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Project Design for Making an Encyclopedia of Traditional Banyumasan Food Using Digital Technology for Elementary School Student

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Abstract

This study aims to describe and formulate the design of a project to create an encyclopedia of traditional Banyumasan food using digital technology for elementary school students. This study uses a qualitative research approach. This article is the result of conceptual thinking (non-empirical research) carried out to produce a design-based pedagogical framework so that the design is formulated. The author uses established theories and concepts to analyze new things so as to give birth to new perspectives. Meanwhile, the analysis techniques for the theories and concepts used are content analysis and integrative synthesis techniques. The results of the study indicate that the project to create an encyclopedia of traditional Banyumasan food using digital technology can be implemented for sixth grade students with the theme of local wisdom. This project can be implemented in four steps. The first step taken in designing the project is to determine the relevance of the project for schools in Banyumas Regency. The second step taken in designing the project to create an encyclopedia of traditional Banyumasan food using digital technology is to develop the objectives, flow, and target achievements of the project. Then the third step taken in designing the project to create an encyclopedia of traditional Banyumasan food using digital technology is to organize the project stages consisting of: (1) the introductory stage; (2) the contextualization stage; (3) the real action stage; and (4) the evaluation stage. Meanwhile, the fourth step is to explain the implementation strategy at each stage of the project.

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Introduction

Learning is a process of self-change carried out by a student through learning activities organized by the teacher (Nast & Yarni, 2019). In these learning activities, students change themselves with a set of competencies that they possess, which consist of cognitive (knowledge), affective (attitude, behavior, or values) and psychomotor (skills) competencies (Meilani et al., 2021). This set of competencies then becomes the learning objectives that students must achieve. Teachers are also expected to provide students with a set of learning materials that can help them master the set of learning objectives (Anggraeni, 2018). This is done by teachers by designing learning plans based on the current curriculum. Basically, the curriculum is a guide used by teachers in transforming knowledge and skills in students so that students have a set of abilities needed by their society now and in the future (Southworth et al., 2023).

Currently, starting in the 2022/2023 academic year, a curriculum known as the "Merdeka Curriculum" has been in effect. Essentially, the "Merdeka Curriculum" is an alternative solution to address the problem of "lost character" among students, a negative consequence of online learning during the COVID-19 pandemic (Heryahya et al., 2022). In fact, optimal intellectual intelligence in students is greatly influenced by the character of the students themselves (Cuartero & Tur, 2021). This is what makes the independent curriculum have a greater emphasis on character education compared to the previous curriculum, namely the 2013 curriculum. The most essential thing that differentiates the independent curriculum from the 2013 curriculum is that in the independent curriculum there are project activities to strengthen the profile of Pancasila students or P5 which are not found in the 2013 curriculum (Ramadhan, 2023). Conceptually, a project as a strategy in learning presents various activities that are systematically arranged and implemented to produce certain products or behaviors in students based on the learning experiences they gain (Ceccon et al., 2025).

The P5 activity aims to shape Pancasilaist character in students by internalizing six dimensions within them. These six dimensions include: (1) faith, piety, and noble character; (2) global diversity; (3) mutual cooperation; (4) independence; (5) critical reasoning; and (6) creativity (Nurjatisari et al., 2023). These six dimensions are internalized through the implementation of project activities with the following themes: (1) Sustainable Lifestyle; (2) Local Wisdom; (3) Bhinneka Tunggal Ika; (4) Build Your Soul and Body; (5) Voice of Democracy; (6) Engineering and Technology to Build the Unitary State of the Republic of Indonesia; (7) Entrepreneurship; and (8) Employment. These themes have been determined by the Ministry of Education and Culture starting from elementary school to high school/vocational school level. However, at the elementary school level, the themes used are only themes from number 1 to number 7, adjusted to the characteristics of the students (Aulia et al., 2023). Teachers in the independent curriculum have the freedom to determine various projects for all themes that are implemented to internalize the six dimensions in P5. There are four principles that teachers must adhere to in determining P5 projects for each theme, namely: (1) holistic; (2) student-centered; (3)

exploratory; and (4) contextual (Idayanti, 2023). The independence or freedom of teachers in designing their curriculum gives them the ability to make innovations in the field of education (Kurucz et al., 2025).

The holistic principle requires teachers to design projects in which each step has meaning and is interconnected, ensuring that each step in the project is designed holistically and not in isolation. The student-centered principle requires teachers to design projects that facilitate students' active learning, fostering student-centered P5 activities. The exploratory principle requires teachers to design projects that provide ample opportunity for students to develop their potential through the diverse learning experiences they gain during the project. The implementation of these student-centered and exploratory principles empowers students to gain independence in their learning (Grøndahl Glavind et al., 2023). The contextual principle requires teachers to design projects that incorporate the diverse potential, resources, and local wisdom within the student's environment. This principle empowers teachers to design projects based on the diverse local wisdom of their communities.

