



Development of CTL video media based to strengthen Pancasila character in elementary school

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ABSTRACT

The decline in students' interest and character development in elementary schools highlights the urgency of designing innovative learning media that integrate value-based education with engaging methods. Video learning media based on Contextual Teaching and Learning (CTL) convey messages through visual and audio elements, enabling students to construct knowledge in a meaningful way while internalizing values. This study aimed to develop CTL-based video learning media to strengthen Pancasila character among grade IV students at SD Negeri 104282 Batu Lokong. The research adopted Thiagarajan's 4D model, which consists of stages: Define, Design, Develop, and Disseminate. The feasibility of the developed media was validated by material, media, and language experts, all categorized as very feasible. Practicality testing with classroom teachers showed that the media was very practical. Effectiveness testing using N-Gain analysis indicated high and moderate improvement levels in strengthening students' Pancasila character, supported by reliable results. These findings confirm that CTL-based video learning media is feasible, practical, and effective in fostering Pancasila character in elementary students. It is therefore recommended that schools adopt this media as an alternative resource to integrate character education with meaningful learning. Future studies may extend its application to other subjects or different educational levels to further explore its potential impact.

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ABSTRAK

Menurunnya minat dan pengembangan karakter siswa di sekolah dasar menyoroti urgensi merancang media pembelajaran inovatif yang mengintegrasikan pendidikan berbasis nilai dengan metode yang menarik. Media pembelajaran video berbasis Contextual Teaching and Learning (CTL) menyampaikan pesan melalui elemen visual dan audio, yang memungkinkan siswa membangun pengetahuan secara bermakna sambil menginternalisasi nilai-nilai. Penelitian ini bertujuan untuk mengembangkan media pembelajaran video berbasis CTL untuk memperkuat karakter Pancasila pada siswa kelas IV di SD Negeri 104282 Batu Lokong. Penelitian ini mengadopsi model 4D Thiagarajan, yang terdiri dari tahapan Define, Design, Develop, dan Disseminate. Kelayakan media yang dikembangkan divalidasi oleh ahli materi, ahli media, dan ahli bahasa, semuanya dikategorikan sangat layak. Uji praktikalitas dengan guru kelas menunjukkan bahwa media sangat praktis. Uji efektivitas menggunakan analisis N-Gain menunjukkan tingkat peningkatan yang tinggi dan sedang dalam memperkuat karakter Pancasila siswa, didukung oleh hasil yang reliabel. Temuan ini menegaskan bahwa media pembelajaran video berbasis CTL layak, praktis, dan efektif dalam menumbuhkan karakter Pancasila pada siswa sekolah dasar. Oleh karena itu, disarankan agar sekolah mengadopsi media ini sebagai sumber daya alternatif untuk mengintegrasikan pendidikan karakter dengan pembelajaran yang bermakna. Penelitian selanjutnya dapat memperluas penerapannya ke mata pelajaran lain atau jenjang pendidikan yang berbeda untuk lebih mengeksplorasi potensi dampaknya.

Kata Kunci: contextual teaching learning; CTL; media video; sekolah dasar

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INTRODUCTION

Education stands as a crucial pillar in the development of a nation's civilization, emphasizing the importance of understanding and applying values rooted in national culture. Proper education equips individuals to resolve personal, societal, and national challenges. Aqib in his book entitled *"Manajemen Belajar dan Pembelajaran di Sekolah"* describe the learning process as a constitutes systematic effort by educators to create effective and efficient instruction through planning, implementation, and evaluation. Learning in this era of globalization plays a crucial role, particularly in shaping resilient individuals who are capable of mastering science and technology. Notably, *the Komisi Perlindungan Anak Indonesia (KPAI) reported a 17.5% increase in school-related violence in 2023* compared to the previous year.

Character strengthening forms the foundation for cultivating noble, civilized, and cultured citizens grounded in Pancasila and the 1945 Constitution of the Republic of Indonesia. SD Negeri 104282 Batu Lokong is situated in a palm oil plantation zone, with students predominantly coming from families that work as plantation employees. The homogeneity of the student background and a lack of courage in questioning or expressing opinions influence their character and everyday decision making. Rofico in his books entitled *"Guru Milenial dan Tantangan Society 5.0."* explain that the new paradigm calls for transforming traditional instruction into differentiated learning focused on competency and character enhancement aligned with Pancasila values. Learning is essentially a process of personality change manifesting as skills, attitudes, habits, and intelligence (Karimullah et al., 2022; Yusri et al., 2020).

Teachers, as the principal resource in education, are responsible for honing competencies to guide students toward expected outcomes. Permendikbudristek Nomor 40 Tahun 2021 Tentang Penugasan Guru Sebagai Kepala Sekolah stipulates that teachers are professional educators tasked with teaching, guiding, directing, and evaluating students across early childhood, formal, primary, and secondary education. Highly competent teachers adapt to changing times and challenges. Advances in technology not only present challenges but also offer opportunities for students to develop critical skills in line with the Profil Belajar Pancasila. In response, the government initiated the *Merdeka Belajar* (Freedom to Learn) policy to foster innovation and contextual quality in learning.

Keputusan Kepala BSKAP Nomor 009 Tahun 2022 tentang Dimensi, Elemen, dan Subelemen Profil Pelajar Pancasila pada Kurikulum Merdeka includes dimensions such as faith and piety, global diversity, collaboration, independence, creativity, and critical reasoning, each with specific sub-elements. For instance, faith and piety encompass religious morality, personal ethics, social ethics, environmental ethics, and civic ethics. Global diversity highlights the importance of cultural appreciation, effective communication skills, self-reflection, personal responsibility, and social justice. Collaboration emphasizes teamwork, caring, and sharing.

