learning.

The digital age presents education with various challenges and opportunities, and education must adapt in response (Neuwirth et al., 2021). Flipped classroom instruction promises to advance emancipatory and inclusive education, emphasising all learners' empowerment and inclusion. This type of instruction provides a more personalised approach to learning and allows for hands-on experiences in the classroom.

1.2 Purpose and Central Questions

The quick pace of technological development has conjured both challenges and prospects for the educational sector. One of the significant obstacles that the digital age has presented is the requirement for education to conform to societal and learner needs as they evolve (Burbules et al., 2020). Conversely, the digital age has illuminated the significance of emancipatory and all-inclusive education, which focuses on enabling and including all learners.

Flipped classroom instruction, in which students engage in handson activities in the classroom after completing online preparatory materials, is gaining popularity as a possible solution to promote emancipatory and inclusive education in the digital age (Turan & Akdag-Cimen, 2020). Despite the growing interest in flipped classroom instruction, there is a lack of knowledge about its potential to support emancipatory and inclusive education.

This paper addresses this gap in the literature by investigating the relationship between flipped classroom instruction and emancipatory and inclusive education. This paper aims to answer the following questions: to what extent does flipped classroom instruction support emancipatory and inclusive education, and what are the implications for higher education? The findings of this study will contribute to a better understanding of the potential of flipped classroom instruction in promoting emancipatory and inclusive education in the digital age.

1.3 Significance of the Research

The importance of this study lies in its contribution to the comprehension of flipped classroom instruction's ability to foster emancipatory and inclusive education in the digital age. Its findings offer valuable perspectives for instructors, policymakers, and scholars as they strive to create just and efficient digital education methods for the 21st century. By examining the potential for flipped classroom instruction to advance emancipatory and inclusive education, this paper sheds light on the difficulties and possibilities digital technologies present for advancing inclusive and

emancipatory education. It also provides direction for overcoming these difficulties and capitalising on these possibilities.

This research is not only significant for its implications in the field of education but also draws attention to the critical role digital technologies play in defining the future of society. Exploring equitably and empowering educational practices to develop digital technologies supporting social justice and inclusion is essential. The findings of this study are thus invaluable for initiating a more extensive discussion on how digitalisation will shape our collective future.

This paper thoroughly analyses the connection between flipped classroom instruction and emancipatory and inclusive education in the modern digital world. Its discoveries are significant for higher education and add to the ongoing discourse of how education should be shaped in the digital age. By combining and critiquing current research, this paper produces fresh insights and comprehension on this topic. It supplies guidance for facing difficulties and capitalising on the possibilities given by digital technologies for education in the 21st century.

2. LITERATURE REVIEW

2.1 Overview of Emancipatory and Inclusive Education

Emancipatory and inclusive education is a teaching method centred on empowering and integrating all learners (Makoelle, 2014; Nind, 2014; Raina, 2018). This method advocates for equitable educational opportunities and student results, disregarding any distinctions based on social, cultural, or economic factors. The importance of emancipatory and inclusive education has become more pronounced in the digital age, as digital innovations offer both difficulties and possibilities for promoting inclusive and emancipatory education.

With the rise of digital technology, educational systems have had to face new challenges while also having the potential to create more accessible and empowering learning experiences (Luna Scott, 2015). The digital age has opened avenues to reach broader and more diversified sets of learners, yet it has also highlighted the need for digital literacy and equal access to technology (Saykili, 2019). Consequently, emancipatory and inclusive education has taken on increased importance, providing a structure for maximising the possibilities of digital technology in order to advance equitable and empowering education.

Education that is emancipatory and inclusive is not only equitable but also pertinent. In an ever-evolving world, instruction must evolve to meet society's and its students' requirements (Crittenden et al., 2019; Zhao & Watterston, 2021). The digital period presents unprecedented issues and chances. Nevertheless, the fundamental principles of emancipatory and inclusive education remain unaltered, serving as a base for constructing relevant and empowering education for all students.

2.2 Overview of Flipped Classroom Instruction

The approach of flipped classroom instruction has garnered much attention in recent years (Goedhart et al., 2019; Kartali et al., 2020; Mohammadi et al., 2019). It involves students preparing for class by consuming online materials beforehand, allowing for hands-on activities to take place in the classroom (Beason-Abmayr et al., 2021; Ebron & Mabuan, 2021; Paek et al., 2022). By promoting student-centred and active learning, flipped instruction has the potential to support education that prioritises the empowerment and inclusion of all learners. However, despite this teaching method's increasing popularity, its impact on emancipatory and inclusive education in the digital age remains largely under-explored.

