ASHA
PUBLISHING
JOURNAL OF EDUCATIONAL
DEVELOPMENT AND LEARNING
(JEDAL)

E-ISSN: 3063-8844
Journal of Educational Development and Learning
https://journal.ashapublishing.co.id/index.php/jedal/index

Analysis of the Use of Interactive Learning Media for Students in the MPLB Department of UPT SMK Negeri 1 Bulukumba

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ABSTRACT

Analysis of the use of Interactive learning media in students in the MPLB department of UPT SMK Negeri 1 Bulukumba is the ability of students to use learning media selected by teachers interactively. This study aims to determine how the use of interactive learning media in students in the MPLB department of UPT SMKN 1 Bulukumba with a qualitative research type. Therefore, to achieve the objectives of this study, the method used to collect data is by conducting observations, interviews, and documentation. The results of this study indicate that all indicators used in this study can be categorized as less than optimal in their use. The indicators in question are effective in the use of learning media because they can help students' understanding, especially by using LCDs and visual displays. The use of the media is also efficient, especially the readiness of teachers in preparing simple media before class starts. However, the media used is still less varied/diverse which is still dominated by traditional media and printed books which causes a lack of creativity in learning. Thus, this also has an impact on the lack of interactive use of learning media because the use of media is monotonous and does not utilize interactive technology. Traditional media tends to produce one-way communication, which has an impact on low active student participation. The new finding in this study is adaptability, which is also an indicator that plays a role in the use of learning media in this research locus, which is different from the theory used so that it can be used as evaluation material and new findings in the educational environment.

Keywords: Use of Media, Learning Media, Interactivity

INTRODUCTION

Effective education requires the role of interactive learning media, which is not only able to attract students' interest but also to improve the overall quality of learning. In a teaching and learning process, two important elements are teaching methods and learning media. Several aspects must be considered when choosing media, including learning objectives, the types of tasks and responses that students are expected to master after learning takes place, and the learning context, which encompasses student characteristics. However, one of the main functions of learning media is to serve as a teaching aid that also influences the climate, conditions, and learning environment created and arranged by the teacher. Interactive learning media is essential for creating a fun and engaging learning atmosphere, which is in line with the development of the times using technology. So, the role of teachers in this case is also significant to design and use interactive learning media in the learning process (Darwis et al., 2022; Faradilla T et al., 2018; Saleh et al., 2024).

One of the important aspects of the learning process is the use of learning media. The interaction that occurs during the learning process is influenced by the environment, which consists of students, teachers, library officers, principals, teaching materials or materials (books, modules, videos, audio and the like), and various learning resources and facilities

(projectors, and so on). Also reinforces that "this can also increase students' interest in learning. Students interest in the learning process has a significant impact on their learning outcomes. The higher the interest of students in the learning process, the better the learning outcomes they will achieve (Darwis et al., 2023; Saleh & Arhas, 2023). Ideally, teachers should be able to create a well-planned, organized, and sustainable learning environment to support student success (Jamaluddin et al., 2021; Niswaty & Arhas, 2019; Saleh et al., 2021). According to the Law Number 20 of 2003 Concerning the National Education System, educators and education personnel: Creating a meaningful, fun, creative, dynamic, and dialogical educational atmosphere; Have a professional commitment to improve the quality of education and setting an example and maintaining the good name of the institution, profession, and position by the trust it gives.

Education is an activity that involves the learning and teaching process, where interaction occurs between teachers and students, as well as between students and learning materials, aiming to achieve the desired educational goals (Indrawati & Wahira, 2024; Nasrullah et al., 2024; Suprianto, 2024). An effective learning process can lead to behavioral changes in students after they have completed it. The role of effective learning media is crucial in ensuring the continuity of education, but the challenges in its implementation are also not few. Therefore, teachers face the challenge of creating an engaging learning environment and process. In creating an interesting learning environment, it is important for teachers to pay attention to the use of appropriate and interactive learning media based on the characteristics of students and suitability with the learning material. But not all teachers are able or willing to take advantage of this interactive learning media, especially in the MPLB UPPT SMKN 1 Bulukumba department. Although there are some teachers who have used interactive learning media, others still use traditional learning media that tend to be passive. This causes the learning process to be less interactive and there is only one-way interaction, namely from teacher to student.

