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SUPPORT SYSTEM FOR MALAYSIAN PARENTS USING
THE ADDIE MODELJuniza Zamri^{1*}, Shafizan Mohamed²¹Department of Design & Visual Communication, Politeknik Tuanku Syed Sirajuddin, Perlis, Malaysia, juniza@ptss.edu.my <https://orcid.org/0009-0007-3116-3725>²Department of Communication, AbdulHamid AbuSulayman Kulliyah of Islamic Revealed Knowledge and Human Sciences, International Islamic University Malaysia shafizan@iiu.edu.my <https://orcid.org/0000-0002-0239-1231>

*Corresponding Author

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Abstract:

Parents' responsibilities have become more challenging today as digital technology influences many aspects of children's daily lives. The challenges do not only revolve around controlling and managing screen time. Beyond that, parents also need to be able to guide their children on online responsibilities and help them respond to online risks while fostering values within the online environment. In Malaysia, these responsibilities towards children are influenced by local culture, religion, language and uneven levels of digital literacy among parents. Thus, this study aimed to design, develop and evaluate Platform KID, a culturally tailored digital parenting platform intended to enhance Malaysian parents' digital literacy and support responsible online parenting practices. Based on the ADDIE model framework, Platform KID was developed phase by phase from Analysis, Design, Development, Implementation and Evaluation stages. The main features of the platform were developed based on a need analysis that was conducted previously in earlier research. Thus, the platform integrates structured learning modules, searchable educational resources, interactive engagement features and culturally relevant parenting guidance to promote digital literacy and safe online practices. The research method employed the design and development research approach with mixed-methods that combined beta-testing scores, user feedback's recommendations and platform usage analytics. The beta-testing involved 38 parents and guardians. Early results showed high initial acceptance with mean scores of 4.26/5 for overall satisfaction, 4.26/5 for expectation fulfilment and 4.32/5 for recommendation likelihood. However, the platform usage analysis highlights that user

retention, mobile-friendly design and stronger engagement approach are important to enhance platform performance. Expert validation procedure was not included in the evaluation phase to focus more on end-user beta testing and early usage performance. However, the platform usage analysis indicates that stronger user-retention strategies, mobile-responsive design, and more engaging content pathways remain necessary to enhance platform performance. Overall, the findings suggest that the ADDIE framework provided a systematic structure for developing an educationally and culturally relevant platform for Malaysian parents.

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Keyword:

ADDIE Model, Digital Literacy, Digital Parenting, Platform KID



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Introduction

As children today are exposed to screen media from an early age, parents' responsibilities have become more challenging. Digital technologies have made homes a space with both opportunities and potential risks at the same time. While digital media can create learning opportunities, entertainment experiences and communication benefits, it might also expose children to online threats, inappropriate content and cyberbullying. A study by Livingstone and Helsper (2008) however indicated that digital parenting should not be about controlling device access but mentioned that children are shaped by what they see on screen and guidance they received from parents. This means, parents are no longer expected only to control access to devices but are also expected to guide children about online behaviour, explain the potential risks while fostering good values within the digital space (Mohamed et al., 2022; Mohamed et al., 2024) . This huge responsibility shows that digital parenting competency should involve both knowledge and practice.

While numerous digital parenting resources are available internationally, only few are designed to reflect Malaysia's multicultural, multilingual and socio-cultural context. Consequently, many parents lack access to culturally appropriate resources that support digital literacy and responsible online parenting.

Although digital access and smartphones are widely used in Malaysia, some families still differ in terms of language preferences, socio-economic status, digital competency and moral expectations due to uneven digital literacy backgrounds. Common struggles among Malaysian parents include screen time management, cyberbullying, online safety and harmful content. Therefore, parents need guidance that is brief, visually interactive and culturally relevant to support their digital parenting mediation practice. This becomes the basis for developing a

digital parenting platform that is structured according to local needs and does not rely only on fragmented advice generally (Astuti et al., 2025).

Platform KID was designed specifically for Malaysian parents with a clear value that is culturally grounded. This digital parenting platform was developed to integrate educational content, guided learning and interactive resources within one ecosystem to support parents to learn, reflect and act rather than functioning only as an information portal. More specifically, this paper has three objectives: first, to explain the theoretical basis and user needs that support the development of Platform KID; second, to describe how the platform was developed using the ADDIE model; and third, to present the early outcomes of development through platform structure, beta evaluation, and usage analytics.

