Self-Study Platform (SSP) Based Solar Cell As A Solution In Improving The Learning Quality In Outermost, In Frontier and Under Develop Area

Muhammad Sarlin[1], Ikhsan Hidayat[2], Muhammad Yasser Arafat[3], Candra Cuga[4]
[1,3,4]Faculty of Teacher Training and Education, Gorontalo State University, Gorontalo City, Indonesia
[1,2]Faculty of Engineering, Gorontalo State University, Gorontalo City, Indonesia
✉ sarlin_muh@ung.ac.id

Abstract. Unbalanced teacher distribution, limitations of learning media, incomplete library book so there are not many students who are interested in literacy, the lack of educators and educational labor, the teacher's quality also is an important issue in 3T area. (Education and Culture Policy Research Center, Kemdikbud, 2013). This results in the quality of learning very low and need to find the right solution effectively. The use of the right technology is a solution to improve the learning quality in 3T areas and unravel the educational gap that still exists between regions where they occur. A combination of a self-study platform (SSP) and solar cells is designed to enhance the learning quality of 3T areas because it is equipped with various learning materials that use fun methods and media. This research is used two research approaches, namely qualitative and quantitative, qualitative approach is done by using the sociology approach and collective memory analysis (Berg, 2007; Biernacki, 2005; Zerubavel, 2003; Nash, 2001). Quantitative approach is used to analyze the data required by schools in the 3T area. The aims in this research are to produce the reconstruction of teacher's experience, school documents, learning reference to increase the learning quality. In addition, to see the relation of the concept that has been developed to improve the learning quality in 3T region school. Self-Study Platform (SSP) Based Solar is a platform designed to be used offline and allow students to learn themselves by choosing the material that wants to be learned or that has been arranged by the teachers to study. SSP also considers the students learning style by audio, visual, and audio visual because the features in it are equipped based on the student learning need. Learning content via SSP can be designed by the teacher, practitioners of education or other teachers from various regions, and being put in SSP to be studied by students in other areas in general or in 3T region where the SSP is provided. The limitations of electricity flow in 3T area are no longer an obstacle because it can take advantage of solar cell. Self-Study Platform (SSP) based Solar is a platform that can bridge the intensity of systemic relations and synergy between teachers, students, learning situation, and learning media in producing optimal processes and learning results in accordance with the curricular terms, especially in the 3T area that has not been handled.

Keywords: self-study platform, solar cell, learning quality, 3T

How to Cite: Sarlin, Muhammad, dkk. (2023). Self-Study Platform (SSP) Based Solar Cell As A Solution In Improving The Learning Quality In Outermost, In Frontier and Under Develop Area. *Proceeding The 5th International Conference on Elementary Education, 5*(1), 763-762

INTRODUCTION

Identification of Education Problems in 3T areas based on data from the education model in 3T areas by local wisdom, Education and Culture Policy Research Center, Kemdikbud, 2013 there are several educational problems faced by children in 3T areas as follows: The lack of educators and educational labor as an illustration of how difficult it is to put the teachers in these areas. Similarly, it is also difficult to build standard of educational facilities due to communication difficulties or the scarcity of teaching and learning aids. Likewise, the terms of the education system related to the level of education as well as the national curriculum preventing remote areas from catching up; Unbalanced of teachers distribution although the teachers quality is important, the distribution of teachers in the 3T areas is also an important issue. The lack of teachers in the 3T area is actually only in certain areas, while in the other area the number of teachers is quite adequate. So, the very important issue to solve is the distribution of the teacher; Mismatch between teacher needs and supply. The lack of teachers is not the only problem faced by the society and government in that area, The teacher quality is also an important issue. Can students learn something if the teacher way in teaching is only in the classroom, open a book and read it aloud? This question is raging in the minds of thousands of students and their parents who are in small villages scattered throughout Indonesia, where the elementary and junior high school teachers generally come into class and "teach" from books without making a lesson plans;

Inadequate number and quality of facilities and infrastructure For example, there are many school buildings that are no longer suitable for use at various levels of education, ownership and use of facilities that are not utilized and low learning media, an incomplete library books make so many students not interested in literacy. This situation greatly affects the quality of learning in the 3T areas. This problem is already exist for a long time and not been resolved until now. Technological developments should be a hope to be a solution in various aspects, one of that is in the field of education.

