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Creative teacher's dictionary: Enhancing teacher competence in creating learning media to support Indonesia's SDGs program

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ABSTRACT

This research focuses on the Creative Teacher's Dictionary, specially designed for educators to assist in developing digital learning media that support Indonesia's Sustainable Development Goals (SDGs) program. This dictionary is crucial in shaping high-quality educators capable of providing meaningful learning experiences. The research is guided by selecting a dictionary as the primary tool for developing educational media because a dictionary plays a strategic role in providing comprehensive guidance to educators in designing learning media that support SDGs. The Creative Teacher's Dictionary offers practical advice on using various up-to-date applications and technologies to create innovative and relevant learning experiences. This research aims to develop the Creative Teacher's Dictionary, provide comprehensive resources for educators, and ensure the quality of its content. The study employs the Design and Development (D&D) method using the ADDIE model. The assessment involves expert validation and interviews to ensure the quality of the content of the Creative Teacher's Dictionary. The validation results by subject matter experts and language experts indicate a "Very Good" assessment. The final trial results affirm that this book can enhance teachers' competence in creating learning media and can be used by educators and students needing the most up-to-date information. This research analyzes the implementation, evaluates strengths and weaknesses, and provides solutions for creating learning media based on relevant application categories.

ABSTRAK

Penelitian ini membahas tentang Kamus Guru Kreatif yang dirancang khusus untuk para pendidik, membantu pengembangan media pembelajaran berbasis digital yang mendukung program Sustainable Development Goals (SDGs) Indonesia. Kamus ini berperan membentuk pendidik berkualitas yang mampu memberikan pengalaman belajar bermakna. Penelitian ini dipandu oleh pemilihan kamus sebagai alat utama pengembangan media pembelajaran karena kamus memiliki peran strategis dalam memberikan panduan lengkap bagi pendidik dalam merancang media pembelajaran yang mendukung SDGs. Kamus Guru Kreatif menyediakan panduan praktis tentang penggunaan berbagai aplikasi dan teknologi terkini untuk menciptakan pengalaman pembelajaran yang inovatif dan relevan. Tujuan dari penelitian ini adalah mengembangkan Kamus Guru Kreatif, menyediakan sumber daya yang komprehensif bagi pendidik, dan menjamin kualitas isinya. Penelitian ini menggunakan metode Design and Development (D&D) dengan model ADDIE. penilaian ini melibatkan validasi ahli dan wawancara untuk memastikan kualitas konten Kamus Guru Kreatif. Hasil validasi ahli materi dan ahli bahasa menunjukkan penilaian pada kategori "Sangat Baik". Hasil akhir uji coba menyatakan bahwa buku ini mampu meningkatkan kompetensi guru dalam membuat media pembelajaran dan dapat digunakan oleh pendidik dan siswa yang membutuhkan sumber informasi terkini. Penelitian ini menganalisis penerapan, evaluasi kelebihan dan kelemahan, serta solusi pembuatan media pembelajaran berdasarkan kategori aplikasi yang relevan.

Kata Kunci: *Kamus guru kreatif; kompetensi guru; media pembelajaran; program SDGs Indonesia*

INTRODUCTION

Education is shaping and transforming an individual's behavior through lifelong learning experiences. It is the foundation for overall personal development, crucial in unlocking one's potential, contributing to society, and enabling individuals to face complex global challenges. Furthermore, education is a deliberate and planned effort to advance a nation and achieve the desired quality of education (Pristiwanti et al., 2022). The higher the quality of education a country implements, the more it aligns with the overall improvement of its society. This is in line with Government Regulation of the Republic of Indonesia No. 19 of 2005, which states that the national education standards aim to ensure the quality of national education to enlighten the nation's intellectual life and shape a dignified character and civilization. However, the current state of education in Indonesia remains concerning compared to other countries. According to UNESCO, Indonesia ranks 64th out of 120 countries in global education quality rankings. This is a serious issue, given the critical role of education as outlined in the National Education System Law No. 20 of 2003 (Depdiknas, 2003). Comparisons with neighboring countries also highlight Indonesia's lag in education quality (Safitri et al., 2022). Therefore, serious efforts are needed to address this problem, and one possible step is implementing the Sustainable Development Goals (SDGs) program.

