



Efficient learning strategies: Student attraction to entrepreneurship lessons using technology

Azmy Naufal Ramelan Kurniawan¹, Sistiyanii², Zalfa Fezya Qolbi³

^{1,2,3}Universitas Pendidikan Indonesia, Bandung, Indonesia

azmy850@upi.edu¹, sistiyanii@upi.edu², zalfafeyza@upi.edu³

ABSTRACT

Education is an essential foundation in shaping the future of individuals and the progress of a country. However, the education system often faces challenges in effectively meeting learners' needs, mainly due to monotonous learning methods and a mismatch with individual learning styles. In addition, increasing learning productivity is a primary goal in education. ICT integration is the key to improving the quality of learning. Thus, this research combines learning styles, ICT integration, and strategies to improve learning productivity to create effective and relevant education. This research uses a descriptive approach with data collection techniques in the form of questionnaires. The collected data were analyzed to understand various aspects related to learning styles, ICT integration, and learning productivity strategies. This research shows that learning strategies are crucial in educational services to increase understanding and effective student learning applications. In addition, using technology in entrepreneurship learning can increase students' interest in learning and experience.

ARTICLE INFO

Article History:

Received: 2 Nov 2024

Revised: 30 Jan 2024

Accepted: 2 Jan 2024

Available online: 12 Feb 2024

Publish: 21 Jun 2024

Keyword:

Efficiency; entrepreneurship; learning strategies; learning technology

Open access

Curricula: Journal of Curriculum Development is a peer-reviewed open-access journal.

ABSTRAK

Pendidikan adalah fondasi penting dalam membentuk masa depan individu dan kemajuan sebuah negara. Namun, sistem pendidikan sering menghadapi tantangan dalam memenuhi kebutuhan peserta didik secara efektif, terutama karena metode pembelajaran yang monoton dan ketidaksesuaian dengan gaya belajar individu. Dengan demikian, penelitian ini bertujuan untuk mengintegrasikan konsep gaya belajar, pemanfaatan Teknologi Informasi dan Komunikasi (TIK), serta strategi pembelajaran guna meningkatkan produktivitas belajar, dengan tujuan menciptakan pendidikan yang efektif dan relevan. Penelitian ini menggunakan pendekatan deskriptif dengan teknik pengumpulan data berupa kuesioner. Data yang terkumpul dianalisis untuk memahami berbagai aspek yang terkait dengan gaya belajar, integrasi TIK, dan strategi produktivitas belajar. Hasil dari penelitian ini menunjukkan bahwa strategi pembelajaran merupakan elemen kunci dalam layanan pendidikan, dengan tujuan meningkatkan pemahaman dan penerapan belajar secara efektif pada peserta didik. Selain itu, penggunaan teknologi dalam pembelajaran kewirausahaan dapat meningkatkan minat belajar dan pemahaman peserta didik.

Kata Kunci: Efisiensi; kewirausahaan; strategi belajar; teknologi pembelajaran

How to cite (APA 7)

Kurniawan, A. N. R., Sistiyanii, S., & Qolby, Z. F. (2024). Efficient learning strategies: Student attraction to entrepreneurship lessons using technology. *Curricula: Journal of Curriculum Development*, 3(1), 125-142.

Peer review

This article has been peer-reviewed through the journal's standard double-blind peer review, where both the reviewers and authors are anonymised during review.

Copyright

2024, Azmy Naufal Ramelan Kurniawan, Sistiyanii, Zalfa Fezya Qolbi. This an open-access is article distributed under the terms of the Creative Commons Attribution-ShareAlike 4.0 International (CC BY-SA 4.0) <https://creativecommons.org/licenses/by-sa/4.0/>, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author, and source are credited. *Corresponding author: zalfafeyza@upi.edu

INTRODUCTION

Education is a milestone in shaping the future of individuals and the progress of a nation. However, the education system often faces challenges in effectively meeting the diverse needs of students. Monotonous and unvaried learning methods are one of the obstacles to optimizing the understanding and application of lesson material (Siringoringo *et al.*, 2023). Similarly, the mismatch between teaching methods and individual learning styles is another issue that requires attention (Costa *et al.*, 2020). Each learner has a different learning style, such as visual, auditory, or kinesthetic. The learning process tends to be less effective without a sufficient understanding of each learner's learning style.

In this context, efforts are needed to find solutions to make the learning process more effective and productive. One key step is a deeper understanding of students' learning styles and their impact on academic achievement. This enables the identification of more effective learning strategies tailored to each student's characteristics. Learning strategies considering differences in learning styles can increase learning productivity and prepare students to enter the industrial world (Aulia *et al.*, 2020).

The rapid changes occurring in the digital age have also significantly impacted the world of education. The digital age has opened up new opportunities and challenges in implementing learning strategies. Information and communication technology has become the center of attention, influencing the integration of technology in learning strategies. This technology expands the potential for improving information absorption, developing critical skills, and motivating students to learn (Rosyiddin *et al.*, 2023). The digital age has expanded perspectives on learning strategies, placing students at the center of learning and promoting independent learning. Integrating information technology as a learning strategy in the digital age is key to improving the quality of learning today and supporting the learning strategies required in the digital age (Faiz *et al.*, 2022).

Furthermore, focusing on improving learning productivity is also a key objective at every level of education. Good learning productivity helps achieve optimal learning outcomes and maximizes students' academic potential. One key to achieving high learning productivity is applying the right tips and tricks, from good time management to improving focus and concentration during the learning process (Pujihastuti *et al.*, 2023). Scientific references that support this help strengthen and reinforce the discussion on effective tips and tricks for improving learning productivity.