Literature Review

Digital Parenting and Parental Mediation

One of the greatest challenges in digital parenting is not simply about monitoring children's use of devices. Several studies have documented that it is a broader process that parents need to explain and negotiate to help children respond to digital opportunities and online risks as Livingstone and Helsper (2008) and Clark (2013) explain this through parental mediation theory. The study discussed approaches including supervised mediation, active mediation, and co-use. These methods are important because children's online experiences are impacted by what they see and what adults tell them to do.

Clark (2013) in his book says parents do not need warnings alone when it comes to parental mediation but to balance between learning, protection, autonomy and also participation. Parents should aim to empower children to have digital skills and at the same time be able to explore the online world confidently. Recent studies by Mohammed et al. (2025) added that enabling mediation is also applicable in the Malaysian context as it can strengthen values and digital skills among children.

In 2020, Livingstone and Blum-Ross reported that parents raised concerns about inappropriate and harmful online content, distraction issues faced by children who overuse the screen and social pressure like unhealthy comparison and cyberbullying. While they also realise that digital tools offline and online can support learning, help their children to stay connected and participate in today's modern life which results in parents' dilemma of holding hope and anxiety at the same time towards technology.

An investigation on children, adolescents and digital media emphasise parental mediation through personalised Family Media Use Plans that are based on specific family situation, environment and social factors. These plans considered healthy development and routines including healthy diet, good sleep, adequate physical activities and offline social interaction. This study suggested that digital parenting should involve appropriate and balanced media use with other healthy activities offline (Chassiakos et al., 2016).

Whilst general parental concern, the differences in parental resources and parental readiness are among factors that influence digital parenting. Another study by Zhao et al. (2023) further the discussion of parental mediation by saying that digital parental mediation should not be treated as a one-size-fits-all solution across families. Each family perceives digital parenting

differently including self-efficacy, digital risk and benefit of digital media. This finding is important as it shifts from whether parents mediate, to why parents mediate differently among families. Thus, Platform KID development should be built with the consideration of a variety of parental knowledge, confidence and family situations.

To address low parental digital literacy, difficulties in monitoring children's online activity and issues between digital trends and Islamic principles, the key points suggested that digital parenting among Muslim families should involve technology guidance, ethics and support that responds to digital realities (Bukhari et al., 2024). For a platform such as Platform KID, this suggests that the content should go beyond safety advice and include ethical as well as value-based guidance that is relevant to Muslim family life.

Digital Literacy and Parental Competence and Readiness

According to Mohd Mahudin & Janon (2022) parental mediation among Malaysian parents of young children can be understood through active mediation, restrictive, monitoring, co-use and technical dimensions that have been practiced based on families' circumstances. The study continues to recommend policymakers to pay great attention in enhancing digital literacy among young children together with national programmes that educate parents more on mediation strategies. A platform such as Platform KID may be one of the supporting platforms that address the needs of parents as mentioned above.

Zhao et al. (2023) found that parental mediation is influenced not only by children's safety but also through self-efficacy, perception of risk, advantages, and the parents' sense of knowledge whether they are more or less capable than their child. The readiness of digital literacy and digital parenting become key factors that can empower parents to confidently respond to the digital challenges. In other words, the capabilities of digital parenting should be beyond awareness where parents should be able to navigate, interpret and guide their children in responsible ways. Other than that, the gaps in digital knowledge between parents and children can weaken parental guidance. Parents may rely on restrictive approaches rather than appropriate digital guidance when the children are more familiar with online space than the parents. In contrast, parents who have stronger knowledge in digital literacy already manage to guide, discuss and support digital experiences of their children such as talking about internet safety, co-using devices and nurturing healthy habits. This finding was in line with the objective of Platform KID development as a digital support system to build parents' capability in digital literacy and readiness.

Another perspective that should be considered to empower parental competency is that parents are not formal students who can work through long formal instructional materials because they also engage with other responsibilities and immediate pressure. Thus, asynchronous learning through guided modular, short-form resources and interactive elements was integrated into Platform KID to directly address common parenting dilemmas.

Digital Parenting in Malaysia and Muslim Family Context

Several studies conducted in Malaysia show that local parents also face the same challenges reported globally where the parents use different approaches to monitor their children's online activities, yet the struggle continues when risks and technology change (Mohd Yusof & Hashim, 2018). Another research by Osman & Muda (2022) agrees that digital parenting in

Malaysia is influenced by the literacy gaps, safety concerns and at the same time need for additional contextual support.