Learner-centered instruction that aligns with the Profil Pelajar Pancasila is effective when students embody the values of religiosity, nationalism, independence, collaboration, and integrity. Effectiveness is evident when students practice these values in real-life settings. However, misconceptions often occur in Pancasila Education, where learning is reduced to rote verbal memorization without activities that genuinely foster the strengthening of students' Pancasila character (Prayudha, 2024).

Lubis et al, in their book entitled *"Pendidikan Pancasila dan kewarganegaraan SD/MI: buku ajar untuk PGSD/PGMI"* explain that Pancasila Education aims to instill the practical application of Pancasila values in daily life, fostering law-abiding citizens in accordance with religious teachings and the 1945 Constitution. However, rapid technological advancements present significant challenges, particularly for elementary students, including changes in communication patterns and the spread of values such as atheism, as well as the growing influence of digital culture (Setia, 2021). These developments demand an educational

process that not only strengthens moral behavior but also cultivates wise decision-making skills to prepare students for both personal and national life.

The ratification of the Convention on the Rights of the Child by Indonesia is reflected in the 2002 constitutional amendment introducing Article 28B (2), which guarantees every child's right to life, growth, protection from violence and discrimination, as well as the right to identity, worship, education, health, and expression (Sholihah, 2018). Despite these robust legal frameworks, violence in schools continues to occur, often influenced by shifting social norms and environmental factors (Rohmatullah, 2024). Addressing this issue requires the integration of character education into all school subjects, particularly through Pancasila Education, which plays a central role in shaping individuals guided by Pancasila values. This is reinforced by Permendikbud Nomor 20 tahun 2018 tentang Penguatan Pendidikan Karakter Pada Satuan Pendidikan Formal, which defines character as the core values that shape personality, influenced by heredity and environment, and are manifested in daily behavior (Nugraha, 2022). However, Fatah, in his doctoral dissertation entitled "*Model Manajemen Pendidikan Karakter Sekolah Menengah Pertama Berbasis Boarding School Di Jawa Barat Ditinjau Dari Ethical Leadership, Teacher Capacity Building, Dan School Culture*," explains that ineffective character strengthening in schools can result in weak moral reasoning and a lack of integration of positive values into students' daily lives.

Indonesia's progress can be measured by the strength of its national character and cultural identity. In this context, Permendikbud Nomor 20 tahun 2018 tentang Penguatan Pendidikan Karakter Pada Satuan Pendidikan Formal mandates the inculcation of Pancasila values, such as spirituality, kinship, harmony, democracy, and justice, as behavioral standards in daily life. These values are expected to be reflected in the learning process, cultivating a society capable of critical reflection and rational action amidst the nation's diversity (Nugraha, 2022). However, at SD Negeri 104282 Batu Lokong, teaching practices remain essentially teacher-centered with limited accommodation for students' technological needs. Classroom interactions are insufficiently interactive, as students tend to passively record what teachers dictate without developing creative or analytical responses to learning tasks. Such conditions limit students' opportunities to construct knowledge, express their perspectives, and engage in meaningful experiences, ultimately hindering the development of religiosity, independence, collaboration, and integrity. The persistent reliance on outdated lecture-based models and the absence of engaging, innovative teaching media have contributed to passive learning and weak character development, which in the long run may diminish both student achievement and morale (Faizin, 2024).

Teachers themselves face several obstacles in implementing meaningful learning to strengthen Pancasila character. These include insufficient competence in character-building approaches, time and budget limitations for designing relevant learning media, and restricted technological skills. While innovative instructional media are essential to connect lesson content with real-life experiences, their utilization remains minimal due to these constraints (Olagbaju & Popoola, 2020). In this regard, instructional media, particularly interactive videos featuring animation, sound, and engaging visuals, play a crucial role in effectively communicating educational content (Anggraeni, 2021). Video media can be accessed flexibly during and beyond school hours, allowing students to expand their knowledge and engage in playful learning that aligns with their developmental stages. As audiovisual tools, they make abstract values such as Pancasila more tangible and actionable, especially when integrated with approaches that link lesson content to students' real-life contexts.

The Contextual Teaching and Learning (CTL) model serves as an ideal approach for such integration because it connects classroom lessons with real-world situations, motivating students to apply knowledge in authentic contexts (Arifin, 2020). CTL encourages learners to construct experiences, bridge subject matter with daily realities, and adopt constructive behaviors within society. It enhances engagement, fosters responsibility, and supports long-lasting learning outcomes, especially when combined with interactive multimedia resources. The development of CTL-based instructional videos is therefore

considered highly effective for strengthening Pancasila character, as such media combine movement, images, and audio to stimulate collaboration, problem-solving, and creativity while keeping learning closely tied to authentic contexts. Grounded in constructivist philosophy, CTL promotes student-centered practices that enhance creativity, instill values, and offer diverse, hands-on experiences (Akmal, 2018). Strengthening Pancasila character in this manner is crucial for cultivating discipline, responsibility, and teamwork in the digital era (Zuhroh, 2024).