Equal distribution of education quality, especially the quality of learning is necessary, equitable distribution will be achieved with the presence of proper technology. The presence of technology will have a positive impact on the education progress. Munir (2008:151) stated the development of science and technology in particular technology has a huge influence on the effectiveness and efficiency of the learning process.

Generally the region and school condition in the 3T areas, in terms of teachers, facilities, and learning resources, are lacking. With ICT (Information, Communication, Technology), these deficiencies can be minimized (Jaka Warsihna, 2013). The presence of these articles was caused due to of the awareness that so far the education quality in Indonesia has not been effective, this is a strong reason for the community, especially the government who has authority and responsibility to provide education in the 3T area (Frontier, Outermost and Least developed), the government is considered need to repair regulations on the components and quality of education in the 3T area, then every citizen has the opportunity to get educational services with the same quality as other regions and can compete in the current global arena. In addition to guarantee efforts and quality control, there is also necessary to increase physical facilities, such as providing supporting facilities and infrastructure in order to create a safe and comfortable learning process, one example is the availability of computer, internet and electricity facilities. With the supporting factors of adequate facilities and infrastructure, the improvement of the school education quality will increase at least equivalent to the education level in cities, (Putera, Rhussary, 2018)

Externally, the input components of education that have a significant effect on improving the quality of education include (1) the availability of educators and educational labors who are inadequate both in terms of quantity and quality, as well as their welfare; (2) learning infrastructure and facilities that are not available and have not been utilized optimally; (3) inadequate education funding to support the quality of learning; and (4) unefficient and effective learning process. One of the most important factors in affecting the education quality is the availability of educators and educational labors, (S. Suryana, 2020). Learning quality can be measured from the student learning achievement, the motivation of learning and student learning interest, from the research results that have been conducted (Sarlin, 2018, 2020) increasing the competitiveness of coastal children (Arwildayanto, Sarlin, Tuasikal, 2020), and student learning achievement (Sarlin, Cuga, Hulukati, Potabuga, 2020) show that students' interest in experiencing obstacles due to the method and media used is still conventional and also inadequate facilities and infrastructure, especially the classrooms are still of the old design which have never experienced any changes so this is an obstacle, Coastal children experience two basic obstacles, namely the family and school environment. The majority of family environment are fishermen consider education not really have an impact on life changes so that the children dropout rate at the elementary school is quite a lot, schools with makeshift facilities because the internet network and electricity are also obstacles for schools in carrying out fun learning, In terms of student achievement in coastal areas, it is quite low compared to urban areas. This is due to inadequate access to sources of knowledge and facilities. This is the condition of education in the 3T area. Also the literacy is very low, this adds to how the quality of our education is still quite far from expectations.

There are 4 main issues related to educational studies, so there are at least 4 things that become the focus point in educational studies in the 3T areas, namely: 1). Quality of education, (2). Equitable of education, (3). Educational relevance, and (4). The efficiency of education management (Widodo, 2015; Manggie, 2021). The four points of the focus of the education problem above, there is a special prudential of the central government and the local government to address this, the solving of the education problem above cannot be done partially or by case,

but must be carried out thoroughly in the context of togetherness. Quality education is education that is able to produce graduates who have the ability or potential, both academic competence and vocational competence, which are based on pe and social competence, as well as noble moral values, which as a whole constitute life skills (Sudrajat 2004). It can be concluded that the main problem in education, especially in the 3T areas, is the uneven distribution of education, which has an impact on the quality of learning. Various innovations and joint initiatives are needed to take roles in solving these problems. So the authors took the initiative to develop appropriate technology by developing a self-study platform (SSP), which is very much needed in the 3T area.

The Self-Study Platform (SSP) is a solution that is based on a multiple intelligences approach and also accommodates a variety of children's learning styles. However, the condition of electric networks and the internet access is remote, it is necessary to use offline and also without PLN network because it is solar cells to be an inseparable part of this platform if its use is in remote areas. Therefore, the presence of SSP based on solar sell as a solution is very appropriate. Independent (renewable) energy, namely solar cells with single-phase DC-AC inverters. The electrical energy generated from the Self-Study Platform solar cell is a home scale with low power dissipation that can be applied in schools to solve problems in the 3T area, especially in areas that have not been developed electric current (Ikhsan, 2019).

This research aims to improve the quality of education, especially the quality of learning in the 3T areas through the implementation of a self-study platform that can be carried out without an internet network. In addition, the self-study platform has its own sources of electricity (solar power) ready to use in the 3T area that does not have an electricity network and can be easily moved so that it is easier to use.