In today's era of globalization, Information and Communication Technology (ICT) has become essential in supporting the effectiveness and quality of the education process (Adnan & Istiqomah, 2022). Educational challenges in Indonesia, such as the quality and relevance of education, accessibility and equity, and various other challenges like geographical distance, educational management, autonomy and accountability, efficiency, productivity, budgeting, and sustainability, cannot be addressed without the assistance of ICT. Education that integrates ICT becomes a valuable tool for interaction among those involved in education, such as teachers, educational staff, and students, to improve the quality, productivity, effectiveness, and accessibility of education. Education that uses information and communication technology (ICT) as its foundation is a tool that enables interaction in

the management and administration of education, benefiting educators, educational staff, and students in improving the quality, productivity, effectiveness, and accessibility of education (Koesnandar, 2020).

Technology is also an integral part of every society; the more advanced a society is, the more technology is developed and used (Rehalat & 'Ainy, 2022). The impact of advances in Information and Communication Technology (ICT) in education has been remarkable. Various computer-based learning models, such as e-learning (electronic learning), Computer-Assisted Instruction (CAI), Computer-Based Instruction (CBI), and e-teaching (electronic teaching), have opened up significant opportunities in addressing the evolving landscape of education (Maheshwari *et al.*, 2021). The integration of information and communication technology (ICT) has also become a focus, enabling innovation in learning and preparing students to face the dynamic industrial world (Butt *et al.*, 2020; Goh & Sigala, 2020).

Combining knowledge about students' learning styles, integrating information technology into digital-era learning strategies, and applying tips and tricks to enhance learning productivity are integral steps in creating effective education that aligns with the demands of the times. This will impact current learning quality and equip graduates with the relevant skills to succeed in the ever-changing industrial world (Aithal & Aithal, 2023; Malik, 2018).

Overall, this article aims to understand effective learning methods, student learning styles, and the application of information technology in entrepreneurship education. The goal is to improve student learning productivity through the use of strategies that are tailored to each student's learning style. In other words, this article encourages the development of learning strategies that consider technological developments and student needs, support the quality of education, and equip graduates with the relevant skills to succeed in the workplace.

LITERATURE REVIEW

Productivity Issues in Learning

Productivity issues in learning are often influenced by several factors, especially in individual learning activities. Each individual has different learning experiences, with varying levels of ease and difficulty. Factors such as comprehension, motivation, and concentration level play a significant role in determining an individual's learning productivity. Individual differences also influence learning behavior, which includes the learning methods used and the emphasis placed on the curriculum (Ahiruddin & Suharyati, 2023).

Learning problems are often considered part of the educational process everyone must face, not just students. Teachers, coaches, parents, doctors, office managers, and many others are all involved in the learning and teaching. Learning challenges are not only related to intelligence factors but are also influenced by inappropriate teaching methods, unsuitable curricula, and the complexity of learning (Chiang *et al.*, 2022; Qin *et al.*, 2020). Learning difficulties can lead to a gap between intelligence quality and academic achievements that must be attained. Diagnosing learning difficulties is important in identifying the factors that influence learning problems. This diagnosis involves analyzing concrete symptoms and

reviewing the background causes. As professional educators, teachers have an important role in analyzing students' learning difficulties. In addition to teachers, the role of parents is also significant in supporting children's learning achievements by providing motivation and innovation (Allam & Martin, 2021).

Children's learning difficulties fall into various categories, such as developmental and academic learning disabilities. Developmental difficulties include sensory, motor, behavioral, and perceptual impairments. On the other hand, academic difficulties include reading, arithmetic, and writing. Each category has characteristics and challenges that affect children's learning productivity (O'Connor & Michaels, 2019). Learning difficulties can also significantly impact children, including emotional disturbances that affect their growth and development. Indications of learning difficulties include low learning outcomes, achievement disproportionate to the effort put in, delays in completing assignments, and inappropriate attitudes displayed by the child. Controlling learning difficulties covers the medical field through drug therapy, behavioral therapy, supportive psychotherapy, and the educational field through remedial therapy and psychosocial approaches (Suci & Riki, 2020).

Indications of learning difficulties should be watched out for, as they often go unnoticed and can affect a child's emotions and development. Identifying and addressing learning difficulties appropriately is an important step towards improving the quality of a child's learning and supporting better education overall. Not properly addressed, learning difficulties can become a serious obstacle in a child's learning process, affecting their emotional well-being and negatively impacting their growth and development (Araújo et al., 2021).

Productivity issues in learning during the COVID-19 pandemic are mainly related to implementing e-learning in response to physical restrictions and spreading the virus. The following is an analysis of learning productivity issues during the pandemic:

1. Transition to E-Learning and Limitations of Adaptation: Implementing e-learning as an online learning method is an important response to maintaining health during the pandemic. However, learners may have difficulty in adapting to this new learning model, especially if they are used to face-to-face learning. Limitations in changing learning habits may hinder their learning productivity.
2. Access and Technology Limitations: Not all learners have equal access to technology and stable internet. Some learners may experience difficulties in accessing online learning materials and joining virtual classes due to accessibility limitations and inadequate internet connections.
3. Technical and Network Challenges: E-learning systems use online platforms and applications. Technical issues, such as network disruptions, device failures, or difficulties using these platforms, can hinder smooth and effective interaction in the learning process.
4. Lack of Engagement and Interaction: Online learning can lead to a lack of interaction. This lack of interactive engagement can affect learners' motivation, interest in learning, and productivity.
5. Psychosocial Challenges and Motivation: Distance learning can lead to isolation and a lack of social support, potentially affecting motivation and emotional well-being. This can negatively impact learning productivity and academic outcomes.

