



## Optimization of Digital Media in Islamic Religious Education Learning to Enhance Joyful Learning

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**Abstract:** This study examines the optimization of digital media in Islamic Religious Education (PAI) to enhance joyful learning at SMK YPM Bojonegoro. The main problem addressed in this research is the low level of student engagement due to teacher-centered learning practices. This study aims to analyze the role of digital media integration in creating an interactive, meaningful, and enjoyable learning environment. This issue is important given the growing need for innovative learning strategies that align with advances in educational technology. This research employs a qualitative case study design, using observation, interviews, and documentation as data collection techniques. The findings reveal that the use of digital media such as multimedia, interactive platforms, and audiovisual content is able to create a more enjoyable, engaging, and active classroom atmosphere. It also helps students better understand the material, provides more varied learning experiences, improves teacher-student relationships, encourages active participation, and enhances students' understanding of PAI content. This study contributes to the development of innovative, technology-based teaching strategies in Islamic education. In conclusion, optimizing digital media is essential for transforming learning into a more engaging, student-centered process and for improving both cognitive and affective learning outcomes.

**Keyword:** Digital Media Optimization, Islamic Religious Education (PAI), Joyful Learning, Student Engagement

*Abstrak:* Penelitian ini mengkaji optimalisasi media digital dalam pembelajaran Pendidikan Agama Islam (PAI) untuk meningkatkan joyful learning di SMK YPM Bojonegoro. Permasalahan utama penelitian ini adalah rendahnya keterlibatan siswa akibat pembelajaran yang masih berpusat pada guru. Penelitian ini bertujuan menganalisis peran integrasi media digital dalam menciptakan lingkungan belajar yang interaktif, bermakna, dan menyenangkan. Hal ini penting mengingat meningkatnya kebutuhan akan strategi pembelajaran inovatif yang selaras dengan perkembangan teknologi pendidikan. Penelitian menggunakan pendekatan kualitatif dengan desain studi kasus melalui observasi, wawancara, dan dokumentasi. Hasil penelitian menunjukkan bahwa pemanfaatan media digital seperti multimedia, platform interaktif, dan konten audio visual mampu menciptakan suasana kelas yang lebih menyenangkan, lebih bersemangat, lebih aktif, lebih mudah memahami materi, pembelajaran lebih variatif, hubungan guru dengan siswa lebih baik, mendorong keaktifan siswa, serta meningkatkan pemahaman terhadap materi PAI. Penelitian ini berkontribusi dalam pengembangan strategi

*pembelajaran inovatif berbasis teknologi dalam pendidikan Islam. Kesimpulannya, optimalisasi media digital penting untuk mentransformasi pembelajaran menjadi lebih menarik, berpusat pada siswa, serta meningkatkan hasil belajar kognitif dan afektif.*

*Kata kunci : Optimalisasi Media Digital; Pendidikan Agama Islam (PAI); Joyful Learning; Keterlibatan Siswa*

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## **Introduction**

The development of digital technology in the field of education has demonstrated a significant transformation in the learning process, including in the area of Islamic Religious Education (PAI). The integration of digital media such as interactive multimedia, online learning platforms, and audiovisual content has become an essential part of creating learning environments that are more innovative and adaptive to the needs of the digital generation (Munir, 2017; Marc, 2010). The concept of joyful learning has also gained increasing attention as an approach that emphasizes enjoyable, active, and meaningful learning atmospheres, thereby enhancing students' cognitive and affective engagement (Suyadi, 2015a; H.B., 2012). Several recent studies have shown that the use of digital media contributes to improving students' learning motivation, creativity, and conceptual understanding across various subjects, including religious education (Sugiarti et al., 2025).

