Online Learning Applications in Shaping Entrepreneurial Character: A Systematic Review

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ABSTRACT
Currently, the challenges facing education include the quantity and quality development to globally competition, as well as producing human resources. Therefore, it is important to educate the younger generation, specifically high school students to become imaginative and creative. This systematic review aimed to focus on internet searching of entrepreneurship context related to character-in-making. The data were collected from three major databases i.e., google Scholar, Sinta, and Scopus database. The results showed that online learning help to shape students' character or behavior to promote entrepreneurial spirit. The results of this research also showed that institutional stakeholders easily select, sort, and compare the quality of applications. Nevertheless, the application or software is beneficial to children in terms of teaching and educating. From a commercial perspective, this software is beneficial because it provides income through purchase or rent. This qualitative descriptive study implies and highlights within its limitation that the emergence of entrepreneurs tends to improve the learning quality and the community economy. And there tend to be needed for educational facilities or software which affects the number of entrepreneurs engaged in teaching.

1. Introduction

Online learning using applications such as classroom, video conference, telephone or live chat, zoom, and WhatsApp group provides opportunities for students because it allows them to interact with teachers. The success of this education is significantly influenced by the tutor's ability to use technology in delivering materials. Assidiqi & Sumarni (2020) explained that not all students tend to successfully learn online.

Therefore, it is important to educate the younger generation, specifically those in high school to become imaginative and creative. People's perspectives and attitudes to becoming self-reliant and tough to facing obstacles during the pandemic are one of the most productive souls in the community. In a technological 4.0 and 5.0 era, students need to build their inventive and creative occupations to benefit others (Eliza & Mulya, 2021). Currently, the challenges facing education include the quantity and quality development to meet local and national needs, as well as producing human resources (Lastariwati, 2012).

Education is a basic need because it allows students to also be beneficial to others (Roza, Aulia, & Zulherman, 2021). It significantly contributes to the development of children in the community (Lestari, Syefrinando, Efni, & Firman, 2021; Saufi & Rizka, 2021). Education is a source of knowledge because it improves and optimizes students' quality. According to Riady, (2021), online and offline learning are used to convey information to stimulate students' attention and interest. The use of application or software is one of the online learning used to improve children's understanding of the community (Kristiawan, Aminudin, & Rizki, 2021; Lestari et al., 2021).

People used this application such as games and interactive media to simplify a process, specifically education (Aini, Rahardja, Santosos, & Oktariyani, 2021; Khotimah, 2021). Currently, the software is indicated in various communication media and on the internet because it significantly affects the learning process (Shirley & Mohammad, 2021). This application leads to the emergence of different entrepreneurs in information technology. The existence of entrepreneur help to improve the learning quality and the community economy (Widianto, 2021).

Entrepreneurship which is an important sector is one of the methods used by the government to increase the country's economy (Lestari et al., 2021). According to the Ministry of Manpower (2016), a total of 5.5% of
7.02 million people is in the unemployment category in Indonesia. There is a need to minimization of the unemployment rate to enable the community to compete in a sport-like manner through strategies and inventions. Entrepreneurship is the disposition, spirit, and capacity to develop new things for the benefit of others. Asroni and Yusantika (2021) explained it is a mental attitude and soul that empower people to become active and create works to increase money through their company activities.

The government's efforts to improve an entrepreneurial spirit were differently implemented during Covid-19 in 2020. All elements of the nation including educational institutions struggled to perform their duties amid the threat of the pandemic. The government decides on the issue of working, worshipping, and studying from home. Rozakiyah et al. (2019) emphasized that entrepreneurship that focuses more on work-based learning needs to be performed online.

In the educational sector, entrepreneurship is a profitable and sustainable business. Pratama (2018) explained that Elementary School (SD) and Senior High School (SMA) are about two hundred thousand in the 2016/2017 session. These schools have a very large number of students reaching about 45 million. There is a need for quality education to become diverse as the country's economy develops. However, companies are more stable because learning is always a top priority for parents to determine their children's future. Moreover, entrepreneurship tends to develop students' initiative and creativity to start work at the time of learning. For instance, the community needs to quickly solve a problem that exists in their business and creativity. Entrepreneurship becomes successful when it is accompanied by prayer. Mustakim (2013) explained that business leaders tend to inspire others to follow in their footsteps and become reliable.