Basically, the independent curriculum is a curriculum that accommodates various local wisdoms and regional cultures (Hilmin et al., 2022). So, it's entirely possible to design P5 activity based on local wisdom or regional culture. Products of local wisdom, such as traditional foods, dances, musical instruments, traditional clothing, ceremonies, and more, can serve as inspiration for designing P5 projects. Unfortunately, not all elementary school teachers have the skills to design P5 projects that incorporate local wisdom or regional culture. In fact, local wisdom in a community can be used as a learning resource for students to achieve the 6 dimensions in P5. This problem is not without cause. Not all teachers have adequate insight into the products of their communities' local wisdom. Understanding local wisdom is not just a means of broadening teachers' horizons, but also a strategic foundation for creating relevant and meaningful learning (Tariq, 2025). In the context of modern education, such as the independent curriculum, local wisdom serves as a bridge between academic theory and the realities of students' lives. When local wisdom is used as a learning resource, it contextualizes the learning material. This contextualization makes the learning material relevant and meaningful to students. The implication is that students will develop an emotional connection with their culture (Wati et al., 2025).

The design of this local wisdom-based P5 activity differs from the implementation of Project Based Learning (PBL). In PBL, students participate in learning activities through an in-depth investigation process into complex questions or problems (Markula & Aksela, 2022). Meanwhile, in the P5 activity design based on local wisdom, students participate in learning activities with activities and materials organized based on local wisdom products of the community. The design of P5 activities based on local wisdom is also different from P5 designs in general. P5 activity designs commonly used by teachers are based on activity themes established by the government (Fatah & Zumrotun, 2023). Meanwhile, P5 activity designs based on local wisdom are based on local wisdom products within a community.

In this article, the author describes the P5 project design, which is based on the local wisdom of the Banyumasan community, namely traditional food. Traditional food is used as a learning medium for the project to create a traditional food encyclopedia. This encyclopedia can later be used as a learning resource by students. Students are designed to create an encyclopedia of traditional Banyumasan food using digital technology. This is very possible considering that they are a digital generation accustomed to using various ICT (information and communication technology) tools.

So, the purpose of this article is to describe and formulate the design of a project to create an encyclopedia of traditional Banyumasan food using digital technology for elementary school students. The results of this article can be used by elementary school teachers to create a P5 teaching module on the theme of "local wisdom" through the project of creating an encyclopedia of traditional Banyumasan food.

Methods

This article is the result of conceptual thinking (non-empirical research) carried out to produce a design-based pedagogical framework so that a project design for creating an encyclopedia of traditional Banyumasan food using digital technology for elementary school students is formulated (Herianto, 2020). The author's conceptual thinking approach is theoretical. He uses established theories to analyze new concepts, generating new perspectives. The theory employed is Vygotsky's constructivism. This theory is supported by concepts related to the independent curriculum, such as enjoyable learning, project-based learning, digital technology-based learning, and learning that accommodates local wisdom.

Based on this theoretical approach, the information sources for this article were obtained from articles relevant to constructivism theory and project-based learning models that accommodate local wisdom and digital technology in the independent curriculum. These articles were obtained through a search on Google Scholar. He then analyzed the ideas within the articles using two techniques: content analysis and integrative synthesis.

In content analysis, he focused on directly examining the written content of the articles by highlighting paragraphs relevant to the research study (Lyhne et al., 2025). The results are then presented and analyzed using an integrative synthesis technique. Using this technique, the author connects various paragraphs related to the study theme into a new, more comprehensive and easier-to-understand conceptual framework, namely the conceptual design framework for the project of creating an encyclopedia of traditional Banyumasan food using digital technology for elementary school students (Brennen, 2024).

Result and Discussion

Theoretically, the implementation of P5 activities in the independent curriculum is based on Vygotsky's constructivism theory. Vygotsky's approach to constructivism emphasizes student-centered learning in the acquisition of knowledge and the process of interaction

with the social environment. Active student participation in learning as an application of constructivism theory can be applied in project-based learning. Project-based learning is a learning model that uses projects in problem-solving and student involvement independently with their peers in completing projects that have been designed by the teacher. This design is the initial stage that must be carried out by teachers in implementing projects. An important thing that must be done in the design is determining the project theme (Siregar et al., 2024). Local wisdom can be used as a basis for determining project themes.

A project to create an encyclopedia of traditional Banyumasan food using digital technology can be conducted for sixth-grade students on the theme of local wisdom. The first step in designing the project was to determine its relevance to schools in the Banyumas residency. This relevance is demonstrated by the encyclopedia's use as a learning resource for Arts, Culture, and Crafts (SBDB). Furthermore, the encyclopedia can serve as an effort to realize the school's role as an institution for transforming local cultural values (Iswatiningsih, 2019).

When students are involved in creating a traditional food encyclopedia using digital technology, they are simultaneously strengthening their digital literacy skills. This is a fundamental skill that children studying in elementary school in the digital age must master. With this skill, they can maximize their access to the rapidly evolving knowledge (Burke, 2026). A traditional food encyclopedia packaged with digital technology can not only strengthen digital literacy in students but also contribute to the development of a digital library, providing various digital learning resources to students as part of the digital generation. Digital literacy competencies will enable students as part of the digital generation to possess technical, cognitive, and socio-emotional competencies (Bélanger, 2026).