Previous studies have highlighted the high feasibility and validity of CTL-based instructional videos, confirming their appropriateness for classroom use (Yusriutami, 2024). By integrating real-world relevance with engaging multimedia features, CTL video media can bring lessons to life, encourage students to participate in collaborative and enjoyable activities, and ultimately reinforce Pancasila values in daily life. This underscores the urgent need to develop CTL-based instructional video media as an innovative and practical solution to enhance both learning quality and character education in Indonesian elementary schools.

In conclusion, the development of CTL-based instructional video media offers a relevant and impactful solution to the challenges of character education, particularly in strengthening Pancasila values among elementary school students. The increasing behavioral issues in schools, the limitations of traditional teacher-centered approaches, and the lack of engaging learning media highlight the urgent need for innovative strategies that connect moral values with real-life applications. CTL-based videos, with their contextual, engaging, and student-centered design, provide opportunities for students to develop collaboration, responsibility, and moral reasoning through active and meaningful learning experiences. For example, a scenario in which students work together to resolve a classroom conflict not only fosters cooperation but also teaches empathy, integrity, and democratic decision-making. Therefore, this study aims to develop CTL-based instructional video media for Pancasila Education, transforming abstract concepts into practical behaviors and contributing to the creation of an ethical, independent, and socially responsible young generation.

LITERATURE REVIEW

Learning Video Media

A learning process in elementary schools greatly benefits from media as intermediaries to convey information through graphic, photographic, or electronic tools that help reveal facts, process, and construct knowledge visually and verbally. In the context of primary education, media play a crucial role as a communication and interaction medium between teachers and young learners, enhancing the clarity and effectiveness of message delivery in ways that match their developmental stage. Media are considered carriers of information or messages from sources to recipients and are termed learning media if they aim to change the recipient's behavior (Kandia et al., 2023; Nurhayati et al., 2024). Specifically, learning video media present both audio and visual messages, displaying moving images that engage elementary students without diminishing the essence of the material, encompassing processes, factual concepts, skills, attitudes, and behaviors (Norma, 2021).

Technological advances and internet accessibility have greatly benefited elementary education by enabling video as a flexible media resource that can be used both inside and outside the classroom. Asari, in his book entitled "*Media Pembelajaran Era Digital*" explains that video media allow for extensive and flexible learning interactions, where students can independently access materials as needed, aligning with the growing technological orientation of today's school-aged children. Among its benefits for primary learners, instructional videos increase interest and motivation, simplify the comprehension of complex concepts through concrete examples, and can be accessed on multiple electronic devices, such as laptops

and smartphones (Rodríguez-Bailón et al., 2021). This flexibility promotes learner autonomy at an early age by reducing reliance on verbal instruction alone.

Despite these advantages, videos in elementary education also have limitations, such as the risk of students perceiving video learning as overly easy, which can lead to a reduced focus on content mastery, and the possibility of memorizing sequences without a deep understanding of the material. Jennah, in her book entitled "*Pengembangan Media Video Pembelajaran*" explains that practical challenges in primary schools include the need for supporting equipment and the reality that some schools still lack adequate internet and technological infrastructure. Therefore, the development of effective learning videos for elementary students requires a systematic approach involving multiple experts, including content specialists, media designers, instructional methodologists, directors, video editors, and sound engineers, to ensure quality that supports curriculum goals and motivates meaningful learning (Kurniawan, 2018).

Although prior research has highlighted the role of video media in motivating learners, clarifying abstract concepts, and fostering independent study, most studies have primarily emphasized their general benefits without specifically examining how video media can be strategically designed to instill character values. This creates a research gap, as elementary education requires not only academic understanding but also moral and civic formation. The present study addresses this need by focusing on the development of video media that are not only engaging but also purposefully structured to strengthen Pancasila character in young learners.

Contextual Teaching Learning (CTL)

Contextual Teaching and Learning (CTL) is an educational approach that enables elementary school students to actively develop their skills by connecting academic material with real-life contexts they experience daily (Sari, 2023). Rooted in constructivist theory, CTL emphasizes meaningful learning through students' direct experiences, facilitating cognitive development by encouraging young learners to think critically and make decisions through reconstructing problems based on prior knowledge and experience. This approach enables elementary students to form relevant connections between subject matter and their family, community, and societal roles, thereby fostering natural and active learning processes that are suited to their developmental stage (Andriani, 2024).

Implementation of CTL in primary schools involves seven procedural steps: questioning to spark curiosity and critical thinking; constructivism to allow students to contribute knowledge; modeling via media such as videos to visualize real life scenarios; fostering learning communities through group discussions; guiding inquiry to uncover relevant information; conducting authentic assessments (pre tests and post tests) to track progress; and reflection to consolidate learning and encourage multiple perspectives (Dhani & Rahayu, 2023; Wasti, 2023; Yasa & Adiyanti, 2023). This systematic process facilitates meaningful learning that links academic content with the everyday experiences of elementary students, encouraging critical reasoning and empathetic understanding essential for citizenship education (Najib, 2023). Theoretical underpinnings from Piaget, Bruner, Ausubel, and Vygotsky also support CTL's emphasis on cognitive development, discovery learning, meaningful assimilation, and sociocultural context in education, all of which are highly applicable to the developmental needs of young learners.

Existing literature demonstrates that CTL supports student-centered, experiential learning by connecting academic material with real-life contexts, thereby cultivating critical thinking and collaboration skills. However, most research has primarily explored CTL in relation to cognitive skill development or subject-specific comprehension, rather than its potential to internalize and strengthen national character values. This indicates a gap where CTL's robust contextual framework has not yet been fully utilized to nurture the values embedded in Pancasila Education. The current study bridges this gap by integrating CTL

principles with video-based media to provide elementary students with authentic opportunities to practice Pancasila values through meaningful, contextualized learning.