In the 2016 Economic Census conducted by the Central Statistics Agency (BPS), the number of entrepreneurs in Indonesia was 619,947 or 2.32% (Purnamasari 2017). These businesses encompass instructional activities in verbal or writing forms through different communication channels. Java Island where most of the country's efforts are concentrated have about 350,665 or 56.56% educational entrepreneurship. Meanwhile, the Maluku and Papua Islands have a total of 13,677 education-related businesses. A large number of young people on Java Island contribute largely to entrepreneurship (Harvianto, 2021).

In educational facilities such as stationery, uniforms, online tutoring applications, and others, the business has its uniqueness in terms of products and providers (Yuli Kurniawan, 2021). Therefore, there is a high level of competition which brings about changes in the product price. Price is open to customers because it tends to be easily accessed through the internet. In school, stakeholders need to easily select, sort, and compare the quality and prices of these products. According to Kotler (2005), the increase in the level of competition tends to make customers face more choices.

Educational facilities are seasonal, indicating that it greatly increases yearly between January to July (Zulafwan & Gusrio Tendra, 2022). Therefore, students entrust their needs to certain application providers which tend to change while there is something very fatal and disappointing (Saufi & Rizka, 2021). These unique qualities enable the software services to be a differentiating factor that determines user satisfaction. Nevertheless, software such as Padlet, Quipper, e-ujian.com, Edmodo, TeamViewer, Ruangguru, and Google class was used for online learning at home (Roza et al., 2021). Each application has the characteristics of distinctiveness which is used to attract a large number of consumers because it has market share. This research aims to focus on entrepreneurship in education, specifically the use of software or application.

2. Literature Review

Behavior indicates the entrepreneur's capacity help to analyze the future and engage in extensive calculations. Djuhan & Trianto (2020) explained knowledge, achievement motivation, and personal freedom significantly contribute to business independence. Santika (2020) indicated this character to be the creation of a school environment that helps students to become responsible in the community. According to the Ministry of National Education, entrepreneurial values include honesty, responsible, disciplined, hard work, risk-taking, independence, curiosity, motivation, creativity, innovation, leadership, commitment, action-oriented, cooperation, abstinence, surrender, realistic, and communicative (Erlinda & Montessori, 2020). In entrepreneurship learning, principles ensure children know and accept the community values. Students are taught to responsibly recognize options, assess choices, determine the position, and make a value in line with self-confidence (Erlinda & Montessori, 2020). Moreover, according to Rakuten, Geoffrey G. Meredith, and Vernia et al. (2018), a decision is one of the most critical tasks of an entrepreneur in small companies. The more critical the decision, the more likely the company failed to receive the information. Therefore, people need to be aware of the outside sources that provide basic decision-making information. Character and competence are indicated in all professions because they enable actors to have high competitiveness. Manion and Rizky Dwi Putri (2018) explained that entrepreneurship behavior is showed in various fields or professions. People with this character tend to manage their company or the one owned by others as an entrepreneur and intrapreneurs, respectively. Intrapreneurs make risky decisions using the organization's resources, while entrepreneurs make complex decisions using their resources.
2.1 Educational Application or Software

Several applications are used in this entrepreneurship or business education-related research that is carried out in 2022. Table 1 shows the software used in the educational sector. The majority of these applications tends to be updated because people paid for them. Furthermore, the expansion of the education system tend to create recurring income depending on students’ demands.

Zhang and S. Y. Sari et al., (2021) showed the internet and multimedia technologies that serve as an alternative to traditional classroom instruction help to transform the method of acquiring knowledge. In conclusion, social separation is one of the methods used for preventing the transmission of Covid-19 in the community. This is because online learning enables students to escape crowds, indicating there is an implementation of social distancing. The applications used for education activities include Whatsapp, zoom, web blogs, and Edmodo.

2.2 Learning Apps

Learning applications that tend to be operated to gain access to a resource are used to support distant and cross-time instruction. This software used text, audio, video, and animation to transmit information and make it easy for the user to publish and download material. Also, students used these applications to send e-mails, post comments on a discussion forum, and use chat rooms, as well as communicate directly without any location or time constraints.

Several kinds of learning applications include the following:
1) Online meeting applications include Zoom Meeting, Webex, and Google Meet.
2) Learning applications such as Sevima Edlink, Google Classroom, and Moodle-based LMS are used to bridge the gap between educators and teachers.