However, the reality in the field indicates a gap between theoretical developments and learning practices. Based on preliminary research data at SMK YPM Bojonegoro through classroom observations and interviews with Islamic Religious Education teachers, it was found that PAI learning was still dominated by lecture methods with limited use of digital media, mainly through WhatsApp groups. Initial interviews with SMK YPM students revealed that they perceived the learning process as less engaging and monotonous, causing many students to feel bored and unmotivated. Meanwhile, interviews with teachers revealed a lack of innovation in learning strategies due to several factors, such as PAI teachers having only taught the subject for one semester and their academic background not being directly aligned with Islamic Religious Education. This condition has an impact.

This condition has led to low student engagement, both in terms of active participation and emotional attachment to the learning material (Wina, 2014; Arsyad, 2013). Over the past ten years, research on digital media in education has shown significant development. Studies conducted between 2015 and 2017 emphasized the importance of using multimedia as an effective learning tool (R.E., 2015). During the 2018–2020 period, research began to focus on the integration of digital platforms and technology-based learning as efforts to enhance interactivity

(G.J. Hwang, 2018; H., 2019). Furthermore, from 2021 to 2024, the research focus expanded toward the concept of technology-based joyful learning, which emphasizes enjoyable and student-centered learning experiences (Ismail Rahman et al., 2024; Fitriana et al., 2021). Nevertheless, studies specifically examining the optimization of digital media in Islamic Religious Education (PAI) integrated with the concept of joyful learning remain limited, particularly in the context of Islamic boarding school-based vocational high schools (Azra, 2012; Qomar, 2013).

Based on this gap, the present study seeks to offer a contribution through the optimization of digital media in PAI learning as a strategy to enhance joyful learning. This research not only emphasizes the use of technology but also focuses on how technology is pedagogically integrated to create learning experiences that are more interactive, enjoyable, and meaningful (Rusman, 2017; Tafsir, 1992).

The objective of this study is to analyze the role of digital media optimization in improving joyful learning in PAI classes at SMK YPM Bojonegoro. The findings of this research are expected to provide theoretical contributions to the development of innovative technology-based learning models in Islamic education, as well as practical contributions for teachers in improving the quality of instruction. The basic assumption of this study is that optimizing digital media in PAI learning can enhance joyful learning, including students' motivation, participation, and emotional engagement, thereby creating a more effective and enjoyable learning process (Sardiman, 2014; Slavin, 2011).

## **Method**

This study employed a qualitative approach with a case study design focusing on the optimization of digital media in Islamic Religious Education (PAI) learning to enhance joyful learning at SMK YPM Bojonegoro (Creswell, 2014; Yin, 2018). The research subjects consisted of Grade X and XI students of SMK YPM Bojonegoro as well as Islamic Religious Education teachers. The participants were selected purposively by considering their direct involvement in the learning process.

The participants were selected based on their direct involvement in digital media-based PAI learning (Sugiono, 2019; Patton, 2015). The research was conducted in a real classroom setting over several learning sessions in order to obtain in-depth and contextual data (Moleong, 2017).

The research instruments included observation sheets, interview guidelines, and documentation. Data collection techniques were carried out through participatory observation, in-depth interviews, and documentation studies (Creswell, 2014). Observation was used to collect data regarding the utilization of digital media in PAI learning, student responses, joyful learning, and related aspects. Semi-structured in-depth interviews were conducted with teachers and several students to explore the implementation of digital media in learning, the challenges encountered, student responses, and other related issues (Kvale & Brinkmann, 2009).

Meanwhile, documentation in the form of photographs, videos, and learning materials was used as supporting data (Arikunto, 2013).

Qualitative data analysis was conducted through the stages of data reduction, data display, and thematic conclusion drawing (Miles, Huberman, & Saldaña, 2014). Data validity was ensured through source and method triangulation techniques (Denzin, 1978), as well as credibility testing through member checking and peer discussions (Guba & Lincoln, 1985). Through these procedures, the study was expected to meet the criteria of trustworthiness so that the findings would be credible, accountable, and relevant to be understood and applied in similar contexts.