6. Level of Material Difficulty and Explanation: Some students may struggle to understand learning materials independently through online learning. Unclear or difficult-to-understand explanations can be a significant barrier to learning productivity.
7. Time Constraints and Schedule Management: E-learning allows for flexibility, but learners often have difficulty managing their time effectively. The challenge of organizing a structured study schedule and prioritizing academic tasks can affect learning productivity.
8. Difficulties Overcoming Facility Limitations: Students who live in remote areas or have limited access to learning support facilities such as libraries or laboratories may face difficulties meeting their learning needs and conducting research.
9. Lack of Support and Orientation: A drastic shift to online learning requires adequate guidance and orientation. The lack of guidance and support from educational institutions or lecturers can cause students to feel confused and lack focus in their studies. (Turmuzi *et al.*, 2021).

Improving productivity in online learning requires solutions that include technology training, better access to technology, academic mentoring, and good planning for time management. Educational institutions must strive to overcome these challenges and ensure optimal learning quality during the pandemic.

Effective Learning and Learning Styles

Effective learning is one of the essential elements of basic services aimed at enabling students to understand effective learning concepts and apply them in their learning experiences. This service is provided through a classical guidance approach to students (Setyoningrum *et al.*, 2023). Effective learning involves viewing learning as a deep-seated need rather than an imposed obligation, choosing a comfortable and personally suitable environment for the learning process, adopting a step-by-step learning method by allocating time appropriately, communicating with peers when facing difficulties, seeking strategies to enhance concentration, focusing on understanding the material rather than merely memorizing it, not hesitating to ask questions when encountering obstacles, continuing to try even after experiencing failure, loving every subject, utilizing available facilities, summarizing each subject, formulating conclusions, practicing with questions related to the material, and seeking support through prayer.

Effective learning methods, according to Zahara *et al.* (2022), are as follows:

1. View learning as a necessity: To increase interest and motivation, view learning as a necessity, not an obligation.
2. Choose a comfortable place to study: To maximize concentration and focus, study in a place that you like and find comfortable.
3. Break down the learning system: Divide your study time well to increase efficiency and understanding of the material.
4. Interact with friends when facing difficulties: Discuss with friends if you encounter difficulties to gain new perspectives and understanding.

5. Understand the material, not just memorize it: Focus on understanding each piece rather than just memorizing it.
6. Utilize available facilities: Use facilities such as technology and other resources to enrich your learning.
7. Review and try questions: Review, try, and draw conclusions to solidify your understanding of the material.

By understanding the definition of learning, the factors that influence it, the types of learning, good and bad learning habits, and applying effective learning methods, students can improve the quality of learning and achieve their learning goals more effectively. Classical guidance services using discussion methods and PPT media also help students understand effective learning methods. Evaluating the process and results is important in continuously improving and enhancing guidance counseling services.

Technology in Learning

Technology plays a crucial role in education as scientific knowledge continues to advance. One of the main requirements for improving the quality of education is the presence of competent and professional teachers who can adapt and innovate the learning process in line with developments in information and communication technology. Teachers must continue to update their skills and keep up with technological developments to avoid being left behind. Education in Indonesia is transforming from a textbook approach to digital products, such as e-books (Srirahayu *et al.*, 2022).

Technology has brought about a significant transformation in entrepreneurship education in the 21st century. Through online platforms, students and aspiring entrepreneurs can access various learning resources, courses, and tools designed to develop entrepreneurial skills. E-learning enables flexibility in terms of time and location, allowing individuals to learn according to their schedules (Satria & Jaya, 2019). Additionally, technology supports business simulations, data analysis, and collaborative projects, which aid in developing practical insights. Applications and software also enable business modeling, financial planning, and risk assessment (Cholilah *et al.*, 2023). With this technology, entrepreneurship education becomes more interactive, practical, and problem-oriented, better preparing aspiring entrepreneurs to face the challenges of the ever-changing business world (Santoso, 2021).

The role of technology in education encompasses various aspects. First, the emergence of mass media, particularly electronic media, as a source of knowledge and an educational hub has shifted the paradigm that teachers are not the sole source of knowledge. Second, technology enables new learning methods that facilitate the learning process for both students and teachers. Third, learning systems no longer require face-to-face interaction but can utilize the internet and other technologies (Aryani & Najwa, 2019).

Modern education needs to understand that learning is not limited to the classroom. Teachers can utilize internet technology and technological applications to support the learning process outside the classroom (Haleem *et al.*, 2022). The application and adaptation of technology are essential to cope with changes in the era of globalization. 21st-century

learning emphasizes competencies such as creativity, innovation, critical thinking, communication, and collaboration, including mastering information, media, and technology (Noviani & Wahida, 2021).

Technological developments have also given rise to innovative learning models such as blended learning, which combines the advantages of face-to-face and virtual learning. Blended learning provides flexibility in class schedules, reduces education costs, and improves learning outcomes. However, challenges such as adequate facilities and public knowledge of technology need to be addressed..

Technology plays a crucial role in modern learning, enabling innovation, expanding access, and preparing students to meet the demands of globalization. Therefore, technology development and public awareness of its use in education are paramount. Technology is not merely a tool for learning but also shapes new characteristics in the learning process, making it more interactive, flexible, and effective.