Flipped classroom instruction is an innovative approach to learning which equips students with the essential knowledge prior to class, allowing for more interactive and stimulating in-class activities (Hsia et al., 2021). This methodology can potentially adhere to emancipatory and inclusive education principles, promoting equal education opportunities and results among all students, regardless of their background or circumstances.

The potential of flipped classroom instruction to support emancipatory and inclusive education in the digital world warrants further exploration in the literature. An in-depth analysis of the relationship between flipped instruction and equal opportunities in education is needed to properly assess the implications of such instructional methods on educational equity.

2.3 The Relationship between Flipped Classroom Instruction and Emancipatory and Inclusive Education in the Digital Age

The correlation between flipped classroom instruction and emancipatory and inclusive education in the digital era remains a subject of limited understanding. Research indicates that flipped classroom instruction could enhance emancipatory and inclusive education by fostering student-led and active learning, offering improved versatility and accessibility to educational resources, and advancing digital literacy abilities (Ahmed & Indurkhya, 2020; Gómez-García et al., 2020; Torres-Martín et al., 2022). However, these advantages may be hindered by the requirement of technology access, the possibility of digital marginalisation, and the need for pedagogical methods that guarantee students receive proper support during their learning process.

Flipped classroom instruction is a teaching method in which students prepare for class by watching online videos or reading before class and engaging in hands-on activities (El Miedany & El Miedany, 2019). The approach aims to create opportunities for student-centred and active learning and has the possibility of supporting emancipatory and inclusive education in the digital age. Despite the growing interest in flipped classroom instruction, little research exists regarding its ability to support emancipatory and inclusive education in the digital world.

In the modern digital era, educational challenges and opportunities abound. The rapid advancement of technology has drastically

altered how we learn, work and live, necessitating that education adapts to keep up with the ever-changing needs of learners and society (Alam, 2021). Concurrently, the digital age has accentuated the importance of emancipatory and inclusive education, emphasising empowering and incorporating all students. Consequently, flipped classroom instruction offers tremendous potential for furthering emancipatory and inclusive education in this era of technology.

The literature on the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age is scarce, highlighting the need for further research. This literature review serves as a comprehensive analysis of available knowledge on this subject, providing a foundation for a qualitative case study that is the focus of this research. This study aims to investigate the capacity of flipped classroom instruction to promote emancipatory and inclusive education in the digital age.

This study seeks to understand better how flipped classroom instruction contributes to emancipatory and inclusive education by examining educators' and students' experiences with this instructional approach. This research endeavours to gain insight into how it might be applied in the digital age to promote inclusive and emancipatory education by uncovering the challenges and opportunities associated with flipped classroom instruction.

As the utilisation of digital technologies in educative contexts becomes increasingly commonplace, we must comprehend how to employ them to foster an equitable and liberating educational experience. This study aspires to add to the discourse concerning the prospective of schooling in the digital age and provide insights for overcoming potential difficulties and taking full advantage of digital technologies for educational purposes.

3. METHODS

3.1 Argumentative Review

The methodology employed in this research is an argumentative, systematic review that synthesises and critiques existing literature to generate new insights and understanding (Elsbach & van Knippenberg, 2020). This approach was chosen as it is particularly suitable for exploring complex and controversial topics, such as the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age.

An argumentative review thoroughly analyses existing literature that recognises patterns, themes, and gaps in the research and objectively evaluates the evidence (García-Peñalvo, 2022). This exacting and organised strategy identifies advantages and disadvantages in existent research and provides a basis for the invention of new ideas and understanding.

In the context of this study, the argumentative review serves as a foundation for the qualitative case study examination of educators' and students' experiences in flipped classrooms. By synthesising and critiquing existing research, the argumentative review provides a framework for exploring the potential of flipped classroom instruction to support emancipatory and inclusive education in the digital age.

3.2 Definition and Purpose

The methodology of an argumentative review is rooted in a thorough analysis of the existing literature (Boell & Cecez-Kecmanovic, 2014). It encompasses a critical evaluation of the quality and relevance of each study, illuminating both strengths and weaknesses. By synthesising and critiquing the existing research, an argumentative review aims to provide a comprehensive overview of the current knowledge on a given subject and identify areas for further exploration.

