

Character Education with Setara Daring Application in Non-Formal Education

Pratama Yoga Wica^{1*}, Marzuki²

^{1,2} Pancasila and civic education, Universitas Negeri Yogyakarta, Daerah Istimewa Yogyakarta, Indonesia

*e-mail: pratamayoga.2019@student.uny.ac.id

Abstract

Character is always a problem in human life that must be overcome immediately. One of the alternatives offered to build human character is through character education in non-formal schools. The school has an application that is able to help the character education process which is named the online equivalent application. This application is a learning system designed by the Ministry of Education and Culture Republic Indonesia. This research is in the form of a qualitative description and the purpose of this study is to describe the function of Setara daring applications in fostering the character of learning citizens. Data collection techniques using observation, interviews and documentation. The data collection instruments used were observation sheets, interview guidelines and document review. The data analysis technique used in this study is interactive model of analysis. The results of the application of the Setara Daring application turned out to have a major impact on the character education of learning citizens especially on the character of discipline, responsibility, independence, and caring for others.

Keywords: Character Education, Non-Formal Education, Setara Daring Application

1. Introduction

Is one of the most important things in a human's life, because character can affect a person's soft skills. Character makes professional discipline in jobs that have a domain of special knowledge and skills as well as attitudes or behaviors that are acquired through academic education and experience (Hariti et al., 2020; D. A. Kurniawan et al., 2019). Positive character strengths directly function for one's psychological well-being. Positive character strength indirectly reduces depression and improves psychological well-being through mediating variables with social support and self-will (Risnawati & Nuraeni, 2019; Xie et al., 2020). Human character can be formed through modeling by experts (teachers, educators, tutors) (D. A. Kurniawan et al., 2019; Putri, 2018). Modeling is the right method for teaching attitudes, values and behavior (Indah Septiani et al., 2020). Character education can provide a valuable conceptual framework for identifying and developing habits of social action (Lamb et al., 2019). This social action can be achieved by developing six principles of character qualities, namely reflective, challenging, good leader, social impact, progressive, and embedded.

The purpose of character education is to develop one's ability to make good decisions and realize that goodness in daily life wholeheartedly (Birhan et al., 2021; Ülger et al., 2014). Through character education, it is expected to be able to independently increase and use knowledge in the surrounding environment. The application of the concept of character education is always associated with moral education, this makes character education always connected with ethics education (Kim, 2015; Sukendar et al., 2019). There are nine pillars of character education. *First*, love for God and truth. *Second*, responsibility, discipline, and independence. *Third*, trust and honesty. *Fourth*, respect and politeness. *Fifth*, love, attention and cooperation. *Sixth*, self-confidence, creative, hardworking, and never give up. *Seventh*, justice and leadership. *Eighth*, kind and humble. *Ninth*, tolerance, love of peace and unity (Dewi E & A., 2020). Curriculum in Indonesia emphasizes the cultivation of character education in schools. Character learning in schools can overcome the problem of

*Corresponding author.

degradation moral that occurs in the youths (Murti, D et al., 2020; Yamin & Syahrir, 2020). One of the solutions offered for carrying out character education is using an application called the setara daring application in non-formal education.

Non-formal education is defined as a system of organized and systematic educational activities carried out outside the framework of the formal system to provide the selected type of learning to certain population subgroups, both adults and children (Kamar et al., 2020; Vezne R., 2020). Non-formal education is also characterized by an institution at a certain level, but its planning is carried out at the level of educational organizations. Non-formal education is universal, comprehensive, and integrated into the framework of Indonesian nation-building which is wholly the responsibility of the entire Indonesian nation and is implemented by families, communities and government (Chernysh, V et al., 2020; Greaves et al., 2019; Pienimäki et al., 2021). Education is a shared responsibility between family, community and government with the aim that everyone can have an education, according to the abilities of each individual (M. I. Kurniawan, 2017; Lase et al., 2021; Logan et al., 2021). Setara daring application is a learning media product in the form of e-learning. In Indonesia, e-learning is expected to be one of the solutions solving a lot of issues in education because e-learning is adaptable to the needs, as a complement, supplement, or substitute for classroom learning activities (Alshehri et al., 2019; Suartama, I et al., 2020). The setara daring application, is a general use of citizen learning in non-formal education-based schools. The use of media is very supportive in the learning process. The use of technology in learning involves positive aspects for students to increase interest in the learning process (Logan et al., 2021; Qureshi et al., 2021; Wu & Plakhtii, 2021). Setara daring application is a program created by the Ministry of Education and Culture Republic Indonesia.