Pancasila Character and Education in Elementary School

Modern society, driven by technological advancements, experiences shifts that can lead to the erosion of cultural values, particularly among younger generations. The Pancasila character serves as the fundamental guide for Indonesian behavior, embodying values derived from its five principles. Tracing its etymology to the Greek "*charassein*" meaning to engrave a pattern, character development involves cultivating desirable traits. For elementary teachers, this means designing learning processes that shape students' character, which is crucial for a nation's civilization. Character strengthening is an integral part of the learning process, requiring both direct instruction and student self-awareness (Chotimah, 2022).

Character is defined as the unique combination of qualities that distinguishes individuals or groups, traditionally referred to as disposition, which influences their thoughts and behaviors. Enduring character traits, such as honesty, are reflected in one's words, actions, and intentions, signifying a distinctive and impactful goodness. Undang-Undang Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional emphasizes that education aims to develop character and national civilization, fostering individuals who are faithful, noble, healthy, knowledgeable, capable, creative, independent, and democratic citizens. Character, universal in nature, represents a nation's identity and pride. Its cultivation is achieved through intervention, such as integrating character values into formal education, particularly in Civics, which plays a role in instilling spiritual, national, independent, and responsible values.

Pancasila Education, as implemented in elementary schools, serves as a foundational subject that guides students in practicing the values of Pancasila in their daily lives, shaping responsible individuals and citizens who adhere to religious teachings and uphold the 1945 Constitution of Indonesia. Winarno, in his book entitled "*Paradigma Baru Pendidikan Kewarganegaraan*" explains that education is fundamental for maintaining the unity of the Republic of Indonesia and is delivered through formal institutions, families, and communities. Peraturan Pemerintah Nomor 4 Tahun 2022 Tentang Perubahan Atas Peraturan Pemerintah Nomor 57 Tahun 2021 tentang Standar Nasional Pendidikan states that graduates of basic education must be prepared to be faithful, uphold noble character, inculcate Pancasila values, and develop literacy and numeracy competencies essential for higher education. Essentially, Pancasila Education equips learners to be good citizens who can adapt, be resilient, and make sound decisions in a competitive world.

The literature on Pancasila Education emphasizes its vital role in shaping moral integrity, civic responsibility, and national identity. While existing studies confirm its importance, many highlight persistent challenges in implementation, such as the use of teacher-centered methods, rote memorization, and the limited use of innovative media. This reflects a gap between the intended character-building objectives of Pancasila Education and the practical strategies employed in classrooms. By introducing CTL-based instructional videos, the present study aims to bridge this gap by offering a pedagogical and technological innovation that translates abstract Pancasila concepts into engaging, practical experiences for elementary students.

METHODS

This study employs a Research and Development (R&D) approach, utilizing the 4D Model developed by Thiagarajan et al. in their book, "*Instructional Development for Training Teacher of Exceptional Children*" which comprises four stages: Define, Design, Develop, and Disseminate. The 4D model provides a systematic framework, particularly suited for educational product development, as it allows for iterative

refinement to ensure the media meet pedagogical, practical, and contextual needs. This model is considered suitable for the present research because it emphasizes structured validation from experts, practical testing with users, and effectiveness evaluation, all of which are essential for developing video media that not only align with learning objectives but also strengthen Pancasila character in students.

1. **Define:** This phase involves analyzing and identifying the needs within the learning process to establish clear objectives. It involves gathering information related to product requirements, including issues such as student participation, teacher dominance, and the effective integration of technology to support Pancasila character development at SD Negeri 104282 Batu Lokong. Understanding these foundational needs directs subsequent design decisions.
2. **Design:** This phase focuses on creating a prototype of the learning media. Based on student interviews and the limited current use of technology in classrooms, the design emphasizes video media as an innovative solution to enhance engagement and critical reasoning in learning Pancasila character values. The design process involves selecting educational content, defining learning objectives, and incorporating multimedia elements such as visuals, audio, and animation, while structuring the video to align with CTL principles.
3. **Development:** Development entails producing and revising the prototype using expert validation from media, content, and language specialists. This stage includes expert appraisal to assess content validity, language appropriateness, and media design, followed by pilot testing with actual students to gather feedback and make necessary modifications. This iterative process ensures the product's quality and usability in real educational settings.
4. **Disseminate:** The dissemination stage involves introducing and distributing the validated CTL-based instructional video media to a broader audience beyond the research site. In this phase, the finalized media is shared with teachers at SD Negeri 104282 Batu Lokong and other relevant elementary schools, accompanied by user guidelines to ensure proper implementation. Dissemination activities include teacher workshops, presentations at educational forums, and sharing media through digital platforms to increase accessibility. This stage also gathers post-implementation feedback to evaluate the adaptability of the media in varied classroom contexts, thus supporting its potential for broader application in strengthening Pancasila character education.

The research site, SD Negeri 104282 Batu Lokong in Galang District, Deli Serdang, was selected for its accessibility and to minimize disruptions to ongoing school activities. Data collection methods include questionnaires, structured interviews, and classroom observations targeting students, teachers, and experts to capture comprehensive insights on the product's feasibility and effectiveness. Data are analyzed both qualitatively and quantitatively, using descriptive statistics and reliability testing, such as the Kuder-Richardson formula for instrument consistency.

