Learning Management System Based on CMS WordPress: An Alternative Loss Learning Solutions at Sanggar Pasaran, Ngento Village, Kulon Progo

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Abstract. During the pandemic, many people are obliged to learn to experience "loss learning". This service aims to empower "Sanggar Pasaran" as a center for community learning activities into alternative learning spaces through the development of a WordPress CMS-based Learning Management System (LMS). Empowerment applies the Co-Creation method to develop LMS products as a vehicle for learning both construction and substance. The main target audience for LMS users is 4 managers of Sanggar Pasaran and 11 students through product trials. LMS development uses simple stages starting from needs analysis, product framework development, and product testing on a small and operational scale. Development respondents: Lecturers as learning media experts and LMS practitioners, namely managers and students. The target community empowerment activity produces a WordPress CMS-based LMS product as a website for Online Classes with features of Material Handout, Questions and Answers, Quiz, Collect Work, Consultation Appointment, Contributor, Register, and log in. The number of registered website users is 12 accounts consisting of 11 child accounts and 1 account as admin. The managers and students of Sanggar Pasaran stated that the features in the Online Class Website in the form of an LMS based on the WordPress Sanggar Pasaran CMS were easy to use. This LMS has the support of the surrounding community as an alternative learning tool that has been "lost" since the pandemic.

Keywords: Online Learning Media · WordPress CMS · Sanggar Pasaran · Loss Learning · Empowerment

1 Introduction

Education plays a significant role in the life of the nation and state and influences efforts to develop quality human resources. Based on Law Number 20 of 2003 concerning the National Education System article 13 paragraph 1, it is stated that the national education system in Indonesia is implemented through formal, non-formal and informal education channels, all of which can complement and enrich the quality of its implementation. Non-formal education or also known as out-of-school education in the National Education

System has a main function, namely, to prepare, improve, develop, and foster human resources so that they have the knowledge, skills, attitudes, and competitiveness to seize opportunities by optimizing existing resources in their environment (Sihombing, 2001; Suriyani et al., 2021).

Education outside of school is no less important than formal learning at school. This is because children need space for play, study, and exploration to self-actualization space that is relevant to their age development. Besides that, we have seen a dramatically accelerating pace in the development of new technologies and modernization, so the learning process must be accompanied by an increase in educational facilities to have a positive impact on the quality of education (Susanti, 2014). However, not all schools have complete facilities and comprehensive learning to support meeting the needs of these children. As a result, the quality of learning in schools has not been able to fully encourage the development of children's character optimally.

To improve the quality of education for children, many learning communities have emerged with various variations of learning. Having a learning process that places more emphasis on exploring and developing children's character, makes this kind of learning community or education outside of schools much in demand by children. That way at this time many alternative learning spaces create more creative and innovative learning methods so that children feel happy while learning.

One of the learning communities that are also actively developing methods and quality of learning in it is Sanggar Pasaran. The word Pasaran as the name of this learning community is an abbreviation of the Javanese language, namely Pasinaon, Pakaryan, and Dolanan which means a place to learn, work, and play. Located in Ngento Village, Sanggar Pasaran started its activities in July 2019 and has continued until now. Where the learning process carried out refers to the use of the Science, Technology, Engineering, Art and Mathematics (STEAM) learning method, so that it can encourage the development of children's potential and character that leads to 4C, namely Creativity, Communication, Collaboration, and Critical Thinking.

To be able to attract children's interest in learning, Sanggar Pasaran opens various classes, including Regular Class of Learning, Science Class, Cooking Class, Sports class, Craft Class, Art Appreciation Class, Sunday Ride Market and Field trip or Outing Class. All activities in these classes are always followed and get high enthusiasm from children from both Ngento Village and the surrounding area. Many children's participation certainly cannot be separated from the positive reception and response from the children's parents and the community of Ngento Village.

However, during the Covid-19 pandemic, just like learning in schools, the Sanggar Pasaran, whose majority of activities are direct meetings, was also forced to postpone all activities with children. Sanggar Pasaran has postponed activities for quite a long time, namely in June-August in 2020 and again had to cancel activities around May-June 2021 due to an increase in positive cases in Ngento Village. On the other hand, the limited human resources that manage Sanggar Pasaran is another factor why the process of developing learning media to adapt to changes in the environment is quite difficult to realize. Many children want activities to fill their free time during school learning carried out from home. This is a dilemma for the Sanggar Pasaran manager who wants

to keep the learning space open with various innovative activities, but the situation does not allow it.