E-learning can also be combined with various methods and learning models used by teachers in learning activities (Jamalpur et al., 2021; M. R. Kurniawan & Rofiah, 2020; Sindiani et al., 2020). Setara daring application is a learning management system designed for distance learning. Distance learning is learned that uses internet networks with accessibility, connectivity, flexibility, and the ability to generate various types of learning interactions (Indrawati et al., 2020; Karasmanaki & Tsantopoulos, 2021). This application is expected to make all schools based on non-formal education compete in the industrial era 4.0. The purpose of this application is to increase students' enjoyment and interest in non-formal education-based schools. An application is made to be able to make people who see it become interested and want to learn it (Achim & Kassim, 2015; Corcoran, S & Christine, 2018). Setara daring application can be accessed via electronic media, for example a mobile device or computer. Setara daring application is used in every subject learning in equality schools. Setara daring application must be installed on a mobile device or computer that has the internet. The use of mobile devices has penetrated almost every stage of life in today's modern societies (Chen & Tsai, 2021; Mayer, 2020; Mohd Zain et al., 2018). The internet is an important part of their education for students (Azhari & Fajri, 2021; Lase et al., 2021). This means that the internet and the needs of students are two very important things at this time (Bastemur & Bastemur, 2015; Madleňák, 2015; Tiwery et al., 2021). Setara daring application are made to make it easier for students to integrate the two things in the learning process so that the goals of education can be achieved.

Research explains that using applications for character education causes the teaching success rate of teachers in the United States to increase by 71% (Haslip, M & Leona, 2020). This is what makes character education using an application better than general teaching without an application (Darmayasa et al., 2018; Marshel & Ratnawulan, 2020). The solution offered to students in strengthening character education in non-formal schools is by implementing setara daring application. This application has many functions in its use that can help students collect assignments on time, students no longer copy other friends' work, students can complete assigned exercises independently, and students care about each other. This ultimately leads to the strengthening of character, especially the character of discipline, responsibility, independence, and concern for others. The purpose of this study is to analyze character education with the equivalent of brave in non-formal education.

2. Method

This study used descriptive qualitative method. The research site is in the Kesetaraan Bunga Kantil School, Mojosoongo Village, Banjarsari District, Surakarta city. Overall all activities were carried out for approximately four month. Informants or resource persons, namely tutors and students learning at Kesetaraan Bunga Kantil School, Mojosoongo Village, Banjarsari District, Surakarta City. Data collection techniques using observation, interviews and documentation. The data collection instruments used were observation sheets, interview guidelines and document review. Triangulation of data used is triangulation of data sources and triangulation of data collection techniques. The data analysis technique used in this research is interactive model analysis. The description of the data analysis technique carried out, namely the *First* is data collection. The data that has been taken are all collected into one. *Second*, data reduction. The main data and focus on an important thing are then sorted. *Third*, data presentation. Create a narrative text from the data that has been obtained, then the data is described. *Fourth*, drawing conclusions. Make a conclusion to find something new from a problem under study.

3. Result and Discussion

Results

The setara daring application has an impact on the character education of learning citizens at the Kesetaraan Bunga Kantil School. The characters they have are very different from the results before and after using the setara daring application. The results of this difference are due to the data collection techniques based on school observations, interviews with tutors and students and taking documentation about the school. The data collection technique can be explained as follows. *First*, observation at school. This observation was carried out by looking at the learning activities in the Kesetaraan Bunga Kantil School. The research instrument used was the observation sheet. Direct learning begins face-to-face then continues using setara daring applications. Through face-to-face, it can be seen that students learning doesn't really care about the tutor in front of the class, but when using the setara daring application the students learn to be enthusiastic and pay attention. Tutors and students learning after using the setara daring application turned out to be very useful. *Second*, interviews with study tutors and students learning. This interview is useful to find out about the benefits of this application on character learning in class. Interviews were conducted using interview guidelines. The interviews that were given had a very big influence in this study compared to other data collection techniques because the interviews given answered a lot about the process of implementing the setara daring application. This interview was made after the application of the setara daring application was taught to learning citizens at the Kesetaraan Bunga Kantil School. The subjects of this interview were tutors and students learning. *Third*, documentation is useful for retrieving data about schools that are used as research locations. Documentation is also used as reinforcement in research. Documentation of citizens learning when using the setara daring of tutors for student learning. Documentation is equipped with a document review that takes data from previous research to be used as a basis for comparison of good learning media for students. Based on data collection using the three techniques above, it finally makes a conclusion that the application of equal courage is able to make citizens learn to maximize their character. There are four indicators to improve the character of learning citizens. The increase in character can be seen from the results of observations before and after using the setara daring applications in Table 1.