Indicator criteria for success include validation results showing a percentage of $\geq 60\%$ with a "feasible" category. Practical usage and effectiveness are evaluated by percentages and N-Gain scores, respectively, reflecting improvements in learning outcomes and character development. Throughout, the research employs a rigorous process for product iteration to ensure the development of an effective CTL-based video learning media for strengthening Pancasila character.

RESULTS AND DISCUSSION

This development research employed the Research and Development (R&D) method, specifically the 4D model (Define, Design, Develop, Disseminate), with a focus on validating and testing the practicality of the developed media. The 4D developmental model was pioneered by Thiagarajan in 1974. The study was conducted with 20 students from Phase B at SD Negeri 104282 Batu Lokong.

Define

The define stage constitutes the initial step in analyzing the needs for developing instructional video media. This phase involves several sub-processes: an initial analysis of learning difficulties, student analysis, concept analysis, formulation of learning objectives, and preparation of the instructional video media. The initial analysis, conducted through observation of Pancasila education among Phase B students at SD Negeri 104282 Batu Lokong, revealed significant challenges, particularly the low Pancasila character scores demonstrated by most students in pretests, indicating the need for effective media interventions.

Table 1. Preliminary Observation Results of Pancasila Character

No	Respondent	Pretest Score	Description
1	Respondent 1	60	Completed
2	Respondent 2	60	Not Completed
3	Respondent 3	55	Not Completed
4	Respondent 4	55	Not Completed
5	Respondent 5	50	Not Completed
6	Respondent 6	35	Not Completed
7	Respondent 7	75	Not Completed
8	Respondent 8	60	Completed
9	Respondent 9	75	Not Completed
10	Respondent 10	60	Completed
11	Respondent 11	76	Not Completed
12	Respondent 12	60	Completed
13	Respondent 13	45	Not Completed
14	Respondent 14	40	Not Completed
15	Respondent 15	55	Not Completed
16	Respondent 16	50	Not Completed
17	Respondent 17	55	Not Completed
18	Respondent 18	55	Not Completed
19	Respondent 19	77	Not Completed
20	Respondent 20	60	Completed

Source: Research (2025)

Student analysis results, obtained via interviews with 20 Phase B students, showed that 70% preferred video media as a learning tool, while smaller percentages favored display media, graphic designs, or audio. This suggests that current media provisions, primarily static images used by teachers, are insufficient to create an interactive and engaging learning environment that meets the developmental needs of elementary students. Therefore, video media was identified as a promising medium to enhance meaningful and engaging learning experiences relevant to Pancasila character development.

Concept analysis focused on collecting information supporting the "Living Pancasila" concept from textbooks, digital resources, and the socio-cultural environment of Galang District, which is rich in diverse traditions and religions. This cultural diversity is reflected in the community's reliance on Pancasila as a guiding principle for life. The formulation of learning objectives aligned with the Merdeka Curriculum's competency standards emphasizes attitudes and behaviors that express love for fellow humans and the environment, appreciation of diversity, understanding of Pancasila's principles, and embodiment of Pancasila values. Additionally, research instruments, including validation and practicality questionnaires for media experts and student respondents, were developed to gather empirical data that supports ongoing validation and refinement of the CTL-based video media and its impact on strengthening Pancasila character in students.

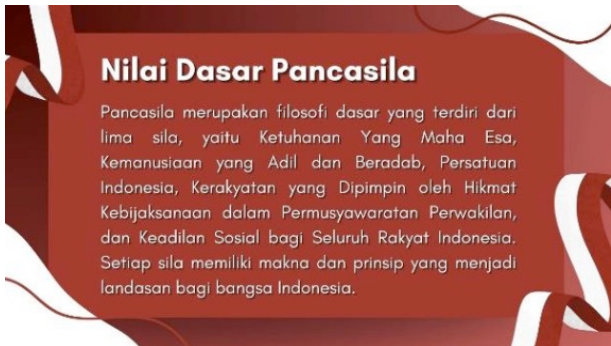
Design

The design stage is conducted as a step to create learning media products that align with the specific learning objectives outlined in the previous Define phase. The product designed is a Contextual Teaching and Learning (CTL) based instructional video on the theme of "Hidup Berpancasila" tailored for Phase B students, following the competency framework of the Merdeka Curriculum. During this stage, data and information related to the content of "Hidup Berpancasila" were gathered from various sources, including the internet, textbooks, interviews, journals, and other relevant materials. These resources included images and videos to enrich the media content.

The instructional video was developed using the Canva application, accessible via its website or through Chrome, with an internet connection. Canva offers numerous engaging templates featuring a variety of images and videos, incorporating sound and motion elements that enhance appeal for elementary school-aged students. Since concrete operational thinking characterizes this age group, utilizing supportive technological facilities, such as laptops, speakers, and projectors, is crucial to maximize the effectiveness of video presentations.

The CTL-based instructional video integrates seven essential stages: constructivism, inquiry, questioning, learning community, modeling, reflection, and authentic assessment. Its structured format includes an introductory profile, perception, learning achievements, learning objectives, material explanation, discussion, presentation, and a summarization activity as closure. The video has an approximate duration of 14 minutes and is available in MP4 format.

