

The Use of School Transformation Intervention Plan (PinTas) And Outcome Performance Planning Matrix (OPPM) In Leading Leadership: A Review Study

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Abstract

The School Transformation Intervention Plan (PinTas) and the Outcome Performance Planning Matrix (OPPM) are part of the Malaysian Ministry of Education's (MOE) efforts to transform the education system, particularly in achieving the goals and vision set out in the School Transformation 2025 (TS25) initiative. The purpose of this study is to investigate the impact of the implementation of PinTas and OPPM on teachers in a TS25 school in northern Malaysia. The study was conducted qualitatively and involved 5 respondents comprising the school's senior leadership team, who were selected through purposive random sampling. For the purpose of data collection, interviews and document analysis were carried out. Interview transcripts were analyzed manually. The results of the analysis revealed that school leaders demonstrated a positive attitude towards the implementation of TS25, which is considered an important step in improving the quality of education and school achievement. The availability of resources, teacher commitment, and support from higher education management influence the effectiveness of the use of PinTas and OPPM. PinTas and OPPM provide a clear framework for the planning and evaluation of management strategies and assist them in monitoring school progress in a more structured manner. This proves the positive function of PinTas and OPPM in improving school performance and quality through various structured and systematic interventions. The role of PinTas and OPPM should continue to be strengthened.

Keywords: Impact, PINTAS, OPPM, Intervention, TS25

1.0 Introduction

The dynamic landscape of global education increasingly emphasizes the critical role of strategic leadership in driving comprehensive school improvement and adapting to evolving societal demands (Samsuddin et al., 2023; Bush, 2020). Effective school leaders are widely recognized as the second most significant school-based factor influencing student outcomes, surpassed only by the quality of teaching itself (Bush, 2020; Leithwood et al., 2006, as cited in Bush, 2020). This global imperative for strong educational leadership resonates deeply within the Malaysian context, where the Ministry of Education has embarked on ambitious reforms to elevate the national education system.

Central to Malaysia's educational reform agenda is the 2025 School Transformation Program (TS25), a cornerstone initiative designed to systematically enhance school leadership and management practices across the nation (Ministry of Education Malaysia, 2018; Sulaiman & Ismail, 2020). Launched with the vision of realizing the aspirations outlined in the Malaysia Education Blueprint 2013-2025, TS25 aims to foster a culture of high performance in schools, ultimately leading to improved student achievement and elevated teacher quality (Mohd Rassidi Saini & Mohd Isa Hamzah, 2023; Soh & Radzi, 2023). To facilitate this transformation, the Ministry of Education introduced specific strategic planning instruments: the School Transformation Intervention Plan (PinTas) and the Outcome Performance Planning Matrix (OPPM). These tools are conceptualized as structured frameworks to guide school leaders in developing targeted strategies, monitoring implementation, and evaluating performance, thereby streamlining efforts to achieve TS25 objectives (Kamaruddin, 2019; Ministry of Education Malaysia, 2018; Ahmad, 2020). The theoretical underpinning for such tools is robust; systematic literature reviews affirm that comprehensive and flexible strategic planning is a critical enabler of enhanced institutional performance and educational excellence (Endo, 2025).

Despite the clear intent and theoretical benefits of PinTas and OPPM, the practical application of these tools by school leaders in Malaysia to fully realize TS25 objectives presents a significant research problem. While the importance of effective leadership in educational change is well-established (Bush, 2020; Nuramal & Lail, 2022), there remains a pressing need to understand *how* school leaders are effectively leveraging PinTas and OPPM to build a school culture that consistently prioritizes student achievement and teacher quality development (Ahmad, 2020; Karim & Aziz, 2018).

The TS25 program is being actively implemented, and PinTas and OPPM are designated as key instruments for school improvement (Ministry of Education Malaysia, 2018; Sulaiman & Ismail, 2020). The general literature on strategic planning affirms its positive impact on organizational performance when effectively implemented (Endo, 2025). Furthermore, it is acknowledged that school leaders play a pivotal role in driving change and influencing school outcomes (Samsuddin et al., 2023; Adams et al., 2024). The Malaysia Education Blueprint 2013-2025 explicitly.

While the introduction of PinTas and OPPM is documented, there is a distinct lack of empirical studies, particularly in the recent literature (2020-2025), that specifically investigate the actual extent and effectiveness of school leaders' utilization of these precise tools in leading change through TS25. Previous reports have indicated various challenges in the implementation of educational reforms and strategic planning initiatives within Malaysian schools (Hassan & Salleh, 2020; Liu et al., 2024). These challenges often include:

- A fundamental lack of understanding or insufficient professional competency among school leaders regarding the optimal use and comprehensive integration of strategic planning tools like PinTas and OPPM (Hassan & Salleh, 2020; Ali, 2025).
- Difficulties arising from limited human and financial resources allocated for effective implementation and follow-up (Liu et al., 2024).
- Pressure to achieve stringent performance targets within compressed timelines, potentially leading to superficial application rather than deep integration of these planning frameworks (Hassan & Salleh, 2020; Liu et al., 2024).
- Concerns about the democratic nature of planning processes and teacher participation, which can affect ownership and effective implementation (Liu et al., 2024).
- Inconsistencies in the reported levels of effective leadership practices (e.g., instructional leadership) across different schools in Malaysia, suggesting varied capacities to operationalize strategic initiatives (Nuramal & Lail, 2022; Said & Jadin, 2020).

These identified challenges suggest a potential disconnect between the intended function of PinTas and OPPM as powerful leadership tools and their actual application and effectiveness in practice. Therefore, a significant gap exists in understanding the nuances of how school leaders navigate these challenges and whether the benefits of these tools are being fully realized in the context of TS25.

This study is critically important because it aims to bridge this knowledge gap by empirically investigating the extent to which school leaders are able to effectively utilize PinTas and OPPM in leading change through TS25. By identifying the factors that influence its effectiveness, both enablers and barriers- this research will provide valuable insights into the practical realities of implementing national educational transformation programs. It will illuminate school leaders' perceptions of the specific challenges and benefits derived from using PinTas and OPPM, offering crucial feedback to policymakers and educational authorities. Ultimately, the findings will contribute to refining training

programs, resource allocation, and policy frameworks to better support school leaders in leveraging these strategic tools for more impactful school performance and sustainable educational excellence in Malaysia.

2.0 Objectives

- i. Identify school leaders' perceptions of the effectiveness of PinTas and OPPM in the implementation of the TS25 Program.
- ii. Examine how PinTas and OPPM assist in the planning and implementation of leadership strategies focused on performance improvement.
- iii. Assess the factors that influence the effectiveness of the use of PinTas and OPPM in the context of school leadership under TS25.

3.0 Research Questions

- i. What are school leaders' perceptions of the effectiveness of PinTas and OPPM in leading change through the TS25 Program?
- ii. How does the use of PinTas and OPPM assist school leaders in planning and implementing performance improvement strategies?
- iii. What factors contribute to supporting or hindering the effective implementation of PinTas and OPPM under TS25?

4.0 Research Methodology

This study was conducted using a qualitative method, involving in-depth interviews with school leaders involved in the TS25 Program. The respondents of this study consisted of 5 senior leader team members from schools that have implemented PinTas and OPPM under the TS25 Program. A purposive sampling technique was used to select study participants based on their experience in using PinTas and OPPM. For the purpose of data collection, interviews and document analysis were carried out. The collected data will be analyzed manually using a thematic analysis approach to identify the main themes related to the use of PinTas and OPPM in school leadership.

5.0 Research Findings

The findings of this study will be presented qualitatively and are expected to identify several main themes as follows:

- i. Leaders' Perceptions of TS25
- ii. Supporting and Hindering Factors.
- iii. Effectiveness of PinTas and OPPM in Achieving TS25 Objectives.

5.1 Leaders' Perceptions of TS25

In general, school leaders demonstrated a positive attitude towards the implementation of TS25, which is considered an important step in improving the quality of education and school achievement. However, some concerns arose, particularly regarding the high workload that school leaders have to bear in ensuring the effectiveness of TS25 implementation. This burden not only includes administrative and management aspects but also requires school leaders to balance between various increasing job demands in an increasingly challenging education environment.

"TS25 is good for the school, it pushes us forward. But honestly, the amount of reports and meetings, plus our daily duties, it's just too much. I sometimes feel like I'm drowning in paperwork instead of leading." (Interview Excerpt 1, School Leader A)

In addition, the challenge of changing the mindset of the school community towards a more data- and outcome-focused approach was also acknowledged by some school leaders. The transformation

intended by TS25 requires a cultural change among teachers, school staff, and students, so that they are more open and willing to adopt a data-driven analysis approach. This includes the use of data in planning and evaluating the effectiveness of teaching and learning, as well as in making strategic decisions for improving academic performance and school management.

"The biggest hurdle isn't the data itself, but convincing teachers that data is a tool to help them, not just another audit. Many are used to traditional methods; shifting to a data-driven approach takes a lot of effort and constant reinforcement." (Interview Excerpt 2, School Leader C)

However, some school leaders felt that the traditional mindset that emphasizes conventional teaching methods and achievement tests may hinder efforts to achieve this goal.

Changing the way the school community thinks is not an easy task. It requires continuous commitment from school leaders to set an example and guide teachers and staff in understanding the importance of using data to improve learning outcomes. Therefore, in addition to providing support and training, school leaders also need to ensure that a more collaborative and open work culture is created so that the school community can jointly explore and utilize the potential of data for the benefit of the school. In facing this challenge, school leaders need to act as agents of change, providing encouragement and clarifying the benefits that can be achieved with a more systematic and data-focused approach.