## **Result and Discussion**

### **Result**

#### **Integration of Digital Media in Islamic Religious Education Learning**

Etymologically, integration comes from the word *integration*, which means the unification or combination of various elements into a complete whole. In the scientific context, integration does not merely refer to combining elements, but also emphasizes the interconnection, harmony, and coherence among those elements in order to produce a functional and coherent system (R, 1991). From an educational perspective, integration is understood as the process of connecting various learning components, including materials, methods, media, and objectives, to create holistic and meaningful learning experiences. Integration may also refer to the combination of various disciplines or approaches within a single learning process to avoid the dichotomy of knowledge (Drake & Burns, 2004).

Based on interviews with Islamic Religious Education (PAI) teachers at SMK YPM, the forms of digital media integration in the learning process include text-based digital media such as learning materials packaged in PDF files, e-books, blogs, and similar platforms. In addition to text-based digital media, teachers also utilize audiovisual media such as videos. Based on observational findings, teachers also use interactive digital media.

Examples include Kahoot and Wordwall. For communication purposes, teachers use the WhatsApp application. The utilization of digital media as learning resources also includes the use of interactive digital media based on Artificial Intelligence.

Based on interviews with PAI teachers, the use of digital media in learning also supports the implementation of modern learning models such as blended learning through the distribution of assignments, delivery of learning materials, and other activities via WhatsApp, email, Google Classroom, Google Drive, and similar platforms. In this model, learning does not only take place inside the classroom but also outside the classroom. Meilinda (2024) explains that the utilization of digital technology in PAI learning is capable of providing flexibility and improving students' understanding through broader access to learning resources.

Based on interviews with PAI teachers at SMK YPM, the integration of digital media in the learning process can improve both teachers' and students' competencies, particularly in digital literacy and learning design. Teachers and students utilize digital media throughout the learning process. Suriati (2025a) emphasizes that the integration of digital media can enhance teachers' pedagogical, professional, and social competencies, especially in creating interactive and effective learning environments. Supporting factors include the permission for students to bring smartphones and the availability of easy internet access.

In addition, the integration of digital media in PAI learning can also serve as a medium for the internalization of Islamic values. Through digital media, moral values, worship practices, and spirituality can be delivered in more engaging and understandable ways. Based on interviews with students, the use of digital media such as Kahoot, Wordwall, and similar applications prevents them from cheating, asking friends for answers, while also increasing their self-confidence and discipline in managing time during assignments and evaluations. As a result, students must be genuinely prepared when answering questions. Indirectly, this condition encourages students to become more diligent in studying and understanding the material. In this context, students are shaped not only to understand Islamic teachings but also to internalize and practice them in their daily lives. Annisa (2024) states that digital technology plays an important role in improving understanding while simultaneously providing innovation in the delivery of PAI materials.

### **Implications of the Utilization of Digital Media in PAI Learning**

Conceptually, joyful learning can be understood as a learning process designed to create feelings of happiness, enthusiasm, and comfort among students. This is in line with the opinion of DePorter and Hernacki (2010), who state that a positive learning atmosphere can accelerate the process of information absorption and improve students' memory. The main characteristics of joyful learning can be seen in a learning environment that is not stressful, the presence of harmonious interaction between teachers and students, and the use of varied methods and media. According to Suyadi (2015), enjoyable learning is characterized by positive emotional engagement among students, making them feel happy and motivated to learn.

The results of interviews with teachers indicate that the utilization of digital media in PAI learning has an impact on classroom dynamics, particularly in creating a more lively and interactive learning atmosphere. Teachers explained that the presence of digital media was able to transform learning patterns that were previously passive into more participatory ones. This was marked by an increase in the intensity of interaction between teachers and students, as well as among students themselves. The interactions were no longer one-way in nature but developed into

two-way and even multi-directional communication, where students had broader opportunities to become actively involved in the learning process.

The increase in student participation can be observed through their involvement in various learning activities, such as group discussions, question-and-answer sessions, and responses to materials presented through digital media. Teachers considered digital media to function as an effective stimulus in attracting students' attention and engagement. The presentation of materials in more varied and interesting forms, such as through visualizations, videos, and interactive quizzes, encouraged students not only to become recipients of information but also active subjects in constructing their own knowledge. As a result, learning became more meaningful because students were directly involved in the process of exploration and understanding of the material.