Table 2. Design Structure of CTL-Based Instructional Video Media

No	Design of Instructional Video Media	Description
1		The initial display features a cover containing the subject and class profile.
2		The display of learning objectives contains statements that explain the indicators to be achieved during the lesson, both cognitively and practically, in accordance with the topic.
3		The apperception activity explores students' prior knowledge about the diverse cultures, tourist destinations, and traditions of Indonesia.
4		Material on the Core Values of Pancasila, covering the First to the Fifth Principles of Pancasila

No	Design of Instructional Video Media	Description
5	Ayo Diskusi IDENTIFIKASI PERILAKU PANCASILA DI SEKITARKU 	Discussion on identifying Pancasila related behaviors in the surrounding environment, whether they align or do not align with Pancasila values
6		Group presentation activities on their project outcomes

Source: Research (2025)

Development

The CTL-based instructional video learning media underwent validation by experts in media, content, and language, after which it was revised and declared highly valid, with an average validation percentage of 92.32%. This confirms its suitability as a learning medium for the Pancasila Education subject. Subsequently, the media was practically tested by the fourth-grade Pancasila teacher at SD Negeri 104282 Batu Lokong on 20 fourth-grade students using the "Hidup Berpancasila" material. The practicality questionnaire consisted of 17 questions, rated on a 1-5 scale, assessing aspects of content, media quality, and usefulness.

The fourth-grade teacher rated the CTL-based video media as highly practical, achieving an average percentage of 89.99%, categorized as "Very Practical" for classroom use. These findings align with another research where an animated video learning media in Pancasila showed validation percentages of 92% (media experts), 80% (content experts), and 98% (language experts), all classified as "Highly Valid."

The effectiveness of the media was measured through the N Gain score, which was 0.4053, indicating a "Moderate" effectiveness in learning outcomes. In contrast, the N Gain score for strengthening Pancasila character reached 0.7530, categorized as "High" effectiveness. Supporting this, previous research states that animated video media, especially those featuring cartoons favored by elementary students, effectively enhance students' sense of responsibility (Gani & Sulfahri, 2024). This evidence highlights that CTL-based video media can be an effective and practical tool to support character education in elementary Pancasila learning.

Disseminate

The dissemination stage is the final step in the 4D development model. This phase involves introducing the CTL-based instructional video media that have been validated by media and content experts and subsequently revised. The overall validation score obtained from the expert validators was 93.36%, which falls into the "Excellent" category, indicating the media is suitable for use. Although the validation results show that the video media does not require major revisions, minor improvements were still needed. Following this, the instructional video media was handed over to the course lecturer for dissemination.

Discussion

This development research employed the Research and Development (R&D) methodology following the 4D model (Define, Design, Develop, Disseminate) pioneered by Thiagarajan et al. in 1974, a widely recognized systematic framework for educational innovation. The study focused on the validity and practicality testing of a CTL-based instructional video for Pancasila character education, conducted on 20 Phase B students at SD Negeri 104282 Batu Lokong. The initial Define stage revealed significant learning difficulties, highlighted by low pretest scores in Pancasila character, underscoring the urgent need for innovative and effective learning media. Student preferences further confirmed that 70% favored video media, suggesting that static images traditionally used in classrooms are insufficient to meet the developmental and interactive needs of elementary learners.

During the Design phase, the CTL-based instructional video was developed using Canva, incorporating multimedia elements suited to the concrete operational stage of the students. Structurally, the video integrated CTL's seven components, including constructivism, inquiry, questioning, and reflection, aligned with the Merdeka Curriculum objectives. The video, approximately 14 minutes long, was designed to be engaging and accessible for young learners, thereby addressing the cultural diversity and social context of the Galang District, where the school is located.

The development stage involved rigorous validation by experts in media, content, and language, resulting in an overall validity rating of 92.32%. Practicality testing by a fourth-grade Pancasila teacher yielded a score of 89.99%, categorizing the media as "Very Practical" for classroom application. Reliability tests supported the media's consistency ($\alpha = 0.877$) and the instrument measuring Pancasila character ($\alpha = 0.794$). Effectiveness was demonstrated through N-Gain scores of 0.4053 (moderate) for learning outcomes and 0.7530 (high) for character strengthening. These findings corroborate another assertion that animated video media, including cartoons favored by elementary learners, effectively enhance responsibility and character development.

The use of animated video media in Pancasila education significantly outperformed the lecture method, with statistical tests confirming meaningful differences in student achievement (Azizah, 2024; Nurila, 2023). At vocational learning videos based on local culture, elementary students' learning outcomes improved (Adiputra, 2021). Another study found that animation-based media incorporating Pancasila values significantly improved the behavior of elementary students (Riyana et al., 2025; Shopuro, 2023). Last but not least, there is a high feasibility and effectiveness of interactive learning videos based on the Profil Pelajar Pancasila in elementary subjects, with significant improvements in learning outcomes (Karnajaya, 2023).

In addition to national studies, international research highlights the effectiveness of multimedia and contextual learning approaches. Multimedia learning, which combines visual and auditory elements, significantly improves understanding and retention compared to traditional text-based instruction (Alhazmi, 2024). The constructivist-based digital media fosters active knowledge construction and higher-order thinking (Minarni & Napitupulu, 2020). CTL promotes character building internationally, as recent studies have found that video-based learning environments enhance student motivation, engagement, and internalization of social values, particularly when interactive features are incorporated (Sailer & Homner, 2020). Another study also discussed how multimedia principles support the reduction of cognitive load and enhance learning efficiency. Additionally, another research demonstrated that integrating cultural context into digital learning media further boosts character education outcomes.