The second step taken in designing a project to create an encyclopedia of traditional Banyumasan food using digital technology is to compile the objectives, flow and target achievements of the project as follows:

Table 1. Project objectives, flow and target achievements

Objectives	(1) Students gain insight into traditional Banyumasan food. (2) Students develop the skills to document information about traditional Banyumasan food using digital technology in an encyclopedia. (3) Students are able to disseminate the encyclopedia of traditional Banyumasan food to the public.
Flow	This project has four main stages: (1) Introductory stage: introducing traditional Banyumasan food through youtube.com. (2) Contextualization stage: inviting students to discuss their experiences eating traditional Banyumasan food. Then, students are invited to discuss why they now prefer foods from other countries over traditional Banyumasan foods. (3) Real-action stage: In this stage, students are guided and facilitated by the teacher to search for data on various traditional Banyumasan foods using the search engine, namely Google. The results are then presented in a Microsoft Word sheet and edited into an encyclopedia. (4) Evaluation stage: During the evaluation, students disseminate the project results

	by uploading and sharing the encyclopedia of traditional Banyumasan food on social media.
Target achievement of project	In this project, the following P5 dimensions were internalized: (1) faith, piety, and noble morals; (2) global diversity; (3) critical reasoning; and (4) creativity. The dimensions of faith, piety, and noble morals are demonstrated by the students' honesty in including the website addresses they cited in creating the encyclopedia. The dimension of global diversity is demonstrated by the students' ability to use digital technology to create and disseminate the encyclopedia. The dimension of critical reasoning is demonstrated by the students' ability to process and present data related to Banyumasan traditional food obtained from the use of digital technology. Meanwhile, the creative dimension is demonstrated by the students' perseverance and ability to create an encyclopedia of Banyumas traditional food in an interesting and varied way.

The third step taken in designing a project to create an encyclopedia of traditional Banyumasan food using digital technology is to organize the project stages as follows:

Table 2. Project organization

Introduction Stage	Contextualization Stage	Real Action Stage	Evaluation Stage
(1) Introduction to traditional Banyumasan food (2 lesson hours)	(4) Ask students to cook mendoan and tell about their experiences when cooking (6 lesson hours)	(7) Invite students to describe traditional Banyumasan foods using the Google search engine by finding out the names of the foods, their districts of origin, and how they are prepared. (2 lesson hours)	(10) Ask students to reread the encyclopedia of traditional Banyumas food that they have compiled to avoid typos. (2 lesson hours)
(2) Identifying various types of traditional Banyumasan food around the home and school (2 lesson hours)	(5) Invite students to discuss why some students are reluctant to eat traditional Banyumasan food. (4 lesson hours)	(8) Guide students to transfer information they obtain through the Google search engine into a Microsoft Word file. (4 lesson hours)	(11) Guiding students to disseminate an encyclopedia of traditional Banyumasan food through social networks such as WhatsApp groups, Facebook, and Instagram. (2 lesson hours)
(3) Watch the instructions for making mendoan on youtube.com (2 lesson hours)	(6) Inventory various types of traditional Banyumasan food by typing it into Microsoft Word using the school's personal computer.	(9) Guide students to edit their work in a Microsoft Word file into an encyclopedia format to create an encyclopedia of traditional Banyumasan food.	(12) Reflect on student work to determine student learning outcomes and determine future projects. (2 lesson hours)

Introduction Stage	Contextualization Stage	Real Action Stage	Evaluation Stage
	(2 lesson hours)	(6 lesson hours)	

The fourth step taken in designing a project to create an encyclopedia of traditional Banyumasan food using digital technology is to describe the implementation strategy at each stage of the project as follows:

Table 3. Implementation of Project Strategy in Introduction Stage

Introduction Stage	Implementation of Project Strategy
(1) Introduction to traditional Banyumasan food (2 lesson hours)	1. The teacher asks students to observe various traditional Banyumasan foods displayed on an LCD projector and laptop. 2. The teacher asks students to name the various traditional Banyumasan foods they have just seen. 3. The teacher divides the class into four groups and asks them to discuss the flavors they can find in each traditional Banyumasan food. 4. The teacher gives each group the opportunity to present the results of their discussions. 5. The teacher clarifies the results of the discussions and presentations from the students..
(2) Identifying various types of traditional Banyumasan food around the home and school (2 lesson hours)	1. The teacher plays a video of traditional Banyumasan food using an LCD projector, laptop, and speakers. 2. The teacher asks students which traditional Banyumasan foods they have eaten and how they obtained them. 3. The teacher divides the class into four groups and asks them to discuss which traditional Banyumasan foods are favorites among the people around the school and why they are favorites. 4. The teacher gives each group the opportunity to present the results of their discussions. 5. The teacher clarifies the results of the discussions and presentations from the students.
(3) Watch the instructions for makingg mendoan on youtube.com (2 lesson hours)	1. The teacher plays a video showing how to make mendoan using an LCD projector, personal computer, and speakers. 2. The teacher asks students about the sequence of steps for makingg mendoan. 3. The teacher divides the class into four groups and asks them to rewrite the mendoan-makingg process by typing it into Microsoft Word using the school computer. 4. The teacher gives students the opportunity to explain the mendoan-makingg process sequentially based on the results of their discussion. 5. The teacher clarifies the results of the students' discussions and presentations.