Based on the results of initial observations on September 7 to 8, 2023, it was found that the school, especially the department, has sought to facilitate in terms of facilities and infrastructure in supporting the use of interactive learning media, such as the availability of Electronic Copy board in the classroom, LCD Projectors, Wi-Fi, books, and comfortable classrooms with adequate facilities that will support the creation of student comfort in learning. Several teachers majoring in MPLB innovate in realizing meaningful learning using interactive learning media such as presenting visual content and audiovisual content. Examples such as the use of zoom, google meet, WhatsApp, google classroom, Quizziz, Microsoft office, and directing students in using technology such as for literacy studies through google search, YouTube.

However, the use of interactive learning media in the MPLB UPT SMKN 1 Bulukumba department remains uneven, with some teachers still limited to the use of traditional media, such as printed books, which do not actively engage students. Based on the data obtained at the research location, this gap shows that although interactive learning media has been proven to improve the quality of learning, its use/application is still limited in the field, especially in the MPLB UPT SMKN 1 Bulukumba department. Some teachers have not applied this interactive learning media optimally, citing limited knowledge, age, and technical ability in using technology. This has an impact on students' low responsiveness to the material taught in theory, despite their greater enthusiasm for practical learning. Based on the above description and problems, it is important to research the analysis of the use of interactive learning media in students in the MPLB UPT SMK Negeri 1 Bulukumba department.

Volume 1, Issue 3, April 2025
DOI: https://doi.org/10.70188/rbdswr47

METHOD

The research entitled Analysis of the Use of Interactive Learning Media in Students in the Department of MPLB UPT SMK Negeri 1 Bulukumba uses a qualitative research approach. Azungah, (2018); Cresswell, (2013) said that data can be collected in several ways, including observing (observation), conducting interviews, distributing questionnaires, collecting documents and using triangulation methods or combined approaches. This research will be carried out at the school institution of UPT SMK Negeri 1 Bulukumba.The type of research used is a descriptive type of research., descriptive research is carried out with the aim of describing the situation in words, not number-based data. Qualitative research is a type of research that relies on observations, interviews, and document analysis to produce data that describes the situation in detail. In this context, the descriptive approach aims to make a systematic, factual, and accurate description of the facts, characteristics, and relationships between the phenomena being studied. (Patton, 2005)

The focus of this research focuses on the analysis of the use of interactive learning media in students in the MPLB UPT SMK Negeri 1 Bulukumba department with several indicators of the use of learning media, namely effectiveness, efficiency, varied/diverse, and interactivity. The description of the focus of this research is the increasing use of interactive learning media in students in the MPLB UPT SMK Negeri 1 Bulukumba department using indicators such as 1) Effectiveness, 2) Efficiency, 3) Varied/Diverse, and 4) Interactivity.

In this study, 9 informants with 1 supportive/additional informant were carried out at the UPT SMK Negeri 1 Bulukumba. Data collection is carried out through observation, interviews, and document collection (documentation) methods. In this study, data analysis was carried out by applying an interactive approach by the model carried out by Miles and Huberman (2014) that data analysis includes data collection, data reduction, data presentation (display data), and conclusion drawing and data verification.