5.2 Supporting and Hindering Factors

The findings indicate that there are internal and external factors that influence the effectiveness of the use of PinTas and OPPM, such as the availability of resources, teacher commitment, and support from higher education management. The availability of adequate resources is a very important foundation for the successful use of PinTas and OPPM. Without sufficient resources such as relevant teaching materials, modern educational technology, and continuous training for teachers, the effectiveness of both systems will certainly be affected. These resources include learning materials focused on student needs, such as educational software and special modules suitable for different student learning styles. In the context of OPPM, a learning management system that is easily accessible to all teachers and students is also a necessity to ensure the smooth teaching and learning process.

"We can plan beautifully with PinTas and OPPM, but if we don't have enough up-to-date learning materials or access to good educational software, it's difficult to implement those plans effectively in the classroom." (Interview Excerpt 3, School Leader D)

Teacher commitment plays a very significant role in the successful use of PinTas and OPPM. Teachers who are dedicated and willing to actively engage in modular learning and inclusive education processes will have a positive impact on student learning outcomes. Without full dedication and involvement from teachers, this initiative may be difficult to implement perfectly. Therefore, continuous training and support to improve teacher competence are essential.

"Our teachers are the frontline. If they don't buy into the PinTas strategies or see the value of OPPM, even the best plans will fail. Their commitment to continuous professional development and trying new approaches is absolutely vital." (Interview Excerpt 4, School Leader B).

In addition, continuous support from higher education management is an important factor in ensuring successful implementation. Management needs to provide continuous guidance, training, and monitoring so that teachers can carry out their duties more efficiently. If this support is insufficient, teachers may face challenges in adapting to the use of PinTas and OPPM, which can ultimately affect their achievement and effectiveness.

"We need more than just directives from the JPN or State Education Department. We need hands-on support, workshops that are truly useful, and consistent monitoring to ensure we're on the right track and to help us troubleshoot issues with PinTas and OPPM." (Interview Excerpt 5, School Leader E) .

Considering these factors, it is clear that the successful use of PinTas and OPPM requires close cooperation between adequate resources, high teacher commitment, and strong support from education management.

5.3 Effectiveness of PinTas and OPPM in Achieving TS25 Objectives

School leaders reported that PinTas and OPPM provide a clear framework for the planning and evaluation of management strategies and assist them in monitoring school progress in a more structured manner.

"PinTas gives us a very clear roadmap. Before, our planning felt a bit scattered. Now, with PinTas and OPPM, we have specific targets, clear strategies, and ways to measure if we are actually achieving them. It makes our work much more organized." (Interview Excerpt 6, School Leader B)

In the area of curriculum management outcomes, the school set an aspiration to improve students' mastery of reading skills to a better level. The main focus is to ensure that 85% of students achieve Mastery Level (TP) 3 and above in Malay Language Literacy. This achievement will be assessed through KPI1, which is the percentage of students who achieve that level. To achieve this target, several strategies have been planned. Among them is implementing a Focused Reading Program that divides students according to their ability level, as well as conducting literacy remediation classes for students who have not yet reached TP3. In addition, parental involvement is also encouraged through the provision of learning guides at home. The school will also utilize technology by using language learning applications to increase students' reading interest. To ensure effectiveness, monitoring and evaluation will be conducted periodically through diagnostic and formative tests. With the implementation of these measures, the school is confident in achieving the set literacy targets.

In the area of curriculum management outcomes as well, the school aspires to improve the competency of Teaching and Learning in the Classroom (T&L) of teachers to a more excellent level. The main focus is to ensure that 75 percent of teachers are able to provide Student Development Records (SDR) systematically. This outcome is important for monitoring student development more effectively and helping teachers plan appropriate T&L strategies. To achieve this goal, various initiatives are implemented, including internal training sessions, teacher professionalism workshops, and continuous guidance in SDR management. Regular monitoring and support from administrators are also provided to ensure teachers receive accurate guidance. With the implementation of these strategies, the school is optimistic that the goal of increasing the percentage of teachers who excel in the preparation of SDR can be achieved, thereby contributing to the overall academic success of students.

In the area of student affairs management outcomes, the school aspires to increase the percentage of student attendance at school. The main focus is to conduct monthly student attendance analysis throughout 2023. Based on existing data, the percentage of student attendance has not yet reached 90% every month. Therefore, several intervention measures are implemented to address this issue. Among them are introducing attendance awareness programs, giving awards to students with excellent attendance, and conducting counselling sessions for students who are frequently absent. In addition, cooperation with parents will be strengthened through regular discussions and reports to ensure student attendance can be improved. With these integrated efforts, the school hopes to achieve a minimum attendance target of 90% every month in the coming year.

"For student attendance, OPPM helps us pinpoint exactly which months we're struggling. It's not just about getting more students to come; it's about using the data to understand why they are absent

and then tailoring our interventions, whether it's through counselling or engaging parents more directly." (Interview Excerpt 7, School Leader A)

6.0 Summary and Discussion

On the part of school leaders, they generally support the implementation of TS25 as an important step to improve the quality of education. However, they also face challenges, especially related to the high workload and changing the mindset of the school community towards a more data- and outcome-focused approach. School leaders need to ensure a cultural change among teachers, staff, and students so that they are more open to accepting the use of data in the teaching and learning process. This requires continuous commitment from school leaders to set an example, provide support, and create a more collaborative work culture.

However, there are several supporting and hindering factors that influence the successful use of PinTas and OPPM. The main supporting factors are the availability of resources, teacher commitment, and continuous support from education management. Without sufficient resources such as relevant teaching materials, modern educational technology, and continuous training, the effectiveness of this system will certainly be affected. In addition, high teacher commitment in engaging with modular learning activities and inclusive education is important to achieve positive results. Support from higher education management is also essential to provide continuous training, guidance, and monitoring so that teachers can carry out their duties more effectively.

The implementation of PinTas and OPPM has demonstrated effectiveness in achieving TS25 objectives, particularly in monitoring and planning school management strategies. With a clear framework, both systems assist school leaders in ensuring the effectiveness of planning and evaluation in the area of curriculum management outcomes, including improving students' mastery of Malay language literacy, increasing student attendance, and improving teacher T&L competency.

School leaders require continuous support from higher education management to ensure they can focus on achieving objectives without being burdened by excessive workload. With these integrated efforts, the use of PinTas and OPPM can be more effective, thereby improving the quality of education and student achievement in schools.

Overall, the success of the use of PinTas and OPPM in achieving the objectives of TS25 is highly dependent on cooperation between all parties, including adequate resources, high teacher commitment, and continuous support from education management. This success will have a positive impact on the quality of learning and student achievement, thus improving overall school performance.

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Malaysian Youth & Political Socialization: Navigating Democracy, Leadership, and Global Citizenship

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Abstract

This mixed-methods study investigates political socialization among Malaysian youth, analyzing data from the Malaysian Youth Index 2023 (N=5,414) and 12 focus group discussions. Findings reveal a digital paradox where high social media engagement (92%) coexists with low political literacy (5.2/10), exacerbated by algorithmic echo chambers. Significant urban-rural disparities (18-point gap) persist due to unequal access to civic education and digital infrastructure. While digital activism is prevalent (43%), formal political participation remains low (6%). The study proposes a Hybrid Political Socialization Model integrating digital platforms, mentorship programs, and community hubs to enhance youth engagement. Key recommendations include: (1) curriculum reforms emphasizing critical digital literacy, (2) accelerated rural digital development, and (3) institutionalized youth co-creation in policymaking. These findings offer both theoretical insights into digital-era citizenship and practical strategies for strengthening youth political participation in Malaysia's multicultural democracy.

Keywords: Youth political engagement, digital citizenship, political literacy, civic education, Malaysia.

1.0 Introduction

Malaysian youth, comprising 29.2% of the country's population [1], are a crucial asset in driving the nation's democratic transformation. The significant increase in youth participation in democratic processes, particularly in the 15th General Election (GE15), which recorded a 76% youth voter turnout [2], highlights their potential as key agents of political change. However, the Malaysian Youth Index (MYI) 2023 report reveals that the domain of Political Socialization, Citizenship, and Democracy is at Tier 3, indicating an urgent need for intervention [3].

This study adopts a comprehensive approach to analyze the political socialization process among Malaysian youth within the context of digital transformation and the country's socio-cultural diversity. Political socialization refers to the process by which individuals acquire political values, attitudes, and behaviors through interactions with various social institutions such as family, the education system, media, and peer groups [4]. In Malaysia, this process has grown increasingly complex with the rise of digital media as a dominant agent of political socialization. Current developments reveal an intriguing paradox - while Malaysian youth show progress in the Global Youth Development Index (0.802 in

2023) [5], their engagement in formal democratic processes continues to decline. This situation raises critical questions about the effectiveness of existing political socialization mechanisms in fostering active and responsible citizens.

This study is particularly significant as it is conducted during a period of rapid political transformation in Malaysia, aligning with the implementation of the National Youth Policy 2015-2035 [6] and the 12th Malaysia Plan [7], which emphasize youth human capital development. The findings are expected to contribute substantially to the formulation of more effective youth policies in the future.

2.0 Materials and Methodology

This study employs a mixed-methods design grounded in pragmatist epistemology [8] and political socialization theory [9], which together justify the integration of quantitative and qualitative approaches. The pragmatist paradigm prioritizes problem-centered research and actionable insights, while political socialization frameworks emphasize the need to examine both structural (e.g., education, media systems) and experiential (e.g., peer interactions) influences on youth engagement.

2.1 Quantitative Component

Analysis of secondary data from the Malaysian Youth Index (MYI) 2023 (N=5,414; ages 15–30) (Ministry of Youth and Sports, 2023) used stratified sampling to capture Malaysia's demographic diversity, including: Geographic distribution (14 states and federal territories), Urban-rural residency (52% urban, 48% rural), Ethnic composition (Bumiputera 62%, Chinese 22%, Indian 10%, other 6%), Socioeconomic status (education level, income brackets).