Based on the description of the introductory stage above, it can be said that the introductory stage involves the transfer of knowledge about traditional Banyumasan food

through learning activities. The approach used in these learning activities is cooperative learning. This allows students to work collaboratively and actively to explore knowledge about traditional Banyumasan food. This approach teaches students to be bold in expressing their opinions while still paying attention to ethical aspects of discussion, being confident in expressing opinions and presenting the results of their discussions, and fostering a cooperative attitude (Mardika & Hasanah, 2020). The learning methods used include interactive lectures, question-and-answer sessions, and discussions. The media used include ICT equipment such as personal computers, LCD projectors, speakers, and internet access. The learning resource used is youtube.com.

Theoretically, project-based learning can be maximized when teachers are able to accommodate various digital tools. The presence of digital tools can be used to innovate learning media and resources in project-based learning (Severance et al., 2025). The use of digital technology, both as a learning medium and as a resource for introducing traditional Banyumasan food, can develop students' digital literacy skills. Digital literacy is one of the skills that must be developed in elementary school students during the implementation of the Merdeka Curriculum (Amelia Rizky Idhartono, 2022). The digital literacy competencies possessed by elementary school students can be used as capital for them to live in the era of globalization as well as the digital era for the benefit of accessing and processing knowledge for learning purposes through the sophistication of the internet so that they become individuals with global insight and global diversity (Handayani, 2023). Digital literacy, whether we realize it or not, has emerged as a basic competency for students living in the 21st century, which enables them to access information, create media content, and communicate effectively anytime and anywhere through a variety of rapidly developing technologies (Yuniar et al., 2025).

Then the strategies that can be carried out in the contextualization stage can be described in the following table:

Table 4. Implementation of Project Strategy in Contextualitaiton Stage

Contextualitation Stage	Implementation of Project Strategy
(4) Ask students to cook mendoan and tell about their experiences while cooking (6 lesson hours)	1. The teacher divides the class into four groups. 2. The teacher asks each group to work together to prepare the equipment and ingredients for cooking mendoan. 3. The teacher asks students to watch the video on how to make mendoan on YouTube. 4. The teacher instructs students to cook the mendoan and assists them throughout the cooking process. 5. The teacher asks students to serve their mendoan and exchange them with other groups. 6. The teacher asks students to share their experiences after cooking mendoan together as a group by typing them in a Microsoft Word document.

Contextualitation Stage	Implementation of Project Strategy
(5) Invite students to discuss why some students are reluctant to eat traditional Banyumasan food. (4 lesson hours)	1. The teacher shows a video of the phenomenon of children and young people preferring foreign food using an LCD projector and a personal computer. 2. The teacher asks students why some children are reluctant to eat traditional Banyumasan food. 3. The teacher divides the class into four groups and asks them to gather as much information as possible about the reasons why children are reluctant to eat traditional Banyumasan food. 4. The teacher asks students to type the information they have gathered on a Microsoft Word sheet. 5. The teacher reflects on the results of the students' discussion.
(6) Inventory various types of traditional Banyumasan food by typing it into Microsoft Word using the school's personal computer. (2 lesson hours)	1. The teacher divides the class into four groups and provides each group with a school computer. 2. Each group will inventory the various traditional Banyumasan foods by typing them into Microsoft Word using the school's personal computer, including at least 10 traditional foods. 3. The teacher will ask students to arrange the various traditional foods alphabetically on a Microsoft Word sheet. 4. The teacher will then ask students to save their work on the school computer. 5. The teacher will then explain to the students that they will be guided by the teacher to create an encyclopedia of traditional Banyumasan foods.

In the contextualization stage, the teacher still uses a cooperative approach. The learning methods employed are recitation, assignments, and discussions. The teacher also continues to use personal computers as the learning medium. However, what differentiates this stage from the previous stage is that the teacher begins to guide students in learning about traditional Banyumasan food using personal computers. The teacher assigns students assignments related to traditional Banyumasan food and then instructs them to complete these assignments using personal computers. This enhances students' knowledge of traditional Banyumasan food and improves their typing skills. Typing and writing on personal computers enhances students' digital literacy and writing skills, contributing to the implementation of STEAM (Science, Technology, Engineering, Art, and Math)-based learning within the Merdeka curriculum, specifically in utilizing technology for learning activities.

The strategies implemented in the concrete action stage are described in the following table:

Table 5. Implementation of Project Strategy in Real Action Stage

Real Action Stage	Implementation of Project Strategy
(7) Invite students to describe traditional Banyumasan foods	1. The teacher asks students to access the internet using the school computer in groups. 2. The teacher then asks students to access the Google search engine.