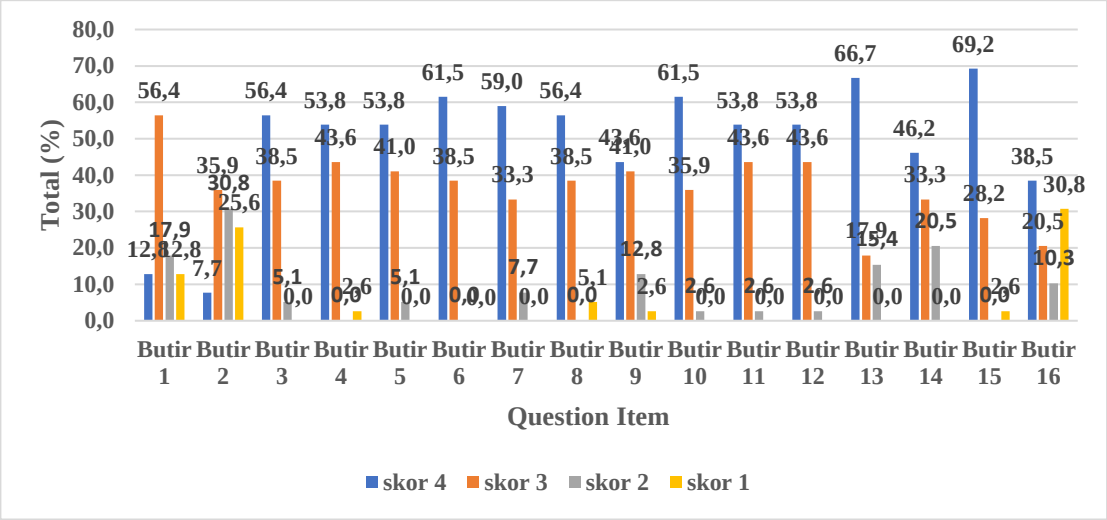
METHOD

This research is a mix-methods research, which means that in this research the author used two research approaches, namely qualitative and quantitative. Mixed-methods research is a study that combines qualitative and quantitative research (Creswell, 2010; Sugiyono, 2017). For a qualitative approach, researchers used a sociology approach and collective memory analysis (Berg, 2007; Biernacki, 2005; Zerubavel, 2003; Nash, 2001). A quantitative approach is used to analyze the needs data required by schools in 3T areas. The main goal to be produced is the reconstruction of teacher experience, school documents, learning references to increase learning quality. In addition, it is also important to see the relation between the concepts that have been developed to improve the schools learning quality in 3T area.

RESULTS

Analysis of the Needs and Conditions of Schools in Remote, Outermost, and frontier Areas (3T)

Based on the questionnaire's distribution of data, it was discovered that the teacher had a difficulty explaining the subject presented in the lesson since there weren't enough media or visual aids; learning media/visual aids are not varied and sufficient; teachers require animated/computer-based learning resources so that learning is fun; Teachers require tools for independent learning that students can use; teachers need learning media that are in accordance with the current trend of information technology development; teachers need mobile/flexible learning media that can be used in all classes; teachers update knowledge on the use of audio-visual media in the form of laptops, LCD projectors in delivering material in class because they still don't understand the use of these tools. The percentage of research findings based on learning needs is as follows:

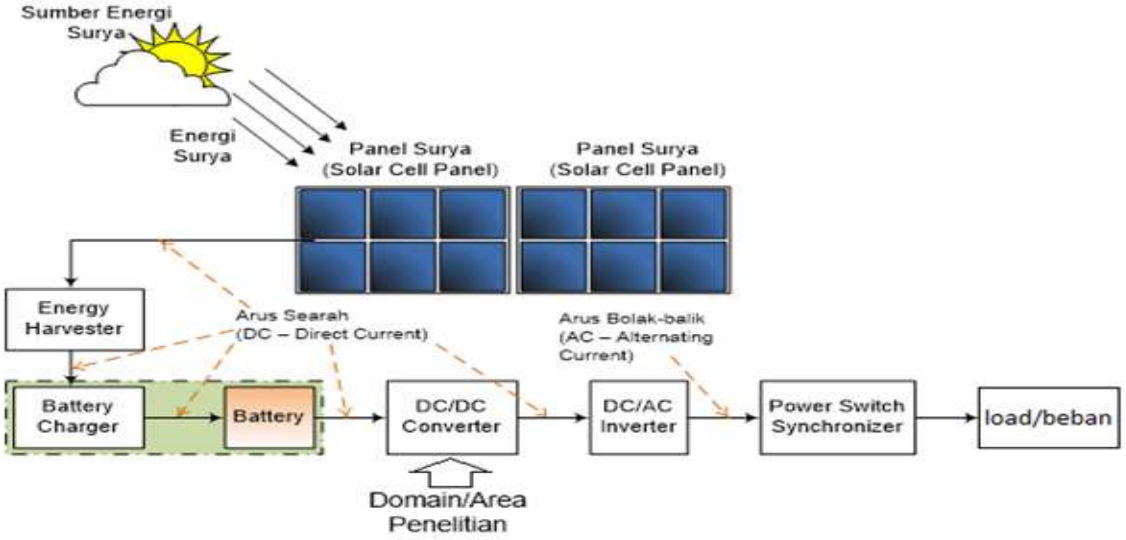


The analysis of the school's needs and conditions is depicted in the figure above. According to the data that has been collected and analyzed, the majority of schools actually need electricity, computers, teaching aids, a variety of media, and laptops or PCs to help in learning, in addition, teachers are limited in operating the technology such as computers, laptop, also LCD so the learning is still abstract and conventional.

Self-Study Platform (SSP) Design Based Solar cell in3T area

1. Components Arcithecture at Solar Cell

The researcher has been conducted research on solar cell, specifically in the inverter DC-AC section, which is an electronic device that can change the tension of DC (Director Current) into AC (Alternating Current/), where the AC flows is required to run electronic devices, such as laptops and projects. Research is being developed towards a DC-DC converter, which is an electronic device that can increase the DC voltage from 12 Volts to 48 Volts or on a home scale. Here are the pictures of the research result that has been developed by Ikhsan Hidayat.



These solar cells have been developed to a home scale with 48 voltages and suitable for use in the tropical areas such as Indonesia, the area that has not been terriable by electricity from PLN, this is a very appropriate solution.

2. Self-Study Platform (SSP) Design

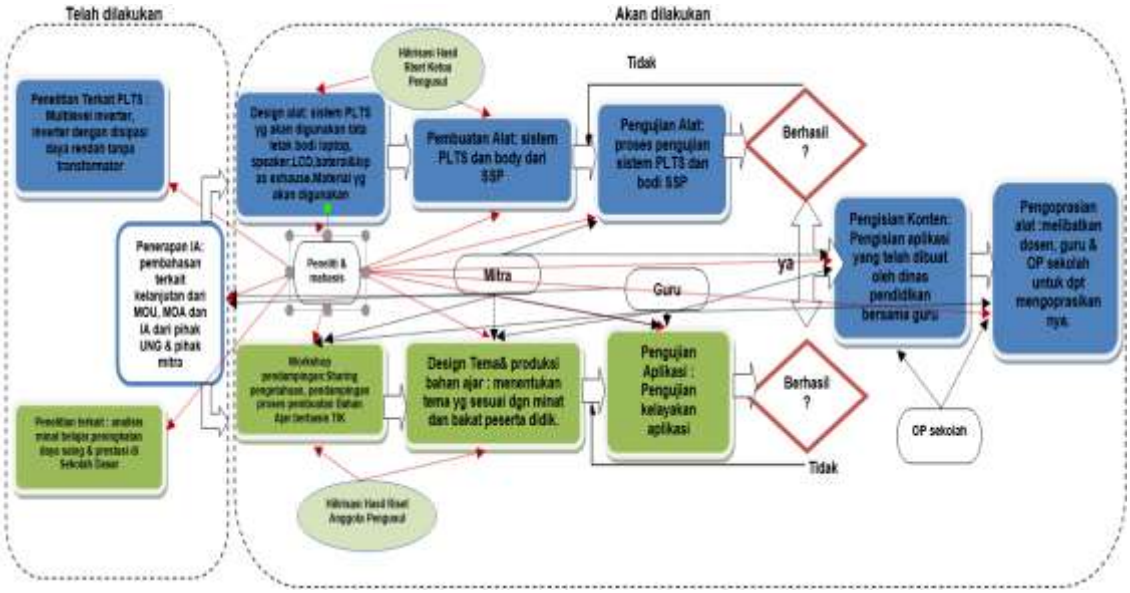
Interface Self-Study Platform hardware design. The learning device that means is a Self-Study Platform (SSP) without an internet network and electricity, which can be filled in by teachers or the local education office. With the aim of equalizing the curriculum in schools, the platform can stand alone without a network (internet connection) and electricity, which is suitable for schools in 3T areas. In this case SSP has advantages in terms of hardware, namely this SSP can be operated in areas with no internet network, also the areas with no PLN electricity, and can be moved from the school library to the classroom so it can be used to fill empty classes (by the school operators help), because the teacher was unable to attend, this device is also equipped with a projector that can display images towards the screen (LCD), then in terms of software (content), namely the content can be filled in by the teacher itself (through training), the application used is an application that is familiar to the teacher, so the teacher does not need to learn coding (practical), the content is based on the grade level (flexible), can be used as a school portal, the content is about an interactive materials and quizzes, for the quizzes there is 2-way interaction, an interactive and interesting content, increases the student learning interest, learning content can increase student knowledge, skills, and achievement, can improve students'