RESULT AND DISCUSSION

To find out an overview of how the analysis of the use of interactive learning media for students in the MPLB department of UPT SMK Negeri 1 Bulukumba, the researcher carried out the process of processing and presenting data that had been obtained at the research stage using observation techniques, interviews, and document collection explained narratively or descriptively The results of the data analysis obtained during the research at UPT SMK Negeri 1 Bulukumba produced the following findings

Effectiveness

The intended effectiveness is when in its application it can be chosen or use the right media so that it can achieve the learning objectives. In the selection to the stage of use, it is necessary to consider several things that support the achievement of learning objectives. Based on the results of the interview, the use of learning media in the MPLB UPT SMKN 1 Bulukumba department has been quite effective, as can be seen from how the media is chosen and used properly by teachers, and well received by students. However, there are several significant obstacles in its implementation. The main obstacles faced are limited access to technological devices, such as smartboards that are not yet available in all classes, and internet/Wi-Fi networks that are not available in every class. In addition, the lack of special training for teachers in utilizing the latest learning media is also an obstacle that affects the effectiveness of the use of learning media. However, overall, the effectiveness of the use of media in the MPLB department is already quite good.

Based on the results of the observations made, it was found that in the learning process of the Correspondence subject, teachers use LCD media to display the material through Microsoft Word. The teacher guides students on how to make letters directly in class. The use of this medium facilitates students' understanding, which can be seen from their active response and enthusiasm during learning. The use of visual examples through LCD media has been proven to help students understand the steps of writing letters faster. However, there are obstacles when students are asked to look for additional materials from external sources such as the internet. Most students experience difficulties due to limited access, such as the absence of internet quota and ≈ facilities in the classroom, so some students experience obstacles in accessing additional sources of materials.

Based on data analysis, in general, the use of interactive learning media by paying attention to indicators of effectiveness in students in the MPLB UPT SMKN 1 Bulukumba department is relatively effective in helping students understand the material. The use of media such as LCD and visual displays that directly guide students has been shown to increase their understanding and participation in learning, especially in subjects such as correspondence. However, this effectiveness still experiences several significant obstacles, namely limited access to technology (such as smartboards, projectors, and internet/Wi-Fi connections that are not yet available in all classes) and lack of teacher training in the use of more sophisticated or interactive learning media. This obstacle shows that even though the media used already supports the learning process, there are external factors that need to be improved so that the use of learning media can achieve an optimal level of effectiveness in accordance with the learning objectives. Overall, although the effectiveness of media use is relatively good, there is room for improvement, especially in terms of providing technological infrastructure and teacher capacity development so that the media used is truly aligned with the needs of students and the learning goals to be achieved.

The expert opinion that supports this is Akib et al., (2021); Dharma et al., (2020); Saleh et al., (2020), the effectiveness of learning media depends on the accuracy of its selection in accordance with the instructional goals (cognitive, affective, or psychomotor domain) and the mental state of students. The right media can help better achieve learning goals and provide effective support for learning concepts, principles, or generalizations. Learning media has a role as a communication tool used by teachers to teach material to students, and its existence increases the effectiveness and efficiency of learning (Arhas et al., 2024; Nasra et al., 2024; Nurfausiah et al., 2024; Rani et al., 2024).

Efficiency

The efficiency in question is when its use does not take a long time, can be applied as needed, is easy to use/find, and its use is appropriate and satisfactory. Based on the results of the interview, the use of learning media in the MPLB UPT SMKN 1 Bulukumba department is relatively efficient with a learning process that is well planned and prepared before classes start. However, there are technical challenges that sometimes cause delays in accessing media. Additionally, although media such as videos and presentations help with the understanding of the material, sometimes in some situations students need to look for additional resources to deepen their understanding. This shows that even though efficiency is already there, it is still necessary to pay attention to the technical aspects and depth of the material to achieve more optimal results.

Based on the results of observations made in classes X and XI of MPLB in several subjects, it was found that teachers have shown readiness before starting the learning process. The teacher instructs the students to prepare an LCD or printed book before the class starts or before the teacher enters the room, so that the learning process can start on time. In the use of learning media, teachers tend to choose simple media that does not require a long preparation

time. Usually, such media is only used for half of the total duration of the subject. The remaining time is used for discussion activities or task completion, so that learning can be completed on schedule. However, there are several obstacles that can affect the smooth learning process, including the limitation of the number of LCDs which causes the preparation time to be longer because it must be used alternately, as well as other technical obstacles such as power outages that hinder the use of LCDs or media that require electrical power.