A study on the needs analysis of PLATFORM KID previously reported by Mohamed et al. (2025) saying that Malaysian parents preferred short-form videos, engaging content, expert-led guidance, age-specification guidance and culturally grounded platform that includes moral and values integrating with information that is relevant within families' real dilemmas. This finding has been the empirical evidence for designing PLATFORM KID that emphasise content effectiveness including language used, learning modular and mobile friendly presentation.

While the previously mentioned research focuses more on supervision and protection, Bukhari et al. (2024), in their research entitled Challenges of parenting in the digital era: A review from the perspective of Islamic family law, argue that parents in the digital era also need to understand Islamic family law foundation, *tarbiyah* and digital ethics. Another research by Ani et al. (2024) supporting this finding where they describe *hadhanah* in the digital era should encompass physical, moral, emotional, and spiritual aspects which also highlight the Islamic parenting.

Thus, Astuti et al. (2025) offer an additional insight by proposing a hybrid digital parenting model where Islamic values have been integrated with social cognitive theory. The research emphasizes the repeated practices that are consistent through daily basis, visible role models and value-based guidance that encourage open dialogue to build inner moral literacy rather than just obey to avoid punishment. This supports the addition of reflective sections and activity-based material inside Platform KID.

Based on this literature review, previous studies on digital parenting show that the development of PLATFORM KID for Malaysian parents should rest on three basic foundations that include i) parental mediation, ii) digital parenting readiness and iii) cultural relevance. These foundations clarify that Platform KID should be built to support different parental readiness, address mediation dilemmas, and remain relevant to Malaysian parents.

Methodology

Research Design

This study was conducted using mixed-methods through design and development approach where beta-testing, user feedback's recommendation and platform usage analytics were used with 38 parents and guardians involved during evaluation. This research aimed to explain how a usable intervention platform was built and evaluated based on empirical evidence. The platform is named as Platform KID, a web-based support system to address digital parenting needs among Malaysian parents. According to Richey & Klein (2014) studies on Methods, Strategies and Issues saying that design and development research is appropriate to understand how the development process can justify and connect theory, context, design and evaluation. Expert validation procedure was not included during this phase as it focused more on end-user beta testing and early usage performance.

ADDIE Model Framework

Platform KID was developed according to the ADDIE model framework which is structured through the phases of Analysis, Design, Development, Implementation and Evaluation as suggested by Branch (2009). This model was selected because it provides a systematic framework starting from problem-based analysis to a functioning platform that supports iterative improvement throughout the process. The five phases in this study are summarised in Table 1. below:

Table 1: Application of the ADDIE Model in the Development of Platform KID

ADDIE	Question	Activities	Outcome
Analysis	What is the issue and user need?	Literature review, Malaysian parents' needs analysis and list of content priorities.	Design requirement and content
Design	How is the design platform structured for parents?	Design navigation, content, modules and interactive elements	Sitemap and design blueprint
Development	How can the design be transformed into a platform?	Develop pages, features, modules and interactive content	Working prototype and site structure
Implementation	How will the platform be used?	Deploy the platform into live domain and opened access to users	Initial usage and user access data
Evaluation	How can the platform be assessed and improved?	Collect feedback, traffic review, engagement and performance data	Early evidence for improvement

Source: ADDIE Model Framework, Branch (2009).

Data Collection and Evaluation

The study used four sources of evidence. The first source is the conceptual and literature review which established the theoretical basis for the platform. The second source is based on earlier need analysis conducted in relation to Platform KID and Malaysian parents. The study particularly found what guidance that parents preferred and which practical approaches they prioritised (Mohamed et al., 2025). Whilst the next source was based on beta-testing feedback gathered from early platform use. In June 2025 to February 2026, usage analytics data were examined to understand how visitors use the platform.

During beta-testing, usability, functionality, content and recommendations were examined to understand whether the platform was usable and meaningful before further large-scale improvements can be made. Usage analytics were also studied to get in-depth data regarding user behaviour, including active users, new users, average engagement time, traffic patterns

and device usage. This analysis is in line with design and development research which value the feedback and recommendation that come with a theory-driven approach (Branch, 2009).

Platform KID Development

Information Architecture and Platform Identity

Figure 1 shows the front page of Platform KID that represents the main identity layout of the platform and positions it clearly as a digital support system for Malaysian parents. The other main menus in the platform were Teroka & Bina, MODUL KID, Komuniti Digital, Blog, Cabaran and Lembaran Titipan.