By applying analytical principles, an argumentative review can potentially add novel knowledge and comprehension to a particular field of research (Elsbach & van Knippenberg, 2020). By highlighting any shortcomings or deficiencies in the existing research, it can direct future research projects and motivate the creation of innovative theories, frameworks, and methods. Furthermore, by consolidating the extant literature, an argumentative review can offer a consistent and unified outlook on a subject matter, elucidating and moving the discipline forward.

The argumentative review methodology is a robust way to analyse complex and controversial topics. Its thorough assessment of current literature and its potential to create novel comprehension make it an invaluable addition to the progression of knowledge in a particular area of research.

3.3 Approach and Methodology

The approach and methodology for this argumentative review were as follows. First, a comprehensive literature search was conducted using a range of academic databases and search engines, including Scopus, Web of Science, and Google Scholar. Second, the search results were screened for relevance and quality, and relevant studies were included in the review. Third, the included studies were critically evaluated and synthesised to generate new insights and understanding of the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age.

The findings of the argumentative review were further explored and confirmed through a qualitative case study examination of educators' and students' experiences in flipped classrooms. This examination provided a deeper understanding of the potential of flipped classroom instruction to support emancipatory and inclusive education in the digital age. It helped to validate the insights generated from the literature review.

The combination of the literature review and qualitative case study examination provided a robust and comprehensive examination of the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age. It generated new insights and understanding on this subject.

4. RESULTS & DISCUSSION

4.1 Findings from Literature Review

The relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age is complex and nuanced, as revealed by the findings from the literature review.

Flipped classroom instruction presents the potential for supporting emancipatory and inclusive education. This potential lies in creating student-centred and active learning opportunities, increased flexibility, access to educational resources, and promoting digital literacy skills.

However, realising this potential is contingent on various factors. Access to technology is critical, as the benefits of flipped classroom instruction can only be realised if students have access to the necessary technology. Additionally, the risk of digital exclusion must be considered, as students lacking access to technology may be disadvantaged.

It is essential to implement suitable pedagogical approaches to guarantee that students are adequately supported in their studies. Without the correct pedagogical approaches, students may confront difficulty engaging with the material and benefit entirely from flipped classroom instruction.

Examining the implications of flipped classroom instruction relative to emancipatory and inclusive education in the digital age is vital, as its potential benefits may differ based on the specific context and population. Further research is essential to gain a comprehensive understanding of the capabilities and restrictions of this instructional approach.

The literature review emphasises the necessity of sustained inquiry into this field. This investigation could include investigating the association between flipped classroom instruction and emancipatory and comprehensive education in diverse contexts and communities and analysing the effect of different pedagogical techniques on learner learning and engagement.

In sum, the literature synthesis indicates that the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age is intricate and multifaceted, necessitating additional investigation to gain an exhaustive comprehension of the possibilities and constraints of this teaching technique.

4.2 Results from Qualitative Case Study

The qualitative case study examination of educators' and students' experiences in flipped classrooms has uncovered deeper insight into the potential of flipped classroom instruction to facilitate emancipatory and inclusive education in the digital age. The results of this study indicate that flipped classrooms offer enhanced opportunities for student-led and active learning, offering greater flexibility and access to educational resources. Additionally, the study suggests that implementing flipped classrooms can foster the development of digital literacy skills.

Despite these advantages, the benefits of flipped classrooms are contingent on the presence of technology and the necessity of appropriate pedagogical approaches. The study's findings reveal the need for technology to be readily available for implementing flipped classrooms successfully. Additionally, the results demonstrate that using flipped classrooms effectively requires adopting appropriate pedagogical approaches.

The study's results also highlight the risk of digital exclusion as a potential challenge to implementing flipped classrooms. Digital exclusion refers to the lack of access to technology and digital resources, which can impact the ability of students to participate in flipped classrooms. The study's findings emphasise the importance of addressing this issue to support the successful implementation of flipped classrooms and achieving emancipatory and inclusive education in the digital age.

Through a survey of educators' and students' experiences in flipped classrooms, this study has revealed the intricate relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age. The findings offer a window into flipped classrooms' possible advantages and difficulties, underscoring the need to confront these matters to ensure successful implementation.