In efforts to support the achievement of the Sustainable Development Goals (SDGs) in Indonesia, teachers play a pivotal role in preparing the younger generation to become agents of change who care about issues such as quality education, gender equality, and environmental protection. This dictionary is designed to empower teachers with the necessary tools and knowledge to create effective learning media that strengthen students' awareness and understanding of the SDGs, while encouraging their active participation in building a sustainable future for Indonesia. Through this *Creative Teacher's Dictionary*, educators across the nation are expected to take a central role in achieving sustainable development goals in the country.

Addressing SDG-related challenges can have significant social impacts. Successful research in the context of the SDGs can contribute tangibly to improving society's educational conditions. The SDGs are an international program aimed at ensuring equitable quality education, enhancing learning opportunities for all individuals, and affirming everyone's right to quality education (Nurfatimah et al., 2022). A key aspect of SDG implementation is education quality, as reflected in the fourth SDG goal: "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all."

Learning media play a vital role in achieving these educational objectives. It is a core component in facilitating effective and meaningful educational processes within an increasingly advanced education sector (Tang et al., 2020; Winarto et al., 2020). However, educators' use of learning media has not yet reached optimal effectiveness (Karo-Karo & Rohani, 2018). Challenges include a lack of creativity and innovation in developing multimedia-based learning tools and limited age-appropriate supporting resources (Arifin et al., 2022; Lisnawati, 2021). Thus, this study explores solutions and actions to enhance teachers' competence in developing engaging learning media. Improving teacher competency is expected to contribute to the success of SDG programs in Indonesia, particularly in achieving quality education.

This research will investigate ways to improve teachers' competence in developing engaging learning media, with a focus on creating a book titled *Kamus Guru Kreatif*. The term "Dictionary" is used because it contains a collection of guidelines on how to utilize various applications based on specific topics. The book *Kamus Guru Kreatif* will be available in both physical and e-book formats.

Researchers chose to develop a book titled **"Kamus Guru Kreatif"** as a supporting tool to enhance teachers' competence in developing learning media. This book provides a systematic and practical guide, helping teachers master various applications relevant to learning objectives. Additionally, with the

availability of both physical and e-book versions, teachers can easily access this book at various educational levels, offering flexibility in the learning process and teacher competency development.

This research seeks solutions to overcome obstacles in teachers' use of creative and effective learning media. The purpose of this article is to explain the importance of improving teachers' competence in learning media development and explore solutions and actions that can be taken to achieve this goal. We will focus on developing the "Creative Teacher's Dictionary" to assist teachers in utilizing technology to create engaging and diverse learning media, with the hope that this will improve the quality of education and the effectiveness of educators in Indonesia.

LITERATURE REVIEW

Dictionary Definition

A dictionary is designed as a reference source that helps individuals discover new concepts or things they were unaware of. Dictionaries play a significant role in the learning process in formal education and independent knowledge exploration. A dictionary is a tool that can translate text or words from one language to another (Erdani et al., 2019). It also serves as a reference tool to clarify the meaning of words. Additionally, dictionaries are crucial in helping individuals understand and integrate new words into their language (Tsai, 2019). Based on this explanation, it can be said that a dictionary is a tool used to compile comprehensive information. This aligns with our research, leading us to develop the *Creative Teacher's Dictionary*, which contains information on procedures for using applications that can assist teachers in creating learning media.

The Essence and Concept of a Creative Teacher

Teachers are, in essence, the most crucial element in the learning process, serving to cultivate high-quality and potential human resources in various aspects. A teacher has the dignity and responsibility to nurture and advance students, individually and collectively, within and beyond the school environment (Hamid, 2017).

Teachers maximize students' potential through various practical, meaningful, and developmentally appropriate learning models and methods. Creativity is a process that challenges existing paradigms and widely accepted methods to produce more innovative solutions or concepts (Ismail, 2019). Teachers with creativity can identify opportunities and potential in challenging situations and stimulate confidence in facing the future (Rahmat & Sum, 2017).