Figure 1: Platform KID Homepage as a Support System for Malaysian parents.

The platform navigation was designed with multiple user pathways where some of them might want to navigate to find quick information while some other users might search for learning or interactive activities. This structure is parallel with the needs of adult learning experience that requires more personalised access. It gives flexibility to exploration-based-environments either to read, take part in community digital forums, participate in guided learning modules or engage with interactive learning activities with their children depending on their levels of urgency, confidence and availability.

Content Discovery and Exploration Layout

Figure 2 shows the Teroka & Bina page that contains the discovery and exploration section. Through this section, parents are able to search, browse and explore digital parenting resources through a search bar and card-based content. This structure was made as an effort to make content faster and easier to retrieve for busy parents.

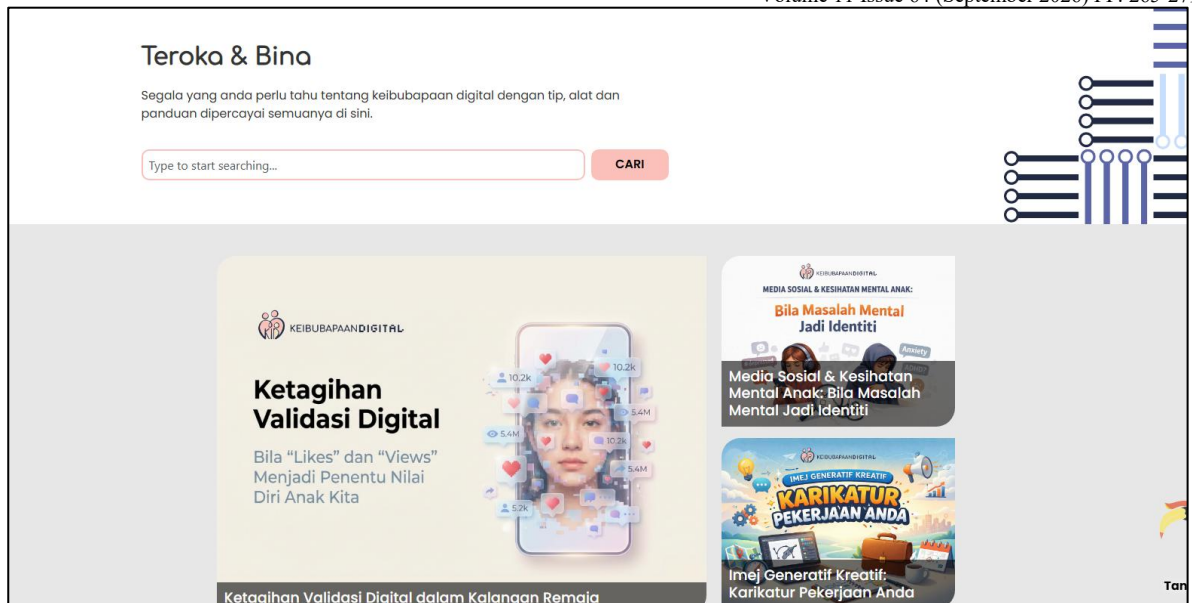


Figure 2: The Teroka & Bina Provides Search and Content Exploration Functions for Digital Parenting Resources.

The card-based content as shown in Figure 2 has been used in this development to help attract parents' attention. Instead of relying on long lists of text, this approach supports the earlier findings where visual presentation helps attract attention and encourage content discovery (Mohamed et al., 2025).

Structured Learning Modules

Structured learning content, namely MODUL KID, shown in Figure 3 allows parents to learn in more guided ways. The learning content is organised into various categories related to digital parenting such as introduction to digital parenting, time management, managing suitable content and cultivating values in digital life.