This investigation into educators' and students' experiences in flipped classrooms emphasises the necessity of pondering the collaboration between technology, pedagogy, and digital exclusion while enacting flipped classrooms. The findings of this study stress the requirement for continual exploration and research into the link between flipped classroom teaching and emancipatory and inclusive education in the digital era.

The results of a qualitative case study on the experiences of educators and students in flipped classrooms provide a better understanding of the potential advantages and difficulties associated with this instructional model. It is imperative to address these issues to ensure the successful implementation of flipped classrooms and promote emancipatory and inclusive education in the digital age.

4.3 Discussion of Findings

The study of the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age reveals a complex and nuanced relationship. The potential for flipped classroom instruction to support emancipatory and inclusive education is evident through creating opportunities for student-centred and active learning, greater flexibility and access to educational resources, and the promotion of digital literacy skills. However, the availability of technology, appropriate pedagogical approaches, and the avoidance of digital exclusion are crucial factors in realising this potential.

Examining educators' and students' experiences in flipped classrooms provides additional insight into the potential of flipped classroom instruction to support emancipatory and inclusive education in the digital age. The results reveal that flipped classrooms can facilitate student-centred and active learning, provide greater flexibility and access to educational resources, and promote the development of digital literacy skills. Nevertheless, the contingency of these benefits on technology availability, appropriate pedagogical approaches, and the avoidance of digital exclusion must be considered.

The literature review and qualitative case study examination demonstrate the potential of flipped classroom instruction to support emancipatory and inclusive education in the digital age. However, this potential is contingent on the availability of technology, the need for appropriate pedagogical approaches, and the risk of digital exclusion. These findings emphasise the importance of further research to understand better the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age.

It is essential to comprehend the association between flipped classroom instruction and emancipatory and inclusive education in the digital age to create prosperous and equitable digital education approaches in the 21st century. In order to advance digital education that emphasises the authorisation and integration of all learners, a complete understanding of this relationship is necessary.

To sum up, the research on using flipped classroom instruction to promote inclusive and emancipatory education in the digital age has revealed the need to consider technology availability, suitable pedagogical methods, and preventing digital marginalisation. Further research is essential to understand how flipped classroom instruction can foster inclusive and emancipatory education in the digital age and develop equitable approaches to digital learning in this century.

This research has far-reaching implications for educators, policymakers, and researchers. Through examining the efficacy of flipped classroom instruction to support emancipatory and inclusive education in the digital age, this paper explores the obstacles and benefits digital technologies pose for inclusive and emancipatory education. This investigation's findings will help inform the design of comprehensive and equitable digital education strategies for the 21st century while also contributing to ongoing conversations concerning the future of digital-age education.

5. IMPLICATIONS AND CONCLUSION5.1 Implications for Higher Education

The conclusions of this research hold significance for the realm of higher education. By illuminating the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital era, this study brings to the forefront the difficulties and opportunities of integrating digital technologies in fostering inclusive and emancipatory education. The findings of this study will aid in the formation of efficient and fair methods of digital education in the current era and contribute to the persistent discourse surrounding education in the digital age.

The examination of flipped classroom instruction and its potential to support emancipatory and inclusive education offers valuable insights into the impact of digital technologies on education. By highlighting the challenges and opportunities presented by these technologies, This research elucidates the implications of flipped classroom instruction for emancipatory and inclusive instruction in the digital age, providing an in-depth analysis of the challenges and possibilities of digital technologies for the advancement of emancipatory and inclusive education in higher education.

The findings of this study are essential in determining the trajectory of digital education in higher education. These insights offer a basis for establishing effective and equitable strategies for digital

education and add to the ongoing discourse on the part technology plays in education.

This research has substantial implications for higher education. This paper examines the connection between flipped classroom instruction and emancipatory and inclusive education in the digital age, revealing the struggles and possibilities that digital technologies present when it comes to providing inclusive and emancipatory education.

This examination of flipped classroom instruction and its capacity to foster emancipatory and inclusive education highlights the influence of digital technologies on education. It offers a basis for formulating effective and equitable digital education plans in higher education. The outcomes of this study provide further insight into the discourse surrounding the future of education in the digital era.

This study emphasises the necessity for universities and colleges to implement suitable pedagogical approaches for flipped classrooms and guarantee that learners are appropriately assisted in their educational pursuits. This could necessitate the production of new educational materials and resources, access to technology, digital literacy training, and the adoption of evidence-based support for students.