The characteristics of a creative and innovative teacher include thorough understanding of the subject matter, possessing broad knowledge—not just theoretical but balanced with practical application, being process-oriented, using diverse teaching methods, embracing independent learning principles, avoiding forcing students, adapting teaching approaches to classroom situations and conditions (Sormin *et al.*, 2022). Therefore, teachers should strive to enhance their creativity by utilizing various learning media, engaging lessons, and encouraging students to become more creative. A teacher can be considered creative when using multiple types of learning media (Setiono & Rami, 2017).

Teacher Competencies

As professionals in education, teachers must meet specific criteria to perform their duties effectively. These criteria include knowledge, skills, attitudes, and behaviors that align with professional teaching standards. According to Undang-Undang No. 14 Tahun 2005 concerning Teachers and Lecturers, teachers must fulfill four key competencies: pedagogical competence, professional competence, personality competence, and social competence (Murkatik *et al.*, 2020). The elaboration of these competencies is as follows (see: https://jdih.kemdikbud.go.id/detail_peraturan?main=1680).

1. **Pedagogical Competence** refers to a teacher's ability to manage the learning process effectively and efficiently. This includes planning, implementing, evaluating, and developing instruction tailored to students' characteristics, subject matter, and learning environment. Pedagogical competence also involves applying innovative, creative, interactive, engaging, and challenging learning principles (Salmitri *et al*., 2021).
2. **Professional Competence** refers to a teacher's mastery of subject matter in a broad and in-depth manner. This includes understanding relevant concepts, theories, principles, methods, and techniques related to the taught subject. Professional competence also entails applying this knowledge in high-quality, nationally standardized teaching practices (Supriyono, 2017).
3. **Personality Competence** refers to a teacher's ability to demonstrate attitudes and behaviors that align with religious, legal, social, cultural, and professional norms. This includes moral integrity, professional ethics, independence, responsibility, honesty, politeness, cooperation, tolerance, and environmental awareness (Purwanto, 2021).
4. **Social Competence** refers to a teacher's ability to communicate and interact effectively with students, fellow teachers, parents/guardians, the school community, and other relevant stakeholders. This includes oral and written communication proficiency, appropriate and beneficial information and communication technology use, and the ability to socialize harmoniously and democratically.

Teacher competencies must be continuously honed and improved to contribute to the advancement of education in Indonesia. Quality education is believed to create a sustainable and brilliant future while preserving civilization. Therefore, as educators, teachers should consistently strive to enhance their competencies to realize high-quality education in Indonesia.

Learning Media

Learning media is a crucial aspect of the educational world, playing a central role in facilitating the learning process to make it more engaging and meaningful (An, 2020). Learning media is closely tied to the teacher's role as a designer of learning experiences. It serves as the core element for teachers in transferring knowledge to students during the learning process. According to Miarso in Nurrita (2018), learning media encompasses all elements used to deliver information, stimulate students to think critically, express their feelings, and motivate them to engage in learning activities, creating intentional, meaningful, and guided learning experiences (Muis & Dewi, 2021). Learning media is essential in education because it provides direction and structure and helps achieve learning objectives (Williamson, 2020). Effective use of learning media can increase student motivation, which in turn helps educators achieve learning goals more efficiently (Sartika *et al.*, 2020).

Modern learning media today is digital-based learning media. Digital learning media involves technology in its creation (Jayawardana, 2017). Digital media represents a replacement or new form of media that

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incorporates communication technologies, such as computers, enabling users to interact with one another and create tools for learning as desired. The learning media designed by teachers must be creative and innovative to create enjoyable and meaningful learning experiences for students, thereby improving the quality of education in Indonesia (Rahmawati & Atmojo, 2021).

SDGs Program in Indonesia

The Sustainable Development Goals (SDGs) are a 2030 agenda, continuing and refining the Millennium Development Goals (MDGs). They commit to achieving 17 goals, including eradicating poverty, ending hunger, ensuring good health and well-being, providing quality education, promoting gender equality, ensuring access to clean water and sanitation, providing affordable and clean energy, fostering decent work and economic growth, developing infrastructure, industry, and innovation, reducing inequalities, building sustainable cities and communities, encouraging responsible consumption and production, taking climate action, preserving marine and terrestrial ecosystems, promoting peace, justice, and strong institutions, and strengthening partnerships to achieve these goals.