Based on the Table 1, the setara daring application turns out to be able to provide character changes for citizens studying at Kesetaraan Bunga Kantil School, Mojosoongo Village, Banjarsari District, Surakarta city. This character change can be explained as follows. *First*, discipline character. The change that occurs is that learning citizens have a time limit which can make them no longer neglect the work that has been given by the study tutor. The time limit that a learning tutor can make depends on the desire and weight of the

assignment. Tutors can also directly provide directions via other social media to inform them of the collection deadline. The dissemination of this information is usually carried out through whatsapp social media, instagram or telegram. Distribution can be done through individuals or groups that have been created. *Second*, responsible character. Responsible nature indicates a person has a high education. Learning citizens can no longer imitate other friends' answers only if the question system is multiple choice. Multiple choice questions can be given a time limit to be processed by the learning tutor. The time limit does not allow residents to learn to see other friends' answers. Learning citizens will try to solve the problem on their own without the help of friends. Each question can also be given a weight value according to the capacity of the material by the learning tutor. This provides the benefit that if students learning has finished working on the questions, the learning tutor can immediately see the results of the grades when they leave without bothering to provide corrections.

Table 1. Before and After Using Setara Daring Applications

Characters	Before	After
Discipline	Citizens learn are not on time in submitting assignments	Citizens learn submit assignments on time because there is a system in the application that is able to automatically close the collection deadline
Responsible	Citizens learn often cheat on other friends' work.	Citizens learn can no longer cheat on a friend's work because the system application is in the form of independent questions.
Independence	Citizens learn are not able to complete the assigned exercises independently	Citizens learn are able to complete assignments on their own because there is a system in the application that is able to come up with the right answers in the form of assignment exercises.
Care for others	Citizens learn do not care about each other.	Citizens learn help each other if they have difficulty accessing the application.

Source: Results of observations at Kesetaraan Bunga Kantil School

Third, character of independence. The system in the application has a function to display the correct answer if the learning citizen has finished filling it in. The system is contained in a question in the form of an exercise which only functions to test the ability of citizens to learn after receiving material from the learning tutor. This task practice system can be presented in multiple choice questions or essay questions. This system is expected to be able to make citizens learn to understand for themselves about the material that has been given, so that it can add to the character of independence possessed by learning citizens. *Fourth*, characters care about others. The character of caring for others makes a person feel cared for and needed so that it increases motivation and enthusiasm in carrying out an activity. Students learning always reminds other friends if there is an assignment from the learning tutor, besides that learning residents who have successfully accessed the setara daring application tell their friends how to access it. This change makes citizens learn to be able to communicate and increase brotherhood between students. Learning residents also get to know other friends. This has a positive effect on the ongoing learning process. This positive influence must also be assisted by the tutor outside of lessons. For example, by joking with the citizens of learning. This will cause tutors and learning citizens to get to know each other, so that closeness between teachers and students can be formed.

Setara daring application using in the Kesetaraan Bunga Kantil School, Mojosongo Village, Banjarsari District, Surakarta city is very good. This is because the school has its own computer as supporting facilities. Tutors are able to use setara daring applications to support skills in technology. Citizens learning in applying this application have also been taught in every meeting with each subject tutor. This certainly makes it easier to implementing setara daring application because all the necessary supporting factors already exist. In addition, this school is one of the pilot schools in implementing uses setara daring

application throughout the city of Surakarta. The skills of citizens to learn in processing technology and information are increasing day by day because every meeting always uses computers in class learning, besides that this application is required in every lesson. Setara daring application practice takes steps to use it. The general steps of creating the setara daring application. *First*, open the setara daring of web applications by opening a browser, such as Google Chrome, Mozilla Firefox, Internet Explores, Opera, Safari, etc. *Second*, enter the setara daring of a website address in a web browser, namely setara.kemdikbud.go.id. *Third*, select the packages that are available and required

The step after opening the initial screen in the setara daring application, it will split into two threads. The first flow for creating a tutor account. The steps for creating an account are the setara daring application for learning tutors. *First*, select the teacher column to create a study tutor account. *Second*, complete and fill in the form according to your personal data, and don't forget to write down the username and password which will be used as login access to the setara daring application. *Third*, click register. *Fourth*, after clicking on the list then a notification will appear that has successfully registered. If the notification that comes out fails, then the tutor may learn to fill in the wrong registration form and than fill back and adjust to the available format. *Fifth*, after successfully registering, you can enter the application and select the school or PKBM where you are registered as a study tutor. *Sixth*, enter an email that is still active, then click save. *Seventh*, the email after being entered can then make the learning tutor go to the home page of the created account. *Eighth*, finally the tutor learns then learns the functions in the application with existing tutorials

The second flow is the creation of accounts for learning citizens. Making steps for learning citizens. *First*, select the student column to create a learning citizen account. *Second*, enter the class code obtained from the teacher or tutor, because without the class code students cannot create an account. *Third*, complete and fill in the form according to your personal data, and don't forget to write down the username and password which will be used as login access to the setara daring application. *Fourth*, then click register. *Fifth*, after clicking on the list then a notification will appear that has successfully registered. If the notification that comes out is a failure, it is possible that students will learn to fill in the wrong registration form, fill it again and adjust it to the form provided. *Sixth*, login and then after successfully registering can enter the application. Select the school or PKBM where you are registered as a learning citizen. *Seventh*, enter an email that is still active and then click save. *Eighth*, after the email has been successfully entered, students learning will go to the home page of the account created. *Ninth*, students then learn the functions in the application with existing tutorials. Setara daring applications also have many shortcomings, this is because this application is the first generation of distance learning media for non-formal education. The drawbacks of this application are due to the results of interviews with study tutors, and can be seen in Table 2.