Based on data analysis, in general, the use of interactive learning media by paying attention to efficiency indicators in students in the MPLB UPT SMKN 1 Bulukumba department is classified as efficient, especially in terms of teacher readiness before learning begins. Teachers set up simple, easy-to-use media, such as LCDs and printed books, that allow learning to start on time and take place without significant constraints. However, there are several challenges that affect overall efficiency, namely: 1) Technology limitations, such as the uneven availability of LCDs and having to be used alternately between classes, so preparation sometimes takes time; 2) Technical problems, such as power outages or interruptions of internet access, can slow down or hinder the learning process when technological media is relied upon; 3) Resource challenges, where students often have to search for additional materials independently, but struggle because not all students have access to the internet or the necessary devices. Although teachers are already using the media appropriately, these technical challenges show that there is room for improvement in terms of efficiency, especially when it comes to better infrastructure procurement and training.

Efficient learning media should be practical, flexible, and do not take long to prepare (Darwin & Burhan, 2021; Darwis, Indra, et al., 2023; Lastri et al., 2024). Media that is simple, easy to move, and inexpensive is also recommended so that it can be used optimally by teachers. Teachers can at least use cheap and efficient tools that, although simple and unpretentious, are a must to achieve the expected teaching goals. According to. For teachers, learning media plays a role as an efficient tool to communicate the material that has been planned. The use of learning materials provides an advantage in helping teachers explain the material simply, allowing the achievement of learning objectives more optimally (Carrero-Planells, 2021; Hasyim et al., 2024; Rachmadtullah et al., 2023)

Varied/Diverse

Diverse/varied in this case means that the learning media used adjusts to the material and is not monotonous to just one type so that its application can vary. Based on the interview results, the use of learning media in the MPLB department of UPT SMKN 1 Bulukumba is less varied or diverse even though the school has tried to provide various media such as projectors, computers and several other media but it is not evenly distributed and limited. The use of media such as presentations and printed books still dominates almost all teachers use this media without varying it according to student or learning needs.

Based on the results of observations conducted in MPLB classes in several subjects, it was found that elderly teachers tend to use traditional learning media more often, such as printed books, or presentations in the form of simple technology. Although this method is familiar to students, their responses seem less enthusiastic, and students' focus tends to be easily diverted during the learning process. In addition to the limitations of existing facilities, teacher creativity and initiative are also key factors in efforts to use more varied learning media.

The definition of "varied" in this study is when the learning media used adjusts the material and does not focus on only one type so that its application can vary. Based on data analysis, in general, the use of interactive learning media by paying attention to diverse/varied indicators in students in the MPLB UPT SMKN 1 Bulukumba department is considered less varied or less diverse. Although schools have provided a variety of devices such as projectors and computers, their use has not been evenly distributed, and media such

as presentations and printed books still dominate. Especially more senior teachers tend to use traditional media, so creativity and variety in learning are limited. As a result, students tend to lose focus due to the use of monotonous and less interactive media. Thus, despite efforts to bring variety to learning media, this lack of variety shows that there is still room for improvement, primarily by increasing teachers' creativity and maximizing the use of available technology.

The importance for teachers to be able to develop their own learning materials if the expected material does not yet exist. Therefore, teachers need to have adequate knowledge and experience in designing learning materials". For the teaching and learning process to succeed well, students should be encouraged to utilize all their sensory tools. The teacher seeks to provide stimuli that can be processed with various senses. The more sensory tools used to receive and manage information, the more likely it is that it will be understood and retained in memory. Thus, students are expected to be able to receive and absorb the material presented easily and effectively. many types of learning media can be made interactive by utilizing current technology, such as the use of applications, web, animated videos, and others in the creation of materials so that it will attract students' attention in learning"(Nurkhin et al., 2022; Yousaf et al., 2023).