ability to fulfill the minimum competency assessment results, learning content through SSP are able to facilitate students with any learning style, such as Visual, Auditory, and Kinesthetic.

The Development Research and Implementation of Self-Study Platform (SSP) Based Solar Cell In 3T Area

Self-Study Platform (SSP) Research Development Flow

Research gradually consisted of producing ready-to-use products. Starting with Ihsan Hidayat's solar cell research, media development research conducted by Muhammad Yasser Arafat and research on student learning achievement. The results of this research became the basis for the development of SSP research, we introduce research patterns for self-study platform (SSP)-based solar cell development. The research development flow that has been developed is as follows.



The picture above shows the appearance of several stages carried out by the research team, activities that have been and are being carried out in research and development. Research activities consist of two main phases: the hardware phase (tools) and the software phase (applications).

The Implementation of Self-Study Platform (SSP) based Solar Cell In 3T areas for a Learning Quality Improvement.

Improving the learning quality involves various roles including the teacher as class control. Learning requires media that is interesting and appropriate to the materials, adequate learning resources, and a variety of learning methods. These needs will greatly help students understand learning materials, so the technology that can be embodied is very necessary. The Self-Study Platform (SSP) covers all of a student's learning needs with interesting learning content that matches their needs and learning style. Learning conditions in the 3T areas require special attention due to various limitations such as learning resources, learning media, non-existent electricity, and limited teachers. Implementation of devices without internet and electricity network is needed to improve the learning quality. That learning device is the Self-Study Platform (SSP) without an internet network and electricity, which can be filled in by teachers or the local education office, with the aim of appropriating the curriculum in schools, this platform can apply without a network (internet connection) and electricity based on the conditions of schools in 3T areas. SSP has advantages in terms of hardware, namely this SSP can be operated in areas with no internet network, also the areas with no PLN electricity, and can be moved from the school library to the classroom so it can be used to fill empty classes (by the school operators help), because the teacher was unable to attend, this device is also equipped with a projector that can display images

towards the screen (LCD), then in terms of software (content), namely the content can be filled in by the teacher itself (through training), the application used is an application that is familiar to the teacher, so the teacher does not need to learn coding (practical), the content is based on the grade level (flexible), can be used as a school portal, the content is about an interactive materials and quizzes, for the quizzes there is 2-way interaction, an interactive and interesting content, increases the student learning interest, learning content can increase student knowledge, skills, and achievement, can improve students' ability to fulfill the minimum competency assessment results.

DISCUSSION

Analysis of the Needs and Conditions of Schools in Remote, Outermost, and frontier Regions (3T) the questionnaire's distribution of data, it was discovered that the teacher had a difficulty explaining the subject presented in the lesson since there weren't enough media or visual aids; learning media/visual aids are not varied and sufficient; Children's tendency with a varied learning style also should be the attention of teachers at school due to the media elections are visual, auditory, kinesthetic (VAK) will help students understand the materials well based on to their learning style (Liew, Sidhu, and Baruan, 2015), (Gordon, Dryden, 2001), (Mills (Fleming, Mills (10), Flewadi; 11 K), (2015; 1 Mills (11). teachers require animated/computer-based learning resources so that learning is fun; Teachers require tools for independent learning that students can use; teachers need learning media that are in accordance with the current trend of information technology development; teachers need mobile/flexible learning media that can be used in all classes; teachers update knowledge on the use of audio-visual media in the form of laptops, LCD projectors in delivering material in class because they still don't understand the use of these tools. The problem will grately affect the learning quality, the appropriate learning media elections will help the students understand learning well and the teacher's learning ability in using learning media and resorces relevant with the student characteristic and subjects that are quite can achieve whole learning goals. (sari, 2019).