Real Action Stage	Implementation of Project Strategy
using the Google search engine by finding out the names of the foods, their districts of origin, and how they are prepared. (2 lesson hours)	3. The teacher instructs students to search for information about the names of various traditional foods in the Banyumas residency, their origins, and how they are made. 4. The teacher asks students to show their search results. 5. The teacher asks several students to share their findings on the Google search engine related to traditional Banyumas foods. 6. The teacher concludes the lesson and encourages students to find and enjoy traditional foods during the school holidays.
(8) Guide students to transfer information they obtain through the Google search engine into a Microsoft Word file. (4 class hours)	1. The teacher asks students to access the internet using the school computer in groups. 2. The teacher again instructs students to search for information about the various names of traditional foods in the Banyumas residency, their origins, and how they are made. 3. The teacher instructs students to copy and paste their search results related to traditional foods from Google into a Microsoft Word document. 4. The teacher asks students to practice copying and pasting their search results into a Microsoft Word document. 5. The teacher asks students to save their work on the computer.
(9) Guide students to edit their work in a Microsoft Word file into an encyclopedia format to create an encyclopedia of traditional Banyumasan food. (6 teaching hours)	1. The teacher simulates searching for traditional Banyumasan food using the Google search engine. The search content includes: (1) the name of the traditional Banyumasan food; (2) the district where the traditional Banyumasan food originates; (3) how to cook traditional Banyumasan food; and (4) how to serve traditional Banyumasan food. 2. The teacher simulates copying and pasting the information obtained from Google into a Microsoft Word document. 3. The teacher simulates editing the results of their work in a Microsoft Word file into an encyclopedia format, thus creating an encyclopedia of traditional Banyumasan food. 4. The teacher instructs students to edit their work to compile an encyclopedia of traditional Banyumasan food. 5. The teacher assists students in editing the work while compiling the encyclopedia of traditional Banyumasan food. 6. The teacher asks students to save their work on their computers.

Based on the description in the table above, it can be seen that during the concrete action stage, students compiled an encyclopedia of traditional Banyumasan food in groups using ICT tools. It can be said that this activity was not only carried out to transform knowledge about traditional Banyumasan food but also to transform students' skills in using ICT tools. Essentially, one of the functions of education is as a medium for cultural transformation, including the culture of local communities (Sujana, 2019). On the other hand, education does not deny modernity. It accommodates modernity by equipping students with the skills to use and utilize technology to complete their learning tasks. However, responding to modernity must also be accompanied by the development of

morals and character in accordance with religious norms (Hasibuan, 2016). This is done to ensure a balance between the transformation of knowledge, skills, and attitudes in educational practice.

The strategies that can be implemented during the evaluation stage are described in the following table:

Table 6. Implementation of Project Strategy in Evaluation Stage

Evaluation Stage	Implementation of Project Strategy
(10) Ask students to reread the encyclopedia of traditional Banyumas food that they have compiled to avoid typos. (2 learning hours)	1. The teacher checks the students' compilation of the traditional Banyumasan food encyclopedia. 2. The teacher asks the students to reread the traditional Banyumasan food encyclopedia they have compiled. 3. The teacher instructs the students to make corrections if they find any typos or errors. 4. The teacher asks each group to cross-check the information as a final step to ensure there are no typos in the traditional Banyumasan food encyclopedia they have compiled.
(11) Guiding students to disseminate an encyclopedia of traditional Banyumasan food through social networks such as WhatsApp groups, Facebook, and Instagram. (2 learning hours)	1. The teacher simulates converting a Word file to a PDF. 2. The teacher instructs students to convert their traditional food encyclopedia, which is still in Word format, to a PDF. 3. The teacher asks students to save the converted file. 4. The teacher asks students to upload the Banyumasan traditional food encyclopedia to their social media accounts, such as WhatsApp groups, Facebook, and Instagram, to disseminate the encyclopedia they have compiled.
(12) Reflect on student work to determine student learning outcomes and determine future projects. (2 learning hours)	1. The teacher gives students a reflection sheet. 2. The reflection sheet contains the following questions: (1) What benefits did you gain from compiling the encyclopedia of traditional Banyumasan food? (2) How did you feel while compiling the encyclopedia of traditional Banyumasan food? (3) How do you feel after reading the encyclopedia of traditional Banyumasan food that you have completed? (4) What activities will you work on next in the next project? 3. The teacher asks students to fill out the reflection sheet. 4. The teacher clarifies the reflection sheet that has been completed by the students.

During the evaluation phase, students successfully compiled an encyclopedia of traditional Banyumasan food in groups. Their success was followed by the teacher instructing them to disseminate the encyclopedia on social media platforms. This was done to teach students that each individual has an obligation to preserve local culture in their community. Afterward, the teacher asked students to fill out a reflection sheet to describe their emotional side when compiling the encyclopedia and to determine their next project. The emotional side in activity P5 describes the psychological side that surrounds students when carrying out activity P5. This psychological side is one that

cannot be ignored in learning activities (Hariyani, 2019). This is because the psychological side will provide teachers with a description regarding the formation of attitudes or behavior in students during P5 activities. Theoretically, reflection activities in the implementation of a project must be carried out by teachers to guide students so that students are able to capture various benefits from the experiences they have gained (Sung et al., 2024). Reflection activities in project-based learning can also be used by teachers to guide students in discovering the values contained in the experiences they have gained (Jin et al., 2024).