These findings collectively demonstrate that well-designed instructional videos, which integrate contextual, cultural, and value-based elements, are feasible, practical, and effective in improving cognitive and character outcomes in elementary education. This research extends the evidence by applying the CTL approach to strengthen Pancasila character, combining multimedia engagement, contextual relevance, and value-based instruction into a single, empirically validated medium.

CONCLUSION

This development research on CTL-based instructional video media for Pancasila Education among Phase B Grade IV students at SD Negeri 104282 Batu Lokong yielded positive results in terms of validity, practicality, and effectiveness. Validation from content, media, and language experts demonstrated the product's high suitability with respective scores of 87.13%, 89.83%, and 100%, confirming the media's appropriateness as a final educational tool. Practicality tests by classroom teachers supported this, earning a score of 89.99% and establishing the media as highly practical for implementation in learning activities. Furthermore, the video media effectively strengthened students' Pancasila character, as evidenced by significant improvements in test scores and high N-Gain values for character development (0.7530). These results collectively confirm that the CTL-based video is a robust medium for enhancing Pancasila character education.

The research findings have important educational implications. The CTL-based video media serves as a valuable resource for educational institutions aiming to raise the quality of learning by incorporating innovative and interactive teaching aids. Its engaging format, grounded in CTL methodology, enables students to connect learning material with their real life contexts and develop critical thinking and problem solving skills relevant to Pancasila values. Additionally, this media can guide teachers in effectively integrating character education into their curriculum, thereby improving pedagogical competence and maximizing character building outcomes for elementary students.

Based on these insights, several recommendations are proposed. Teachers should maintain a strong commitment to routinely applying CTL based video media in Pancasila lessons, fostering a learning environment where both educators and students model positive character traits. School leaders are encouraged to provide adequate support by supplying necessary technological resources, such as projectors, laptops, and audio equipment, alongside facilitating teacher training in educational technology. Researchers and practitioners alike may consider this study a comprehensive reference for innovative curricular development and scholarly inquiry. Finally, educators are advised to engage in lifelong learning to continuously enhance their instructional skills and adopt emerging educational innovations.

AUTHOR'S NOTE

The author declares that there is no conflict of interest regarding the publication of this article. The author confirms that the data and content of the article are free from plagiarism.

REFERENCES

- Adiputra, D. K. (2021). Development of vocational learning video based on local account in PKn learning in elementary school. *Journal of Physic: Conference Series*, 1764(1), 1-5.
- Akmal, M. M. (2018). Pengembangan media pembelajaran interaktif berbasis contextual teaching and learning bidang studi PKn. *Jurnal Teknologi Informasi dan Komunikasi dalam Pendidikan*, 2(4), 223-231.
- Alhazmi, K. (2024). The effect of multimedia on vocabulary learning and retention. *World Journal of English Language*, 14(6), 390-399.
- Andriani, E. H. (2024). Penerapan metode Contextual Teaching and Learning (CTL) untuk mendorong pemahaman pada nilai-nilai Pancasila dalam pembelajaran PPKn pada siswa kelas IV di SDN 20 Kampung Korong tahun ajaran 2024/2024. *Humanitis: Jurnal Humaniora, Sosial, dan Bisnis*, 2(9), 1023-1029.
- Anggraeni, Y., Alpian, D., Prihamdani, D., & Winarsih, E. (2024). Development of video-based interactive learning multimedia to increase learning outcomes in Pancasila education. *Journal of Innovative Learning Media*, 10(1), 45-58.
- Arifin, M. B. (2020). Pengembangan media audio visual menggunakan Contextual Teaching and Learning (CTL) dalam pembelajaran menulis paragraf narasi pada siswa kelas VII SMP. *Jurnal Kajian Bahasa, Sastra, dan Pengajarannya*. 3(4), 373-384.
- Azizah, V. N. (2024). pengembangan media video pembelajaran berbasis animasi pada pembelajaran pendidikan Pancasila siswa kelas IV SD Negeri 1 Tegal Rejo. *Journal of Elementary School Education*, 4(1), 176-186.
- Chotimah, U., Yanzi, H., Kurnisar, K., Faisal, E. E., Yusuf, M., & Susanti, E. (2022). Strengthening students' character through TPACK-based learning. *Jurnal Civics: Media Kajian Kewarganegaraan*, 19(2), 235-244.
- Dhani, M. I., & Rahayu, W. (2023). Literatur review: Contextual Teaching and Learning (CTL) dalam pembelajaran Matematika. *Jurnal Ilmiah IKIP Mataram*, 10(2), 118-135.
- Faizin, M. (2024). Strengthening character education through Pancasila student profile. *Primary Edu: Journal of Elementary Education*, 9(1), 68-76.
- Gani, H. A., Muharram, M., & Sulfahri, S. (2024). The effectiveness of experiential learning models based on local culture in shaping Pancasila character in early childhood. *Tematik: Jurnal Pendidikan*, 10(2), 79-90.