Improving the learning quality involves various roles including the teacher as class control in facilitating the achievement of goals through adequate learning experiences (Slameto, 2013). In learning, an interesting and appropriate media is required an adequate learning resources, various learning methods, (Hamalik, 2015). These needs will greatly help students understand learning materials, so the technology that can be embodied is very necessary. The Self-Study Platform (SSP) has encapsulated all the needs of students in learning because it is equipped with interesting learning content, based on needs and learning styles of students. The learning conditions in the 3T areas require special attention due to various limitations of learning resources, learning media, electricity that does not yet exist, limited teachers and etc. Implementation of devices without internet and electricity network is needed to improve the quality of learning. The learning conditions in the 3T Areas require specific attention due to various limitations of learning resources, learning media, electricity that does not yet exist, limited teachers and so on. Implementation of devices without internet and electricity network is needed in order to improve the quality of learning.

The learning conditions in the 3T Areas require special attention due to various limitations of learning resources, learning media, electricity that does not yet exist, limited teachers and etc. Implementation of devices without internet and electricity network is needed to improve the quality of learning. SSP can be used independently by students so the students can directly study independently according to the pair/topic they want. Either definition of independent learning or independence in learning is: "...the ability to take charge of one's learning" H. Holec, 1981, namely the ability of a person to be responsible for the learning process. Independent learning is also known as self-directed learning or independent learning or self-regulated learning. Harrison (1978), saw self-directed learning as a process of organizing instruction, namely focusing students' attention on the degree of autonomy over the instructional process. Guglielmino (1977) and Kasworm (1988), defined self-directed learning as self-direction as a personal attribute, with the aim education is described as developing individuals who can assume moral, emotional, and intellectual autonomy (Candy, 1991). Independent learning in the

sense of self-regulated learning according to Bell and Akroyd (2006) is part of cognitive learning theory which states that behavior, motivation, and aspects of the learning environment affect a student's achievement. Chamot (1999) states that, self-regulated learning is a learning situation in which students have control over the learning process through knowledge and application of appropriate strategies, understanding of their tasks, strengthening decision-making and learning motivation. Montalvo and Torres (2004) argue that students who have been able to carry out self-regulated learning will be reflected in their ability to actively participate in learning both in terms of metacognitive, motivational and seriousness of behavior in achieving learning goals, (Harli Trisdiono, 2013)

The Self-Study Platform (SSP) has advantages in hardware because this SSP can be operated in areas where there is no internet network yet, as well as areas that are still not supplied by power plants (PLN) and also flexible, which is easy to move from the school library to the classroom so that it can be used for fill empty classes (with the help of school operators) because the teacher is unable to attend, this device is also equipped with a projector that can display images towards the screen (LCD), then from a software (content) perspective, that is, content can be filled in by the teacher himself (through training), the application used is an application that is familiar to the teacher so that the teacher does not need to learn coding (practical), the content is according to the grade level (flexible), can be used as a school portal, the content contains interactive materials and quizzes, to quizzes have 2 way interaction (2 way communication), interactive and interesting content, increase student learning interest, learning content can increase student knowledge, skills, and achievement, can increase student ability to meet the minimum competency assessment results (AKM).

CONCLUSION

The presence of the Self-Study Platform in the 3T areas is to answer the educational gap, especially in the 3T areas which have inadequate facilities such as the unavailability of electricity networks and the internet. According to (Widodo, 2015), the focus of educational studies in the 3T area is 4 things, but this research focuses on the quality of learning. The Self-Study Platform was created based on a very urgent need as an effective learning tool that bridges between students and teachers in the limited conditions of the 3T areas which does not have an internet network and electricity. In addition, the Self-Study Platform is very interactive and flexible for students and teachers because the Self-Study Platform provides space for users to fill out, edit, update material content in the Self-Study Platform. This platform can be run in areas that do not have an electricity network because this platform uses independent (renewable) energy, namely solar cells with single-phase DC-AC inverters. The electrical energy generated from the Self-Study Platform solar cell is a home scale with low power dissipation that can be applied in schools to solve problems in the 3T area, especially in areas that have not yet had electricity that has been developed by researchers (Ikhsan, 2019). The presence of the Self-Study Platform in the 3T areas hoped that students will have the opportunity to get educational services of the same quality as other regions and be able to compete in the current global situation without discrimination as mandated by UUSPN. Solar-Based Self-Study Platform (SSP) is a platform that can bridge the intensity of systemic and synergic linkages between teachers, students, learning climate, and learning media in producing optimal learning processes and outcomes in accordance with curricular demands, especially in the 3T areas which have not been unraveled.