Table 1. Educational Applications

<table>
<thead>
<tr>
<th>No</th>
<th>Name of Research</th>
<th>Application understudy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jiha Nova Sari, Anim, Dewi Astuti, Anil Hakim Syofra</td>
<td>Cisco Webex</td>
</tr>
<tr>
<td>2</td>
<td>Yonly Adrianus Benufinit, Ade Ria Pratami Malaikosa, Enjel Saryanti Modok</td>
<td>Team Viwer</td>
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<tr>
<td>3</td>
<td>Samuel P. Ritiauw, Elsinora Mahananiningtyas, Lisye Salamor, Ni Ketut Sayang</td>
<td>Zoom Cloud</td>
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<td>4</td>
<td>Abdul Juliadin Rindo</td>
<td>Literature Review TI</td>
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<tr>
<td>5</td>
<td>Ria Sabaria, Agus Budiman</td>
<td>Aplikasi Edmodo</td>
</tr>
<tr>
<td>6</td>
<td>Ahmad Hakam, Amaliyah, Abdul Fadhil, Suci Nurpratiwi</td>
<td>Aplikasi Android BERSALAM</td>
</tr>
<tr>
<td>7</td>
<td>A. Sriyanti, Sri Wahyuni, Nur Khalisah Latuconsina, Rahmasinar Amin</td>
<td>Software Sigil</td>
</tr>
<tr>
<td>8</td>
<td>Zamza Satria Edwar, Romli Ardie, Lukman Nulhakim</td>
<td>Augmented Reality</td>
</tr>
<tr>
<td>9</td>
<td>Rahman Haryadi, Iwit Prihatin, Dwi Oktaviana, Herminovita</td>
<td>Adobe Flash CS6</td>
</tr>
<tr>
<td>10</td>
<td>Fitriyani Sanuhung, Unik hanifah Salsabila, Juliani Abd Wahab, Mukhlisatunnisa Amalia, Mira Ifta Rimadhani</td>
<td>Software POWTOON</td>
</tr>
<tr>
<td>11</td>
<td>Lulu Sofi Kurniawan</td>
<td>Aplikasi Padlet</td>
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<tr>
<td>12</td>
<td>Yose Indarta, Ambiyar, Agariadne Dwinggo Samala, Ronal Watriantos</td>
<td>Aplikasi Quipper, e-ujian.com</td>
</tr>
<tr>
<td>13</td>
<td>Rachel Mia Lorenza Lumban Toruan, Sakhyan Asmara, Iskandar Zulkarnain</td>
<td>Metaverse</td>
</tr>
<tr>
<td>14</td>
<td>Zamza Satria Edwar, Romli Ardie, Lukman Nulhakim</td>
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</table>
2.3 Entrepreneurs in the Education Sector

Entrepreneurs tend to recognize and evaluate the company prospects because they amass the necessary resources to take proper action and have the personality, character, as well as desire to be creative. This type of person possesses a business personality and principles. An entrepreneur needs to possess these qualities to successfully tackle an unpredictable future of the company (Kirby, 2004). Therefore, it is important to conceptually align business education with its intended beneficiaries in terms of curriculum, instructional materials, and methodology. The curriculum helps to inspire entrepreneurial attitudes, develop skills, and give management training (Kirby, 2004). According to Hasan (2020), business education affects people's attitudes, behavior, values, and intentions toward self-employment as a viable career path in the community.

Entrepreneurship encompasses all realms of human endeavor because people engage in it when daring to create new forms and concepts. This business process comprises all actions and activities associated with acquiring opportunities in the company. Entrepreneurship help to produce additional value on the market by integrating resources in innovative ways to compete with others. According to Zimmerer (1996:51), this value is developed in the sphere of education through the following methods:

1. Development of new technology.
2. The discovery of new knowledge.
3. Improvement of existing products, goods, and services.
4. Using different ways to provide more goods and services with fewer resources.

According to Wahyuni & Suyadi, (2020), entrepreneurship education enables students to have life and social skills. Social teach children how to interact with the environment while the life skills include the ability and courage to confront challenges by proactively and creatively seek for solutions (Wahyuni & Suyadi, 2020).

The research of Dadang Yunus Lutfiansyah, Purwaningsih, and Al Muin (2021) aimed to provide training participants with skills, knowledge, and practical functional abilities by opening up employment and business opportunities to improve their quality and welfare. In this life skills education program, trainees are mostly poor women who graduated from Elementary School (SD).