In addition, teachers also observed an increase in students' confidence in expressing opinions and answering questions. This condition indicates changes in students' psychological aspects, particularly in terms of self-confidence. In this context, digital media acts as a "bridge" that reduces students' fear or awkwardness when they have to participate in class.

For example, through the use of quiz platforms or digital forums, students can express their answers or opinions without excessive social pressure. This indirectly creates a more inclusive and supportive learning environment, where every student has equal opportunities to participate.

In the context of learning evaluation, teachers also highlighted that the use of digital media has a positive impact on students' attitudes and behavior. Students become more enthusiastic in participating in evaluations because the formats used tend to be more engaging and less monotonous. Evaluations presented in digital forms, such as interactive quizzes or application-based tests, provide experiences that differ from conventional paper-based evaluations. This is able to reduce students' levels of boredom and anxiety, allowing them to complete evaluations in a more relaxed and optimal manner.

Furthermore, teachers revealed that digital media also encourages students' independent learning. In digital-based evaluation systems, students are required to complete tasks independently by following the instructions provided within the system. This condition trains students to take responsibility for their own learning processes and outcomes. In addition, the immediate feedback provided by digital systems enables students to instantly recognize the results of their work, allowing them to reflect and make improvements independently.

Another aspect that has also improved is students' self-confidence in completing evaluations. With a more transparent and objective assessment system, students feel more confident about the results they achieve. They no longer worry about the possibility of subjective assessment, since digital systems generally use automatic

scoring mechanisms based on the answers provided. This creates a sense of fairness for students and encourages them to have greater confidence in their own abilities.

These findings indicate that the utilization of digital media in learning not only affects the technical aspects of material delivery but also brings significant changes to students' pedagogical and psychological aspects. A more dynamic classroom atmosphere, increased interaction and participation, as well as the development of students' independence and self-confidence, are indicators that learning has shifted toward a more active, humanistic, and student-centered approach. Thus, digital media not only functions as a learning aid but also as a catalyst in creating more meaningful and high-quality learning experiences.

Islamic Religious Education (PAI) learning that implements a joyful learning approach through the utilization of digital media demonstrates a significant contribution to increasing student engagement. Based on interviews with SMK YPM students, it was found that learning processes designed in enjoyable and interactive ways were able to create a more dynamic, interesting, and challenging learning atmosphere. Students expressed that they no longer experienced boredom or drowsiness, which often occurred in conventional and monotonous learning methods. This indicates a change in the dimension of students' emotional engagement, where feelings of enjoyment and comfort become important factors in supporting the learning process.

Furthermore, students also stated that the use of digital media in PAI learning made it easier for them to understand the material being delivered. The presentation of material through varied media, such as visual and interactive forms, helped students connect abstract concepts with more concrete contexts. This condition had an impact on increasing students' learning focus as well as their ability to absorb and process information. Thus, students' cognitive engagement also increased, marked by better understanding and more focused attention throughout the learning process.

In addition, the aspect of students' learning motivation also showed positive development. Students felt more encouraged to participate in learning because of the elements of novelty, challenge, and interactivity offered by digital media. The motivation that emerged was not only external in nature but also developed into intrinsic motivation, where students learned because of their own desire and interest. This shows that the joyful learning approach is capable of creating meaningful and sustainable learning experiences. In the context of learning evaluation, the use of digital media also provided quite significant impacts. Students revealed that the evaluation process became more enjoyable and less stressful, allowing them to complete assignments or answer questions with greater confidence. In addition, the system Digital-based evaluation systems also train students' discipline, particularly in terms of time management. Moreover, character

values such as honesty and sportsmanship begin to develop because transparent and technology-based assessment systems encourage students to behave honestly in completing assignments.