Interactivity

The interactivity referred to in this case, when the application of the learning media can create an interactive situation between students and learning sources/media, students and teachers, or students and other students which then results in effective and two-way communication. Based on the interview results, it can be concluded that the use of learning media in the MPLB department of UPT SMKN 1 Bulukumba is less interactive, which is related to the previous indicator, namely the variation of the press. It turns out that the challenges that come from the lack of diversity/variation of learning media also have an impact on the lack of interactivity presented during learning. Such as the absence of updates to the media used, some teachers who still use traditional media and do not encourage interaction, resulting in students' focus being easily diverted and only causing interactions that are not comprehensive or only dominant in terms of academics, and other students are not lost or remain passive.

Based on observations in grades X and XI, it was found that in subjects that use applications such as Quizizz, students show very active interactions and comprehensive responses. This is due to the novelty of the learning media for students, so which can increase their participation. In some situations, the use of video learning media has also been proven to attract students' interest and encourage interaction between them through the discussion forums provided. On the other hand, media such as printed books and presentation slides tend to be less interactive and cause students to easily lose focus, because this method tends to produce one-way communication from teachers to students.

Interactivity is a very crucial aspect in determining the success of using learning media. Interactive learning media or presenting an active learning atmosphere in the classroom makes learning objectives can be achieved well. Based on data analysis, in general, the use of learning media by paying attention to interactivity indicators in students in the MPLB department of UPT SMKN 1 Bulukumba is still relatively less interactive. The lack of media variation has a negative impact on interactivity during learning. Many teachers still use traditional media such as printed books and presentation slides, which tend to produce one-way communication, so that students easily lose focus and active participation is reduced. As a result, interaction between students and teachers, as well as between students, only occurs among students who are more academically dominant, while other students remain passive. However, when media such as the Quizizz application and learning videos are used, there is

a significant increase in student interaction. Students are more enthusiastic and actively involved in discussions, indicating that interactive media can increase their involvement in lessons. This interactivity creates a more dynamic learning atmosphere, allowing students to interact actively with learning resources, teachers, and their friends. Therefore, it can be concluded that interactivity in learning within the MPLB department is not evenly distributed, particularly because the use of media is still limited and does not effectively utilize interactive technology that encourages active participation. The use of more diverse and innovative media can increase overall student interaction and engagement.

Appropriate and diverse learning media can make learning interactive by establishing interaction between students and learning resources, students, and teachers, increasing students' learning motivation so as to support the creation of conducive, effective and efficient learning situations(Dharma et al., 2020; Muzammil, 2021; Wong & Chapman, 2023). The, especially interactive learning media, is due to the role of media in helping the learning process. The benefit of media in the learning and learning process is to facilitate interaction between teachers and students so that learning activities will be more effective and efficient. (Bismala, 2021; Umar & Hassan, 2019).

Recent Findings

A notable finding in this study is the emergence of a new indicator that plays a critical role in the effectiveness of learning media namely, adaptability. This indicator refers to the capacity of both the media and the educators to flexibly adjust instructional tools and strategies to align with the dynamic conditions of the learning environment and the diverse needs of students. Adaptability becomes especially relevant in vocational education settings, where infrastructural limitations and contextual variability often present significant challenges to consistent instructional delivery.

Unlike conventional indicators such as usability, accessibility, or interactivity, adaptability emphasizes situational responsiveness—how well the media and its users can cope with unforeseen obstacles such as unstable internet connections, limited availability of student devices, or changes in learning modalities (e.g., from in-person to online or hybrid formats). In this study, observations at the Office Management and Business Services (MPLB) program of UPT SMKN 1 Bulukumba revealed that learning continuity was often maintained not by the robustness of the media itself, but by the teacher's ability to reconfigure or simplify media use under constrained conditions. This might include switching to offline resources, modifying digital materials for low-bandwidth access, or incorporating analog tools when necessary.