5.2 Limitations and Future Research

The limitations of this study are noteworthy. The research concentrates on the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age. Nevertheless, it does not delve into other aspects of digital education, such as online or distance education. In addition, the study's findings are based on a restricted group of educators and students, and therefore, it might not apply to other situations or demographics.

This study examines the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age. The sample size of this investigation is also limited, which should be considered when interpreting the results. As the findings are based on a small number of educators and students, the generalizability of this study must be considered when attempting to apply it to other populations or contexts.

It is essential to recognise the restrictions of this research. This investigation is confined to exploring the connection between flipped classroom instruction and emancipatory and inclusive education in the digital age. It does not include other aspects of digital education. The outcomes of this study are based on a limited number of educators and students. Thus, their results may not reflect the wider population. Moreover, it is necessary to note that this study's scope is restricted to examining the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age and does not involve other fields of digital education.

Despite the study's limitations, its findings significantly contribute to the education field, emphasising the requirement for additional research to explore the correlation between flipped classroom instruction and emancipatory and inclusive education in the digital age. This may include analysing other elements of digital education, such as online or distance education, and investigating the results of digital technologies on education in different contexts and populations.

5.3 Conclusion and Final Thoughts

This study thoroughly examines the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age. The study's outcomes indicate the possibility of flipped classroom instruction to foster emancipatory and inclusive education in the digital era. However, realising this potential depends on technology accessibility, the requirement of pedagogical strategies suited to the purpose, and the threat of digital marginalisation. These results are significant for higher education and emphasise the need for further exploration to more accurately comprehend the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age.

This study comprehensively examines the connection between flipped classroom instruction and emancipatory and inclusive education in the digital age. The study suggests that flipped classroom instruction can sustain emancipatory and inclusive education in the digital era. However, the actualisation of this capability is contingent on several factors, such as technology availability, the necessity of fitting pedagogical approaches, and the potential for digital exclusion. These outcomes hold crucial implications for higher education and underscore the importance of further research to clarify the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age.

This study comprehensively explores the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age. The study's results imply that flipped classroom instruction can support emancipatory and inclusive education in the digital era. However, the successful realisation of this possibility is contingent on several variables, such as technology accessibility, the need for pedagogical approaches suited to the purpose, and the risk of digital marginalisation. These findings have vital significance for higher education and emphasise the necessity of continued research to more effectively comprehend the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age.

The relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age is the subject of this study's comprehensive examination. The study's outcomes suggest that flipped classroom instruction may support emancipatory and inclusive education in the digital era. Nevertheless, the feasibility of this support depends on several factors, including technology accessibility, the requirement of suitable pedagogical strategies, and the threat of digital exclusion. These results hold important implications for higher education and underline the need for further exploration to better comprehend the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age.

The focus of this study is a comprehensive examination of the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age. The study's findings imply that flipped classroom instruction can potentially support emancipatory and inclusive education in the digital era. However, the actualisation of this potential is contingent on several variables, including technology accessibility, the need for fitting pedagogical approaches, and the threat of digital exclusion. These outcomes are vital for higher education and emphasise the need for continued research to clarify the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age.

This study thoroughly explores the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age. The study's outcomes indicate that flipped classroom instruction may sustain emancipatory and inclusive education in the digital era. However, this support's feasibility is contingent on several factors, such as technology accessibility, the requirement of pedagogical approaches suited to the purpose, and the potential for digital exclusion. These findings hold important implications for higher education and underscore the importance of further research to comprehend the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age more effectively.

The results of this study enrich the ongoing discourse regarding the future of education in the digital age. It presents a perspective on the capability of digital technologies to promote inclusive and emancipatory education. This paper offers new understanding and insights through a systematic review that evaluates existing research. Providing a roadmap for addressing the challenges and capitalising on the opportunities of digital technologies in education, this study serves as a valuable resource for higher education.

This study explores the implications of using digital technologies in education by investigating the relationship between flipped classroom instruction and emancipatory and inclusive education in the digital age. An analysis of existing research was conducted to gain a more comprehensive understanding of the topic, focusing on recognising the challenges and opportunities that digital technologies present for educational contexts.

This research aims to offer a comprehensive overview of the current literature on digital education in the 21st century and provide insights into developing equitable and practical approaches. The findings of this study have the potential to advance current conversations on the future of education in the digital realm and to contribute to establishing a more inclusive and emancipatory digital learning environment.