Another equally important finding is students' perceptions regarding the objectivity of assessment. The use of digital media in evaluation allows the assessment process to be conducted automatically and systematically, thereby minimizing subjectivity on the part of teachers. This creates a sense of fairness for students because the results obtained truly reflect their actual abilities. Nevertheless, this objectivity is more dominant in the cognitive aspect, while affective and psychomotor aspects still require direct observation from teachers.

Based on the explanation above, it can be concluded that the implementation of digital media-based joyful learning in PAI learning not only impacts the improvement of student engagement but also contributes to enhancing understanding, learning motivation, and students' character formation. In addition, the evaluation system implemented becomes more objective and transparent.

### **Joyful Learning in Digital Media-Based PAI Learning**

Based on the results of interviews and observations conducted in this study, it was found that joyful learning in digital media-based Islamic Religious Education (PAI) learning at SMK YPM was realized through changes in the learning atmosphere into one that was more enjoyable, interactive, and less stressful. PAI teachers revealed that the use of digital media was able to create a more dynamic classroom environment compared to conventional learning, which tended to be passive. This can be seen from the increased interaction between teachers and students, as well as among students themselves. Interactions that were initially one-way developed into two-way and even multi-directional communication, allowing students to have broader opportunities to participate in the learning process.

The research findings also showed that students became more actively involved in learning. Students not only acted as recipients of material but were also actively engaged in discussions, question-and-answer sessions, and responding to materials presented through digital media. Teachers explained that the use of media such as videos visualizations, and interactive quizzes was able to attract students' attention and stimulate their active participation. This was reinforced by interview results with students, who stated that learning became more interesting, less boring, and helped them focus more during learning activities. This condition indicates the presence of positive emotional engagement, which is one of the main characteristics of joyful learning.

In addition, students' psychological aspects also experienced changes, particularly in terms of self-confidence. Based on teachers' observations, students became more confident in expressing opinions and answering questions. Students no longer felt afraid or awkward when participating in learning activities. The use

of digital media, especially interactive media, provided a safer space for students to express themselves. This indicates that digital media-based learning is capable of creating an inclusive and supportive learning environment.

From the cognitive perspective, interview results with students showed that the use of digital media helped them understand PAI materials more easily. The presentation of material through varied forms, such as visual and interactive media, made it easier for students to connect abstract concepts with more concrete examples. These findings indicate that joyful learning not only affects emotional aspects but also contributes to improving students' understanding.

In the context of learning motivation, students stated that they were more enthusiastic in participating in learning activities because of the elements of novelty and challenge offered by digital media. Learning motivation was no longer solely derived from external encouragement but began to develop into intrinsic motivation. Students learned because they were interested in and enjoyed the learning process itself. This shows that the implementation of digital media-based joyful learning is capable of creating meaningful and sustainable learning experiences.

Furthermore, in the aspect of learning evaluation, teachers revealed that the use of digital media made students more enthusiastic and less pressured when answering questions. Students admitted that they felt more confident and better prepared in facing evaluations. In addition, digital-based evaluation systems also trained students' discipline and honesty because they were required to complete questions independently within predetermined time limits. Observation results also showed that students did not have opportunities to cheat or depend on their friends, requiring them to genuinely understand the material before evaluations were conducted.

Joyful learning in digital media-based PAI learning at SMK YPM not only creates an enjoyable learning atmosphere but also enhances student engagement, understanding, motivation, and character formation. In this context, digital media functions as a means of supporting the creation of learning that is more active, humanistic, and student-centered. Thus, the joyful learning that is produced is not merely an enjoyable atmosphere, but also a meaningful learning experience that holistically impacts students' development.

## **Discussion**

### **Integration of Digital Media in Islamic Religious Education Learning**

Based on the research findings, the integration of digital media in PAI learning at SMK YPM demonstrates the implementation of modern learning principles aligned with constructivist theory. The use of text-based media such as PDFs, e-books, and blogs reflects teachers' efforts to provide learning resources that enable students to construct knowledge independently. This is in line with the view of Jean

Piaget (1970), who emphasized that knowledge is actively constructed by individuals through interaction with the learning environment. In addition, the use of audiovisual media such as videos reinforces the dual coding theory proposed by Allan Paivio (1986), in which the combination of visual and verbal information can improve students' understanding and memory retention.