Teachers who demonstrated high adaptability were able to sustain student engagement and ensure the achievement of learning objectives despite technological disruptions. Their ability to strategically modify media use and integrate alternative solutions reflects pedagogical resilience and media fluency. As such, adaptability serves not only as a buffer against environmental constraints but also as a lever that enhances instructional quality in uncertain or under-resourced contexts.

This finding has significant implications for both media development and teacher training. It suggests that adaptability should be integrated as a core evaluative dimension in the design, selection, and deployment of instructional media. Moreover, teacher professional development programs must explicitly build educators' competencies in adaptive media use, including troubleshooting, improvisation, and contingency planning. Ultimately, recognizing adaptability as a critical success factor highlights the need to shift attention from static functionality to dynamic responsiveness in learning media effectiveness.

Supporting Factors

Volume 1, Issue 3, April 2025
DOI: https://doi.org/10.70188/rbdswr47

The effectiveness of interactive learning media is not solely determined by the sophistication of the technology used, but also by the presence of key supporting factors that enable its optimal application. These supporting elements serve as the foundational infrastructure—both pedagogical and contextual—that allows educators to implement media effectively, align it with instructional objectives, and foster meaningful student engagement. When adequately addressed, these factors can enhance the teaching and learning process and increase the likelihood of achieving desired educational outcomes. Based on the findings of this study, several supporting factors were identified as essential to the successful use of interactive learning media in vocational classroom settings:

1. Suitability of Media to Learning Materials
   The alignment between the selected media and the learning content ensures that instructional delivery remains relevant and context-specific. Media that is tailored to the characteristics of the subject matter, such as simulations for procedural tasks or visuals for abstract concepts, improves clarity and learning retention.
2. Active Student Involvement
   Interactive media should not position students as passive recipients, but rather as active participants in the learning process. The degree to which media facilitates exploration, problem-solving, or collaboration directly affects its pedagogical value.
3. Ease of Use of Media
   Media that is user-friendly and accessible, both for students and educators promotes more consistent usage. Complex interfaces or technical barriers can hinder engagement and reduce the time available for actual instruction.
4. Teacher Readiness Before Learning
   Effective use of media is also contingent upon the educator's preparedness. Teachers who plan their lessons with clear instructional goals and have technical proficiency in using media are better positioned to integrate it purposefully and adaptively.
5. Availability of Various Media Choices
   The presence of multiple media options allows educators to differentiate instruction and select the most appropriate tools based on student needs, learning styles, and environmental constraints.
6. Media that Encourages Active Learning
   Media should be designed or selected in ways that promote cognitive engagement, such as through interactive quizzes, simulations, or scenario-based activities. This supports deeper processing and application of knowledge.
7. Student Enthusiasm for Interactive Media
   Positive student attitudes toward media use can act as a motivational driver, increasing participation and willingness to explore learning content. Enthusiasm often emerges when students perceive media as engaging, relevant, and enjoyable.
8. Teacher Creativity in Overcoming Obstacles
   When encountering limitations such as time constraints or technological failures creative teachers are able to adjust their approaches, such as by repurposing available tools or redesigning activities without compromising learning goals.
9. Ability to Improvise with Limited Resources
   In settings with restricted access to digital infrastructure, the ability to improvise becomes a critical skill. Teachers who can adapt offline resources, modify lesson plans, or leverage local materials ensure that learning continues without interruption.

Together, these factors illustrate that the success of interactive learning media hinges not just on the tools themselves, but on the surrounding pedagogical ecosystem. Developing media literacy, institutional support, and adaptive teaching practices is therefore crucial in maximizing the educational benefits of interactive media.

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DOI: https://doi.org/10.70188/rbdswr47

Inhibiting Factors

Despite the recognized benefits of interactive learning media in enhancing student engagement and improving learning outcomes, various inhibiting factors can limit its effective implementation. These barriers can significantly disrupt the instructional process, reducing the pedagogical value of media use and ultimately hindering the achievement of learning objectives. If not properly addressed, such challenges may lead to a reversion to traditional, less interactive teaching methods, thereby undermining innovation and student-centered learning.