Judging from the background of the problems faced, the innovation of developing internet technology-based learning media is considered important to do. This is because the manager also considers that the development of this learning media can help overcome the loss learning phenomenon faced by children during distance learning. The absence of direct interaction between student and teacher, limited communication with peers, limited study time and difficulty in the discussion process have an impact on decreasing academic achievement, relationship problems between friends and parents, as well as increasing the possibility of juvenile delinquency (Munawaroh & Nurmalasari, 2021; Blagg, 2021).

Considering that after the implementation of online learning from home activities, the number of internet usage is increasing. Data from the Indonesian Internet Service Providers Association (or APJII) show that internet usage penetration in Indonesia in 2019–2020 reached 73.7% or around 196.71 million people. Thus, the development of quality and digital-based learning resources in learning is very important to build an information-based education system (Zhu, 2010; Januarysman and Ghufron, 2016).

Efforts to provide access to adequate learning resources can be done through web-based learning media. Web-based learning media is Web-based learning media is one of the educational services that enables the implementation of edutainment by using internet media so that it can connect the learning process in an online learning room. If designed properly and appropriately, this web-based learning can be fun learning and has a high element of interactivity so that it can make children remember more learning materials.

Based on these problems and consideration of the needs and benefits of the program, it was finally decided together between the students and the manager of the Sanggar Pasaran to create a website for the Online Class of the Sanggar Pasaran. Where later this website can be used to bridge the learning process and teach children the use of internet technology which is in line with the STEAM learning method.

2   Method

This empowerment method used is the method of mentoring and collaboration through Co-Creation or joint ideas and Co-Funding or mutual funds. The mentoring method is used to ensure that the program implementation process can run in a structured and directed manner. Where the development of web-based instructional media will be done referring to the model developed by Alessi & Trollip (2001), which includes planning, design, and development.

Then the Co-Creation method is used so that students and the managers of Sanggar Pasaran can integrate each other's concepts, ideas, ideas, and abilities or expertise in the process of developing learning media or problem-solving. While the Co-Funding method is intended to obtain optimal results, the use of funding sources must also be optimized, namely through mutual funds.

Community empowerment strategies to solve problems that will be carried out are as follows: improving the skills of students and managers of the Sanggar Pasaran in

conceptualizing and creating the Online Classroom website for the Sanggar Pasaran as well as the features and content in it to develop learning media; develop collaborative empowerment patterns through mentoring and Co-Creation in skills transfer and innovation creation; provide training to children on the use of features on the Sanggar Pasaran Online Class website; and build a network of cooperation in the form of small groups who will become volunteer tutors to support the success and sustainability of the program.

3   Results and Discussion

3.1   Program Implementation

The implementation of this program begins with planning the design concept that will be used in the website and the available features. In the planning process, KKN students helped in conducting a brief survey of the children regarding the plan to create this online website. This is done to obtain a response from children regarding the creation of an online website while at the same time knowing what the child's obstacles are while studying at home.

Based on the survey results, on average children do have problems while studying at home because of the lack of clarity in the material provided by the teacher and the limited media or learning applications used. Then the children also responded by welcoming the creation of an online website because, in addition to being a bridge for the Sanggar Pasaran learning process, it can also support learning or completing school assignments.

After a brief survey was conducted, the KKN students together with the Sanggar Pasaran manager held several online meetings and discussions to complete the website creation process. At the design stage, students make a design about the appearance of the web that will be developed and start planning about the main menus of the web, web themes used, animations used, layout, and other visualizations. The header design concept and some of the logos used, all them were created by students using Canva software.

The development of this website-based learning media was developed using a CMS (Content Management System) WordPress and used in the learning process for online Market Workshop activities. Users can access this web learning media through the URL address https://class.sanggarpasaran.org/. The following is the display of web-based learning media which can be seen through Fig. 1.

The types of features that are available and can be used on the website are as follows: The first feature is question and answer. This feature can be used to conduct questions and answers about learning or school assignments that children do not understand. In using it, children are directed to the Send Questions section to fill in the available question fields and send them. Furthermore, when the website administrator receives a notification of incoming questions, they will be answered immediately with the help of a responsible tutor. To be able to see the answers or feedback that has been given, the child can see it in the Answers section (Fig. 2).