3. Method

This research uses a systematic review and data were collected by searching on the internet about entrepreneurship in terms of application or software. In 2022, the search on journal issues includes the following.

a. Google Scholar, Sinta, and Scopus database in small scale topic and in this ongoing year (2022).

b. The journals used have topics, discussions, and themes such as applications, entrepreneurship, and education.

![Image of a flowchart showing the determination of the used journal]

Figure 1. Determination of the Used Journal
The feasibility of the journal is determined by its content which is in line with the learning application. Figure 1 shows the competent research that were examined. The determination of the used journal which is performed due to Covid-19 begins with the search in 2022. A total of 30 journals were indicated in the search results on Google Scholar with the keywords such as learning applications, entrepreneurship, and education. In the next process, the abstract of 20 research was read and re-affirm. The final process uses 14 journals that were read to see when they produce the specified criteria. Data were analyzed using descriptive and qualitative methods in a deductive way, indicating from theories to specific conclusions. This technique is inductively related to specific and concrete events.

4. Result and Discussion

The results showed that a total of 14 research match the specified criteria. All applications are useful in terms of the teaching and learning process. From a commercial perspective, income is obtained through the purchase or rental of this software. According to the policies of each institution, this application is influenced by the number of students.

4.1 Entrepreneurship Education through Software or Application

The Air Joman Regional Private High School explained that the Cisco Webex and the learning maple program provide self-efficacy for students. Several research tended to be conducted using alternative approaches and applications. (J. N. Sari et al., 2022). Software such as video games which makes youngsters skillful and proficient in performing activities help to improve eye and hand coordination. For instance, the manners depicted in the characters of Tsakib and Arash affect the children's behavior while asking for permission to borrow a friend's pencil. This is one of the ways to inculcate good character and makes students feel it as manners and courtesy (Juniarti et al., 2020).

This research selected Cisco Webex at the Air Joman Regional Private High School because it is a Video Conference application that helps the learning process with optimal results. Technology assists in increasing and reducing mathematical knowledge and perceptions of students, respectively. This assumption negatively affects the psychological aspects which help students to complete their tasks properly and appropriately. J. N. Sari et al. (2022) indicated this through high and low self-confidence, a sense of optimism, motivation to learn, and self-efficacy.

The research titled Mobile Applications for Moral Education discussed the arguments for the importance and the division of morality for Android-Based Children. However, the Book of Al-Akhlaq Lil Banin Volume 1 written by Al-Ustaz Umar Bin Ahmad Baraja is one of the guides used in studying children's character. In this book, education is classified into two including morality to (1) Allah and His Messenger and (2) fellow human beings. The fellow human beings are divided into morals to parents, teachers, relatives, friends, neighbors, and helpers. According to Tresnawati et al. (2016), the guidebook is used as a reference for developing education values.

The development of quality, dignified, and virtuous human resources places a premium on character. This development is crucial because it allows the internet not to interfere with the creation of children's behavior. In terms of education, the online need to be designed, planned, implemented, and evaluated to develop the Indonesian population and human characters, intelligence, as well as empowerment (Madya, 2011).

Moreover, educators and other personnel need to implement the following concepts including the use of technology to (a) consider the students character in the overall decision-making process, and (b) be structured to enable users to exclusively use it for their intellectual, spiritual, social, and physical development, (c) promote awareness and belief by interacting with the natural and socio-cultural environments including meetings, museums, and historical sites, (d) ensure the target audience enjoy basic communication and learning activities, as well as (e) promote users to be more creative and imaginative (Sugianti, 2011). The outcomes indicate Edmodo to be an application that is accessed through cellphones or other technical devices such as laptops and desktops (Sabaria & Budiman, 2022). This mobile application help to build a learning area that is also conducted concurrently and in-person through virtual means. Judge, A., et al. (2022) explained that 'Bersalam' received a score of 85 and 82.5% based on the validation of media and material experts respectively. Furthermore, students rated it to be a total of 86% for user-friendliness, clarity of instructions, and interest.

Technology brings changes in daily life, specifically in the field of education. It serves as a learning medium such as interactive multimedia which is consist of images, sounds, and video materials presented under computer control to enable students to make active responses (Lestari, 2018). Social Media is in the forms of magazines, internet forums, weblogs, social blogs, microblogging, wikis, broadcasts, photos or images, videos, ratings, and bookmarking. Kaplan and Haenlein created a schema by using social presence, media wealth, self-presentation, and self-disclosure (Eliza & Mulya, 2021). Online learning has several advantages including speed of access and no limitations on space and time. Also, this type of education is easily performed because it is connected to the internet network which helps to provide the latest information (Mustafa et al., 2022).