Data were analyzed using SPSS 28 to:

Measure prevalence of key behaviors (e.g., 92% social media engagement vs. 6% formal political participation) and identify correlations (e.g., between digital literacy and political engagement via regression analysis).

2.2 Qualitative Component

Twelve Focus Group Discussions (FGDs) were conducted with 60 participants, purposively selected to ensure:

- Age distribution: 20 participants aged 15–20, 20 aged 21–25, 20 aged 26–30,
- Gender balance: 30 male, 30 female,
- Political interest: Screened to include equal representation of low/moderate/high self-reported engagement,
- Education diversity: Secondary school (n=20), university (n=30), vocational training (n=10).

FGDs employed a semi-structured protocol covering six socialization domains (media, family, education, peers, civic participation, institutional trust). Sessions were conducted hybrid (online/physical), audio-recorded, and transcribed verbatim. Thematic analysis followed Braun Clarke's

(2006) framework, with reflexivity memos documenting researcher assumptions (e.g., challenges interpreting colloquial political slang).

2.3 Integration and Validation

1. Integration matrices mapped quantitative trends (e.g., 18-point urban-rural participation gap) to qualitative themes (e.g., rural youth describing limited civic education opportunities).
2. Peer debriefing: Three independent experts in political sociology reviewed coding frameworks and regression models to challenge interpretations.
3. Audit trail: A doctoral candidate unaffiliated with the study verified analysis steps for consistency.
4. Member checking: Participants received summaries to confirm accuracy of their responses.

2.4 Limitations and Transferability

While findings are delimited to Malaysian youth (15–30), the Hybrid Political Socialization Model may inform similar multicultural contexts with digital divides. Generalizability is constrained by self-report bias, mitigated through:

- Triangulation of MYI data, FGDs, and policy analysis,
- Transparency about researcher positioning (e.g., noting urban bias in initial coding).

2.4 Ethical Compliance

Approved by the University of Malaya Research Ethics Committee (Ref: UM.REC/2023/058). Participants provided written consent with guarantees of anonymity and data security

3.0 Results

3.1 Malaysian Youth Development Targets (2021-2025)

The Malaysian Youth Index (MYI) 2023 tracks progress toward national development goals under the 12th Malaysia Plan (2021–2025), which set an annual improvement target of 0.5 index points [7]. Table 1 distinguishes between:

Baseline MYI scores (measured at year-end), and

Mid-year assessments (interim evaluations of specific policy interventions).

Table 1: MYI Score Progress Against 12th Malaysia Plan Targets

Year	Baseline MYI Score (Year-End)	Annual Change	Mid-Year Assessment Score*	Key Policy Drivers (Mid-Year)
2021	68.30 (Moderate)	-	69.79 (+1.49)	Post-pandemic recovery programs
2022	68.80 (Moderate)	+0.50	70.25 (+0.46)	Digital youth entrepreneurship launch
2023	74.39 (Moderate)	+5.59**	74.39 (+4.14)	Implementation of Belia Prihatin welfare scheme & MyDigital initiatives
2025	70.30 (Target)	-	-	-

Source: 12th Malaysia Plan Mid-Term Review (2023), Chapter 5 [7]

Note: Mid-year assessments evaluate policy rollout impacts before final year-end scoring. The unprecedented 5.59-point increase in 2023 reflects the combined effects of:

Belia Prihatin: Welfare subsidies reducing youth financial stress (implemented Q1 2023),
MyDigital Acceleration: Expanded rural broadband access (+38% coverage in 2023),
Post-pandemic rebound: Delayed 2022 program benefits materializing in 2023 metrics.

The 2023 mid-year assessment (+4.14) specifically captured early gains from these interventions, explaining the divergence from the annual target (+0.5).

3.2 Key Research Findings

3.2.1 Political Literacy Levels

Malaysian youth demonstrate moderate-low political literacy (mean score: 5.2/10), with significant gaps:

- Only 32% accurately explain Malaysia's governance system
- 28% fully understand electoral processes
- Urban-rural disparity (6.1 vs. 4.3 scores) [3]

3.2.2 Digital Media Consumption Patterns

Political information sources (ranked):

- TikTok (43%)
- Instagram (28%)
- WhatsApp (17%)
- Facebook (9%)
- Twitter (3%)

Note: 68% consume algorithm-driven content (non-active searches) [10]

3.2.3 Political Participation Rates

- Voting (GE15): 76% [2]
- Party membership: 6%
- Political rally attendance: 12%
- NGO activism: 8%

3.2.4 Determinants of Political Engagement

- Regression analysis (significant predictors):
- Political education access ($\beta=0.42$, $p<0.01$)
- Political social media use ($\beta=0.38$, $p<0.05$)
- Family support ($\beta=0.31$, $p<0.05$)

3.2.5 Trust in Political Institutions

- Parliament: 22%
- Political parties: 18%
- Youth NGOs: 35%
- Mainstream media: 27%

3.2.6 Demographic Variations

Significant differences exist by:

- Location: Urban (45%) vs. rural (27%) engagement
- Ethnicity: Malay (38%), Chinese (29%), Indian (25%)
- Education: Tertiary (45%) vs. school-level (28%)

3.2.7 Government Program Effectiveness

- Youth Parliament: 12% participation
- Rakan Muda: 18% awareness
- Ministry programs: 22% recognition

3.2.8 Youth Aspirations (Qualitative Data)

- Demand for practical political education (71% FGD responses)
- Preference for interactive digital platforms
- Frustration with partisan politics
- Strong interest in transnational issues (climate, human rights) [9]

3.2.9 Effective Socialization Model

Three critical elements emerged:

- Hybrid (digital-traditional) approaches
- Cross-generational engagement
- Problem-solving focus

3.2.10 Key Barriers

- a) Limited access to credible political information
- b) Growing apolitical attitudes
- c) Urban-rural digital divide
- d) Fragmented government programs

These findings collectively underscore three critical policy imperatives for enhancing youth political socialization in Malaysia. *First*, the consistently moderate-low political literacy scores (5.2/10) and limited understanding of governance systems (32%) reveal **an urgent need for innovative political education reforms** that move beyond theoretical curricula to emphasize practical civic competencies [3][10]. *Second*, the dominance of algorithm-driven political content consumption (68% via TikTok/Instagram) necessitates **digital platform optimization for civic engagement**, including partnerships with tech companies to promote credible information and counter misinformation [10]. *Third*, the persistent urban-rural (18-point gap), ethnic (Malay 38% vs. Indian 25% engagement), and educational disparities demand **targeted interventions** such as localized digital literacy programs and community-based mentorship initiatives to ensure equitable political participation opportunities [3][7]. Together, these priorities address both structural barriers and evolving youth behaviors identified in the study.

4.0 Discussion

The study reveals a complex landscape of political socialization among Malaysian youth, marked by three interrelated challenges. First, a digital paradox has emerged where high social media engagement (92% daily usage) coexists with alarmingly low political literacy (mean score 5.2/10). This disparity stems partly from algorithm-driven platforms like TikTok (used by 43% for political information) that create echo chambers reinforcing existing beliefs rather than fostering critical discourse. The situation is exacerbated by stark urban-rural disparities, with rural youth scoring 1.8 points lower due to infrastructure gaps (32% vs 89% urban broadband penetration) and heavy reliance on family political transmission (68%), which often perpetuates misinformation rather than civic knowledge.

A parallel crisis of institutional trust further compounds these challenges, with only 22% of youth expressing confidence in Parliament and 18% in political parties - significantly lower than trust in youth NGOs (35%). Focus group discussions illuminated how this trust deficit stems not only from historical corruption cases (cited by 72% of participants) but also from perceived failures in accountability mechanisms. As one urban participant noted, "When ministers break promises without consequences, why should we engage?" This legitimacy vacuum has transformed political participation patterns, with digital activism (43%) far surpassing traditional party involvement (6%), reflecting a global shift toward personalized, issue-based engagement through networked rather than hierarchical organizations.

In response, we propose a Hybrid Political Socialization Model with three key components. The digital dimension would employ deliberative algorithms based on the Polis platform used in Taiwan's vTaiwan consultations, which structure online discussions by surfacing consensus points and flagging disputed claims for fact-checking. This technological approach would be balanced with community democracy hubs adapted from Indonesia's Rumah Demokrasi model, emphasizing youth-led programming like "Democracy Hackathons" to co-design local policies. The model also includes cross-generational mentorship networks that leverage Malaysia's cultural values through non-partisan "Bicara Demokrasi" (Democracy Dialogues). Importantly, the framework acknowledges the vital role of informal civic spaces where youth political identities often form organically, beyond government initiatives.

Implementation requires addressing four systemic barriers: digital infrastructure gaps, rigid curricula, restrictive association laws, and limited institutional partnerships. Our recommendations therefore propose phased reforms beginning with curriculum revisions to include practical citizenship skills, accelerated rural digital development through community mesh networks, and the creation of "sandbox" zones for experimental youth assemblies. Success metrics would track both quantitative indicators (e.g., annual 1.5-point gains in political literacy scores) and qualitative improvements in civic discourse quality.

The revised framework of youth political socialization components (Table 2) now organizes these elements into cognitive dimensions (voter education, political discourse), behavioral dimensions (formal/informal participation), and emotional dimensions (critical patriotism, social unity). This restructuring, using visual icons and clear categorization, enhances the model's utility for policymakers while maintaining academic rigor. However, we caution against over-reliance on technocratic solutions - as several focus group participants emphasized, "Apps can't replace protests." The model's effectiveness will ultimately depend on balancing digital tools with sustained support for organic youth movements and addressing the root causes of political alienation through genuine institutional reform. These findings underscore the urgent need for Malaysia to develop dynamic, inclusive approaches to youth political socialization that bridge digital and traditional spheres while respecting the nation's unique socio-cultural context.