Appeal of Entrepreneurship Lessons with the Use of Technology

The appeal of entrepreneurship lessons with technology is enormous and relevant in today's ever-evolving world. Here are some reasons why entrepreneurship lessons with technology are appealing. Entrepreneurship with technology encourages creativity and innovation. Students are allowed to design creative solutions, such as apps, digital products, or online services that solve real-world problems (Srikan *et al.*, 2021). They learn to think outside the box and create something new that can change the world's operations. This fosters critical and creative thinking in students when facing business challenges.

Entrepreneurship lessons with technology help students develop technological skills that are highly valuable in today's job market. They can learn programming, web design, data analysis, and digital marketing. With an understanding of technology, students can more effectively manage the technical aspects of their businesses or even start their technology businesses. Technology provides global access to information, resources, and markets, enabling students to learn how to use technology to collaborate and partner with individuals and companies worldwide (Min *et al.*, 2019) This allows them to expand their networks and access resources that may not be available in their local environment. According to Attaran dan Woods (2019), technology enables entrepreneurs to save costs in various aspects of business, such as production, marketing, and distribution. Students learn how technology can improve efficiency and reduce operational costs. This is important in managing a sustainable and profitable business.

Entrepreneurship lessons utilizing technology offer various benefits to students. These include extensive business opportunities, creativity and innovation drivers, valuable technology skills development, access to global resources, cost savings, flexibility and mobility in work, opportunities to share knowledge and build networks, better understanding of the market and consumer behavior, practical project-based learning, and deep insights into the world of startups. These lessons equip students with the knowledge and skills to understand and manage businesses involving technology, helping them become more successful entrepreneurs or positively contribute to the rapidly evolving technology industry.

METHODS

This study uses a descriptive approach. Descriptive research aims to describe existing phenomena, namely natural phenomena or artificial phenomena, that is used to analyze or describe the results of subjects. The data collection technique used in this study is a questionnaire. This study aims to reveal effective learning methods, students' learning styles, and the application of information technology in entrepreneurship education, including ICT integration and learning strategies. The collected data will be analyzed using descriptive analysis techniques.

RESULTS AND DISCUSSION

In this study, researchers conducted observations involving the participation of students majoring in Online Business and Marketing in grade XII at SMK Pasundan 1 Bandung as research subjects to evaluate the use of technology in entrepreneurship education. Our research focused on analyzing the impact of technology use in the context of teaching entrepreneurship to students. The researchers collected data through a survey completed by students who took entrepreneurship lessons with the support of technology as one of the learning tools they used.

Research Findings

1. **Increased Interest in Learning:** The research shows a significant increase in interest in learning among students who study entrepreneurship with the support of technology. They show higher motivation to learn and actively participate in the learning process. This is reflected in the survey scores, which show a much higher level of interest than students who do not use technology as a learning tool.
2. **Improved Understanding of Material:** This study also highlights improving understanding of material among students who utilize technology in learning. They tend to understand entrepreneurial concepts better and can apply that understanding in real-world situations. This is evidenced by higher test scores and assignment grades than students who learn without the support of technology.
3. **Active Participation:** The study's results reveal that students who use technology participate more often in various aspects of learning, including class discussions, group projects, and other learning activities. They feel more confident voicing their opinions, creating a more dynamic and interactive learning environment.

Survey Results

1. Opinions on the Use of Technology in Entrepreneurship Education

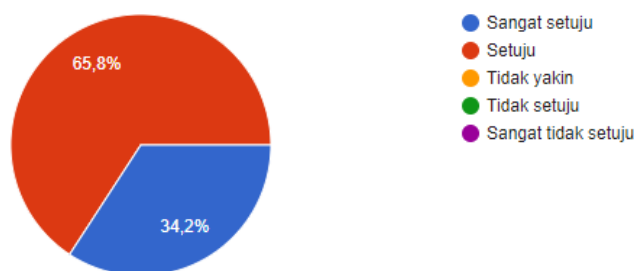


Figure 1. Research Results
Source: Author's Documentation 2023

The results in **Figure 1** show that most respondents (65.8%) strongly agree or agree with using technology in entrepreneurship education. This indicates that the majority feel that technology is an effective tool in entrepreneurship education, consistent with efficient learning strategies that emphasize using relevant tools and resources in the learning process. Technology, such as business simulation software and access to online resources, provides a more efficient way to present entrepreneurship material to students. Students who feel positive about using technology are likelier to engage and participate actively in learning.

2. The Influence of Technology on the Attractiveness of Entrepreneurship Education

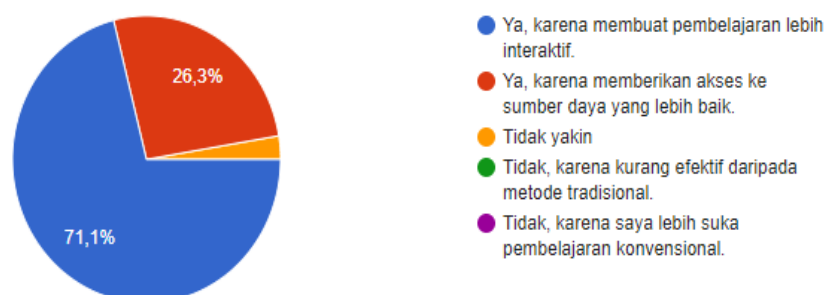


Figure 2. Research Results
Source: Author's Documentation 2023

The results in **Figure 2** show that most respondents (97.4%) feel that technology makes entrepreneurship learning more engaging. Some consider it more interactive (71.1%), while others see it as better resource access (26.3%). Only a small portion feels uncertain (2.7%). Attractiveness is a key factor in motivating students to learn. In entrepreneurship, technology can transform learning into a more engaging experience, such as through interactive business simulations, online case studies, or creative use of multimedia. Interested students are more likely to be engaged and focused in their learning.