The second feature is collect works. This feature can be used to share and collect the results of challenges done by children at home. The goal is to replace these types of activities with face-to-face meetings and so that children can still fill their spare time with
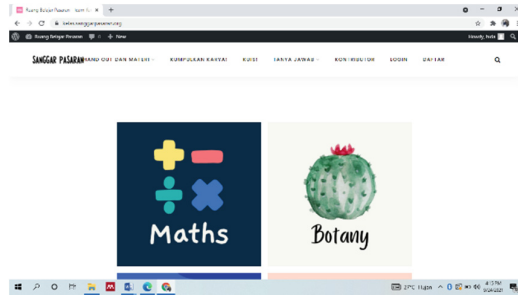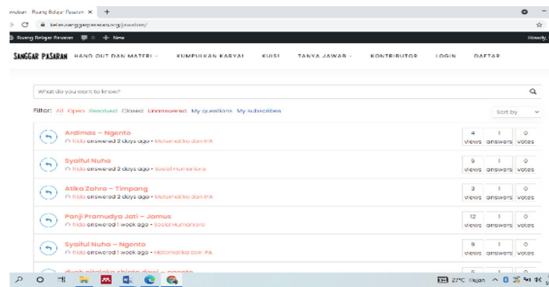
Fig. 1. Home Page
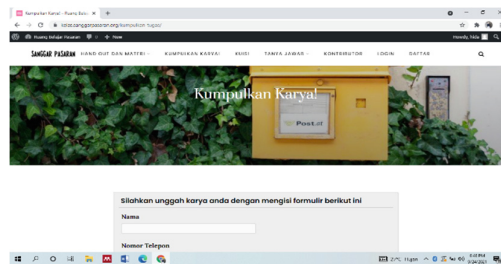

Fig. 2. Answer Page

Fig. 3. Collect Works Page

certain activities at home. So when accessing this feature, the child will get information about what challenges are given along with all the provisions. To attract interest and develop children's creativity, usually, in a challenge at the end of the collection there will be an announcement of ranking and distribution of rewards for those who participate (Fig. 3).

The third feature is quiz. This feature is intended to provide short quizzes that can be done by children at any time. In addition to being able to train children in doing quiz questions as well as increase knowledge, this feature is also intended to see the participation rate or activity of children in accessing websites for learning (Fig. 4).
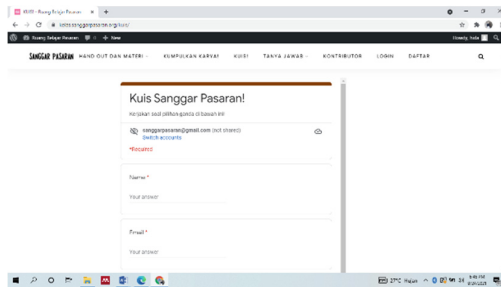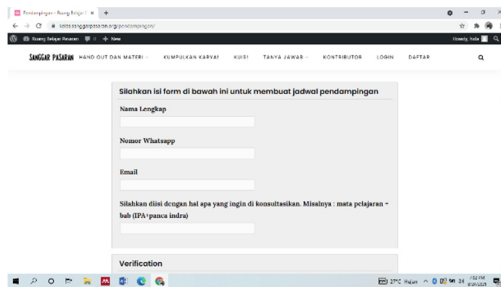
Fig. 4. Quiz Page

Fig. 5. Consultation Appointment Page

Fig. 6. Material Handout Page

The fourth feature is consultation appointment. This feature can be used for children who feel they need a special and intensive private related to the certain subject matter. So, through this feature, children can make mentoring schedules with tutors both online and offline (Fig. 5).

The fifth feature is material handout. This feature is used to provide a variety of subject matter including Mathematics and Science, Social Humanities, and Arts and Languages. In addition, it can also be filled with explanatory material related to the challenges that have been given (Fig. 6).

The next feature is register and log in. This feature is used for children who want to use all the features on the website. So if you want to be able to use the Q&A feature
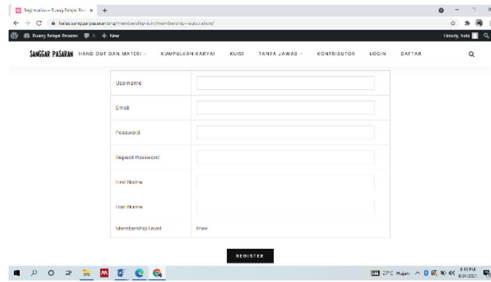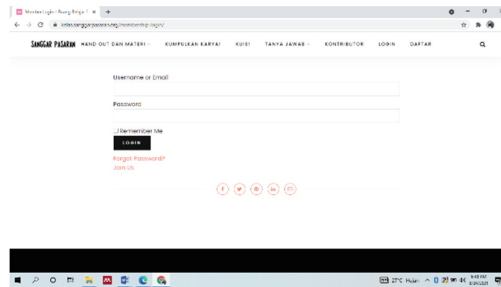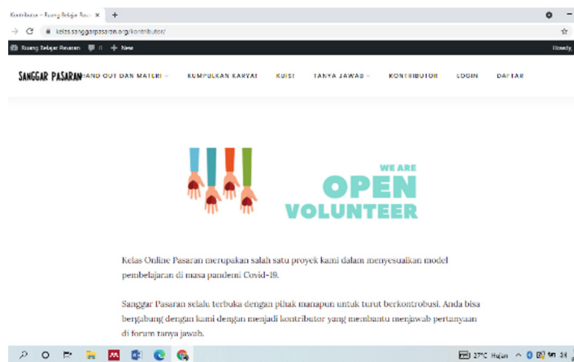
Fig. 7. Register Page