Table 2: Framework of Youth Political Socialization Components

Concept	Definition/Description
Existence of Youth Development Policies	Officially approved action plans that serve as the basis for decision-making and implementation regarding youth readiness to advance youth to higher levels
Voter Education	Programs that foster awareness across societal strata, promoting transparency and efficiency in election management, while planning, developing, and implementing democracy and election awareness programs
Youth Freedom of Expression	The freedom for youth to express opinions formally through trusted channels
Political, National and Democratic Discourse	Discussions about political, national and democratic issues with peers, family, online networks, teachers and others
Following Political, National and Democratic Developments	Consistently obtaining updated information about politics, nationhood and democracy
Participation in Political, National and Democratic Activities	Engagement in political activities including voting, attending political talks, and being active in political parties
Patriotism	A strong feeling of love and devotion towards one's country
Spirit of Unity	The social cohesion and solidarity demonstrated by a community

*Sources: Indeks Belia Malaysia, 2023, m/s 28-29

5.0 Conclusion

This study illuminates the complex challenges and transformative opportunities in Malaysian youth political socialization, revealing three pivotal insights with significant policy implications. First, the identified digital paradox—where high connectivity (92% daily usage) coexists with superficial political understanding due to passive content consumption and algorithmic echo chambers—highlights systemic flaws in contemporary political engagement. With youth political literacy averaging just 5.2/10 despite near-universal internet access, these findings underscore how digital platforms can distort rather than deepen democratic participation [10,12]. Second, the crisis of institutional trust (Parliament: 22%; political parties: 18%) reflects a generational shift toward alternative democratic channels like youth NGOs (35% trust), signaling an urgent need for structural reforms to rebuild legitimacy through transparency and youth-inclusive governance [14,16]. Third, the dominance of digital activism (43%) over formal political participation (6% party membership) necessitates innovative approaches—including civic technology tools and peer-led participatory campaigns—to bridge emerging engagement paradigms with traditional democratic institutions [17,19].

The proposed Hybrid Political Socialization Model addresses these challenges through an integrated framework combining deliberative digital platforms, cross-generational mentorship, and community democracy hubs. Its successful implementation requires overcoming four systemic barriers: (1) infrastructure disparities (current 32% rural broadband penetration), (2) rigid curricula lacking critical digital literacy and media discernment components, (3) restrictive youth association policies, and (4) fragmented interagency coordination [20,22]. Immediate priorities should include comprehensive civic education reform—embedding participatory citizenship skills and digital fact-checking competencies into national curricula—alongside accelerated rural digital inclusion programs and institutionalized youth co-creation in policy design processes.

These findings carry profound implications for Malaysia's democratic trajectory. Without timely intervention, current trends risk cementing a generation that is digitally connected yet politically disenchanted, potentially eroding social cohesion and governance efficacy [23]. By acting decisively on these recommendations, Malaysia can transform its youth into a demographic dividend—digitally savvy, politically literate citizens capable of advancing an inclusive and resilient democratic future. The time to nurture this transformative potential is now, leveraging both technological innovation and Malaysia's rich tradition of communal dialogue to redefine political socialization for the digital age.

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Integration of ICT-Based Career Skills Program in Islamic Religious Education: Case Study of MAN 2 Cirebon City

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Abstrak

Education in Indonesia with the advancement of technology and communication in the digital era is growing rapidly. The purpose of this study is to increase awareness of educators in Indonesia with communication technology that can be easily developed adaptively and tested. The research method with a qualitative approach, data collection through observation, interviews. The research location at Madrasah Aliyah Negeri 2 Cirebon City, November - December 2024. The research subjects consisted of Guidance and Counseling Teachers, Physics Teachers, Curriculum and 4 students of Class XII Mathematics and Science. The plus skills program is related to career decision making in 3 areas of expertise. The results of the study explain that the level of ability of educators as facilitators in the world of education is a central concept of collaboration to improve the ability to synergize in depth and develop the potential of educators in understanding the process and mechanisms of technology-based learning. The skills expected by students can increase academic potential in the field of expertise.

Keywords: Skills Program, ICT, Career, Islamic Education.

1.0 Introduction

Perkembangan ilmu pengetahuan dan teknologi telah membawa perubahan hampir di setiap aspek kehidupan manusia, dan berbagai permasalahan hanya dapat diselesaikan dengan menguasai dan meningkatkan ilmu pengetahuan dan teknologi [1]. Pendidikan di Indonesia memiliki budaya yang unik yaitu pendidikan yang berbasis pada nilai-nilai Islam seperti model pendidikan pesantren dan pendidikan formal yang berbasis pada nilai-nilai agama yang terdiri dari madrasah negeri dan swasta. Integrasi pendidikan agama Islam dengan teknologi Informasi dan Komunikasi, dapat meningkatkan inovasi pendidikan agama Islam dengan menggunakan teknologi pengembangan yang terus berlanjut [2].

Pendidikan Islam dan teknologi di Indonesia merupakan proses pembelajaran mayoritas masyarakat muslim yang memanfaatkan teknologi dalam kehidupan sehari-hari. Khususnya satuan pendidikan dapat menyetarakan pembelajaran teknologi berbasis Islam secara khusus. Dinamika perkembangan pendidikan Islam di Indonesia telah mencerminkan adanya perkembangan, khususnya dalam masalah pentingnya keberagaman ajaran yang harus diimplementasikan pada peserta didik dalam kehidupan sehari-hari [3]. Pengembangan dan inovasi pendidikan yang menjadi landasan pendidikan Islam di Indonesia mempunyai landasan dasar keagamaan yaitu untuk membiasakan peserta didik mengenal dan memahami kegiatan religiusitas serta membangun kesadaran diri dengan keyakinan dan kemampuan potensi spiritual sebagai landasan dapat meningkatkan kualitas keimanan serta dampak positif dari perilaku sikap peserta didik, adapun unsur-unsur kelemahan peserta didik diantaranya belum memiliki pembiasaan diri dan belum mampu memahami lingkungan dengan baik. Tantangan bagi pendidikan Islam adalah bagaimana menjaga nilai-nilai agama di tengah pengaruh globalisasi dan teknologi [4]. Digitalisasi hadir sebagai salah satu alat komunikasi yang dapat diintegrasikan dengan pendidikan Islam. Bentuk dari komponen pembelajaran terdapat pada bagaimana metode pengajaran dalam pemanfaatan serta fungsi objektif teknologi. Lingkungan pendidikan di sekolah terdiri dari kepala sekolah, guru kelas, guru mata pelajaran, guru bimbingan dan konseling dan siswa serta staf TU. Keterlibatan komunikasi antar personil sekolah menjadi salah satu upaya penting dalam mengembangkan karir masa depan.

Keterampilan plus merupakan bagian dari pengembangan kurikulum untuk meningkatkan keahlian khusus pada siswa di lingkungan Madrasah. Strategi dan model pengajaran berbasis teknologi berlandaskan pada kurikulum merdeka. Keterampilan khusus dapat meningkatkan intensitas

pengetahuan peserta didik pada materi-materi keagamaan (spiritual) [5]. Peran teknologi informasi dan komunikasi sebagai upaya pemerataan untuk membantu sistem pengajaran dan kemajuan guru dan siswa. Peran guru sebagai fasilitator dapat memberikan layanan bimbingan karir dengan informasi dan pelatihan soft skill untuk meningkatkan pemahaman dalam menggunakan teknologi secara bijak. Fasilitator di Madrasah Aliyah Negeri 2 Cirebon terdiri dari guru, siswa, fasilitator pendukung yaitu orang tua dan masyarakat dapat meningkatkan sistem kolaborasi untuk membangun suatu sistem komunikasi jaringan secara efektif.

Layanan bimbingan karir dengan pemetaan bakat dan minat melalui pohon karir oleh guru bimbingan dan konseling untuk membantu siswa untuk memilih karir masa depan. Layanan bimbingan karir bertujuan untuk mengarahkan siswa dalam mengambil keputusan pekerjaan. Harapan dari layanan bimbingan karir siswa dapat memiliki pekerjaan sesuai dengan bakat dan minat sehingga kematangan karir dapat berkembang dengan baik di masa depan. Adapun peran guru dan orang tua merupakan bagian dari dukungan sistem dalam mempersiapkan jenjang karir masa depan. Kematangan karir siswa sekolah menengah atas sudah di persiapkan oleh kurikulum di sekolah sejak siswa kelas X sehingga di kelas XI siswa dapat memilih jenis keterampilan khusus berdasarkan minat dan bakat yang dimiliki. Penentuan peminatan ini menjadi salah satu strategi implementasi sekolah membantu siswa dalam mengembangkan potensi diri dan mempersiapkan keterampilan serta pengetahuan. Pemanfaatan teknologi informasi dan komunikasi bagi dunia pendidikan khususnya dalam proses pembelajaran [6] Program keterampilan dalam konteks pendidikan di MAN dirancang untuk membekali siswa dalam meningkatkan kemampuan berfikir praktis yang relevan dengan kebutuhan dunia kerja serta pandangan yang lebih luas tentang kesempatan karir yang tersedia. Program ini mencakup pengembangan keterampilan teknis, keterampilan komunikasi, dan keterampilan berpikir kritis yang penting dalam mendukung kesiapan karir. Program ini juga membantu siswa mengidentifikasi minat dan bakat, serta mengembangkan kemampuan analisis dalam mengevaluasi berbagai pilihan karir. Pada dasarnya, tujuan utama program ini adalah membekali siswa dengan kemampuan yang dapat meningkatkan keterampilan kerja.