Table 2. Disadvantages of Setara Daring Apps

Deficiency	Explanation
Internet	Must be connected to the internet. This causes learnings citizen who do not have a quota, they will not be able to access the setara daring application.
Effectiveness of time	How to enter questions and answers in this application is still difficult and limited. This means that if you want to provide training to learning citizens, the learning tutor must enter the questions and answers one by one in sequence. This causes the tutor to learn difficulties if after finishing providing learning material they must make questions and answers for the learning community. Such a system reduces the effectiveness of time.
Email and password.	This application does not have access if the user forgets his email and password. This means that if a user forgets their email and password, they will automatically lose their setara daring application. This causes

Deficiency	Explanation
Users online simultaneously.	users of this application to record their email and password so they are not lost. A system that hasn't been able to create an account again if it's lost like this is very difficult for users of this application This application must make users online simultaneously. This means that tutors and learning residents must make an appointment to meet when using this application. A system that does not have a recording like this can make learning difficult if people fall behind in lessons.

Source: Results of interviews with study tutors at Kesetaraan Bunga Kantil School

Based on information about the weaknesses of the setara daring application, users of the application hope for improvement. The improvements that tutors and learning citizens expect for setara daring applications. *First*, the application is made more concise so that application users become easier to access, especially those related to the internet. *Second*, the application should only be made by the tutor, so that residents learn to just use it. This will make the username and password secure. *Third*, this application is expected to be accessible offline, so that application users do not need to specify a meeting time. *Fourth*, the system for entering questions and answers for learning citizens should be improved immediately. So that the learning tutor doesn't feel tired using the application. Education is a major factor in the formation of the human person. Education plays an important role in shaping the good or bad of the human person. The purpose of education itself is to produce quality human resources, so that they are able to compete with other workers according to their competencies in facing global competition. A person who succeeds in achieving education is not solely based on the values obtained, but based on daily behavior patterns that reflect noble and virtuous values. Learning technology is something important and must be taught to today's millennial generation. Learning technology is useful for providing the right and correct information basis for students, so that later the goals of education become successful. National education has the function of fostering and fostering dignified national character and civilization in order to educate the nation's life so that it has the ability to fear God Almighty, have noble character, health, knowledge, competence, etc.

Discussion

Looking at the comparison before and after using a setara daring application, it is clear that there is a very significant difference. This comparison proves that the application of setara daring is very influential in maximizing the character of learning citizens. The application of setara daring actually proves previous research which illustrates that internet learning media is very important for now, but this research also has differences with previous research. According to research, the results show that the use of technology in the learning system has shortcomings (Shatri, 2020). The drawback is that information technology destroys class concentration and takes a lot of time. The results of these studies make a difference in the use of technology for learning (Hatlevik et al., 2018; Logan et al., 2021; Sindiani et al., 2020). The research that has been done states that the character of the discipline of students who is punctual in collecting assignments proves that technology has helped students in doing the assignments given by the teacher (Majid et al., 2012; Tiwery et al., 2021). The results of other studies that support the use of distance learning in Spain. The results illustrate that the e-learning environment improves the functionality and quality of the resources provided, thereby simplifying the creation of a learning ecology tailored for students with disabilities (Rodrigo & Bernardo, 2020). This study involved 161 students with disabilities and 137 students (87.5%) stated that online learning resources are easier to download than offline learning sources. The conclusion is that distance learning actually has the benefit of simplifying learning methods. This is of course in line with the current research. One of the benefits of implementing the setara daring applications is also to facilitate learning so as to create good character education for students.

Based on the previous research that has been mentioned, it is clear that online learning media has advantages and disadvantages of each (Bakri et al., 2016; Fortuna et al.,

2020; Herdiana et al., 2021). This concludes that distance learning media doesn't just make learning better. The success of implementing online learning media is very dependent on the school and application users (Abidah et al., 2020; Indrawati et al., 2020; Sari et al., 2021). The intended users of the application are teachers and students. Users must also be provided with places and tools to support the successful use of distance learning using the application (Agustini et al., 2020; Divayana et al., 2016; Wulandari et al., 2020). This provision is a mandatory factor if distance learning is to be better. The internet learning media training is a very valuable investment in any educational organization and it is necessary to build a profile of inexperienced students and also affect the psychological development of students so that they are better (Aldawood & Geoff, 2019; Rimawati & Wibowo, 2018; Villamil et al., 2020). However, provide a solution that the use of distance learning media should only be done three to five times in one semester (Unger & Meiran, 2020). This is also what is done when implementing setara daring application, tutors only use this when they are unable to do activities at school only. If already in school, learning is done face to face again. The setara daring application is expected to be a character education solution with distance learning methods that can be used in non-formal education. The application of these applications can make non-formal education attractive so that it is not underestimated by the Indonesian people. For further updates, hopefully this application needs more attention so that it can accommodate all learning activities in non-formal education.