3. Concrete Examples in Understanding Entrepreneurship Concepts with Technology



Figure 3. Research Results
Source: Author's Documentation 2023

Based on **Figure 3**, most respondents (78.9%) stated that technology has helped them understand entrepreneurship concepts. They cited concrete examples such as online business simulations (71.1%) and interactive learning applications (26.3%). Using online business simulations and interactive learning applications provides concrete examples of how technology can help students understand entrepreneurship concepts. This aligns with the principles of efficient learning strategies that prioritize experience-based learning and practical application. Students hear theory and can directly apply it in real-world situations through technology. This allows them to understand concepts more deeply and relevantly..

4. Preparing for the Future in Entrepreneurship with Technology

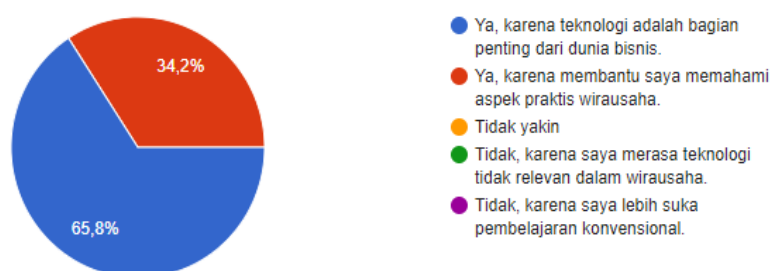


Figure 4. Research Results
Source: Author's Documentation 2023

Figure 4 illustrates research results showing that most students view technology as an important part of the business world (65.8%) and as a tool that helps them understand the practical aspects of entrepreneurship (34.2%). The fact that technology prepares them for entrepreneurship in the future reflects the relevance of entrepreneurship material to efficient learning strategies. Entrepreneurship education must reflect the real-world conditions of the business world, which is currently heavily influenced by technology. Students who master relevant technological tools and skills will be better prepared to enter the modern entrepreneurial world.

5. Effectiveness of Platforms or Applications in Entrepreneurship Education

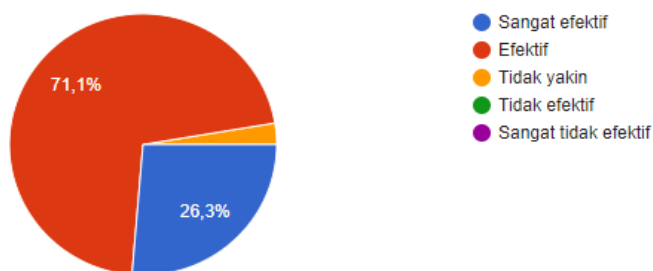


Figure 5. Research Results
Source: Author's Documentation 2023

Based on **Figure 5**, the effectiveness of platforms or applications in entrepreneurship education is an important factor in efficient learning strategies. The use of technology must yield effective results in delivering material and enhancing students' understanding. Findings indicate that the majority of respondents (97.4%) consider the platforms or applications used in entrepreneurship education to be effective (71.1% effective, 26.3% very effective), with only a small portion unsure (2.6%).

6. Active Participation in Entrepreneurship Education with Technology

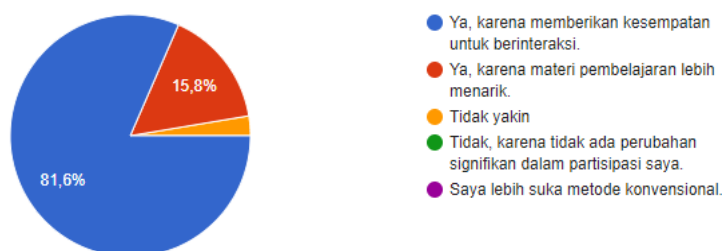


Figure 6. Research Results
Source: Author's Documentation 2023

Figure 6 illustrates that most respondents (99.5%) feel technology helps them participate more actively in entrepreneurship lessons. They feel that technology provides opportunities for interaction (81.6%) and makes learning materials more interesting (15.8%). Only a few do not see significant changes in their participation (2.6%). When students feel actively involved, they are more likely to understand and be interested in the material. Technology that enables interaction, such as online forums, online discussions, or virtual group work, can facilitate active participation.

7. Recommendations for Improving the Use of Technology in Entrepreneurship Education

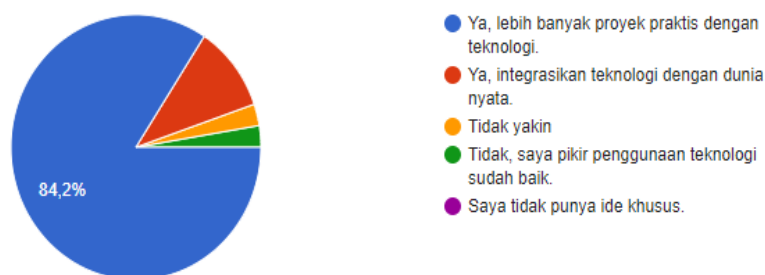


Figure 7. Research Results
Source: Author's Documentation 2023

Figure 7 shows that most respondents (93.8%) have suggestions or ideas for improving the use of technology in entrepreneurship education. They propose more practical projects with technology (84.2%) and technology integration with the real world (9.8%). However, some are unsure (3%) or feel that the use of technology is already adequate (3%). The students' suggestions for more practical projects involving technology and integrating technology with the real world align with the principles of efficient learning strategies. Practical experience and the use of technology in real-world contexts can enhance students' understanding and interest. These suggestions reflect efforts to make learning more relevant and efficient.