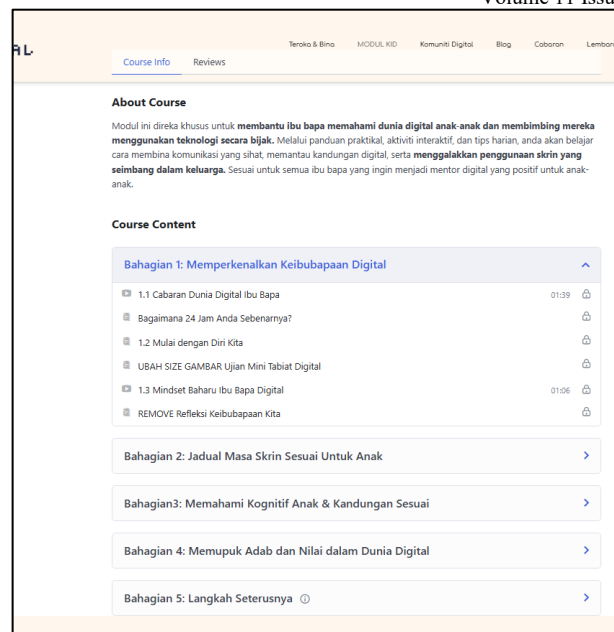


Figure 3: Example of a MODUL KID Showing Structured Learning for Parents.

Parents who need proper structure and continuous guidance may not only become readers who get information but also learners. On the other hand, this structured learning approach is useful for parents as it allows learning based on parents' availability and flexibility. It also encourages parents to practically take proper action and get clearer guidance instead of only knowing about digital parenting in general.

Interactivity and User Engagement

To create approachable and memorable parent-child learning space, interactive and gamified content was integrated into the platform as shown in Figure 4.

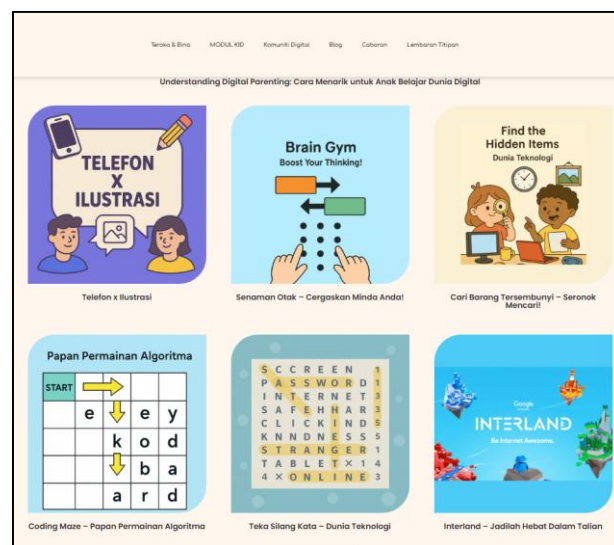


Figure 4: Example of Interactive Activities Supporting User Engagement and More Applied Digital Learning.

The activities such as puzzles, brain-gym and quizzes help to engage children in a participatory learning process. The visual elements in this figure also show that Platform KID was designed to meet the criteria of usable, learning modular and interactive engagement.

Findings and Discussion

Theoretical Basis and User Needs to Support Platform KID

During the development of Platform KID, five stages of the ADDIE model framework were used starting from the analysis phase that was grounded in local digital parenting issues. The phase continues to the design stage where it translates the issues into a structured platform sitemap. From there, the development stage turned the site map planning into a functioning platform while the implementation and evaluation phases became the stage where early feedback was collected from users who visited the site for further improvement. Thus, this confirms that the ADDIE model was a relevant framework approach in building Platform KID where the sequence shows the value of the ADDIE model in educational development.

Platform KID was designed to align with the previous literature and not to be developed as a generic based platform. Instead, it was built as a structured support that helps parents translate their concern into action including discussion, restriction, co-use and monitoring, rather than only getting general information about digital risk as parents differ in digital confidence and interpretation (Livingstone & Helsper, 2008; Clark, 2013; Livingstone & Blum-Ross, 2020; Chassiakos et al., 2016; Zhao et al., 2023; Mohd Mahudin & Janon, 2022).

Searchable content, structured learning modules with short and brief forms instead of websites full of text-heavy was integrated into the platform as suggested in earlier study by Mohamed et al. (2025) that Malaysian parents preferred to have visually brief content that was easy to understand based on background level and relevant to the local culture. The development is also supported by other research where overly long theoretical materials make the resources less practical for daily dilemmas and time pressure (Clark, 2013; Livingstone & Blum-Ross, 2020).

The other finding indicates that in Muslim family contexts, digital parenting should emphasise the importance of ethical and cultural relevance including parent-child open discussion about *adab*, *tarbiyah* and *hadhanah* to nurture values in digital daily life. (Bukhari et al., 2024; Ani et al., 2024; Astuti et al., 2025). Therefore, the development of Platform KID was designed to provide holistic development that combines with mediation guidance, readiness support and cultural relevance. This combination potentially distinguishes Platform KID from generic digital parenting resources that may not fully-reflect Malaysian family expectations, language preferences and everyday dilemmas.