4. Conclusions and Suggestions

Character education through setara daring applications in non-formal education turns out to provide evidence that character education using application assistance is better than character education without using applications. This application turns out to be able to support character education in students in non-formal education, this is evidenced by four improvements in student character, namely the character of discipline, the character of responsibility, the character of independence and the character of caring for others. This application further provides reinforcement that non-formal education can compete with formal education so that non-formal education is no longer underestimated by the community. This application is also able to increase the enthusiasm of students in obtaining lessons so that learning becomes more interesting and innovative. This application also supports the creation of material by the teacher to students, so that the teacher can better prepare the material that will be given to students. This application is also a solution in distance learning so that if suddenly there are obstacles, the learning method can be changed immediately and does not hinder the learning process.

5. References

- Abidah, A., Hidaayatullaah, H. N., Simamora, R. M., Fehabutar, D., & Mutakinati, L. (2020). The Impact of Covid-19 to Indonesian Education and Its Relation to the Philosophy of "Merdeka Belajar." *Studies in Philosophy of Science and Education*, 1(1), 38–49. <https://doi.org/10.46627/sipose.v1i1.9>.
- Achim, N., & Kassim, A. Al. (2015). Computer Usage: The Impact of Computer Anxiety and Computer Self-efficacy. *Procedia - Social and Behavioral Sciences*, 172, 701–708. <https://doi.org/10.1016/j.sbspro.2015.01.422>.
- Agustini, D., Lian, B., & Sari, A. P. (2020). School'S Strategy for Teacher'S Professionalism Through Digital Literacy in the Industrial Revolution 4.0. *International Journal of Educational Review*, 2(2), 160–173. <https://doi.org/10.33369/ijer.v2i2.10967>.
- Aldawood, H., & Geoff, S. (2019). Reviewing Cyber Security Social Engineering Training and Awareness Programs-Pitfalls and Ongoing Issues. *Future Internet Jurnal*, 11(73). <https://doi.org/10.3390/fi11030073>.
- Alshehri, A., Rutter, M., & Smith, S. (2019). Assessing The Relative Importance of an E-Learning System's Usability Design Characteristics Based on Students' Preferences.