Based on the description above, the design for the Banyumasan food encyclopedia project utilizing digital technology can be formulated into four steps as follows:

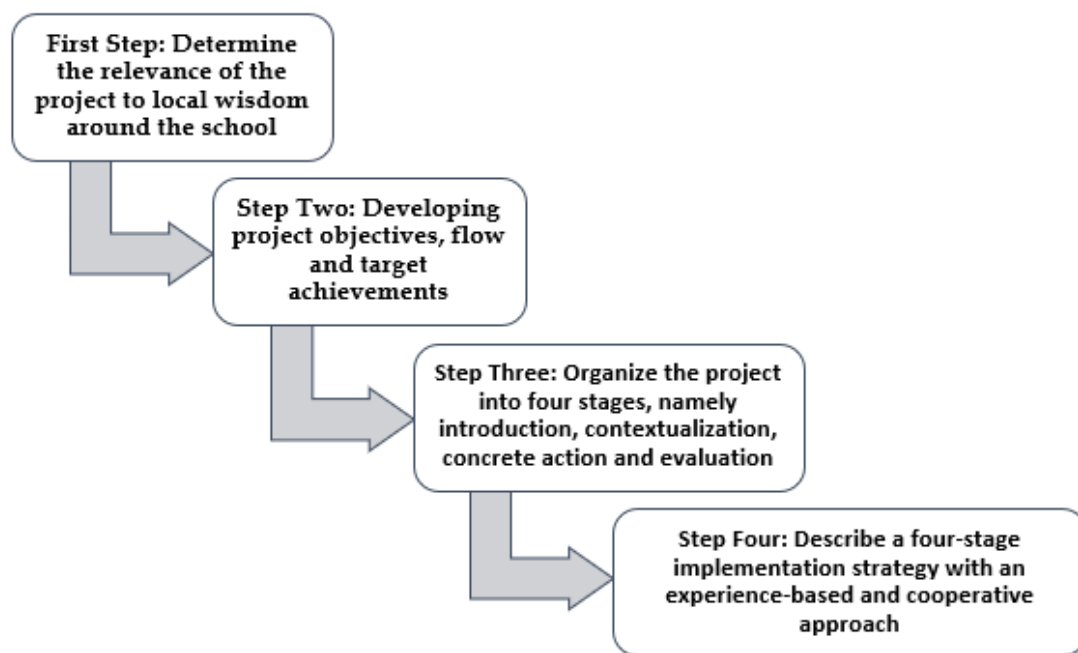


Figure 1. The design for the Banyumasan food encyclopedia project utilizing digital technology

The first step in designing the traditional food encyclopedia project is to determine the project's relevance to the local wisdom of the community surrounding the school. The second step is to develop the project's objectives, flow, and target achievements. The third step is to organize the project's stages into four phases: introduction, contextualization, concrete action, and evaluation. The introduction stage involves transforming knowledge related to Banyumasan traditional food. The contextualization stage involves making traditional Banyumasan food. The concrete action stage involves creating the traditional Banyumasan food encyclopedia using digital technology. The evaluation stage involves reflecting on student learning outcomes. The fourth step describes the implementation strategy for each stage of the project.

These four steps, when systematically implemented, will produce a pedagogically effective design. Furthermore, this design utilizes digital technology to support effective and efficient learning. The design for the Banyumasan food encyclopedia project utilizing

digital technology differs from P5. If P5 is aimed at actualizing the following 6 dimensions: (1) faith, piety, and noble character; (2) global diversity; (3) mutual cooperation; (4) independence; (5) critical reasoning; and (6) creativity, then the project design offered by the author is not only aimed at transforming character values based on local wisdom but also at strengthening digital literacy competencies in elementary school students. In elementary school, Information and Communication Technology (ICT) learning can be done in an integrated manner with learning in other subjects. However, this project is a development of the P5 concept in the independent curriculum. The challenges that will be faced in implementing this project design are the limited ownership of digital literacy competencies among teachers and the limited completeness of ICT equipment for students and schools.

Conclusion

A project to create an encyclopedia of traditional Banyumasan food using digital technology can be organized for sixth grade students on the theme of local wisdom. The project can be implemented through four steps. The first step taken in designing the project is to determine the relevance of the project for schools in the Banyumas residency. The second step taken in designing a project to create an encyclopedia of traditional Banyumasan food using digital technology is to compile the objectives, flow and target achievements of the project. Then the third step taken in designing a project to create an encyclopedia of traditional Banyumasan food using digital technology is to organize the project stages consisting of: (1) the introduction stage; (2) the contextualization stage; (3) the concrete action stage; and (4) the evaluation stage. While the fourth step is to describe the implementation strategy at each stage of the project. Creating an encyclopedia of traditional Banyumasan food using digital technology for elementary school students can not only be used as an activity to internalize the six dimensions in the Pancasila student profile. But also to preserve the culture of the Banyumasan community while developing digital literacy competencies in elementary school students.

References

- Amelia Rizky Idhartono. (2022). LITERASI DIGITAL PADA KURIKULUM MERDEKA BELAJAR BAGI ANAK. *Devosi: Jurnal Teknologi Pembelajaran*, 12(2), 91-96. <https://doi.org/10.36456/devosi.v6i1.6150>
- Anggraeni, P. (2018). ANALISIS KETERKAITAN ANTAR KOMPONEN DALAM RENCANA PELAKSANAAN PEMBELAJARAN DI SEKOLAH DASAR KOTA SUMEDANG. *El-Ibtidai:Journal of Primary Education*, 1(1), 64. <https://doi.org/10.24014/ejpe.v1i1.5069>
- Aulia, D., Hadiyanto, & Rusdinal. (2023). Analisis Kebijakan Kurikulum Merdeka Melalui Implementasi Proyek Penguatan Profil Pelajar Pancasila di Sekolah Dasar. *Jurnal Pemikiran Dan Pengembangan Sekolah Dasar (JP2SD)*, 11(1), 122-133. <https://doi.org/10.22219/jp2sd.v11i1.25923>