Secara umum, pelaksanaan program keterampilan di MAN 2 Kota Cirebon melibatkan sejumlah tahapan, meliputi evaluasi minat dan bakat, penyusunan modul keterampilan, pelatihan keterampilan teknis dan nonteknis, serta sesi pendampingan karir. Tahapan-tahapan tersebut dirancang untuk memfasilitasi pengembangan keterampilan siswa secara bertahap. Evaluasi minat dan bakat, Pendidikan teknologi menjadi salah satu pilar utama dalam transformasi pendidikan di era digital. Dengan adopsi teknologi yang terus berkembang, metode pembelajaran konvensional semakin diperkaya oleh inovasi-inovasi digital yang memungkinkan proses pembelajaran menjadi lebih interaktif, personal, dan efisien [7]. Misalnya, membantu siswa mengidentifikasi bidang yang sesuai dengan calon siswa. Selain itu, modul keterampilan yang disusun juga disesuaikan dengan kebutuhan jurusan MIA yang berfokus pada penguasaan ilmu-ilmu eksakta. Keterampilan yang dikembangkan melalui program ini, seperti keterampilan analisis data, keterampilan laboratorium, dan pemahaman teknologi, dirancang untuk mendukung siswa yang akan melanjutkan pendidikan di bidang STEM (Science, Technology, Engineering, and Mathematics) atau yang berminat bekerja di bidang terkait. Pelaksanaan program keterampilan ini tidak terkecuali dengan berbagai tantangan. Salah satu tantangan yang utama adalah keterbatasan sumber daya, baik dari sisi anggaran maupun tenaga pengajar yang memiliki kompetensi dalam bidang keahlian khusus. Disamping itu kesadaran siswa tentang pentingnya keterampilan karir masih perlu ditingkatkan. Sebagian siswa belum begitu menyadari bagaimana keterampilan tertentu dapat mempengaruhi pilihan karir di masa yang akan datang, sehingga untuk mencapai keberhasilan program ini diperlukan suatu pendekatan yang komprehensif, dengan melibatkan pendidik, konselor dan orang tua dalam mendukung pengembangan keterampilan siswa [8]

Pengembangan soft skills menjadi perhatian dalam program ini. Keterampilan seperti komunikasi, kepemimpinan, dan manajemen waktu menjadi hal yang sangat penting untuk mendukung kesiapan karir siswa. Soft skills ini membantu siswa beradaptasi dengan lingkungan kerja yang dinamis dan sering kali menjadi faktor penentu keberhasilan karir seseorang. Hal ini bertujuan agar siswa tidak hanya cakap dalam bidang akademik tetapi juga memiliki kemampuan sosial yang baik. Pelaksanaan program skills plus own ini memberikan dampak yang positif bagi peserta didik di

lingkungan madrasah secara umum secara keseluruhan. Integrasi ilmu yang dimilikinya lahir dari pemikiran tentang adanya fakta pemisahan (dikotomi) antara ilmu-ilmu agama dan ilmu-ilmu umum [9]. Dengan membekali peserta didik kelas XII MIA dengan skills yang relevan, maka reputasi sekolah sebagai lembaga pendidikan yang menyiapkan peserta didik secara holistik akan semakin meningkat. Hal ini dapat lebih menarik minat peserta didik dan orang tua yang berminat terhadap pendidikan yang tidak hanya mengutamakan akademis, tetapi juga menyiapkan peserta didik untuk menghadapi dunia kerja yang kompetitif. Selain itu, keberhasilan program ini dapat menciptakan sinergi yang positif antara sekolah dengan dunia industri atau perguruan tinggi, misalnya melalui program magang atau kemitraan dengan lembaga pendidikan tinggi dan perusahaan-perusahaan terkait. Kerjasama antara sekolah dengan dunia industri tidak hanya memperkaya pengalaman belajar peserta didik tetapi juga memperluas jaringan sekolah untuk mendukung karier peserta didik di masa depan. Pembinaan karier di kelas.

Kematangan karir merupakan salah satu keberhasilan pengembangan diri pada siswa dalam dunia kerja sebelum memasuki masa kerja siswa sudah memiliki keterampilan dan disiplin serta kesiapan karir. Harapan dari tercapainya kematangan karir pada siswa kelas XII memberikan dampak positif bagi masa depan pendidikan Islam. Sekolah Islam tidak lagi dipandang sebagai sekolah yang lemah dalam kesiapan karirnya sendiri di dunia kerja. Keberhasilan pelaksanaan program keterampilan tersebut diharapkan dapat menghasilkan dampak jangka panjang bagi siswa. Dengan keterampilan yang dimiliki oleh siswa kelas XII MIA MAN diharapkan mampu mengambil keputusan untuk karir yang lebih baik, matang dan berorientasi ke masa depan. Mereka akan lebih siap menghadapi persaingan di dunia pendidikan lanjutan dan dunia kerja. Selain itu, keterampilan yang diperoleh dari program ini juga dapat membangun rasa percaya diri siswa yang merupakan aspek penting dalam mencapai kesuksesan karir [10].

Program ini tidak hanya membantu siswa mengenali potensi dan minatnya tetapi juga membekali mereka dengan keterampilan yang relevan dengan kebutuhan dunia kerja dan perkembangan zaman. Dengan demikian, program ini tidak hanya menjadi sarana untuk meningkatkan kesiapan karir siswa tetapi juga berperan dalam menciptakan generasi muda yang adaptif dan siap berkontribusi bagi masyarakat. Program ini juga menjadi cerminan upaya MAN dalam menyelaraskan pendidikan dengan tuntutan global. Dengan perpaduan pendidikan karakter, pengembangan keterampilan teknis, dan pemahaman tren digital, MAN diharapkan mampu menghasilkan lulusan yang kompeten, memiliki daya saing tinggi dan mampu beradaptasi dalam berbagai kondisi pekerjaan yang ada. Inovasi pembelajaran dapat berupa media pembelajaran time line chart jika digunakan sesuai dengan langkah-langkah pada saat proses pembelajaran dapat meningkatkan hasil belajar siswa karena media ini dapat membantu guru menyampaikan materi pembelajaran dengan mudah [11].

Dalam pembelajaran siklus terdapat suatu gerakan pembelajaran yang memiliki tujuan yang diinginkan tercapai, untuk mencapai tujuan tersebut perlu adanya prosedur pembelajaran yang sesuai dengan materi program pendidikan, serta situasi dan kondisi peserta didik yang ingin belajar. Sistem pembelajaran yang menggunakan prosedur pembelajaran tradisional dari waktu ke waktu dan akibat dari teknik ini masih kurang baik, dimana peserta didik mengalami kesulitan memahami materi yang diperkenalkan oleh guru dan peserta didik menjadi terpisah karena hanya sebagai penonton [12]. Media pembelajaran memegang peranan penting bagi peningkatan efektivitas pengajaran dan pemahaman agama. Salah satu ciri Islam menurut Al-Qardhawi adalah syumul (universal dan menyeluruh) berlaku bagi seluruh umat dan bangsa, sepanjang masa (Al-Qardhawi, 1996). Universalitas Islam membuka peluang bagi umatnya untuk melakukan upaya melakukan penafsiran kontekstual terhadap Islam (Al-Qur'an dan as-Sunnah) sesuai dengan dinamika dan perkembangan zaman, dengan berbagai permasalahan yang menyertainya [13].

2.0 Metodologi

Penelitian ini menggunakan jenis penelitian kualitatif deskriptif, yaitu metode penelitian yang memanfaatkan data dan informasi yang diperoleh dari responden, kualitatif bersifat naturalistik atas jawaban dari pertanyaan responden sendiri, serta menggunakan metode dan prosedur-prosedur untuk memahami gambaran subyek penelitian secara menyeluruh [15]. Teknik pengumpulan data yang

digunakan adalah wawancara, observasi, dan dokumentasi. Kegiatan observasi dilaksanakan selama 40 hari di lingkungan Madrasah Aliyah Negeri 2 Kota Cirebon.

Sumber data dikelompokkan menjadi dua, yaitu data primer dan data sekunder. Data primer terdiri dari wakil kepala sekolah kurikulum dan 5 siswa program keterampilan plus. Kemudian analisis data dilakukan di lapangan dengan menggunakan extended participating, persistence observe,

Berdasarkan Indikator dari siswa yang merupakan siswa pada program keterampilan kelas plus di MAN 2 Kota Cirebon, yang terpilih dengan inisial: SE, M, F, A dan N. dan teknik analisis data dengan menggunakan triangulasi. Menurut Moelong Triangulasi adalah teknik pemeriksaan keabsahan data dengan memanfaatkan sesuatu di luar data itu sendiri.

3.0 Hasil dan Pembahasan

Sekolah yang berbasis pendidikan Islam memberikan nuansa keilmuan secara holistik dan komprehensif. Keterlibatan siswa dan guru dalam proses pembelajaran mengajar serta memberikan keterampilan melalui perencanaan pelatihan, workshop dan kelas khusus menjadikan dasar-dasar mental, kepribadian serta melatih rasa tanggung jawab penuh sebagai manusia Kamil. plus keterampilan adalah Prototipe Madrasah Aliyah Untuk mengembangkan keunggulan kompetitif dalam bidang keterampilan program tertentu yang diselenggarakan oleh pemerintah (RI, 2020). Pengertian lain dari Pendidikan keterampilan adalah pendidikan yang pada dasarnya bertujuan untuk membekali peserta didik dengan keterampilan yang berkaitan dengan aspek pengetahuan, sikap (fisik dan mental), dan kejujuran yang berkaitan dengan pengembangan peserta didik. sehingga mampu menghadapi tuntutan Dan tantangan kehidupan.

Keputusan karir merupakan suatu proses dimana seseorang mengenali dirinya sendiri, melihat mengetahui tentang lingkup pekerjaan yang akan dilakukannya, dan mempunyai kemampuan untuk mengintegrasikan kedua hal tersebut dalam pilihan karir yang akan diambilnya [16] . memutuskan A karier akan selalu terkait dengan dua faktor , yaitu faktor internal dan faktor eksternal. Faktor intern terpengaruh oleh tanda - tanda kehidupan , kecerdasan bakat, minat, sifat, kepribadian, pengetahuan dan keadaan fisik. Sedangkan faktor eksternal diantaranya dipengaruhi oleh pendidikan sekolah, pergaulan teman, teman sebaya, dan masyarakat [17] .