8. Positive Experiences in Understanding Entrepreneurship Concepts through Technology

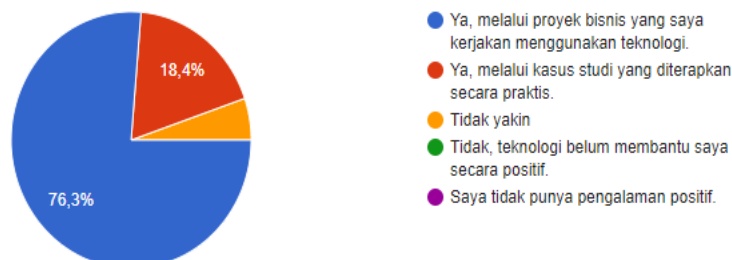


Figure 8. Research Results
Source: Author's Documentation 2023

Figure 8 shows that most respondents (95.6%) have positive experiences understanding entrepreneurship concepts practically through technology. They referred to business projects they worked on using technology (76.3%) and practical case studies (16.4%). Students' positive experiences in understanding entrepreneurship concepts through business projects using technology and practical case studies support the idea of an efficient learning strategy emphasizing experience-based learning. Using technology to create positive experiences can enhance students' understanding and interest in entrepreneurship lessons.

9. The Relevance of Technology Skills in Everyday Life or Future Entrepreneurship



Figure 9. Research Results
Source: Author's Documentation 2023

Based on **Figure 9**, most respondents (99.6%) felt that the technological skills they learned in Entrepreneurship lessons could be applied in their daily lives or future entrepreneurship. They were confident that these skills would be helpful to (78.9%), although some were unsure how to apply them (18.4%). The relationship between entrepreneurship education and developing technology skills relevant to daily life and future entrepreneurship aligns well with efficient learning strategies. Learning relevant to the context of students' lives is more efficient in achieving learning objectives. Students who feel that the technology skills they learn will benefit their daily lives and future entrepreneurship will be more motivated to acquire these skills.

10. Measuring the Success of Technology-based Entrepreneurship Learning Strategies in Attracting Student Interest

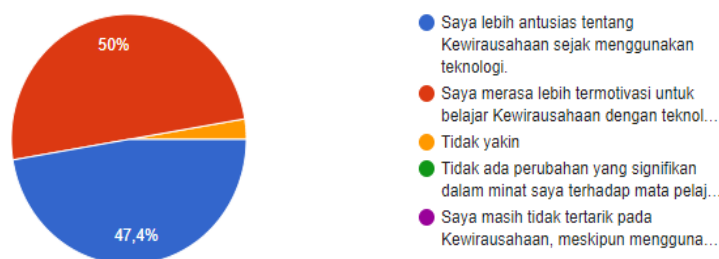


Figure 10. Research Results
Source: Author's Documentation 2023

Figure 10 shows that most respondents (97.9%) reported that the Entrepreneurship learning strategy using technology successfully attracted their interest in this subject. Most felt more enthusiastic (50%) or more motivated (47.4%) to learn entrepreneurship with technology, while only a few did not see significant changes in their interest (2.6%). The success of the learning strategy in increasing students' interest in entrepreneurship is the core of an efficient learning strategy. Research results showing increased enthusiasm and motivation among students to learn entrepreneurship with technology demonstrate the effectiveness of this strategy. In the context of efficient learning strategies, success is measured by how engaged, understanding, and interested students are in the learning material. Results showing increased student interest are an indicator of the success of this learning strategy.

Discussion

Discussions about interactivity and student engagement in entrepreneurship education through technology reflect constructivist learning principles. In this theory, students construct their understanding through experience and reflection. Using technology as a learning tool can provide students with interactive experiences that support the construction of their knowledge. The understanding that technology is an integral part of the business world reflects the concept that technology is not merely an additional tool but an inseparable element in running a business. This theory emphasizes the importance of integrating technology into the context of learning and developing skills relevant to the times. Research results align with previous studies indicating that using technology in learning can enhance students' interest and understanding.

Learning technology can be an effective tool for improving learning outcomes (Sarker et al., 2019). Increased interest in learning and understanding among students due to the use of technology in learning results from easier access to various learning resources, interactivity, and the possibility of customizing the learning experience. Technology also enables students to use more engaging and relevant learning methods. However, it is important to note that some research has produced conflicting results. Some studies suggest that excessive use of technology in learning can reduce social interaction among students and affect their ability to communicate effectively. Therefore, it is essential to consider the appropriate balance in using technology in learning.