Prototype Assessment and Beta Testing

Prototype assessment was conducted at an earlier stage before the platform reached a more complete stage, showing promising user acceptance in terms of value and usability. The data collection during beta-testing phase recorded an overall satisfaction score of 4.26/5, an expectation fulfilment score of 4.26/5 and a recommendation score of 4.32/5. The continuous growth is expected to expand for the upcoming years. Beta-testing indicated high user

satisfaction and perceived usefulness, although participants identified improvement in mobile responsiveness, interactive engagement and long-term user retention.

These findings suggest that while Platform KID demonstrates strong educational potential, sustained user engagement will require enhanced mobile optimisation, personalised content delivery and interactive learning features. Technically, no major problems were reported during beta testing. However, some users experienced loading issues which may affect engagement performance. Thus, video content needs to be optimized as it becomes one of the strongest types of content that is linked to technical improvement requirements.

Platform Usage Analytics from June 2025 to February 2026

Usage analytics from June 2025 to February 2026 indicate that the main challenge after development was to sustain higher user engagement. A high volume of traffic during paid campaigns did not always lead to longer browsing time. This suggests that Platform KID should improve user retention, provide clearer onboarding and ensure the content meets users' expectations.

Table 2 shows users and engagement quality across campaigns and stages.

Table 2: Data of Platform KID Usage Performance for Selected Months.

Month	Active User	New User	Engagement time (Average)	Observation
June 2025	76	75	1m 28 s	Good engagement from early users.
August 2025	176	157	1m 11s	Strong increase with direct traffic.
September 2025	436	418	22s	Paid traffic surge but weaker engagement
November 2025	387	360	26s	Returning users increase. The platform became more stable
December 2025	1.2K	1.1K	30s	Major growth by strong direct traffic
January 2026	1.5K	1.4K	12s	High traffic volume but short engagement time
February 2026	440	429	15s	Traffic improved, but engagement quality remained low

In June 2025, the platform recorded 76 active users with average engagement time in 1 minute 28 seconds. Even though the platform started with a small user base, it showed stronger engagement quality compared to other monthly records. Active users increased to 176 in August 2025 followed by 436 visitors in September and November 2025. Major growth in traffic has been recorded in December 2025 and January 2026 with a score of 1.2K and 1.5K active users. Unfortunately, the data indicates low engagement quality which is not parallel with the increase of users.

Devices, Traffic, and Performing Content

User activity recorded that 73.7% of users used mobile devices to access the platform. It clearly shows that mobile devices are the preferred devices compared to desktop access, which recorded only 26.3%. This finding confirms that accessibility, usability and content presentation should be optimised for mobile use.

In terms of content performance, video-based material recorded deep engagement in 18 minutes and 1 second, showing strong user retention. Content related to parental controls, screen time management and community forum also recorded higher engagement. This indicates the users are attracted to the interactive content which feels practical and relevant to their needs.

In the earlier phase, direct and organic traffic played a significant role. However, the campaign in September 2025 to February 2026 contributed to high volume user growth from Facebook and Tiktok paid traffic. Yet this increase lacked engagement duration and showed higher bounce rates, which indicates that attracting users to the platform and keeping them engaged are related but require different strategies.

Conclusion

This study points out four different areas that emphasise continuous enhancement of mobile experience as most users access the platform through mobile devices. Video content should be optimised as it becomes one of the significant engagement materials, while all other modular and interactive content should be aligned with the local culture. Lastly, traffic acquisition and user retention strategies should be connected to sustain growth and not depend only on paid campaigns. These improvements are also relevant to other future studies related to family-oriented educational platforms that are diverse in other user groups.

Through this study, Platform KID has been presented as a culturally grounded digital platform for parents in Malaysia that was developed using the ADDIE model framework and integrates a combination of theory, research evidence and systematic design. Iterative evaluation in this study also led to the final development, which includes homepage identity layout, searchable and discovery content, structured learning modules and interactive activities that cumulatively support digital parenting education.

The findings from the usage analytics evaluation indicate the encouraging potential of the platform to grow as an educational ecosystem to support digital parenting in Malaysia. However, sustainable value should also focus on improving usability, engagement quality and content retention while attracting more traffic.

This study contributes to the digital parenting literature by demonstrating how instructional design principles can be incorporated with culturally responsive content to develop a digital parenting platform tailored to Malaysian families.