The Indonesian government has developed programs to achieve quality education in line with the SDGs, including the SATAP Program (Sekolah Satu Atap), which aims to provide educational opportunities for underprivileged children to access junior high school education; the SM3T Program (Sarjana Mendidik di Wilayah Terdepan Terluar Tertinggi), aligned with the Program Profesi Guru (PPG) program to honor graduates who dedicate themselves to teaching and educating children in remote, outermost, and underdeveloped areas (3T region); and the Calistung Program (Membaca, Menulis, Menghitung), an initiative to facilitate basic literacy and numeracy skills (Safitri et al., 2022). The success of SDGs in Indonesia, particularly in education, relies on competent and innovative teachers who can contribute to improving the country's education quality.

METHODS

This study involves the structured design and development of learning media products while devising solutions tailored to identified needs and existing problems. The research employs the Design and Development (D&D) method. According to Richey & Klein in their book *"Design and Development Research,"* the D&D method is an instructional design approach that systematically details the learning development process. It encompasses identifying learning needs, planning, development, implementation, and evaluation, focusing on formulating learning objectives, selecting instructional strategies, and creating effective learning materials.

The researcher adopted the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) as the framework for the development process.

Figure 1. Grouping nine Category
Source: Kurt's book "An Introduction to The ADDIE Model

The ADDIE model, depicted in **Figure 1** and developed by Dick and Carey, serves as a framework for designing and developing learning and training programs. This model offers a structured, rational, and

systematic approach to planning, developing, and implementing educational programs, with distinct advantages over alternative models. As noted by Mulyatiningsih in her book *"Metode Penelitian Terapan Bidang Pendidikan"* the ADDIE model can also be utilized to refine various learning components, such as instructional strategies, teaching methods, and educational media/materials. The research data collection process included validation phases and teacher-distributed questionnaires, which comprised survey sheets and observational findings documented in journals. Data analysis employed both quantitative and qualitative techniques upon completion of data gathering. The study adhered to the ADDIE model's sequential stages: Analysis involved identifying learning media development needs and challenges, primarily referencing teacher and student requirements. The Design phase focused on crafting a learning media blueprint derived from analytical outcomes. During Development, a prototype was constructed following the predetermined design. Implementation entailed deploying the finalized learning media, while Evaluation assessed its effectiveness through data collection. Teachers participated as the study's primary subjects.

RESULTS AND DISCUSSION

The Concept of the *Creative Teacher's Dictionary* Book

Effective learning depends significantly on the impression left by instructional media on students. In this context, it is crucial to recognize that the media used plays a pivotal role in the learning process. The importance of media in education cannot be understated—it holds equal significance to the teaching methods employed. Both elements complement and collaborate to support the achievement of learning objectives tailored to students' needs.

A teacher's creativity in developing instructional media is a key aspect of professional teaching competence. This competence significantly impacts students' interest and engagement in learning. Therefore, enhancing teachers' ability to design effective learning media is essential for creating high-quality learning experiences and improving teachers' professional skills (Kirkwood & Price, 2014; Winarto et al., 2020). The *Creative Teacher's Dictionary* was developed to meet standards for improving teachers' competence and skills in designing innovative instructional media that align with student characteristics, technological advancements, and contemporary demands. This dictionary is structured based on guidelines that address actual needs in the educational process.

Referring to the Indonesian Dictionary (KBBI) definition, a dictionary is a book containing an alphabetically arranged list of words and phrases, along with information about their meanings, usage, or translations. Dictionaries play a vital role in formal education and independent knowledge exploration. Additionally, they serve as tools for translating words between languages (Erdani *et al.*, 2019; O'Neill, 2019). Thus, the *Kamus Guru Kreatif* offers similar benefits by providing teachers with new knowledge and references.