Furthermore, the use of interactive media such as Kahoot! and Wordwall demonstrates the implementation of active learning theory, which positions students as the subjects of learning. From the perspective of Lev Vygotsky (1978), social interaction in learning is highly important in developing students' cognitive abilities, particularly through the concept of the *zone of proximal development* (ZPD). Interactive digital media allows students to learn through direct experiences, immediate feedback, and intensive interaction, thereby strengthening the process of knowledge construction.

In the aspect of communication, the use of WhatsApp as well as platforms such as Google Classroom and email, reflects the application of connectivism theory proposed by George Siemens (2005). This theory emphasizes that learning in the digital era occurs through broad networks and information connections. Thus, learning is no longer limited to the classroom but extends into digital environments that enable students to access various learning resources flexibly.

Findings related to the implementation of blended learning also reinforce the concept of modern learning that integrates face-to-face and online instruction. This is in line with the opinion of Charles R. Graham (2006), who stated that blended learning can improve learning effectiveness through the combination of the advantages of direct instruction and digital technology. In this context, research findings supported by Meilinda (2024) indicate that flexibility in learning access contributes to improving students' understanding.

In addition, the integration of digital media also has an impact on improving the competencies of both teachers and students, particularly in digital literacy. This is relevant to the framework proposed by Punya Mishra and Matthew J. Koehler (2006) regarding *Technological Pedagogical Content Knowledge* (TPACK), which emphasizes the importance of integrating technology, pedagogy, and content in learning. These findings are reinforced by Suriati (2025b), who states that digital media can improve teachers' pedagogical and professional competencies. Supporting facilities such as smartphone use and internet access are also important factors in successful implementation, as emphasized in the technology acceptance theory proposed by Fred Davis (1989).

From the perspective of Islamic education, the integration of digital media functions not only as a tool for delivering learning materials but also as a means of internalizing Islamic values. This can be analyzed through a holistic educational approach that emphasizes balance among cognitive, affective, and spiritual aspects.

The finding that students become more honest, disciplined, and self-confident through the use of interactive digital media indicates that learning not only transfers knowledge but also shapes character. This condition is consistent with the concept of *ta'dib* in Islamic education, which emphasizes the formation of proper conduct (*adab*) and moral character (*akhlaq*), as proposed by Syed Muhammad Naquib al-Attas (1980).

Furthermore, the use of interactive media such as Kahoot! and Wordwall, which limits opportunities for cheating, can also be associated with the theory of self-regulated learning proposed by Barry Zimmerman (2002), in which students are trained to become independent, responsible, and capable of controlling their own learning processes. This has an impact on increasing students' learning readiness as well as strengthening their intrinsic motivation.

These research findings are reinforced by Annisa (2024), who states that digital technology not only improves students' understanding but also introduces innovation into PAI learning. Thus, the integration of digital media in PAI learning at SMK YPM can be understood as the implementation of technology-based learning that not only enhances students' cognitive aspects but also strengthens their affective and spiritual dimensions. This indicates that digital media functions as a strategic instrument in realizing adaptive, interactive, and meaningful PAI learning in accordance with the demands of the digital era.

### **Implications of the Utilization of Digital Media in PAI Learning**

The view of Bobbi DePorter and Mike Hernacki (2010), which states that a positive learning atmosphere can improve students' absorption and memory retention, is consistent with the *affective filter* theory proposed by Stephen Krashen (1982). This theory emphasizes that comfortable emotional conditions reduce learning barriers and facilitate the process of knowledge internalization.

Lev Vygotsky (1978) emphasized that learning occurs through active social interaction. The finding that learning interactions developed from one-way communication into two-way and even multi-directional communication indicates that digital media has facilitated the creation of collaborative learning environments. This strengthens the principle of *student-centered learning*, in which students play active roles in constructing their own knowledge.