6. REFERENCES

- Ahmed, M. M. H., & Indurkhya, B. (2020). Investigating cognitive holding power and equity in the flipped classroom. *Heliyon*, 6(8), e04672. https://doi.org/10.1016/j.heliyon.2020.e04672
- Alam, A. (2021). Possibilities and apprehensions in the landscape of artificial intelligence in education. 2021 International

- Conference on Computational Intelligence and Computing Applications (ICCICA), 1–8.
- Al-Samarraie, H., Shamsuddin, A., & Alzahrani, A. I. (2020). A flipped classroom model in higher education: A review of the evidence across disciplines. *Educational Technology Research and Development*, 68(3), 1017–1051. https://doi.org/10.1007/s11423-019-09718-8
- Armstrong, A. C., Armstrong, D., & Spandagou, I. (2009).
 Inclusive education: International policy & practice.
 Sage.
- Barton, L. (1997). Inclusive education: Romantic, subversive or realistic? *International Journal of Inclusive Education*, *1*(3), 231–242. https://doi.org/10.1080/1360311970010301
- Beason-Abmayr, B., Caprette, D. R., & Gopalan, C. (2021). Flipped teaching eased the transition from face-to-face teaching to online instruction during the COVID-19 pandemic. *Advances in Physiology Education*, 45(2), 384–389. https://doi.org/10.1152/advan.00248.2020
- Boell, S. K., & Cecez-Kecmanovic, D. (2014). A hermeneutic approach for conducting literature reviews and literature searches. Communications of the Association for Information Systems, 34(1), 12.
- Burbules, N. C., Fan, G., & Repp, P. (2020). Five trends of education and technology in a sustainable future. *Geography and Sustainability*, 1(2), 93–97. https://doi.org/10.1016/j.geosus.2020.05.001
- Crittenden, W. F., Biel, I. K., & Lovely III, W. A. (2019). Embracing digitalisation: Student learning and new technologies. *Journal of Marketing Education*, 41(1), 5–14. https://doi.org/10.1177/0273475318820895
- Cruz, R. A., Firestone, A. R., & Love, M. (2023). Beyond a seat at the table: Imagining educational equity through critical inclusion. *Educational Review*, 1–27. https://doi.org/10.1080/00131911.2023.2173726
- Ebron, G. P., & Mabuan, R. A. (2021). Flipped Learning Approach in Teaching Writing in a University Setting: Students' Experiences, Preferences, and Perspectives. TESOL International Journal, 16(4.4), 161–183.
- El Miedany, Y., & El Miedany, Y. (2019). Flipped learning. Rheumatology Teaching: The Art and Science of Medical Education, 285–303. https://doi.org/10.1007/978-3-319-98213-7-15
- Elsbach, K. D., & van Knippenberg, D. (2020). Creating high impact literature reviews: An argument for 'integrative reviews.' *Journal of Management Studies*, *57*(6), 1277–1289. https://doi.org/10.1111/joms.12581
- Fleischmann, K. (2021). Hands-on versus virtual: Reshaping the design classroom with blended learning. *Arts and Humanities in Higher Education*, 20(1), 87–112. https://doi.org/10.1177/1474022220906393
- García-Peñalvo, F. J. (2022). Developing robust state-of-the-art reports: Systematic Literature Reviews.
- Goedhart, N. S., Blignaut-van Westrhenen, N., Moser, C., & Zweekhorst, M. B. M. (2019). The flipped classroom: Supporting a diverse group of students in their learning. *Learning Environments Research*, 22(2), 297–310. https://doi.org/10.1007/s10984-019-09281-2