Based on field data obtained through interviews and classroom observations in the Office Management and Business Services (MPLB) department at UPT SMK Negeri 1 Bulukumba, the following key inhibiting factors were identified:

1. Limited Technological Infrastructure
   Many classrooms still lack sufficient access to essential devices such as computers, projectors, or smartboards. This infrastructural limitation restricts the consistent use of digital media and hinders lesson continuity, especially when multiple classes must share limited tools.
2. Lack of Teacher Training in Technology
   The effectiveness of interactive media depends heavily on the teacher's competence in operating and integrating technology into instruction. A lack of formal training or professional development often results in underutilization or misuse of available tools.
3. Shared Use of Technology Among Students
   In many cases, available technological resources must be used alternately due to insufficient quantities. This reduces individual student access and limits the interactive and hands-on aspects that are central to media-based learning.
4. Technical Barriers (Electricity and Internet Disruptions)
   Frequent power outages and unstable internet connectivity disrupt lessons and make educators reluctant to rely on media that may not function reliably under local conditions.
5. Uneven Media Use Among Educators
   There is often inconsistency in the use of interactive media across different teachers or subjects. This creates unequal learning experiences for students and weakens institutional integration of media-supported pedagogy.
6. Lack of Creativity in Media Utilization
   Some educators tend to rely on static or repetitive media formats, which diminishes student interest and the potential for dynamic interaction. Creative and varied use of media is needed to sustain engagement.
7. Dominance of Traditional Media
   A strong reliance on conventional tools such as whiteboards and textbooks persists, often due to habit or institutional culture. This can overshadow the adoption of more interactive and technology-enhanced alternatives.
8. Limited Use of Interactive Applications
   While many digital applications offer interactive features, their use is often minimal due to unfamiliarity or lack of integration into the curriculum. This results in missed opportunities to enrich learning.
9. Lack of Emergency Response Training

Teachers are frequently unprepared to adapt their media use in response to unexpected disruptions, such as system crashes or technical failures. The absence of contingency planning leads to instructional delays.

10. Limited Availability of Backup Media Options
    The lack of alternative or low-tech media that can serve as substitutes when digital tools fail further amplifies dependency on a single platform or format, increasing vulnerability to technical interruptions.

These inhibiting factors suggest the need for a comprehensive support system that includes infrastructure investment, teacher training, contingency planning, and curriculum integration. Addressing these barriers is crucial for ensuring that the use of interactive media moves beyond sporadic implementation and becomes a sustainable, integral part of vocational education pedagogy.

CONCLUSION

Based on the results of data analysis and discussion regarding the use of interactive learning media for students in the MPLB department of UPT SMK Negeri 1 Bulukumba, it can be concluded that the use of interactive learning media is in the less-than-optimal category. This can be seen from several indicators. In terms of effectiveness, the use of learning media is classified as effective in helping students' understanding, especially with the use of LCDs and visual displays. Efficiency is also classified as good because of the readiness of teachers in preparing simple media that support the learning process to run on time. However, in terms of diversity, the learning media used is still not very varied. Although the school provides devices such as projectors and computers, their use is not optimal and is still dominated by traditional media such as printed books, so that it does not encourage student creativity and involvement. In addition, in terms of interactivity, the learning process is still less interactive due to the use of monotonous media and minimal use of interactive technology. Traditional media tends to produce one-way communication, which has an impact on low active student participation. Supporting factors for the use of interactive learning media include the suitability of the media to the learning material, active student involvement, ease of use of the media, teacher readiness, and teacher creativity in overcoming obstacles. However, there are several significant inhibiting factors, such as limited technological infrastructure, lack of teacher training in the use of technology, and limited devices that must be used alternately. Technical constraints such as unstable electricity and internet are also challenges.

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Volume 1, Issue 3, April 2025
DOI: https://doi.org/10.70188/rbdswr47