The increase in student participation in discussions, question-and-answer sessions, and responses to digital materials is also consistent with the theory of *active learning* proposed by Melvin L. Silberman (1996). According to this theory, learning becomes more meaningful when students are directly involved in the learning process. Varied digital media, such as videos and interactive quizzes, function as stimuli capable of increasing students' attention and engagement. This is also supported by the multimedia learning theory proposed by Richard E. Mayer (2009),

which states that the combination of visuals, audio, and text can significantly improve students' understanding.

Furthermore, the increase in students' self-confidence in expressing opinions can be explained through the theory of *self-efficacy* proposed by Albert Bandura (1997). Bandura explained that positive learning experiences and supportive environments enhance individuals' confidence in their own abilities. Digital media, particularly interactive media, provides a safer space for students to participate without social pressure, thereby increasing their courage and self-confidence.

In the context of learning evaluation, the change in students' attitudes toward becoming more enthusiastic and less anxious indicates a transformation in the assessment paradigm. This is consistent with the concept of *assessment for learning* proposed by Paul Black and Dylan Wiliam (1998), in which evaluation functions not only as a measurement tool but also as part of the learning process itself. In addition, the use of digital media in evaluation also reinforces the theory of *self-regulated learning* proposed by Barry Zimmerman (2002), which emphasizes the importance of students' independence, discipline, and responsibility in learning.

Students' perceptions of assessment objectivity can be analyzed through the principles of objective and transparent educational evaluation proposed by Anthony J. Nitko and Susan M. Brookhart (2011). Automated digital-based assessment systems are able to minimize teacher subjectivity, thereby creating a sense of fairness for students. This condition impacts the increase in students' confidence regarding the learning outcomes they achieve.

From the perspective of motivation, the increase in students' intrinsic motivation can be explained through the *Self-Determination Theory* proposed by Edward L. Deci and Richard M. Ryan (2000). This theory states that intrinsic motivation emerges when the needs for autonomy, competence, and relatedness are fulfilled. Digital media in PAI learning provides opportunities for students to learn independently, receive immediate feedback, and interact with teachers and peers, thereby encouraging the emergence of motivation from within the students themselves.

From the perspective of Islamic education, the finding that digital media-based learning is able to shape character traits such as honesty, discipline, and responsibility indicates that learning is not only oriented toward cognitive aspects but also toward affective and spiritual dimensions. This is in line with the concept of *ta'dib* proposed by Syed Muhammad Naquib al-Attas (1980), which emphasizes that the goal of Islamic education is the formation of proper conduct (*adab*) and holistic personality development. In this context, digital media functions as a means of internalizing these values through authentic learning practices.

The findings of this study indicate that the implementation of digital media-based joyful learning in PAI learning is aligned with various modern learning

theories. Digital media not only increases student engagement but also strengthens students' cognitive, emotional, and character aspects. Therefore, joyful learning-based PAI learning can be understood as a form of pedagogical transformation toward learning that is more active, humanistic, and meaningful in the digital era.

### **Joyful Learning in Digital Media-Based PAI Learning**

The research findings indicate that the implementation of joyful learning in digital media-based PAI learning at SMK YPM has implications for creating a learning atmosphere that is more enjoyable, interactive, and less stressful. This condition is consistent with the views of Bobbi DePorter and Mike Hernacki (2010), who emphasized that a positive learning environment can improve learning effectiveness by enhancing students' absorption and memory retention. Furthermore, from the perspective of the *affective filter* theory proposed by Stephen Krashen (1982), a comfortable and non-threatening learning atmosphere functions to reduce emotional barriers, allowing students to receive and process information more easily.

The change in interaction patterns from one-way communication into two-way and even multi-directional communication indicates a shift in the learning paradigm toward a social constructivist approach. According to Lev Vygotsky (1978), learning occurs optimally through active social interaction. The finding that students have broader opportunities to participate indicates that digital media has facilitated the creation of collaborative learning environments. This also reflects the principle of *student-centered learning*, in which students act as active subjects in constructing knowledge rather than merely recipients of information.