- Bélanger, A. (2026). In Support of the Continued Role of Libraries in Digital Literacy. *The International Information & Library Review*, 58(1), 160–168. <https://doi.org/10.1080/10572317.2026.2614244>
- Brennen, B. S. (2024). *Qualitative Research Methods for Media Studies* (4th ed.). Routledge. <https://doi.org/10.4324/9781003457411>
- Burke, P. (2026). ‘We all have to do our bit’: Literacy practice, perceptions and policy in Irish primary and post-primary schools. *Irish Educational Studies*, 45(1), 91–120. <https://doi.org/10.1080/03323315.2024.2370795>
- Ceccon, C., Schachner, M. K., Umaña-Taylor, A. J., & Moscardino, U. (2025). Promoting adolescents’ cultural identity development: A pilot study of the identity project intervention in Italy. *Cultural Diversity & Ethnic Minority Psychology*, 31(2), 386–392. <https://doi.org/10.1037/cdp0000643>
- Cuartero, N., & Tur, A. M. (2021). Emotional intelligence, resilience and personality traits neuroticism and extraversion: Predictive capacity in perceived academic efficacy. *Nurse Education Today*, 102, 104933. <https://doi.org/10.1016/j.nedt.2021.104933>
- Fatah, M. A., & Zumrotun, E. (2023). Implementasi Projek P5 Tema Kewirausahaan Terhadap Kemandirian Belajar Di Sekolah Dasar. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, 6(2), 365–377. <https://doi.org/10.54069/attadrib.v6i2.603>
- Grøndahl Glavind, J., Montes De Oca, L., Pechmann, P., Brauner Sejersen, D., & Iskov, T. (2023). Student-centred learning and teaching: A systematic mapping review of empirical research. *Journal of Further and Higher Education*, 47(9), 1247–1261. <https://doi.org/10.1080/0309877X.2023.2241391>
- Handayani, N. N. L. (2023). Peningkatan Literasi Digital Dan Karakter Peserta Didik Melalui Implementasi Kurikulum Merdeka. *Lampuhyang*, 14(2), 144–159. <https://doi.org/10.47730/jurnallampuhyang.v14i2.354>
- Hariyani, Y. (2019). Peran Penting Psikologis terhadap Peserta Didik SD melalui Pembelajaran Tematik-Terpadu. *EDURELIGIA; JURNAL PENDIDIKAN AGAMA ISLAM*, 2(2), 70–76. <https://doi.org/10.33650/edureligia.v2i2.456>
- Hasibuan, N. (2016). PENGEMBANGAN PENDIDIKAN ISLAM DENGAN IMPLIKASI TEKNOLOGI PENDIDIKAN. *FITRAH: Jurnal Kajian Ilmu-Ilmu Keislaman*, 1(2), 189. <https://doi.org/10.24952/fitrah.v1i2.313>
- Herianto, H. (2020). *Teknik Menulis Artikel Konseptual*. Open Science Framework. <https://doi.org/10.31219/osf.io/6y3as>
- Heryahya, A., Herawati, E. S. B., Susandi, A. D., & Zulaiha, F. (2022). Analisis Kesiapan Guru Sekolah Dasar dalam Implementasi Kurikulum Merdeka. *Journal of Education and Instruction (JOEAI)*, 5(2), 548–562. <https://doi.org/10.31539/joeai.v5i2.4826>
- Hilmin, H., Dwi Noviani, & Ani Nafisah. (2022). KEBIJAKAN PEMERINTAH DAERAH DALAM PENERAPAN KURIKULUM MERDEKA. *Khatulistiwa: Jurnal Pendidikan Dan Sosial Humaniora*, 2(2), 148–162. <https://doi.org/10.55606/khatulistiwa.v2i2.565>
- Idayanti, S. (2023). ANALISIS KESESUAIAN P5P2RA DENGAN PRINSIP PELAKSANAAN DAN DAMPAKNYA TERHADAP PERILAKU PESERTA DIDIK. *Wawasan: Jurnal Kediklatan Balai Diklat Keagamaan Jakarta*, 4(1), 48–66. <https://doi.org/10.53800/wawasan.v4i1.228>