- European Journal of Educational Research*, 8(3). <https://doi.org/10.12973/eu-er.8.3.839>.
- Azhari, B., & Fajri, I. (2021). Distance learning during the COVID-19 pandemic: School closure in Indonesia. *International Journal of Mathematical Education in Science and Technology*. <https://doi.org/10.1080/0020739X.2021.1875072>.
- Bakri, F., Siahaan, B. Z., & Permana, A. H. (2016). Rancangan Website Pembelajaran Terintegrasi dengan Modul Digital Fisika Menggunakan 3D PageFlip Professional. *Jurnal Penelitian & Pengembangan Pendidikan Fisika*, 2(2), 113–118. <https://doi.org/10.21009/1.02215>.
- Bastemur, S., & Bastemur, E. (2015). Technology Based Counseling: Perspectives of Turkish Counselors. *Procedia - Social and Behavioral Sciences*, 176(1998), 431–438. <https://doi.org/10.1016/j.sbspro.2015.01.493>.
- Birhan, W., Shiferaw, G., Amsalu, A., Tamiru, M., & Tiruye, H. (2021). Exploring the context of teaching character education to children in preprimary and primary schools. *Social Sciences & Humanities Open*, 4(1). <https://doi.org/10.1016/j.ssaho.2021.100171>.
- Chen, C.-H., & Tsai, C.-C. (2021). In-service teachers' conceptions of mobile technology-integrated instruction: Tendency towards student-centered learning. *Computers & Education*, 170(1). <https://doi.org/10.1016/j.compedu.2021.104224>.
- Chernysh, V. V., Yuliia, V., Vasily, K., Liudmyla, T., & Julia, B. (2020). Modern Methods of Training Foreign Language Teachers. *International Journal of Higher Education*, 9(7). <https://doi.org/10.5430/ijhe.v9n7p332>.
- Corcoran, S. P., & Christine, B. S. (2018). Pathways to an Elite Education: Application, Admission, and Matriculation to New York City's Specialized High Schools. *Education Finance and Policy*, 13(2). https://doi.org/10.1162/edfp_a_00220.
- Darmayasa, I. K., Jampel, N., Simamora, A. H., & Pendidikan, J. T. (2018). Pengembangan E-Modul Ipa Berorientasi Pendidikan Karakter di SMP Negeri 1 Singaraja. *Jurnal Edutech Undiksha*, 6(1), 53–65. <https://doi.org/10.23887/jeu.v6i1.20267>.
- Dewi E, R., & A., A. (2020). Transformation Model for Character Education of Students. *Cypriot Journal of Educational Science*, 15(5). <https://doi.org/10.18844/cjes.v15i5.5155>.
- Divayana, D. G. H., Suyasa, P. W. A., & Sugihartini, N. (2016). Pengembangan Media Pembelajaran Berbasis Web Untuk Matakuliah Kurikulum dan Pengajaran di Jurusan Pendidikan Teknik Informatika Universitas Pendidikan Ganesha. *Jurnal Nasional Pendidikan Teknik Informatika (JANAPATI)*, 5(3), 149. <https://doi.org/10.23887/janapati.v5i3.9922>.
- Fortuna, A. P., Rida, A. M., Maharani, L. S. P., Ardiansyah, R., & Sari, A. A. (2020). A needs analysis of digital connecting book in education in the pandemic era. *ACM International Conference Proceeding Series*. <https://doi.org/10.1145/3452144.3452154>
- Greaves, M., Nabhani, M., & Bahous, R. (2019). Shelter in a storm: A case study exploring the use of psycho-social protection Strategies in non-formal refugee education in Lebanon. *International Journal of Educational Development*, 66. <https://doi.org/10.1016/j.ijedudev.2019.02.005>.
- Hariti, T., Sri, R., & Ernawati. (2020). Strengthening Soft Skills as the Character of Student Nurses through the Preceptorship Management Model. *Enfermería Clínica*, 30(5). <https://doi.org/10.1016/j.enfcli.2019.11.022>.
- Haslip, M. J., & Leona, D. (2020). How Early Childhood Educators Resolve Workplace Challenges Using Character Strengths and Model Character for Children in the Process. *Early Childhood Education Journal*, 49(2). <https://doi.org/10.1007/s10643-020-01072-2>.
- Hatlevik, O. E., Throndsen, I., Loi, M., & Gudmundsdottir, G. B. (2018). Students' ICT self-efficacy and computer and information literacy: Determinants and relationships. *Computers and Education*, 118, 107–119. <https://doi.org/10.1016/j.compedu.2017.11.011>.
- Herdiana, D., Rudiana, R., & Supriatna, S. (2021). Kejenuhan Mahasiswa dalam Mengikuti