According to the *Indonesian Dictionary*, "creative" means having the ability to create. This concept of creativity forms the foundation of this book, aiming to stimulate teachers' creativity in enhancing their teaching quality. Furthermore, the book seeks to deepen teachers' understanding of various applications, websites, and artificial intelligence technologies that can support them in developing more effective and innovative learning materials.

Effective learning is closely tied to achieving the Sustainable Development Goals (SDGs). Engaging and meaningful instructional media are critical in advancing SDG objectives, such as quality education, gender equality, and sustainable development. Well-designed learning media can help students understand key issues related to the SDGs and encourage their involvement in solving global challenges (Persello *et al.*,

2022). Therefore, the *Creative Teacher's Dictionary* aims to improve teachers' competence in designing effective media and supports the integration of SDG values into education. With this tool, teachers are expected to prepare the young generations better to become agents of change who contribute to achieving the Sustainable Development Goals in Indonesia.

The Development Process of the "Creative Teacher's Dictionary" Book

The development process of the *"Kamus Guru kreatif"* book involves five stages: analysis, design, development, implementation, and evaluation. These stages represent the steps taken by the researcher in developing the book. Below is an explanation of each stage: The first stage in this research is analysis. The analysis results show that the classroom learning process relies on instructional media as a tool to deliver information to students. Effective learning media enables interaction between the media and students. Teachers must consider this when creating learning materials to ensure the learning process achieves its objectives, from the introductory activities to the closing session.

The book's preparation began by analyzing the applications, websites, and artificial intelligence (AI) tools frequently used by teachers during instruction. This process covered the introductory, core, and closing activities. Data was gathered from various sources, including literature studies, social media platforms like YouTube and TikTok, and previously distributed questionnaires. Responses from participants revealed that Microsoft PowerPoint and Canva are the most commonly used applications among teachers and students.

The presentation of applications, websites, and AI is segmented into nine categories, reflecting their grouping based on functionality and their typical use in the learning sequence (introduction, core activities, and closing). Below is the list of these nine categories.

Table 1. Grouping nine categories

Category
1. Applications or websites to support learning content/material before creating learning media.
2. Applications or websites for games/entertainment for students.
3. Applications or websites for creating online tests/evaluations.
4. Applications or websites for randomly selecting students.
5. Applications or websites that assist in the learning media based on learning styles.
6. Applications or websites that assist in the learning media process based on subjects.
7. Applications or websites that facilitate the distribution/display of learning media from teachers to students.
8. Applications or websites for file format conversion (e.g., MP3 to MP4, PNG to PDF, etc.).
9. Applications or websites for link shortening/conversion.

Source: Research 2023

The nine categories of applications or websites in Table 1 have been categorized based on their role in supporting the learning process. The first category is "applications or websites supporting learning content/material before creating learning media," which includes tools for finding supporting resources before designing learning media. The second category is "applications or websites for games/entertainment for students," which includes learning games and interactive activities. The third category is "applications or websites for creating online tests/evaluations," used to design and manage online tests. The fourth category is "applications or websites for randomly selecting students," which helps select students for various purposes. The fifth category is "applications or websites that assist in the learning media process based on learning styles," which allows learning to be tailored to individual learning

styles. The sixth category is "applications or websites that assist in the learning media process based on subjects," which provides specific learning materials for various subjects. The seventh category is "applications or websites that facilitate the distribution/display of learning media from teachers to students," which facilitates the distribution of learning materials. The eighth category is "applications or websites for file format conversion," used to convert file formats. The final category is "applications or websites for link conversion," which helps modify or shorten links (URLs) for distribution purposes. With these categories, educators can choose tools that suit their needs and learning objectives, improving the effectiveness of the teaching process and supporting better learning outcomes.