Berdasarkan wawancara dan observasi yang telah dilakukan, peneliti dapat mendeskripsikan pelaksanaan program plus keterampilan di dalam meningkatkan keputusan karir . Dalam penelitian ini penulis memperoleh berbagai implementasi program ini dalam meningkatkan keputusan karir. Menurut John Davis, psikologi transpersonal dapat diartikan sebagai ilmu yang menghubungkan psikologi dan spiritualitas. Psikologi yang memadukan konsep, teori dan metode psikologi dengan kekayaan spiritual berbagai macam budaya dan agama hasil wawancara bersama (Ujam Jaenudin, 2024 wali kelas XII) Sebelum melaksanakan program ini, peneliti akan menguraikan hasil dengan mengaitkan faktor eksternal dari keputusan karir yaitu pendidikan di sekolah. berikut hasil wawancara.

“ Kami melihat ini (program keterampilan plus) sesuatu yang bagus. Karena pada umumnya peserta pendidikannya berasal dari kalangan menengah ke bawah, sehingga sebagian besar melanjutkan pendidikannya ke jenjang yang lebih tinggi, ” katanya. ke kampus tinggi jarang , Ada sejumlah Yang memilih langsung bekerja, jadi Kami mempersiapkan keterampilan pada siswa. Siswa merasakan adanya perubahan dalam keterampilan. Selain ilmu agama yang didapatnya lebih banyak dari sekolah menengah atau sekolah umum, siswa dapat mengembangkan bakat dan minat sesuai dengan minatnya ”.

Kemudian dengan adanya program ini peneliti mendapatkan Bagaimana harapan dari diadakannya program ini khususnya pada anak kelas XII yang ingin menentukan karirnya di masa depan , yakni bagi yang ingin langsung terjun ke dunia kerja diharapkan mampu melatih mental dan mempersiapkan diri sejak awal melalui program magang atau PKL. Berikut narasi hasil wawancara.

"siswa dapat melanjutkan kuliah ke perguruan tinggi dan Sebagian siswa memilih Untuk Bekerja , Dampak dari program keterampilan sesuai dengan pilihannya. Kemudian ada juga PKL di (sekolah) kami magang di beberapa perusahaan, yang melatih mental mereka lebih. Sebenarnya lebih mempersiapkan mereka sejak dini bagi yang langsung kerja". sekolah menempatkan siswa secara praktis untuk mengembangkan keilmuan sehingga pengalaman praktik lapangan dapat diperoleh secara nyata.

Lalu bagaimana guru dan staf mendukung adanya suatu program agar tercapai tujuan yaitu dengan dapat mengembangkan potensi bakat dan minat dalam dirinya terhadap bidang pilihan serta memiliki berbagai pengalaman dalam bidangnya. Jadi dari program keterampilan siswa mendapatkan Pengalaman secara praktik untuk mempersiapkan jenjang karir masa depan berikut narasi hasil wawancara .

"kemampuan dan keterampilan siswa secara spesifik dapat berkembang dipengaruhi dari kemampuan, pengetahuan dan pengalaman. Jurusan bidang teknik dan bisnis motor dan multimedia."menjadi salah satu pilihan bakat dan minat diri siswa di sekolah Madrasah Aliyah Negeri 2 Cirebon.

Wawancara lebih lanjut Untuk mengaitkan faktor internal keputusan karir yaitu menandai kehidupan, minat , Dan bakat, Di mana Siswa menjelaskan pengetahuan dan keterampilan apa saja yang di dapat dari keterampilan yang telah diambilnya sesuai dengan bakat dan minat. Menurut M dan F , Berikut narasi hasil wawancara.

M " pendapat dari M perolehan pada program keterampilan plus bidang pelatihan multimedia diperoleh dari hasil Belajar diantaranya memahami jenis program computer, , corel draw, menggambar, Terus berlanjut khususnya Ya . dengan memperdalam keterampilan desain computer digital"

F " pendapat dari F jenis program unggulan yang dapat dipelajari yaitu desain grafis dan Corel Draw, hasil dari pemahaman ini memberikan potensi siswa untuk terus berkembang secara potensial.

Menurut A Dan N, murid kelas Bahasa Indonesia: XII Sains 1 tahun Yang mengambil keterampilan Tata Boga kegiatan pelatihan seperti memesan katering, menerangkan bahwa mereka TIDAK hanya Belajar memasak , Tetapi Belajar Untuk presentasi makanan , bisnis, estetika, takaran gizi. Berikut narasi hasil wawancara.

A " keterampilan tata boga ini mempelajari tentang bagaimana memasak dengan resep yang berkualitas standar hotel Bintang 5. Siswa di latih untuk Belajar masak, siswa Belajar presentasi bagaimana cara mengembangkan bisnis catering. Selanjtnya diadakan ujian praktik, kemudian hasil masakan tersebut di presentasikan dan di pasarkan secara offline dan online. Siswa dilatih untuk membuat akun pemasaran digital.

N " siswa mendapatkan Latihan jenis masakan dengan resep , dengan metode presentasi Yang Bagus , dan terlatih secara profesional, untuk menyajikan makana, siswa dilatih untuk menyiapkan dan menyajikan makanan dengan strategi dan metode yang tepat.

Kemudian menurut empat responden siswa kelas XII IPA 1, mengikuti program keterampilan yaitu penting sebagai tambahan pelajaran, memiliki manfaat, dan memiliki tambahan keterampilan baru . Berikut narasi hasil wawancara.

M " program keterampilan plus menjadi salah satu pembelajaran tambahan diluar dari jam Pelajaran sehingga dapat memberikan pengetahuan secara nyata, dengan keterampilan

yang dilatih oleh guru sesuai dengan bidang keahliannya maka dapat menjadi nilai tambahan, siswa dibekali Latihan mental dan keterampilan sesuai bakat dan mintanya"

F "jurusan multimedia dapat mengembangkan software dan jenis tools yang dapat meningkatkan pengetahuan digital yang dibutuhkan di era perkembangan teknologi digitalisasi., siswa dibekali dalam bidang keahlian khusus sebagai Upaya persiapan kematangan karir dimasa yang akan datang.

A " Kami di dalam PRIA, jarang Ada PRIA Yang plus keterampilan, biasanya di dalam sekolah Menengah Kejuruan Ya, manfaat juga untuk siswa MAN, kita belajar agama yang berbeda dari sekolah menengah tetapi kita juga belajar keterampilan plus Itu"

N " Menambahkan keterampilan baru, jadi selain "siswa memiliki keterampilan baru untuk terus dikembangkan."

Peneliti memahami bahwa keterampilan pada setiap Responden memberikan nilai tambah untuk meningkatkan kesiapan dunia kerja, Ada hubungan dengan tingkat karier di masa depan. Responden Yakin. Keterampilan yang telah mereka miliki tentu saja berkaitan dengan responden di masa mendatang. Hal ini dapat dilihat dari hasil wawancara sebagai berikut.

M " terdapat hubungan, antara siswa dan guru dalam mengembangkan keterampilan plus siswa diberi pemahaman dan pelatihan sebelum mulai bekerja. Tidak semua dari mereka bekerja menggunakan laptop, tapi mungkin nanti saya yang bekerja di tempat yang sudah ada menggunakan laptopnya seperti program khusus ini memberikan wacana masa depan siswa saat siswa mampu mempelajari ilmu bekal pengetahuan secara terus menerus"

F " ada potensi pada perkembangan siswa dalam mengembangkan bakat dan minat di program keterampilan plus, apabila siswa bekerja di kantor maka sudah memiliki kesiapan secara psikologis begitu pula Ketika siswa bekerja secara praktik memiliki peran tanggung jawab dalam menyelesaikan pekerjaan yang sedang dihadapi.

A " kesempatan siswa dalam mengembangkan bakat dan minat saat bekerja menjadi salah satu upaya keberhasilan Pendidikan khususnya pada program keterampilan khusus"

N " keterampilan yang dikembangkan untuk membantu siswa dalam mengembangkan kemampuan dengan potensi dan keahlian yang lebih professional dan terlatih.

Peneliti memahami bahwa keberagaman implementasi dari program keterampilan plus dalam meningkatkan keputusan karir pada siswa kelas XII. Berikut kategorisasi data hasil belajar berdasarkan hasil observasi dan wawancara yang telah dilakukan. Berikut ini adalah tabel kategorisasi data hasil belajar.

Tabel.1 Program Keterampilan Plus

Kategorisasi Program Keterampilan Plus		
No.	Faktor-faktor Keputusan Karir	Pelaksanaan
1.	Faktor Eksternal Pendidikan di Sekolah	Program keterampilan plus merupakan program yang sesuai dengan kebutuhan siswa karena tidak semua siswa MAN 2 Kota Cirebon akan melanjutkan karirnya ke jenjang Perguruan Tinggi. Berdasarkan hasil observasi dan wawancara diketahui terdapat keterbatasan ekonomi keluarga siswa.
		Persiapan Pelatihan Mentalitas melalui program magang atau pedagang kaki lima.
		Pelaksanaan Program Keterampilan Sudah mengarahkan peserta untuk menempuh jenjang pendidikan perguruan tinggi dan dunia kerja.
2.	Faktor Internal Minat dan Bakat	Memahami penggunaan aplikasi, memahami isi setiap aplikasi, dan membuat <i>desain</i> menggunakan aplikasi
		Belajar Untuk presentasi makanan, bisnis, estetika, pengukuran nutrisi.