- Perkuliahan Daring dan Strategi Penanggulangannya. *Edunesia: Jurnal Ilmiah Pendidikan*, 2(1), 293–307. <https://doi.org/10.51276/edu.v2i1.128>.
- Indah Septiani, A. nisa N. S., Septiani, I., Rejekiningsih, T., Triyanto, & Rusnaini. (2020). Development of interactive multimedia learning courseware to strengthen students' character. *European Journal of Educational Research*, 9(3), 1267–1279. <https://doi.org/10.12973/eu-jer.9.3.1267>.
- Indrawati, M., Prihadi, C., & Siantoro, A. (2020). The Covid-19 Pandemic Impact on Children's Education in Disadvantaged and Rural Area Across Indonesia. *International Journal of Education (IJE)*, 8(4), 19–33. <https://doi.org/10.5121/ije.2020.8403>.
- Jamalpur, B., Kafila, Chythanya, K. R., & Kumar, K. S. (2021). A comprehensive overview of online education – Impact on engineering students during COVID-19. *Materials Today: Proceedings*. <https://doi.org/10.1016/j.matpr.2021.01.749>.
- Kamar, K., Asbari, M., Purwanto, A., Nurhayati, W., & Sudiyono, R. N. (2020). Membangun Karakter Siswa Sekolah Dasar Melalui Prakter Pola Asuh Orang Tua Berdasarkan Genetic Personality. *Jurnal Inovasi Pembelajaran*, 6(c), 75–86. <https://doi.org/10.22219/jinop.v6i1.10196>.
- Karasmanaki, E., & Tsantopoulos, G. (2021). Impacts of social distancing during COVID-19 pandemic on the daily life of forestry students. *Children and Youth Services Review*, 120(December 2020), 105781. <https://doi.org/10.1016/j.childyouth.2020.105781>.
- Kim, D. (2015). A Study on the Class of Education that Builds Students' Character Through Films – Classes at the University of Liberal Arts. *Procedia - Social and Behavioral Sciences*, 174. <https://doi.org/10.1016/j.sbspro.2015.01.784>.
- Kurniawan, D. A., Astalini, A., Kurniawan, N., & Pathoni, H. (2019). Analisis korelasi sikap siswa dan disiplin siswa terhadap IPA pada Siswa SMP Provinsi Jambi. *Jurnal Pendidikan Fisika Dan Keilmuan (JPFK)*. <https://doi.org/10.25273/jpfr.v5i2.5014>.
- Kurniawan, M. I. (2017). Meningkatkan Hasil Belajar Pendidikan Kewarganegaraan Melalui Strategi Active Learning. *PEDAGOGIA: Jurnal Pendidikan*, 6(1), 124. <https://doi.org/10.21070/pedagogia.v6i1.764>.
- Kurniawan, M. R., & Rofiah, N. H. (2020). Pola Penggunaan Internet di Lingkungan Sekolah Dasar Se-Kota Yogyakarta. *Southeast Asian Journal of Islamic Education*, 2(2). <https://doi.org/10.21093/sajie.v2i2.1930>.
- Lamb, M., Emma, T. C., & Cameron, S. (2019). Character Education for Social Action: A Conceptual Analysis of the Campaign. *Journal of Social Science Education*, 18(1). <https://doi.org/10.4119/jsse-918>.
- Lase, D., Zega, T. G. C., & Daeli, D. O. (2021). Parents' Perceptions of Distance Learning during COVID-19 Pandemic in Rural Indonesia. *SSRN Electronic Journal*, 13(2), 101–111. <https://doi.org/10.2139/ssrn.3890610>.
- Logan, R. M., Johnson, C. E., & Worsham, J. W. (2021). Development of an E-learning Module to Facilitate Student Learning and Outcomes. *Teaching and Learning in Nursing*, 16(2), 139–142. <https://doi.org/10.1016/j.teln.2020.10.007>.
- Madleňák, R. et al. (2015). Designing a Social Network to Support E-learning Activities at the Department of Communications, University of Žilina. *Procedia - Social and Behavioral Sciences*, 176, 103–110. <https://doi.org/10.1016/j.sbspro.2015.01.449>.
- Majid, M. S. Z. B. A., Ali, M. M. B. A., Rahim, A. A. B. A., & Khamis, N. Y. B. (2012). The Development of Technical English Multimedia Interactive Module to Enhance Student Centered Learning (SCL). *Procedia - Social and Behavioral Sciences*, 67, 345–348. <https://doi.org/10.1016/j.sbspro.2012.11.337>.
- Marshel, J., & Ratnawulan. (2020). Analysis of Students Worksheet (LKPD) integrated science with the theme of the motion in life using integrated connected type 21st century learning. *Journal of Physics: Conference Series*, 1481(1). <https://doi.org/10.22219/jppg.v1i1.12462>.
- Mayer, R. E. (2020). Where is the learning in mobile technologies for learning? *Contemporary Educational Psychology*, 60, 101824. <https://doi.org/10.1016/j.cedpsych.2019.101824>.