Mastering technology is the key to success in managing a business. Students need to understand and utilize relevant technology for business development. Students must also understand the importance of building networks and collaborating with fellow entrepreneurs, investors, and other stakeholders. This can help expand business opportunities and provide valuable insights (Sutama et al., 2021). From the responses analyzed, several key findings emerged. First, technology has made learning in an entrepreneurial context more interactive. Learners feel that using technology in business education and training has helped increase engagement and interactivity, which can enhance understanding and skills. Second, technology is used in the form of online business simulations, allowing entrepreneurs to experience real-world business scenarios in a safe environment. This enables them to test strategies, make decisions, and learn from the outcomes without significant risk. Additionally, technology facilitates practical business projects that can be carried out using digital tools and platforms.

Furthermore, students stated that technology is an important part of today's business world. This reflects a deep understanding that technology is not just an addition but an integral element in running a business in the digital age. This requires relevant skills and strong technological knowledge. In addition, technology has proven to be very effective in improving performance and productivity in various aspects of entrepreneurship. Business projects that utilize technology also provide valuable opportunities to interact, learn, and grow in an entrepreneurial context.

Research results indicate that using technology in entrepreneurship education can enhance students' interest in learning and understanding the subject. However, it is important to note that technology must be balanced with other crucial aspects of education to ensure a holistic learning experience. Students also expressed that they have become more enthusiastic

about entrepreneurship since using technology. They believe that the skills they have learned and the experiences they have gained through technology will be highly beneficial for the development of their businesses in the future. Therefore, it can be concluded that respondents strongly agree that technology plays a significant and positive role in entrepreneurship.

CONCLUSION

From the above explanation, it can be concluded that learning strategies are a key element in educational services to improve understanding and effective learning among students. The study results show that using technology in entrepreneurship education can increase students' interest in learning and understanding. Technology in entrepreneurship education has also enhanced students' interest and understanding. However, it is important to note that technology must be balanced with other important aspects of education. While the research findings provide valuable insights into the effects of technology on students' interest in entrepreneurship education using technology, the study also has several limitations that should be considered. First, researchers used subjective survey data, which can influence individual students' perceptions. This limitation requires careful interpretation of the results. Second, this study was conducted over a limited period, which may not reflect the long-term impact of technology use in learning. Finally, the researchers acknowledge the impossibility of directly measuring long-term impacts, a standard limitation in similar studies. Therefore, the results of this study provide a foundation for further research to understand the impact of technology on entrepreneurship education comprehensively.

REFERENCES

- Adnan, D. F. H., & Istiqomah, N. (2022). The role of YouTube platform as a learning resource in online learning effectiveness. *Curricula: Journal of Curriculum Development*, 1(1), 1-14.
- Ahiruddin, & Suharyati, H. (2023). Analisis rendahnya motivasi belajar mahasiswa dengan teknik pemecahan masalah kreatif. *Ilma Jurnal Pendidikan Islam*, 2(1), 58-66.
- Aithal, P. S., & Aithal, S. (2023). Introducing systematic patent analysis as an innovative pedagogy tool/experiential learning project in HE Institutes and Universities to boost awareness of patent-based IPR. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 8(3), 395-413.
- Allam, F. C., & Martin, M. M. (2021). Issues and challenges in special education: A qualitative analysis from teacher's perspective. *Southeast Asia Early Childhood*, 10(1), 37-49.
- Araújo, L. A. D., Veloso, C. F., Souza, M. D. C., Azevedo, J. M. C. D., & Tarro, G. (2021). The potential impact of the COVID-19 pandemic on child growth and development: A systematic review. *Jornal de Pediatria*, 97, 369-377.
- Aryani, M., & Najwa, L. (2019). Peran pendidikan kewirausahaan sebagai upaya

pembentukan karakter siswa sekolah dasar. *Jurnal Visionary: Penelitian dan Pengembangan di bidang Administrasi Pendidikan*, 4(1), 1-4.

- Attaran, M., & Woods, J. (2019). Cloud computing technology: Improving small business performance using the Internet. *Journal of Small Business & Entrepreneurship*, 31(6), 495-519.
- Aulia, A., Suarman, S., & Nasir, M. (2020). Implementasi pembelajaran kewirausahaan dalam menumbuhkembangkan karakter kewirausahaan pada siswa di SMK Negeri Pertanian Terpadu Provinsi Riau. *Jurnal Manajemen Pendidikan Penelitian Kualitatif*, 4(1), 1-10.
- Butt, R., Siddiqui, H., Soomro, R. A., & Asad, M. M. (2020). Integration of Industrial Revolution 4.0 and IOTs in academia: A state-of-the-art review on the concept of Education 4.0 in Pakistan. *Interactive Technology and Smart Education*, 17(4), 337-354.
- Chiang, F. K., Zhu, D., & Yu, W. (2022). A systematic review of academic dishonesty in online learning environments. *Journal of Computer Assisted Learning*, 38(4), 907-928.
- Cholilah, M., Tatuwo, A. G. P., Komariah, & Rosdiana, S. P. (2023). Pengembangan kurikulum merdeka dalam satuan pendidikan serta implementasi kurikulum merdeka pada pembelajaran abad 21. *Sanskara Pendidikan dan Pengajaran*, 1(2), 56-67.
- Costa, R. D., Souza, G. F., Valentim, R. A., & Castro, T. B. (2020). The theory of learning styles applied to distance learning. *Cognitive Systems Research*, 64, 134-145.
- Faiz, A., Pratama, A., & Kurniawaty, I. (2022). Pembelajaran berdiferensiasi dalam program guru penggerak pada modul 2.1. *Jurnal Basicedu*, 6(2), 2846-2853.
- Goh, E., & Sigala, M. (2020). Integrating Information & Communication Technologies (ICT) into classroom instruction: Teaching tips for hospitality educators from a diffusion of innovation approach. *Journal of Teaching in Travel & Tourism*, 20(2), 156-165.
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3, 275-285.
- Koesnandar, A. (2020). Pengembangan model pembelajaran inovatif berbasis Teknologi Informasi dan Komunikasi (TIK) sesuai kurikulum 2013. *Kwangsan: Jurnal Teknologi Pendidikan*, 8(1), 33-61.
- Maharani, A. (2019). Media pembelajaran dan minat berwirausaha siswa terhadap hasil belajar kewirausahaan. *Jurnal Pendidikan IPS*, 1(3), 202-209.
- Maheshwari, M., Gupta, A. K., & Goyal, S. (2021). Transformation in higher education through e-learning: A shifting paradigm. *Pacific Business Review International*, 13(8), 49-63.
- Malik, R. S. (2018). Educational challenges in 21st century and sustainable development. *Journal of Sustainable Development Education and Research*, 2(1), 9-20.
- Min, S., Zacharia, Z. G., & Smith, C. D. (2019). Defining supply chain management: In the past, present, and future. *Journal of Business Logistics*, 40(1), 44-55.
- Noviani, L., & Wahida, A. (2021). Pembelajaran kewirausahaan di SMA selama pandemi COVID-19. *Jurnal Pendidikan Ekonomi (JUPE)*, 10(1), 15-22.