The second stage in this research is the design phase**.** The learning medium for teachers is a book designed like a dictionary, arranged alphabetically with diverse content. The book is divided into nine chapters, each corresponding to the categories outlined earlier. It includes detailed explanations such as the names of applications, websites, and AI tools, along with clarifications on whether each is an application, website, or AI and its availability across different devices. Additionally, it provides definitions or practical uses for each tool, specifies whether they are free or paid, and offers step-by-step instructions, from registration to usage. The book also addresses common troubleshooting issues and solutions, incorporates logos for easy identification, and features a user-friendly guide written in clear, accessible language to help teachers seamlessly follow the instructions. Below is the researcher's selection of applications:

Table 2. Preferred Application Selection

Applications, Websites, and AI (Artificial Intelligence) Supporting Content Creation and Learning Materials

1. Kemdikbud Book (https://buku.kemdikbud.go.id/)
2. Bukusekolah.id
3. Guru Berbagi (Teacher Sharing)
4. Magicpen
5. Merdeka Mengajar (Freedom to Teach)
6. Open AI
7. Quizlet
8. TLDR This
9. Tutor AI

Entertainment Game Applications and Websites for Students

1. Baamboozle.com
2. Educandy
3. Educaplay
4. Jamboard
5. Koco Engage
6. Padlet
7. PBSKids.org
8. Word Search Puzzle
9. Wordwall

Applications or Websites for Creating Online Tests or Assessments

1. Blooket
2. Google Forms
3. Kahoot!
4. Live Worksheets

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5. Mentimeter
6. Quiz Whizzer
7. Quizizz
8. Slido
9. Wordwall

Applications or Websites for Random Student Selection

1. Rakko Tools
2. Generator.github.io
3. Wheel of Names

Applications or Websites Assisting in Learning Media Based on Learning Styles

1. Animaker
2. Audiolab
3. AutoDraw
4. Assemblr
5. Benime
6. Canva
7. CapCut
8. Curipod.com
9. Dolby On
10. Doratoon
11. Freepik
12. Google Slides
13. InShot
14. KineMaster
15. Lexis Audio Editor
16. Lumio
17. Metademolab
18. Microsoft PowerPoint Online
19. MindMeister
20. Mindomo
21. Nearpod
22. Voice Changer with Effects
23. Pexels
24. Pictory
25. Piktochart
26. Pixabay
27. Podcast.adobe.com
28. PowerDirector
29. Scratch
30. Scribble
31. Simple Mind
32. Slides Carnival
33. Slidesgo
34. Spotify
35. Templateswise
36. Tome App
37. Unsplash
38. Vista Create
39. VivaVideo
40. WaveEditor

Applications or Websites for Creating Subject-Specific Learning Media

1. Khan Academy
2. Belajarku.bangunruang
3. Colorado.edu
4. Duolingo
5. Games to Learn English
6. GeoGebra
7. Grammarly
8. Scientific Calculator
9. Kipin School
10. Merge EDU
11. Microscope Online
12. PhET
13. Photomath
14. PhysicsLab
15. Science Project Pathways
16. WikiHow

Applications or Websites Facilitating the Distribution/Display of Learning Media from Teachers to Students

1. BlueJeans
2. Book Creator
3. ClassDojo
4. Edpuzzle
5. Flip
6. Google Classroom
7. Google Lens
8. Google Meet
9. Google Sites
10. Kupintar
11. Lifesize
12. Microsoft Teams
13. Moodle
14. Sevima Edlink
15. Teachmint
16. WordPress
17. YouTube
18. Zoho Meetings
19. Zoom Cloud Meetings

Applications or Websites for File Format Conversion

1. CloudConvert
2. Convertio
3. ILovePDF
4. Smallpdf
5. YTMP3
6. Zamzar

Applications or Websites for Link Shortening/Modification

1. Bit.ly
2. Me[QR]

3. Pageloot

Total: 114

Source: Research 2023

Based on the previous design concept, the next stage is development. Referring to the earlier design concept, after compiling various applications, websites, and AI tools, the first step in the development phase is testing each application. This testing is conducted by examining the usability and features of each application one by one, considering both ease of use and potential obstacles. During testing (see **Table 2** for the selected applications), the researcher will document the solution in the book if any obstacles are encountered in an application, website, or AI tool. This testing process resulted in 114 applications, websites, and AI tools deemed suitable for teachers to use in creating learning media.