Fig. 8. Login Page

Fig. 9. Contributor Page

or access all the information on the website, the child needs to register using a g-mail account first. This is so that the managing admin has data on the users who access and know whether those who are accessing are children of the Sanggar Pasaran (Figs. 7 and 8).

The last feature is contributor. This feature explains open volunteer information for anyone willing to join and contribute to helping answer questions on the website (Fig. 9).

On August 7, 2021, a meeting was held to test the use of the main features, namely for Questions and Answers and the Create Consultation Schedule feature. From the test results, the website system can be used properly, it just requires a little improvement in the process of sending answers.

After improving the system, the website launching event will be held on August 8, 2021, inviting 11 children from the Sanggar Pasaran. In this activity, KKN students help demonstrate and teach children how to log in with g-mail or create a g-mail account, then try to use the Q&A feature and the Create Consultation Schedule feature. After testing the use of features on children, it turns out that children can access and use the features provided on the website either through laptops or handphones.

From the results of the program implementation, several children have started registering accounts to be able to access the features of the Sanggar Pasaran Online Class website. Furthermore, these children also use the Q&A feature to ask about school assignments that they do not understand. In addition, the manager of the Sanggar Pasaran together with KKN students can also use the website to provide information on the challenge of mini vlogs and writing short stories.

3.2   Program Evaluation

In the implementation of the Community Service Program in Ngento Hamlet, students encountered several supporting and inhibiting factors that greatly influenced the implementation of the program.

Some factors supporting the program are communication process and HR competence. The first factor is communication process. The friendliness of the people of Ngento Village and the manager of Sanggar Pasaran helped the process of establishing good communication with KKN students. The ease of the communication process, both online and during face-to-face meetings, makes every information conveyed right on target. This factor then also affects the smooth process of coordination to the development of learning media.

Another factor is HR competence**.** The managers of Sanggar Pasaran, who are all young, make the coordination and discussion process easier. This is because the competence and knowledge possessed by the Sanggar Pasaran manager as well as the experience they have make program ideas or ideas easier to plan. This means that the knowledge and experience that has been owned by the manager of the Sanggar Pasaran can be more easily integrated with the abilities and expertise of the students so that the programs implemented are of higher quality and useful.

While the obstacle factors in this program are coordination time. Although the communication process went smoothly, sometimes there were obstacles related to coordination time. This is because the busyness of each manager of Sanggar Pasaran makes it difficult to determine the schedule for face-to-face meetings and is mostly done at night.

The second obstacle is number of human resources. In managing the sustainability of the program, volunteers are needed who are willing to become tutors to help answer questions on the website or assist children with learning difficulties. The manager of the Sanggar Pasaran, which only has 4 people and has various activities, may not necessarily be able to answer questions from children or always update the website all the time.

The next is child age difference. The children who attend the Sanggar Pasaran are quite diverse in age, some are still in kindergarten and some are in junior high school. For children who are still in kindergarten or elementary school grades 1 and 2, of course, they cannot fully feel the benefits of the Sanggar Pasaran Online Class website because they have not been able to use it directly.

The last obstacle is making material handouts. The limited ability of students and managers of Sanggar Pasaran in formulating comprehensive, informative, and interesting material handouts makes the available materials only limited to short story introductions.

3.3   Program Sustainability Plan

From the planning process for the development of website-based learning media to its use by children and the managers of Sanggar Pasaran, several useful inputs were obtained for the sustainability of the program. Things that need to be improved and developed in the use of the Sanggar Pasaran Online Class website are as follows: Improved website layout and added new features that provide useful guidance; adding new informative materials and useful tips as well as input from children; collaborating with volunteers who are willing to become tutors or help develop material on the website.

4   Conclusion

The implementation of the KKN-PPM program by students has provided benefits for the development of learning media as well as bridging the learning process or activities of the Sanggar Pasaran through the creation of the Sanggar Pasaran Online Class website. The features available on the website include Material Handouts, Questions and Answers, Quizzes, Collect Work, Consultation Appointments, Contributors, and Register and Login. After launching the website, the Sanggar Pasaran learning process can take place again online through the use of the Questions and Answers feature by children and the Collect Work feature for giving interesting challenges.

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