- O'Connor, C., & Michaels, S. (2019). Supporting teachers in taking up productive talk moves: The long road to professional learning at scale. *International Journal of Educational Research*, 97, 166-175.
- Pujihastuti, A., Waluyo, T., & Murtiyasa, B. (2023). Penerapan metode gamifikasi dengan pendekatan hasthalaku pada pelajaran produk kreatif dan kewirausahaan. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, 3(4), 415-424.
- Qin, F., Li, K., & Yan, J. (2020). Understanding user trust in artificial intelligence-based educational systems: Evidence from China. *British Journal of Educational Technology*, 51(5), 1693-1710.
- Rehalat, A., & 'Ainy, Z. N. (2022). Pengaruh penerapan strategi pembelajaran active learning, berpikir kritis, pada masa pandemi terhadap hasil belajar ekonomi siswa. *JPEK (Jurnal Pendidikan Ekonomi dan Kewirausahaan)*, 6(1), 36-47.
- Rosyiddin, A. A. Z., Fiqih, A., Hadiapurwa, A., Nugraha, H., & Komara, D. A. (2023). The effect of interactive powerpoint media design on student learning interests. *Edcomtech: Jurnal Kajian Teknologi Pendidikan*, 8(1), 12-24.
- Santoso, T. N. B. (2021). Pengenalan kewirausahaan digital dimasa pandemi melalui kegiatan fotografi. *Jurnal Kewirausahaan dan Bisnis*, 26(2), 147-155.
- Sarker, M. N. I., Wu, M., Cao, Q., Alam, G. M., & Li, D. (2019). Leveraging digital technology for better learning and education: A systematic literature review. *International Journal of Information and Education Technology*, 9(7), 453-461.
- Satria, A., & Jaya, P. (2019). Kontribusi motivasi wirausaha dan pemanfaatan media pembelajaran internet terhadap hasil belajar kewirausahaan. *Voteteknika (Vocational Teknik Elektronika dan Informatika)*, 7(3), 104-111.
- Setyoningrum, A. A. D., Nindita, K., Sirait, E., & Herdawan, D. (2023). Model pendidikan kewirausahaan yang ideal untuk menumbuhkan Entrepreneur muda. *JMK (Jurnal Manajemen dan Kewirausahaan)*, 8(1), 69-79.
- Siringoringo, R., Asbari, M., & Margaretta, C. (2023). Strategi pembelajaran berdiferensi: Akselerasi meningkatkan potensi peserta didik. *Journal of Information Systems and Management (JISMA)*, 2(5), 13-16.
- Srikan, P., Pimdee, P., Leekitchwatana, P., & Narabin, A. (2021). A Problem-Based Learning (PBL) and teaching model using a cloud-based constructivist learning environment to enhance Thai undergraduate creative thinking and digital media skills. *International Journal of Interactive Mobile Technologies*, 15(22), 68-83.
- Srirahayu, D. P., Nurpratama, M. R., Handriana, T., & Hartini, S. (2022). Effect of gender, social influence, and emotional factors in usage of e-Books by generation Z in Indonesia. *Digital Library Perspectives*, 38(3), 263-282.
- Suci, A., & Riki, M. (2020). Efektivitas model pembelajaran problem based learning pada mata pelajaran dasar listrik dan elektronika. *Journal of Multidisciplinary Research and Development*, 2(2), 51-57.
- Sutama, I. W., Astuti, W., & Anisa, N. (2021). E-modul strategi pembelajaran anak usia dini sebagai sumber belajar digital. *Jurnal Pendidikan Anak Usia Dini Undiksha*, 9(3), 449-456.

Turmuzi, M., Dasing, A. S. H., Baidowi, B., & Junaidi, J. (2021). Analisis kesulitan belajar mahasiswa secara online (e-learning) selama masa pandemi COVID-19. *Edukatif: Jurnal Ilmu Pendidikan*, 3(3), 900-910.

Zahara, R., Nasution, F. S., Yusnadi, Y., & Surya, E. (2022). Implementasi pembelajaran blended learning di jenjang sekolah dasar. *Jurnal Basicedu*, 6(4), 6482-6490.