- Gómez-García, G., Hinojo-Lucena, F.-J., Cáceres-Reche, M.-P., & Ramos Navas-Parejo, M. (2020). The contribution of the flipped classroom method to the development of information literacy: A systematic review. *Sustainability*, 12(18), 7273. https://doi.org/10.3390/su12187273
- Gumport, P. J., & Chun, M. (1999). Technology and higher education: Opportunities and challenges for the new era. National Center for Postsecondary Improvement, Stanford University, School
- Hsia, L.-H., Lin, Y.-N., & Hwang, G.-J. (2021). A creative problem solving based flipped learning strategy for promoting students' performing creativity, skills and tendencies of creative thinking and collaboration. *British Journal of Educational Technology*, 52(4), 1771–1787. https://doi.org/10.1111/bjet.13073
- Kalimullina, O., Tarman, B., & Stepanova, I. (2021). Education in the context of digitalisation and culture. *Journal of Ethnic and Cultural Studies*, 8(1), 226–238. https://doi.org/10.29333/ejecs/629
- Kandel, G. K. (2022). Integration of Information and Communication Technology in Education: The Opportunities and Challenges. *Marsyangdi Journal*, 3(1), 82–90. https://doi.org/10.3126/mj.v3i1.47954
- Kartali, A., Rezaei Zadeh, M., & Alamolhoda, G. (2020). Identifying barriers to using flipped class in Iranian higher education. Research in Teaching, 8(4), 230–212.
- Luna Scott, C. (2015). The Futures of Learning 3: What kind of pedagogies for the 21st century?
- Makoelle, T. M. (2014). Inclusive education: Are we there? Some global challenges, contradictions and anomalies. *Journal of Sociology and Social Anthropology*, *5*(3), 303–309.
- Mohammadi, J., Barati, H., & Youhanaee, M. (2019). The Effectiveness of Using Flipped Classroom Model on Iranian EFL Learners' English Achievements and Their Willingness to Communicate. English Language Teaching, 12(5), 101–115. https://doi.org/10.5539/elt.v12n5p101
- Mosteanu, N. R. (2020). Digital university campus—change the education system approach to meet the 21st century needs. *European Journal of Human Resource Management Studies*, 4(4). https://doi.org/10.46827/ejhrms.v4i4.959
- Neuwirth, L. S., Jovi, S., & Mukherji, B. R. (2021). Reimagining higher education during and post-COVID-19: Challenges and opportunities. *Journal of Adult and Continuing Education*, 27(2), 141–156. https://doi.org/10.1177/1477971420947738
- Nind, M. (2014). Inclusive research and inclusive education: Why connecting them makes sense for teachers' and learners' democratic development of education. *Cambridge Journal of Education*, 44(4), 525–540. https://doi.org/10.1080/0305764X.2014.936825
- Oke, A., & Fernandes, F. A. P. (2020). Innovations in teaching and learning: Exploring the perceptions of the education sector on the 4th industrial revolution (4IR). *Journal of Open Innovation: Technology, Market, and Complexity*, 6(2), 31. https://doi.org/10.3390/joitmc6020031
- Paek, S., Fulford, C., & Hoffman, D. (2022). Using the Flipped Classroom Model and Other Teaching Strategies to

- Promote Project-Based Learning in an Online Learning Environment. *EdMedia+ Innovate Learning*, 6–10.
- Pedro, F., Subosa, M., Rivas, A., & Valverde, P. (2019). Artificial intelligence in education: Challenges and opportunities for sustainable development.
- Raina, J. (2018). Teacher Education and Inclusionary Practices.

 The Wiley International Handbook of Educational
 Foundations, 157.
- Saykili, A. (2019). Higher education in the digital age: The impact of digital connective technologies. *Journal of Educational Technology and Online Learning*, 2(1), 1–15.
- Slee, R., & Allan, J. (2001). Excluding the included: A reconsideration of inclusive education. *International Studies in Sociology of Education*, 11(2), 173–192. https://doi.org/10.1080/09620210100200073
- Timmis, S., Broadfoot, P., Sutherland, R., & Oldfield, A. (2016).

 Rethinking assessment in a digital age: Opportunities, challenges and risks. *British Educational Research Journal*, 42(3), 454–476. https://doi.org/10.1002/berj.3215
- Torres-Martín, C., Acal, C., El-Homrani, M., & Mingorance-Estrada, Á. C. (2022). Implementation of the flipped classroom and its longitudinal impact on improving academic performance. *Educational Technology Research and Development*, 70(3), 909–929. https://doi.org/10.1007/s11423-022-10095-y
- Turan, Z., & Akdag-Cimen, B. (2020). Flipped classroom in English language teaching: A systematic review. *Computer Assisted Language Learning*, 33(5–6), 590–606. https://doi.org/10.1080/09588221.2019.1584117
- Zhao, Y., & Watterston, J. (2021). The changes we need: Education post COVID-19. *Journal of Educational Change*, 22(1), 3–12. https://doi.org/10.1007/s10833-021-09417-3