- Mohd Zain, N., Mohd Fadil, N. F., & Abdul Hadi, A. (2018). Learning Management System: An Experience and Perception Study from Medical Imaging Lecturers and Scholars in a Private University. *International Journal of Interactive Mobile Technologies (IJIM)*, 12(7), 174. <https://doi.org/10.3991/ijim.v12i7.9638>.
- Murti, D. K., Gunarhadi, & Winarno. (2020). Development of Educational Comic with Local Wisdom to Foster Morality of Elementary School Students: A Need Analysis. *International Journal of Educational Methodology*, 6(2). <https://doi.org/10.12973/ijem.6.2.337>.
- Pienimäki, M., Kinnula, M., & Iivari, N. (2021). International Journal of Child-Computer Interaction Finding fun in non-formal technology education. *International Journal of Child-Computer Interaction*, 29, 100283. <https://doi.org/10.1016/j.ijcci.2021.100283>.
- Putri, D. P. (2018). Pendidikan Karakter Pada Anak Sekolah Dasar Di Era Digital. *AR-RIAYAH: Jurnal Pendidikan Dasar*, 2(1), 37. <https://doi.org/10.29240/jpd.v2i1.439>.
- Qureshi, M. I., Khan, N., Raza, H., Imran, A., & Ismail, F. (2021). Digital Technologies in Education 4.0. Does it Enhance the Effectiveness of Learning? A Systematic Literature Review. *International Journal of Interactive Mobile Technologies (IJIM)*, 15(04), 31–47. <https://doi.org/10.3991/ijim.v15i04.20291>.
- Rimawati, E., & Wibowo, A. (2018). Pengaruh Persepsi Guru Sekolah Dasar Terhadap Minat Menggunakan Internet Sebagai Sumber Belajar. *Jurnal Sains Dan Informatika*, 4(2). <https://doi.org/10.34128/jsi.v4i2.134>.
- Risnawati, A., & Nuraeni, L. (2019). Meningkatkan Kemampuan Berbahasa Sunda Anak Usia Dini Melalui Kegiatan Rebo Nyunda Di Pendidikan Anak Usia Dini. *CERIA (Cerdas Energik Responsif Inovatif Adaptif)*, 2(5). <https://doi.org/10.22460/ceria.v2i5.p243-250>.
- Rodrigo, C., & Bernardo, T. (2020). Learning Ecologies in Online Students with Disabilities. *Comunicar: Media Education Research Journal*, 28(62). <https://doi.org/10.3916/C62-2020-05>.
- Sari, R. P., Tussyantari, N. B., & Suswandari, M. (2021). Dampak Pembelajaran Daring Bagi Siswa Sekolah Dasar Selama Covid-19. *Prima Magistra: Jurnal Ilmiah Kependidikan*, 2(1), 9–15. <https://doi.org/10.37478/jpm.v2i1.732>.
- Shatri, Z. G. (2020). Advantages and Disadvantages of Using Information Technology in Learning Process of Students. *Journal of Turkish Science Education*, 17(3). <https://doi.org/10.36681/used.2020.36>.
- Sindiani, A. M., Obeidat, N., Alshdaifat, E., Elsalem, L., Alwani, M. M., Rawashdeh, H., Fares, A. S., Alalawne, T., & Tawalbeh, L. I. (2020). Distance education during the COVID-19 outbreak: A cross-sectional study among medical students in North of Jordan. *Annals of Medicine and Surgery*, 59, 186–194. <https://doi.org/10.1016/J.AMSU.2020.09.036>.
- Suartama, I. K., Eges, T., Sukardi, A., Wiwik D, H., Usman, M., Singgih, S., Umar, & Mohammad, S. (2020). Development of E-Learning Oriented Inquiry Learning Based on Character Education in Multimedia Course. *European Journal of Educational Research*, 9(4). <https://doi.org/10.12973/eu-jer.9.4.1591>.
- Sukendar, A., Usman, H., & Jabar, C. S. A. (2019). Teaching-Loving-Caring (Asah-Asih-Asuh) and Semi-Military Education on Character Education Management. *Jurnal Cakrawala Pendidikan*, 38(2). <https://doi.org/10.21831/cp.v38i2.24452>.
- Tiwery, W. Y., Patty, F. N., & Nanlohy, D. F. (2021). Role Of Family For Children's Education During A Pandemic In Eastern Indonesia. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(7), 1522–1527. <https://doi.org/10.17762/turcomat.v12i7.2965>.
- Ülger, M., Yiğittir, S., & Ercan, O. (2014). Secondary School Teachers' Beliefs on Character Education Competency. *Procedia - Social and Behavioral Sciences*, 131. <https://doi.org/10.1016/j.sbspro.2014.04.145>.
- Unger, S., & Meiran, W. R. (2020). Student Attitudes towards Online Education during the COVID-19 Viral Outbreak of 2020: Distance Learning in a Time of Social Distance. *International Journal of Technology in Education and Science*, 4(4).

- <https://doi.org/10.46328/ijtes.v4i4.107>.
- Vezne R. (2020). Participatory Video: A Non-Formal Education Tool for Adult Educators. *World Journal on Educational Technology*, 12(4). <https://doi.org/10.18844/wjet.v12i4.5145>.
- Villamil, S., Hernández, C., & Tarazona, G. (2020). An overview of internet of things. *Telkomnika (Telecommunication Computing Electronics and Control)*, 18(5). <https://doi.org/10.12928/TELKOMNIKA.v18i5.15911>.
- Wu, W., & Plakhtii, A. (2021). E-Learning Based on Cloud Computing. *International Journal of Emerging Technologies in Learning (IJET)*, 16(10), 4. <https://doi.org/10.3991/ijet.v16i10.18579>.
- Wulandari, I. G. A. A. M., Sudatha, I. G. W., & Simamora, A. H. (2020). Pengembangan Pembelajaran Blended Pada Mata Kuliah Ahara Yoga Semester II di IHDN Denpasar. *Jurnal Edutech Undiksha*, 8(1), 1. <https://doi.org/10.23887/jeu.v8i1.26459>.
- Xie, J., Min, L., Zhuqing, Z., Qiuxiang, Z., Jianda, Zhou., & Lu, W. (2020). Relationships among Character Strengths, Self-efficacy, Social Support, Depression, and Psychological Well-being of Hospital Nurses. , 14(3), 150-157. <https://doi.org/10.1016/j.anr.2020.06.002>.
- Yamin, M., & Syahrir, S. (2020). Pembangunan Pendidikan Merdeka Belajar (Telaah Metode Pembelajaran). *Jurnal Ilmiah Mandala Education*, 6(1), 126–136. <https://doi.org/10.36312/jime.v6i1.1121>.