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References

- Ani, S., Azim, P., Azik, M., Sopyah, N., & Badriyah. (2024). The transformation of hadhanah in the digital era: Islamic parenting strategies with technology. *NALAR FIQH: Jurnal Hukum Islam*, 15(2), 87–99. <https://doi.org/10.30631/nf.v15i2.1687>
- Astuti, R., Aziz, T., & Yuniatari. (2025). Hybrid digital parenting models: Integrating social cognitive theory with Islamic values in early childhood development. *Al-Tadzkiyyah: Jurnal Pendidikan Islam*, 16(2), 305–323. <https://doi.org/10.24042/atjpi.v6i2.30210>
- Branch, R. M. (2009). *Instructional design: The ADDIE approach*. Springer. <https://doi.org/10.1007/978-0-387-09506-6>
- Bukhari, B., Bastiar, B., & Anwar, A. (2024). Challenges of parenting in the digital era: A review from the perspective of Islamic family law. *Al-Qadha: Jurnal Hukum Islam dan Perundang-Undangan*, 11(2), 357–370. <https://doi.org/10.32505/qadha.v11i2.9549>
- Chassiakos, Y. L. R., Radesky, J., Christakis, D., Moreno, M. A., & Cross, C. (2016). Children and adolescents and digital media. *Paediatrics*, 138(5), e20162593. <https://doi.org/10.1542/peds.2016-2593>
- Clark, L. S. (2013). *The parent app: Understanding families in the digital age*. Oxford University Press.
- Livingstone, S., & Blum-Ross, A. (2020). *Parenting for a digital future: How hopes and fears about technology shape children's lives*. Oxford University Press.
- Livingstone, S., & Helsper, E. J. (2008). Parental mediation of children's internet use. *Journal of Broadcasting & Electronic Media*, 52(4), 581–599. <https://doi.org/10.1080/08838150802437396>
- Mohamed, S., Janon, N. S., Yusoh, M. H., Salleh, N., Mohd Nasir, N. S., & Wan Mohd Ghazali, W. N. (2025). Designing and evaluating a culturally grounded digital parenting initiative in Malaysia. *Intellectual Discourse*, 33(3), 993–1015. <https://doi.org/10.31436/id.v33i3.2433>
- Mohamed, S., Wan Ghazali, W. N., & Mohd Nasir, N. S. (2024). Navigating digital risks and benefits: Malaysian parents' perceptions of their children's digital media usage. *e-Bangi: Journal of Social Sciences & Humanities*, 21(1), 135–145. <https://doi.org/10.17576/ebangi.2024.2101.12>
- Mohamed, S., Wok, S., Wan Mohd Ghazali, W. N., & Nasir, S. (2022). *Maternal digital competencies as a prerequisite for effective digital parenting among Malaysian mothers*. *International Journal of Social Policy and Society*, 2022(Special Edition), 115–135. <https://ijspis.ism.gov.my/IJSPS/article/view/236>
- Mohd Mahudin, N. D., & Janon, N. S. (2022). Lock, talk, or stop? Measuring how parents mediate their young children's use of digital devices in the Malaysian context. *e-JURNAL IPPTAR*, 1(1), 1–25.
- Mohd Yusof, N., & Hashim, N. H. (2018). Digital parenting: Understanding Malaysian parents' strategies in monitoring children's online activities. *Jurnal Komunikasi: Malaysian Journal of Communication*, 34(3), 140–155. <https://doi.org/10.17576/JKMJC-2018-3403-09>
- Osman, Z., & Muda, M. (2022). Digital parenting practices among Malaysian parents: Challenges and opportunities. *Jurnal Komunikasi: Malaysian Journal of Communication*, 38(2), 100–117. <https://doi.org/10.17576/JKMJC-2022-3802-06>
- Richey, R. C., & Klein, J. D. (2014). Design and development research. In J. M. Spector, M. D. Merrill, J. Elen, & M. J. Bishop (Eds.), *Handbook of research on educational communications and technology* (4th ed., pp. 141–150). Springer. https://doi.org/10.1007/978-1-4614-3185-5_12

Zhao, P., Bazarova, N. N., & Valle, N. (2023). Digital parenting divides: The role of parental capital and digital parenting readiness in parental digital mediation. *Journal of Computer-Mediated Communication*, 28(5), zmad032.
<https://doi.org/10.1093/jcmc/zmad03>