At this stage, the researcher also develops application instructions by providing original screenshots, each captured manually, ensuring originality, and video tutorials for steps considered difficult to apply, to prevent errors. Next, the researcher selects the type of paper for printing, choosing Art Paper to ensure high-quality images and instructions. In addition to physical printing for portability, an e-book version has also been created. The developed *Kamus Guru Kreatif* (Creative Teacher's Dictionary) is designed in a medium-sized dictionary format but does not occupy excessive space. Several copies will be printed as samples for validity testing.

The validity test involves two experts: a content expert who evaluates the book's substance and a media expert who assesses its design. This process serves as an effort to measure the performance of the produced product. Several findings were obtained from this validation test. Based on the feasibility assessment by the content and media experts, the *Kamus Guru Kreatif* received a "Very Good" rating and is deemed suitable for use, as it has met all testing indicators. Below is a preview of the *Creative Teacher's Dictionary* (**Figure 2**).
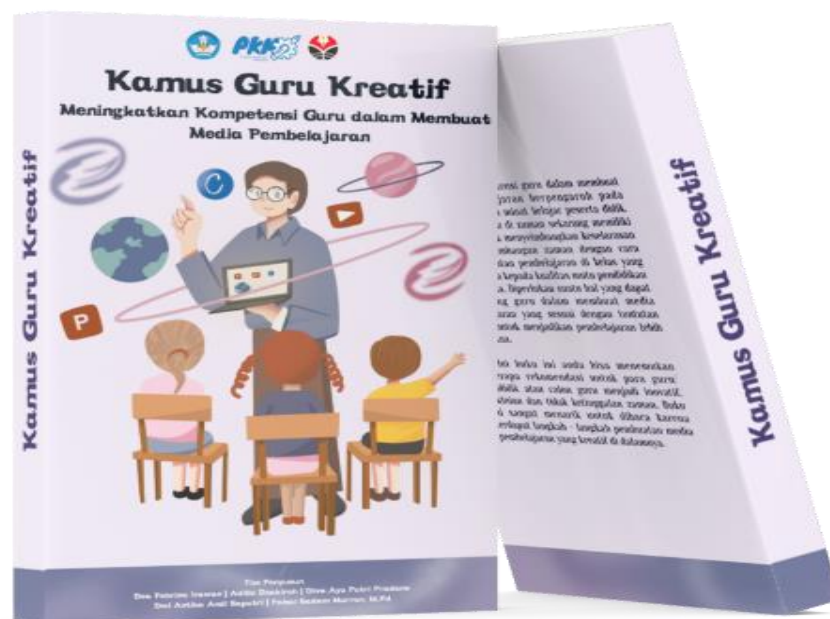

Figure 2 Kamus Guru Kreatif book

Source: writer's documentation 2023

The fourth stage of the development process is Implementation, where the product is introduced for use in an actual field or real-world environment. As previously explained, the main objective of this research is to enhance teachers' competence in creating learning media to support Indonesia's SDGs program. A study and trial of the Kamus Guru Kreatif (Creative Teacher's Dictionary) book product were conducted in schools to measure its effectiveness. The trial focused on gathering teacher feedback and obtaining preliminary input for the evaluation process.

The researcher conducted a field test at Bandung Muhammadiyah 6 Elementary School, Ir. H. Juanda Street, Kampung Bengkok, Ciumbuleuit, Cidadap District, Bandung City, West Java Province. The sample consisted of seven teachers, including homeroom teachers and subject-specific teachers (one physical education teacher and one Islamic religious education teacher). The product was tested on teachers to assess its design and content.

First Stage: The evaluator introduced the *Kamus Guru Kreatif* book to the teachers. At this stage, the teachers analyzed the product's design. Findings revealed that the *Kamus Guru Kreatif* exhibited several positive aspects, including an attractive cover design, clear font readability, and vibrant color usage. This successfully captured the teachers' interest in understanding the book's content.

Next Stage: Testing was conducted by applying several sample applications per category. Teachers were given instruction sheets based on categories and time to create their learning media using the specified applications. The researcher's role was to assist and guide teachers if they encountered difficulties during the application. The trial results showed that some teachers still lacked knowledge or skills in using supporting applications for creating learning media, such as Pageloot, OpenAI, ClassDojo, and others. This indicated a need for knowledge improvement.