A majority of students in Elementary School feel happy while playing video games. The game is not only in the form of concrete media but also use digital-based. This PowerPoint learning collaborates with
educational games which help to educate and shape children’s personalities in terms of physical, intellectual, social, moral, emotional, and knowledge. A total of 2 students classified as ZA and MRB explained the materials problem because enthusiasm about being active or not while learning is difficult to understand (Z & Saputra, 2022).

Based on this android application, the learning media help to achieve the objectives of Islamic religious education, specifically in the realm of attitudes. This android application-based is called Bersalam which is in line with Islam. The development of this software is expected to promote the daily values or affective with the religious or cognitive understanding that students have learned in class discussion sessions. Also, this research examines the response of end users while using Islamic values daily (Ahmad et al., 2022). Moreover, according to Muthahhari, Wahyuni, and Suyadi (2020), entrepreneurship education aims to prepare students to have life and social skills. Meanwhile, social enable children to interact with the environment, while life skills include the ability and courage to confront challenges by proactively and creatively seek for solutions.

Sportsmanship character is instilled in school rules to make sure the class leader collects all students’ cellphones before the lesson begins. All the phones are handed over to the pcket educator who is in charge of returning or distributing them back to the children when the lesson is over. Students who are late for class tend to directly go to this school personnel and give reasons for their delay. Children are allowed to enter and take part in ongoing lessons after filling out and getting a certificate from the pcket educator. Also, courage is another character instilled in students to make them take turns leading school ceremonies, classes, and groups. The behavior is indicated when carrying out entrepreneurial learning with five (5) stages including (1) formation of small groups, (2) exploration, (3) development of business ideas, (4) creating a business plan presentation, and (5) participating in business action and competition. The following are stages of entrepreneurship learning (Hermany, 2019).

4.2 Using Online in Shaping the Entrepreneurial Spirit

Social media is a means of socializing, engaging, and luring people to watch as well as click on links carrying items and other information. Also, internet marketing tends to attract a broader spectrum of customers without any limitation of time or location. The items become ready to earn revenue when the website that substitutes the promotional efforts is accessible online (Indoworo, 2016). Nevertheless, in this technological era, marketing is very easy to perform since it allows the promotion of products and services through social media platforms. Meanwhile, in Indonesia, competition is tight because entrepreneurs make their shops and stores with good innovation and not to lose consumers (Farhan et al., 202; Irwansyah & Sirait, 2021). Moreover, Social Media is in several forms including magazines, internet forums, weblogs, social blogs, microblogging, wikis, broadcasts, photographs or pictures, videos, ratings, and bookmarking. Kaplan and Haenlein developed a schema by using social presence, media wealth, self-presentation, and self-disclosure. Meanwhile, people use online media such as text, audio, photographs, and videos for communication through websites and programs that is only accessed through the internet. This type of media encompasses the news, corporate, institutional, or agency, and sales websites, blogs, community forums, and chat applications (Eliza & Mulya, 2021).

Mass-scale is a social media that enable users to exchange information and connect with others who have a shared bond. This website radically alters the information-use landscape to bring together people with similar interests. According to Wijayanti, Irwansyah, and Sirait (2021), social media is a new set of communication and collaboration tools that opens up all the inaccessible forms of connection to the community. The technological era improves Indonesia's economic life which has been a challenge for the people. This era allows businesses to increase in terms of global market competition. The emergence of the millennial generation which is more inventive, imaginative, and analytical has become a driving force in shaping the country's economy, technology, e-commerce, and companies (Ambarwati & Sobari, 2020).

To end this section, it needs to highlights that this qualitative descriptive research only tries to explains the use of applications in 2022 online learning applications in shaping entrepreneurial character under small scale local database (Sinta and Google scholar) based in Indonesian context, therefore, it needs a further research to strengthen its claim and ideas.

5. Conclusion

Current, educational system significantly influenced by the tutor’s ability to use technology in delivering materials. The analysis of this present study revealed that online learning somehow help to shape students’ character or behavior to promote entrepreneurial spirit. The results of this research also showed that institutional stakeholders easily select, sort, and compare the quality of applications. There tend to be needed for educational facilities or software which affects the number of entrepreneurs engaged in teaching. This development opens up job opportunities for the community as well as helps students to optimally learn. In conclusion, online education implies that children's character tends to improve entrepreneurship spirit.
References