The increase in students' activeness in discussions, question-and-answer sessions, and responses to digital materials can be analyzed through the theory of *active learning* proposed by Melvin L. Silberman (1996). Within this framework, students' direct involvement in the learning process results in deeper understanding. In addition, the use of media such as videos, visualizations, and interactive quizzes is consistent with the multimedia learning theory proposed by Richard E. Mayer (2009), which explains that the combination of visual and verbal elements can improve learning effectiveness and help students understand abstract concepts.

From the psychological aspect, the increase in students' self-confidence in expressing opinions demonstrates relevance to the theory of *self-efficacy* proposed by Albert Bandura (1997). Bandura stated that positive learning experiences and supportive environments can increase individuals' confidence in their own abilities. Interactive digital media provides a safer space for students to participate without social pressure, thereby encouraging the emergence of courage and self-confidence.

In the cognitive aspect, the finding that students understand learning materials more easily through digital media indicates that joyful learning not only affects

emotions but also thinking processes. This is in line with the *information processing theory*, which states that structured and engaging information presentation facilitates the processes of encoding and retrieval in memory (Slavin, 2012). Digital media that presents material visually and interactively helps students connect abstract concepts with concrete realities, thereby improving understanding.

From the motivational perspective, the increase in students' enthusiasm and the development of intrinsic motivation can be explained through the *Self-Determination Theory* proposed by Edward L. Deci and Richard M. Ryan (2000). This theory emphasizes that intrinsic motivation emerges when the needs for autonomy, competence, and relatedness are fulfilled. Digital media in learning provides opportunities for students to learn independently (autonomy), receive feedback (competence), and interact with teachers and peers (relatedness), thereby strengthening students' internal learning motivation.

In the context of evaluation, the finding that students felt more confident and less pressured when answering questions indicates a transformation in assessment practices. This is in line with the concept of *assessment for learning* proposed by Paul Black and Dylan Wiliam (1998), which emphasizes that evaluation should support the learning process rather than merely measure outcomes. In addition, the use of digital evaluation systems that require independence and honesty is also related to the theory of *self-regulated learning* proposed by Barry Zimmerman (2002), in which students are trained to manage their own learning processes independently, with discipline and responsibility.

Furthermore, the formation of character traits such as honesty, discipline, and responsibility in digital media-based PAI learning can be analyzed from the perspective of Islamic education. The concept of *ta'dib* proposed by Syed Muhammad Naquib al-Attas (1980) emphasizes that the goal of Islamic education is to form civilized human beings who are not only intellectually intelligent but also possess good moral character. The research findings indicate that digital media can serve as a means of internalizing these values through authentic learning practices.

### Conclusion

The conclusion of this study shows that the optimization of digital media in PAI learning at SMK YPM Bojonegoro is capable of transforming learning into a process that is more interactive, enjoyable, and student-centered. The utilization of digital media increases students' engagement, understanding, and learning motivation. In addition, the implementation of digital-based joyful learning also has positive impacts on psychological and character aspects, such as self-confidence, independence, discipline, and honesty. Thus, digital media functions not only as a learning aid but also as a strategic means of creating meaningful and humanistic learning that is capable of integrating Islamic values.

This study contributes theoretically to the development of digital-based PAI learning by strengthening the concept of joyful learning integrated with Islamic educational values. Practically, the findings provide references for teachers, schools, and educational policymakers in designing innovative and student-centered learning models through the effective utilization of digital media in Islamic education.

However, this study also has several limitations. The research was conducted only in one educational institution, so the findings cannot be generalized to all school contexts. In addition, the study focused primarily on the implementation process and students' responses without deeply examining the long-term impact of digital media on students' academic achievement and character development. Therefore, further studies are recommended to involve broader research settings and more comprehensive evaluation approaches in order to strengthen the findings of this study.

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