After trying 2–3 applications, the researcher distributed evaluation sheets to measure the usefulness of the *Kamus Guru Kreatif* book and findings post-testing. The evaluation results revealed that some teachers were unfamiliar with or had never tried these applications, websites, or AI tools. However, teachers significantly improved their understanding of these supporting tools after receiving instructions and knowledge from reading the Kamus Guru Kreatif and applying it in creating learning media.

This reinforces the researcher's finding that the *Kamus Guru Kreatif* can meaningfully enhance educators' knowledge of applications, websites, or AI, serving as a solution to improve teachers' competence in developing learning media. Below is a summary of the questionnaire results.

Table 4: Questionnaire Results Summary

No	Question	Response
1	How do you evaluate the book *"Kamus Guru Kreatif"*?	The book significantly simplifies and enhances the effectiveness of creating learning media.
2	Is the writing in *Kamus Guru Kreatif* clear?	The writing in the book is clear, with good vocabulary usage, making it easy to understand.
3	Are the instructions in this book explained clearly?	Yes, they are clear and enriched with practical examples that align with each step.

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No	Question	Response
4	Is the language used easy to understand?	The language is straightforward, and the included illustrations substantially aid comprehension.
5	What is your opinion on the font size in *Kamus Guru Kreatif*?	The font size is appropriate, with an aesthetic and reader-friendly typeface.
6	Are the recommended apps, websites, and AI (Artificial Intelligence) relevant?	The suggestions are highly relevant and diverse, keeping up with current trends, elementary education levels, and today's curriculum.
7	Did you gain new experiences after reading *Kamus Guru Kreatif*?	Most readers gained valuable insights, especially discovering new apps for creating learning media and teaching materials.
8	After reading *Kamus Guru Kreatif*, did it impact your skills?	This book has positively influenced their technological competence, particularly in creating engaging and innovative learning materials.

Source: Research 2023

The fifth stage of the development process is evaluation. Based on **Table 4**, this stage involves critically reviewing the test results, measuring the achievement of the product development objectives, assessing the progress made by the target users, identifying information that supports teachers in achieving optimal results, and refining the final product. After completing a series of testing phases, the researcher found constructive insights that contribute to the sustainability of the *Kamus Guru Kreatif (Creative Teacher's Dictionary)* book. These findings were documented as improvements for similar future research.

According to the findings, the *"Kamus Guru Kreatif"* book effectively enhances teachers' competence in developing creative learning media. It is deemed effective because the book facilitates teachers' creation of learning media as part of the teaching process for students in the classroom. The improvement in teacher competence aligns with Dewi et al. (2018), suggesting that it contributes to achieving one of Indonesia's SDG targets: quality education.

The impact of this research on SDGs in Indonesia is highly significant. Given the effectiveness of the *"Kamus Guru Kreatif"* book in enhancing teachers' ability to develop creative learning media, its positive influence on SDGs (particularly Goal 4: Quality Education) is evident. Teachers more skilled in designing innovative learning media can improve their teaching quality, enhancing student understanding and engagement (Bower *et al.*, 2014; Callaghan, 2016). This establishes a stronger foundation for quality education that meets contemporary needs, aligning with one of the SDGs' targets. Thus, this research significantly contributes to advancing SDGs in Indonesia, particularly in the education sector.

CONCLUSION

The research findings conclude that studying the *Kamus Guru Creative* (*Creative Teacher's Dictionary) Book* enhances teachers' competence in developing learning media. This is evidenced by teachers' ability

during field tests to easily and enthusiastically apply the application, website, or AI content, thanks to the book's communicative and user-friendly design with clear, illustrated instructions. The study is also rated highly based on expert validation assessments, which state that the *Creative Teacher's Dictionary Book* is categorized as highly suitable for improving learning quality in alignment with Indonesia's SDGs program. Thus, this research on the book helps teachers access up-to-date learning media information and simplifies the creation of engaging teaching tools, serving as a practical classroom guide. Consequently, the study is effective in advancing teachers' pedagogical competence and supporting Indonesia's SDG initiatives.

AUTHOR'S NOTE

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