3.	Faktor Internal Nilai Kehidupan	<p>Program keterampilan sebagai pelajaran tambahan, memiliki manfaat, dan memiliki <i>keterampilan tambahan</i> baru .</p> <p>Responden tertentu bahwa keterampilan yang telah diambilnya pasti berhubungan dengan responden di masa mendatang</p>
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Analisis dari tabel di atas, peneliti dapat mendeskripsikan faktor keputusan karir dibagi menjadi dua yaitu faktor eksternal dan internal, eksternal salah satunya adalah pendidikan di sekolah. Pelaksanaan dari program ini yaitu sekolah merasakan program ini merupakan program yang tepat karena tidak semua siswa MAN 2 Kota Cirebon akan melanjutkan karirnya ke jenjang perkuliahan, dilihat dari aspek ekonomi keluarga, maka bagi yang ingin langsung terjun ke dunia kerja diharapkan mampu melatih mental dan mempersiapkan sejak awal melalui program magang atau PKL, dan program keterampilan yang sudah langsung mendidik peserta ke jenjang perkuliahan dan dunia kerja. Kemudian dilihat dari faktor internal yaitu minat dan bakat, dan nilai-nilai kehidupan.

Dengan adanya prioritas dan upaya nyata yaitu peran teknologi sebagai media penunjang pembelajaran secara optimal yang berdampak positif dan mampu meminimalisir dampak negatif. Hal ini berpotensi bagi perilaku peserta didik sehingga berdampak bagi kehidupan di masa yang akan datang. Integrasi media dan teknologi ke dalam kurikulum pendidikan berpotensi untuk meningkatkan mutu pendidikan dan memudahkan peserta didik dalam memahami materi yang disampaikan. Melalui penerapan teknologi dan media dalam pembelajaran maka proses pembelajaran yang sebelumnya bersifat normatif dapat berubah menjadi lebih inovatif, kreatif, dan efektif. Upaya integrasi ini bertujuan untuk memadukan teknologi dan media dengan penggunaan bahan ajar guna meningkatkan mutu dan kualitas pembelajaran yang ditawarkan kepada peserta didik [19] .

Konteks perubahan modern, hilangnya ikatan spiritual dianggap berdampak buruk tersendiri dalam kehidupan manusia [20] . Pengajaran yang bermutu membutuhkan bimbingan spiritual yang tidak hanya mengajarkan nilai-nilai spiritual klasik, tetapi juga mampu menjawab kompleksitas permasalahan hidup di era modern. Fungsi domain kesadaran pendidik dapat menumbuhkan dan menyadari dirinya atas keyakinan, kokoh dalam kekuatan pemahaman, mentalitas serta ketahanan diri dapat mempengaruhi perubahan sikap peserta didik. Landasan agama dalam diri peserta didik menjadi pedoman keberhasilan pendidikan.

Pembelajaran inovatif di era 5.0 mencakup perubahan pola pengembangan kecerdasan teknologi, kecerdasan buatan, khususnya pembelajaran mendalam, telah membuka babak baru dalam berbagai bidang kehidupan manusia. 2 Inovasi dalam bimbingan rohani Islam menjadi semakin relevan di era modern ini, di mana kebutuhan akan pemahaman dan pengamalan spiritual yang mendalam semakin mendesak. 3 Pendekatan pembelajaran mendalam, yang merupakan metode pembelajaran yang mendalam dan berlapis, menawarkan potensi yang signifikan untuk memperkaya pengalaman bimbingan rohani. Pembelajaran berbasis mindful learning mampu mendukung keseimbangan siswa antara kekuatan diri dengan penyesuaian pembelajaran dengan beradaptasi dengan situasi. Pendekatan pembelajaran mendalam yang baru mampu mengarahkan siswa berpikir kritis dan analitis secara mendalam, terjadi adanya reaksi antara apa yang dipikirkan dengan pemahaman, hal. Hal ini memberikan konsep bahwa kekuatan pikiran dan proses pencapaian pembelajaran pada siswa menjadi agen perkembangan dalam sistem pendidikan.

Pada masyarakat 4.0 sebelumnya, manusia akan mengakses layanan cloud (basis data) di dunia maya melalui Internet [21] Adapun perilaku positif peserta didik untuk meningkatkan perubahan diri dengan adanya pengembangan dan pola pikir produktif seperti memanfaatkan media online untuk belajar dan meningkatkan pengetahuan kognitif, menggunakan fitur e-learning dan media promosi pemasaran sebagai bisnis online. Perubahan perilaku positif menyumbangkan ilmu pengetahuan dan penghasilan di bidang tersebut secara komprehensif. Kesadaran akan hal inilah yang dapat memberikan perubahan positif. Manajemen kelas berbasis teknologi digital menjadi suatu kebutuhan yang tidak dapat dielakkan lagi, terutama dalam upaya peningkatan mutu pembelajaran dan pencapaian tujuan pendidikan yang lebih efektif [22]

Masyarakat 5.0 mencapai tingkat konvergensi yang tinggi antara ruang virtual dan ruang fisik nyata (real space). Pada masyarakat 4.0 sebelumnya, manusia akan mengakses layanan cloud (basis data) di dunia maya melalui internet [21]. Peserta didik pada program keahlian khusus dibekali dengan ilmu pengetahuan dan teknologi agar siap menghadapi dunia kerja setelah lulus sekolah. Kegiatan program keahlian ini tidak menjadi mata pelajaran di sekolah tetapi lebih kepada minat peserta didik dalam memilih keterampilan yang akan dilatihkan secara khusus, kegiatan pengembangan minat ini dapat diikuti dengan magang di beberapa industri yang telah bekerja sama dengan sekolah. Peserta didik dapat mengikuti program plus dalam jangka waktu tidak cukup lebih dari 3 bulan. Persiapan pembekalan praktik magang sebagai upaya guru dan sekolah membantu peserta didik agar dapat berkembang secara optimal sesuai bakat dan minat serta keterampilan yang dimiliki.

Model Perubahan Ilmu pengetahuan yang dikemukakan oleh Kuhn diawali dengan dominasi suatu paradigma tertentu sehingga terjadi akumulasi pengetahuan. Tahapan inilah yang disebut dengan ilmu pengetahuan normal, pada masa ini aktivitas pemecahan masalah berjalan dengan lancar berpedoman pada kaidah-kaidah paradigma tertentu. Ilmuwan pada masa normal ilmu pengetahuan tidak memerlukan sifat kritis karena bekerja tidak memerlukan tantangan-tantangan baru [23]. Tantangan pendidikan masa depan ada pada generasi yang lahir pada era pertumbuhan teknologi, untuk dapat mengimbangi perlu adanya pemerataan sehingga hal ini perlu ditingkatkan guna memahami permasalahan-permasalahan yang akan dihadapi di masa mendatang. Bentuk dari pendampingan dan pembelajaran yang sifatnya konvensional tidak ada inovasi dan kurangnya kreativitas dapat menyebabkan proses pengembangan pendidikan menjadi terhambat. Fokus dari tujuan pengajaran di Indonesia adalah seorang fasilitator yang mampu menyeimbangkan perubahan situasi dan menggunakan teknologi secara bijaksana. Pengajaran dan pembelajaran memerlukan, setidaknya dalam keadaan teknologi kita saat ini dimana Kecerdasan Buatan (AI) terbatas, guru dan siswa yang berinteraksi dalam tindakan yang berkesinambungan dan teratur untuk mentransfer pengetahuan, nilai-nilai dan keterampilan [24].

Tantangan utama platform WFH atau School From Home (SFH) terletak pada kemauan pengguna untuk merangkul teknologi ini [6]. Perubahan dapat dirasakan secara masif oleh setiap siswa dan guru di lingkungan satuan Pendidikan, generasi digital (digital native). Generasi ini sangat dekat dengan teknologi digital. Teknologi digital menjadi bagian yang tidak terpisahkan dengan kehidupan mereka. Bahkan, perkembangan teknologi informasi dan komunikasi yang begitu pesat telah membuka ruang-ruang baru bagi mereka untuk berinteraksi dan melakukan berbagai hal. Dunia virtual telah menjadi ruang tanpa batas yang tidak dapat dipisahkan dengan generasi muda [25]. Kehadiran generasi internet tidak dapat dihindari tetapi dapat dikendalikan dengan cara yang bijaksana sehingga guru, orang tua, dan masyarakat mampu menyeimbangkan peran serta memanfaatkan teknologi.

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Awareness of PERMATA@Pintar Negara Centre Students about Bingo Game as Aid Tool in Teaching and Learning

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Abstract

Gamification is an effective method for engaging students and sustaining their interest in learning. Educational games like Bingo incorporate elements like points and badges to enrich the learning experience. Playing Bingo can enhance cognitive function, communication skills, and critical thinking by encouraging active learning rather than passive memorization. This study aimed to evaluate students' awareness at the PERMATA@Pintar Negara Centre regarding using Bingo as a teaching tool. The research was conducted through purposive sampling, involving an online survey with students aged 12 to 17. The results indicate that while many students play Bingo, most are unaware of its educational potential. Therefore, it is recommended that the elements of Bingo games be introduced in teaching and learning.

Keywords: bingo game; gamification; education 4.0; secondary school.

1.0 Gamification in Teaching and Learning

Gamification in education has gained considerable attention in recent years, with studies conducted between 2020 and 2025 highlighting its potential to enhance student engagement, motivation, and learning outcomes. A thorough meta-analysis by [1] synthesised findings from 41 studies involving over 5,000 participants, revealing a significant positive effect of gamification on learning outcomes. Similarly, a study by [2] reported a moderately positive impact of gamification on students' academic performance. In the field of STEM education, a study by [3] showed that leaderboards used in gamification strategies significantly improved learning performance in university-level calculus courses. However, implementing gamification comes with its own set of challenges. Research by [4] identified some adverse effects associated with certain game design elements, noting that when gamification is not thoughtfully integrated, it can lead to decreased motivation and performance. These findings emphasise the importance of applying gamification in a deliberate and context-sensitive manner in educational settings to maximise benefits while mitigating potential drawbacks.