ACKNOWLEDGMENTS

This paper is the result of research that has been developed by lecturers in Electrical Engineering, Mechanical Engineering Education and Elementary School Teacher Education. We express our gratitude to the Ministry of Education, Culture and Higher Education as well as the Institute for Research and Community Service, Gorontalo State University, the Bone Bolango Education Office through the Matching Fund Program and also the 2022 UNG PNBP research.

REFERENCES

Arwildayanto, Sarlin. M, Tuasikal. J, (2020). Peningkatan Daya Saing Anak-Anak Pesisir Melalui Pendidikan Di Desa Bilato Kecamatan Bilato Kabupaten Gorontalo Provinsi Gorontalo. Jurnal : http://lonsuit.unismuhluwuk.ac.id/index.php/monsuan/article/view/750

Bell, P.D. dan Akroyd, D. (2006). Can Factors Related to Self Regulated Learning Predict Learning Achievement in Undergraduate Asynchronous Webbased Courses?. International Journal of Instructional Education and Distance Learning, ISSN : 1550-6908

Berg, B. (2007) An Introduction to Content Analysis. In: Berg, B.L., Ed., Qualitative Research Methods for the Social Sciences, Allyn and Bacon, Boston, 238-267.

Biernacki, R. 2005. "The Event of Place in Historical Sociology". In H.J. Graff., L.P. Moch., P. McMichael & J. Woesthoff (Eds), *Looking Backward and Looking Forward: Perspectives on Social Science History*. Madison: University of Wisconsin Press.

Candy, P. C. (1991). Self-direction for lifelong learning: A comprehensive guide to theory and practice. San Francisco: Jossey-Bass

Chamot, A.U. (2005). Language learning strategy instruction: current issues and research. Annual Review of Applied Linguistics. Cambridge University Press. 25, 112-120

Fleming dan Mills, 2011, Mengatasi Kesulitan Belajar Pada Anak, Javalitera, Yogyakarta.

Gordon, Dryden, dkk. (2001). Belajar Akan Efektif Kalau Anda Dalam Keadaan Fun. Bandung : Kaifa

Guglielmino, L.M., (1977). Development of the self-directed learning readiness scale. Unpublished Doctoral Dissertation. The University of Georgia, Atherns. GA

Hamalik, O. (2015). Proses Belajar Mengajar. Jakarta: Bumi Aksara; (cetakan ketujuh belas)

Harli Trisdiono, W. M. (2013). Strategi pembelajaran abad 21. Yogyakarta: Lembaga Penjaminan Mutu Pendidikan Prov. D.I. Yogyakarta.

Harrison, R. (1978). How to Design and Conduct Self-Directed Learning Experiences. Group and Organization Studies. 3(2), 149-167.

Holec, H. (1981). Autonomy and Foreign Language Learning. Oxford/New York: Pergamon Press. (First Published 1979, Council of Europe).

Ikhsan Hidayat, Faizal Arya Samman, Rhiza S Sadjad. (2019). Single-Phase DC-AC Inverter with Transformer and Transformerless and Low Power Dissipation Filter for Photovoltaic-Based Home-Scale Electric Power System. Jurnal: https://scholar.google.com/citations?view_op=view_citation&hl=id&user=iRQ2wpAAAAAJ&citation_for_view=iRQ2wpAAAAAJ:u-x6o8ySG0sC

Jaka Warsihna. (2013). Pemanfaatan Teknologi Informasi Dan Komunikasi (TIK) Untuk Pendidikan DI Daerah Terpencil, Tertinggal, Dan Terdepan (3T). Jurnal: Jurnal Teknodik Vol. 17 - Nomor 2, Juni 2013

Kasworm, C. (1988). Self-directed learning in institutional contexts: an exploratory study of adult self-directed learners in higher education. In H. Long & Associates, Self-directed learning: application and theory. Georgia: Adult Education Department, University of Georgia, 65-97

Kementerian Pendidikan Dan Kebudayaan Badan Penelitian Dan Pengembangan Pusat Penelitian Kebijakan Pendidikan Dan Kebudayaan. (2018). Model Penyelenggaraan Pendidikan untuk Daerah Terdepan, Terluar, dan Tertinggal yang Mengakomodasi Keberagaman Kondisi Lingkungan, Sosial, dan Budaya Setempat (Berbasis Kearifan Lokal). Jakarta: Pusat Penelitian Kebijakan Pendidikan dan Kebudayaan, Badan Penelitian dan Pengembangan, Kementerian Pendidikan dan Kebudayaan.