- Iswatiningsih, D. (2019). Penguatan Pendidikan Karakter Berbasis Nilai-Nilai Kearifan Lokal di Sekolah. *Satwika : Kajian Ilmu Budaya Dan Perubahan Sosial*, 3(2), 155–164. <https://doi.org/10.22219/satwika.v3i2.10244>
- Jin, H., Yan, D., & Krajcik, J. (2024). *Handbook of Research on Science Learning Progressions* (1st ed.). Routledge. <https://doi.org/10.4324/9781003170785>
- Kurucz, E., Spencer-Mueller, E. K., Hands, C., Gudz, N., & Archer, K. (2025). Co-constructing educational innovations for an uncertain future: Design thinking and developmental evaluation in the school reform process. *Evaluation and Program Planning*, 111, 102559. <https://doi.org/10.1016/j.evalprogplan.2025.102559>
- Lyhne, C. N., Thisted, J., & Bjerrum, M. (2025). Qualitative content analysis–framing the analytical process of inductive content analysis to develop a sound study design. *Quality & Quantity*, 59(6), 5329–5349. <https://doi.org/10.1007/s11135-025-02220-9>
- Mardika, F., & Hasanah, R. U. (2020). PENINGKATAN KEPERCAYAAN DIRI SISWA SMP DENGAN PEMBELAJARAN KOOPERATIF TIPE THINK PAIR SQUARE. *AXIOM: Jurnal Pendidikan Dan Matematika*, 9(1), 87. <https://doi.org/10.30821/axiom.v9i1.7267>
- Markula, A., & Aksela, M. (2022). The key characteristics of project-based learning: How teachers implement projects in K-12 science education. *Disciplinary and Interdisciplinary Science Education Research*, 4(1), 2. <https://doi.org/10.1186/s43031-021-00042-x>
- Meilani, L., Bastulbar, B., & Pratiwi, W. D. (2021). Dampak Pembelajaran Jarak Jauh Terhadap Aspek Kognitif, Afektif, dan Psikomotor Bagi Siswa Sekolah Menengah Atas (SMA). *Jurnal Pendidikan Bahasa Dan Sastra Indonesia Undiksha*, 11(3). <https://doi.org/10.23887/jjpbs.v11i3.31476>
- Nast, T. P. J., & Yarni, N. (2019). TEORI BELAJAR MENURUT ALIRAN PSIKOLOGI HUMANISTIK DAN IMPLIKASINYA DALAM PEMBELAJARAN. *Jurnal Review Pendidikan Dan Pengajaran*, 2(2), 270–275. <https://doi.org/10.31004/jrpp.v2i2.483>
- Nurjatisari, T., Sukmayadi, Y., & Nugraheni, T. (2023). Penguatan Profil Pelajar Pancasila melalui Kemasan Pertunjukan Seni pada Kurikulum Merdeka di Sekolah Dasar. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 7(4), 4013–4024. <https://doi.org/10.31004/obsesi.v7i4.4836>
- Ramadhan, I. (2023). DINAMIKA IMPLEMENTASI KURIKULUM MERDEKA DI SEKOLAH PADA ASPEK PERANGKAT DAN PROSES PEMBELAJARAN. *Academy of Education Journal*, 14(2), 622–634. <https://doi.org/10.47200/aoej.v14i2.1835>
- Severance, S., Miller, E. A., & Krajcik, J. (2025). IF science AND making AND computing: Insights for project-based learning and primary science curriculum design. *Studies in Science Education*, 61(2), 173–237. <https://doi.org/10.1080/03057267.2024.2397300>
- Siregar, T. E., Luali, N., Vinalistyosari, R. C., Hanurawan, F., & Anggraini, A. E. (2024). Implementation of Vygotsky's Constructivism Learning Theory through Project-Based Learning (PjBL) in Elementary Science Education. *Al Qalam: Jurnal Ilmiah Keagamaan Dan Kemasyarakatan*, 18(4), 2586. <https://doi.org/10.35931/aq.v18i4.3620>
- Southworth, J., Migliaccio, K., Glover, J., Glover, J., Reed, D., McCarty, C., Brendemuhl, J., & Thomas, A. (2023). Developing a model for AI Across the curriculum: Transforming the higher education landscape via innovation in AI literacy.

Computers and Education: Artificial Intelligence, 4, 100127.
<https://doi.org/10.1016/j.caeai.2023.100127>

- Sujana, I. W. C. (2019). FUNGSI DAN TUJUAN PENDIDIKAN INDONESIA. *Adi Widya: Jurnal Pendidikan Dasar*, 4(1), 29. <https://doi.org/10.25078/aw.v4i1.927>
- Sung, S., Thomas, D., & Rikakis, T. (2024). Enacting Transdisciplinary Values for a Postdigital World: The Challenge-Based Reflective Learning (CBRL) Framework. *Postdigital Science and Education*. <https://doi.org/10.1007/s42438-024-00485-1>
- Tariq, M. U. (2025). Bridging Home and Classroom: Harnessing Cultural and Ecological Wisdom in Teacher Education. In L. B. Liu, N. Mohamed, C.-C. Lin, C. V. Bauler, & K. Kapur (Eds.), *Funds of Knowledge in Teacher Education* (pp. 407–426). IGI Global. <https://doi.org/10.4018/979-8-3693-8094-9.ch018>
- Wati, R., Dewi, S. L., & Iskandar, I. (2025). Implementasi Kurikulum Merdeka Berbasis Kearifan Lokal di SDN Gugus Tiga Kecamatan Babussalam Aceh Tenggara. *EDU SOCIETY: JURNAL PENDIDIKAN, ILMU SOSIAL DAN PENGABDIAN KEPADA MASYARAKAT*, 4(3), 1959–1971. <https://doi.org/10.56832/edu.v4i3.667>
- Yuniar, Y., Wigati, I., Astuti, M., & Ramdani, Z. (2025). Identification of student digital literacy competencies using Rasch model analysis. *Journal of Applied Research in Higher Education*, 1–13. <https://doi.org/10.1108/JARHE-03-2025-0185>