Harnessing the powerful benefits of gamification in education, the integration of active learning techniques through gamified approaches has emerged as a dynamic catalyst for elevating student engagement and learning outcomes. Active learning immerses students in the educational journey, compelling them to delve deep into the analysis, synthesis, and evaluation of information rather than simply absorbing it passively. By incorporating gamification elements such as points, badges, and competitive leaderboards, educators can create an engaging environment that inspires students to interact more meaningfully with the content. For instance, a study conducted by [5] revealed that the application of gamification within active learning settings at the collegiate level not only fostered significant skill development but also heightened student satisfaction, all while preserving rigorous academic performance. These compelling findings underscore the remarkable potential of merging gamification with active learning, paving the way for educational experiences that are not only more engaging but also profoundly productive.

One innovative application of gamified active learning is the incorporation of Bingo games

within educational environments. This educational adaptation reimagines the classic Bingo game, aligning its structure and content with specific learning objectives to promote active student

involvement and reinforce the learning process. For instance, a study conducted by [6] focused on the use of activity-based Bingo games within a medical education context. The researchers meticulously evaluated the impact of this interactive approach on students' academic performance. Their findings revealed that participants who engaged in the Bingo activity showed a significant improvement in their post-test scores compared to their pre-test results. Furthermore, students expressed that the Bingo game not only deepened their comprehension of complex subject matter but also rendered the learning experience more enjoyable and engaging. Similarly, a study conducted by [7] detailed the implementation of an innovative strategy known as activity Bingo to boost student engagement during fieldwork experiences. This technique involved creating a Bingo card filled with various tasks and challenges related to the fieldwork, encouraging students to take an active role in their learning process. As they sought to complete their Bingo cards, students not only participated more eagerly but also took the time to reflect on their observations and experiences in the field. This thoughtful engagement ultimately led to enhanced learning outcomes, illustrating how such a game can transform traditional educational methods. By adopting this playful and interactive approach, educators can foster an environment that encourages active learning and critical thinking. The dynamic nature of activity Bingo not only revitalises the classroom atmosphere but also encourages collaboration among students, making the learning process more engaging and impactful. Through these engaging activities, educators can effectively facilitate a richer educational experience, leaving a lasting impression on their students.

2.0 Methodology

This study was conducted in three phases to investigate students' awareness of the Bingo game as an aid tool in teaching and learning based on Fig. 1.

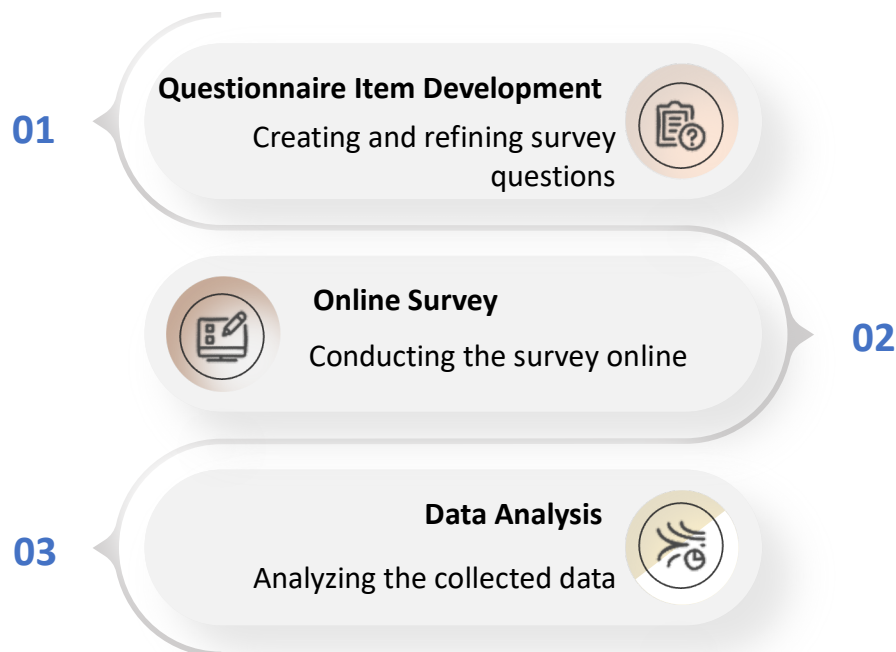


Fig. 1. Methodology

In the first phase, a questionnaire was developed to gather demographic data including age and gender. The questionnaire also includes a specific element about the Bingo game. During the second phase, an online survey was distributed to students aged 12 to 17. Participation was voluntary, allowing students to share their thoughts about the Bingo game. In the third phase, the collected data was analyzed

using Microsoft Excel. Descriptive statistics, which are percentages, were calculated using basic Excel functions to identify trends and patterns in students' responses.

3.0 Results and Discussion

The age distribution of the 60 respondents shows a diverse range of student participants within the school in Fig. 2. Most respondents are aged 14 (18 students) and 15 (17 students), indicating that early to mid-secondary school students are the most engaged in the survey. Following them are 12 students aged 13, which also demonstrates substantial participation from younger students. The groups of 16 year olds and 17 year olds, each represent a smaller portion, totalling 13 students. This variation in age suggests that the activity or survey appealed to a broad range of students but was particularly engaging for those in the middle secondary level.

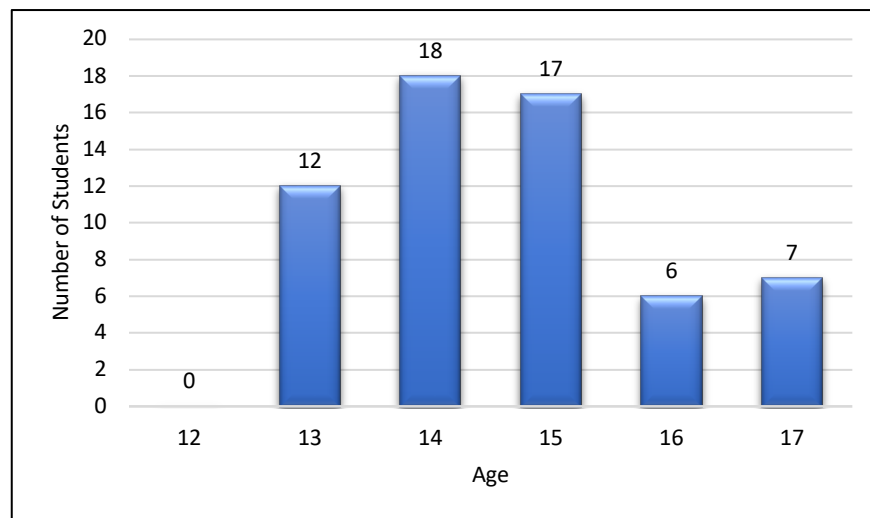


Fig. 2. Distribution of student participants according to age group ($n = 60$)

Regarding Fig. 3, based on the gender of students engaged, the survey indicates a significantly higher participation rate among female students (68%) than male students (32%). This gender gap may reflect differences in interest, availability, or engagement with the subject matter or platform used for the activity. The increased involvement of females may offer essential perspectives for upcoming planning, especially when it comes to customizing content, choosing themes, or creating follow-up activities that are engaging and accessible to both genders.

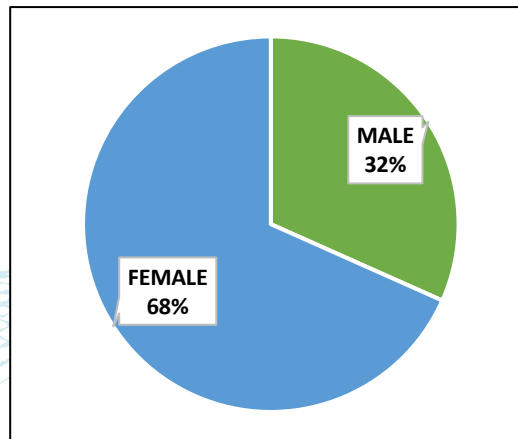


Fig. 3. Gender distribution of the students participants ($n = 60$)

Table 1 summarizes students' awareness, prior experience, and perceptions of Bingo games as a teaching tool. The data show that most respondents (93.3%, $n = 56$) are familiar with Bingo games and have prior experience playing them. The highest number of students indicated that Bingo is a popular game that students often play.

Table 1. Number of students' awareness, experience playing and perception as a teaching tool of Bingo games

Description	Yes	No
Awareness	56	4
Experience playing	56	4
Perception of Bingo as a teaching tool	21	39

However, despite this widespread awareness and experience, students' perceptions of Bingo as an educational tool are limited. Only 35% ($n = 21$) of respondents believe that Bingo can effectively support teaching and learning, while the majority (65%, $n = 39$) do not see it as such. This discrepancy highlights a significant gap between students' recreational engagement with the game and their recognition of its educational value. The findings suggest that while Bingo has the potential to be a familiar and interactive medium, further efforts are needed to help students understand how game based learning can enhance educational outcomes. Implementing structured Bingo based activities that align with curriculum content and learning objectives may increase students' acceptance of and appreciation for its academic relevance. Future research could examine the impact of such interventions on student engagement, motivation, and learning performance.

4.0 Conclusion

The findings of this study indicate a high level of student awareness and prior experience with Bingo games, demonstrating its potential as a familiar platform for engagement in educational settings. However, the relatively low perception of Bingo as a viable teaching tool underscores the need for targeted efforts to demonstrate its instructional value. Educators should consider integrating content-based Bingo activities that align with specific learning outcomes to enhance student engagement and understanding of concepts. Future efforts should focus on developing Bingo games and evaluating the effectiveness of these gamified approaches in various educational settings to encourage broader acceptance and maximize their impact on learning.

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