Liew, S., Sidhu, J. and Barua, A. (2015) 'The relationship between learning preferences (styles and approaches) and learning outcomes among preclinical undergraduate medical students', pp. 1–7. doi: 10.1186/s12909- 015-0327-0.

Manggie, Riuomand. (2021). Pemerataan Pendidikan dan Mutu Pendidikan daerah 3T. https://www.kompasiana.com/riumond73442/6102855f1525103eb530ff22/pemerataan-pendidikan-dan-mutu-pendidikan-di-daerah-3t

Montalvo, F. T, dan Torres, M. (2004). Self Regulated Learning: Current and Future Directions. Journal Educational Psychology, 2 (1), 1-34, 1696- 2095.

Muhammad Tommy Fimi Putera, Margaertha Lassni Rhussary. (2018). Peningkatan Mutu Pendidikan Daerah 3t (Terdepan,Terpencil Dan Tertinggal) Di Kabupaten Mahakam Hul. Jurnal: https://journals.umkt.ac.id/index.php/JEM/article/view/119/69 Nash, Kate. 2001. "The 'Cultural Turn' in Social Theory: Towards a Theory of Cultural Politics".*Sociology*Vol. 35, No.1, pp. 77-92.

Russel, Lou. (2011). The Accelerated Learning Fieldbook. Bandung: Nusa Media

Sari, P. (2019). Analisis terhadap kerucut pengalaman edgar dale Dan keragaman gaya belajar untuk memilih media Yang tepat dalam pembelajaran. MUDIR (Jurnal Manajemen Pendidikan) Avalaible online at : http://ejournal.insud.ac.id/index.php/mpi/index Volume 1, Nomor 1, Januari 2019

Sarlin, M.(2018). Analisis Minat Belajar Siswa Terhadap Perubahan Hasil Belajar Ilmu Pengetahuan Sosial DI SDN 104 Kota Utara Kota Gorontalo. Jurnal: Cokroaminoto Journal of Primary Education Vol.1 No.1 Oktober 2018

Sarlin, M. (2020). Hubungan Antara Minat Belajar dan Prestasi Belajar Siswa pada Pembelajaran IPS di Sekolah Dasar. Jurnal : https://ejournal-fip-ung.ac.id/ojs/index.php/jeej/article/view/140

Sarlin, M, Cuga, C, Hulukati, I, Potabuga, N. (2020). Persepsi Siswa Tentang Metode Mengajar Guru Dan Motivasi Terhadap Prestasi Belajar IPS Siswa Di Sekolah Dasar. Laporan Hasil Penelitian (belum diterbitkan)

Slameto. (2013). Belajar dan Faktor-Faktor Yang Mempengaruhi. Jakarta: Rineka Cipta (edisi Revisi)

Sudrajat, Hari. 2004. Manajemen Peningkatan mutu Berbasis Sekolah (Bandung: Cipta Cekas Grafika).

Sugiyono. 2017. Metode Penelitian Pendidikan; Pendekatan Kuatitatif, Kualitatif, dan R&D. Bandung: Afabeta

Suryana. (2020). Permasalahan Mutu Pendidikan Dalam Perspepektif Pembangunan Pendidikan. Jurnal: https://scholar.google.co.id/citations?view_op=view_citation&hl=id&user=CRZ8dsAAAAAJ&citation_for_view=CRZ8dsAAAAAJ:u-x6o8ySG0sCWidodo, H. (2015). Potret Pendidikan Di Indonesia Dan Kesiapannya Dalam Menghadapi Masyarakat Ekonomi Asia (Mea). Jurnal: Cendekia Vol. 13 No. 2, Juli - Desember 2015 https://jurnal.iainponorogo.ac.id/index.php/cendekia/article/view/250

Zerubavel, E. 2004.*Time Maps: Collective Memory and the Social Shape of the Past*. Chicago: University of Chicago Press.