- Kandia, I. W., Suarningsih, N. M., Wahdah, W., Arifin, A., Jenuri, J., & Suwarma, D. M. (2023). The strategic role of learning media in optimizing student learning outcomes. *Journal of Education Research*, 4(2), 508-514.
- Karimullah, S. S., Amin, M., & Munawwarah, U. D. (2022). Strengthening spiritual education based on the Qur'ān in building character in the digital age. *Devotion: Journal of Research and Community Service*, 3(14), 2785-2794.
- Karnajaya, K. N. (2023). Video pembelajaran interaktif berbasis profil pelajar Pancasila mata pelajaran IPAS bagi siswa kelas IV sekolah dasar. *Indonesian Journal of Instruction*, 4(3), 195-206.
- Kurniawan, D. C., Kuswandi, D., & Husna, A. (2018). Pengembangan media video pembelajaran pada mata pelajaran IPA tentang sifat dan perubahan wujud benda kelas IV SDN Merjosari 5 Malang. *Jurnal Inovasi dan Teknologi Pembelajaran*, 4(2), 119-125.
- Minarni, A., & Napitupulu, E. E. (2020). The role of constructivism-based learning in improving mathematical high order thinking skills of indonesian students. *Journal of Mathematics Education (INFINITY)*, 9(1), 111-132.
- Najib, M. (2023). The effect of Contextual Teaching and Learning (CTL) model on civics learning outcomes of elementary school students. *Educare: Journal of Primary Education*, 4(1), 33-46.
- Norma, N. (2021). Meningkatkan hasil belajar peserta didik melalui media video pembelajaran pada pembelajaran jarak jauh di masa pandemi COVID-19. *Social: Jurnal Inovasi Pendidikan IPS*, 1(2), 101-115.
- Nugraha, I. H. (2022). Pemanfaatan teknologi informasi dalam penguatan karakter Pancasila di kalangan pelajar. *Jurnal Agama dan Sosial Humaniora*, 1(3), 158-169.
- Nurhayati, R., MoHa, L., & Fiidznillah, R. (2024). The role of online learning media in increasing student achievement and learning motivation. *Journal Emerging Technologies in Education*, 2(3), 289-297.
- Nurila, H. A. (2023). Pengaruh penggunaan media video animasi terhadap hasil belajar PPKn materi persatuan dan kesatuan siswa kelas V di Madrasah Ibtidaiyah Ketanggan Kabupaten Semarang. *Jurnal Syntaks Fusion*, 3(11), 1215-1222.
- Olagbaju, O. O., & Popoola, B. (2020). Impact of learning media on student motivation and academic performance. *Journal of Educational Multimedia*, 15(2), 45-54.
- Prayudha, A. (2024). Penerapan nilai-nilai Pancasila untuk membentuk karakter mandiri siswa kelas IV di sekolah dasar. *Jurnal Ilmiah Pendidikan Dasar (Pendas)*, 9(3), 45-60.
- Riyana, R., Sukriono, D., & Untari, S. (2025). Development of E-Modules based on Contextual Teaching and Learning (CTL) on the actualization of Pancasila values. *Inovasi Kurikulum*, 22(1), 293-306.
- Rodríguez-Bailón, M., Fernández-Solano, A. J., Merchán-Baeza, J. A., & Vidaña-Moya, L. (2021). From clinical practice to the classroom: Advantages and disadvantages of video and paper cases on the motivation and clinical reasoning of occupational therapy students. *International Journal of Environmental Research and Public Health*, 18(18), 1-15.

- Rohmatullah, N. A., & Kusuma, E. (2024). Youth violence (bullying) in schools and the school's efforts to overcome it: Case study at SMPN 1 Leuwiliang. *Al-Afkar, Journal For Islamic Studies*, 7(4), 1492-1504.
- Sailer, M., & Homner, L. (2020). The gamification of learning: A meta analysis. *Educational Psychology Review*, 32(1), 77-112.
- Sari, D. P. (2023). The influence of Contextual Teaching and Learning (CTL) learning model on student's mathematical problem solving ability. *Jurnal Eduscience*, 10(2), 585-594.
- Setia, S. (2025). Technology leadership in Indonesian junior high school: The new normal era learning. *Jurnal Manajemen*, 10(1), 1-15.
- Sholihah, H. (2018). Perbandingan hak-hak anak menurut Undang-Undang nomor 23 tahun 2002 tentang Perlindungan Anak dan hukum islam. *Al Afkar, Journal For Islamic Studies*, 1(2), 88-112.
- Shopuro, D. (2023). Media pembelajaran berbasis video animasi bermuatan nilai-nilai Pancasila dalam kehidupan sehari hari. *Jurnal Ilmiah Pendidikan Profesi Guru*, 6(3), 571-581.
- Wasti, Y. (2023). Meningkatkan hasil belajar IPS dengan mengoptimalkan langkah-langkah model pembelajaran Contextual Teaching and Learning (CTL) siswa Kelas VII. 3 SMP Negeri 16 Batam tahun pelajaran 2019/2020. *Sentri: Jurnal Riset Ilmiah*, 2(5), 1775-1794.
- Yasa, I. P. W. P., & Adiyanti, N. M. (2023). Upaya meningkatkan kemampuan menulis siswa melalui Contextual Learning (CTL) siswa SD Negeri 3 Siangan. *Metta: Jurnal Ilmu Multidisiplin*, 3(4), 561-573.
- Yusri, N. A., Kibtiyah, M., & Hamim, T. (2020). Emotional intelligence with learning achievements reviewed from Islamic education. *International Journal of Islamic Educational Psychology*, 1(2), 112-125.
- Yusriutami, A. N. (2024). Pengembangan video pembelajaran berbasis kinemaster pada pembelajaran pendidikan Pancasila kelas IV sekolah dasar. *Didaktika: Jurnal Kependidikan*, 13(3), 4257-4272.
- Zuhroh, F. A. (2024). Penguatan karakter Pancasila melalui dasa darma pramuka di era digital. *SAP (Susunan Artikel Pendidikan)*, 9(1), 76-83.