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Integrating Holistic Physical Education and Digital Teaching Materials in a University Partnership Programme

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ABSTRACT

This practice report examines the documented implementation of a community engagement programme delivered by Universitas Negeri Surabaya at the University of Malaya, Kuala Lumpur, Malaysia, on 28 October 2025. The programme combined an introduction to holistic physical education, instructional design, and practical development of digital teaching materials using PowerPoint and Canva. A descriptive documentary appraisal distinguished planned activities, reported delivery, verifiable outputs, and unmeasured outcomes. The source corpus comprised an institutional programme document and an attached news report; international journal literature provided the interpretive framework. Reported delivery included conceptual instruction, media development practice, discussion of draft learning materials, and academic feedback. The available records did not establish participant numbers, completed product counts, pre–post competence changes, physical activity changes, or fitness improvement. The principal contribution is therefore a documented educational approach and an explicit account of its evidentiary limits. A prospective evaluation framework is proposed to assess product quality, educational transfer, behavioural outcomes, and partnership continuity. The report offers a basis for strengthening evidence-informed university community engagement while separating the delivery of an educational opportunity from demonstrated health or learning effects.

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INTRODUCTION

Physical education can connect movement competence with knowledge, motivation, social participation, and well-being. Its educational value depends on the quality of learning experiences and the contexts in which participation occurs. A review of school physical education identified potential contributions across physical, affective, social, and cognitive domains (Bailey, 2006). Evidence from cooperative learning similarly highlights the importance of examining multiple learning domains rather than equating participation with comprehensive educational success (Casey & Goodyear, 2015). Although school-based findings cannot be transferred automatically to universities, they provide a useful starting point for defining holistic educational intentions.

Physical literacy offers a complementary framework. It links movement competence, confidence, motivation, and understanding with participation in physical activity and broader health processes (Cairney, Dudley, Kwan, Bulten, & Kriellaars, 2019). Conceptual and measurement reviews show that the construct requires careful definition and cannot be represented adequately by a single fitness test (Dudley, 2015; Edwards, Bryant, Keegan, Morgan, & Jones, 2017; Giblin, Collins, & Button, 2014). The Canadian Assessment of Physical Literacy illustrates one operational approach developed for children; its measures would require age-appropriate reconsideration before use in university populations (Longmuir et al., 2015). A university programme should therefore specify which dimensions it intends to influence and how each will be assessed.

The relevance of this agenda extends beyond physical education courses. Reviews of university students' physical activity behaviours have identified substantial participation challenges (Keating, Guan, Piñero, & Bridges, 2005). More recent research places environmental resources, social influences, and goals among the important determinants of active student lifestyles (Brown et al., 2024). Reviews of university interventions identify varied strategies and effects, reinforcing the need to match intervention content to context and outcome (Johannes, Roman, Onagbiye, Titus, & Leach, 2024; Maselli, Ward, Gobbi, & Carraro, 2018; Plotnikoff et al., 2015; Yuan, Peng, Khairani, & Liang, 2024). A brief educational workshop may contribute knowledge and skills, but the pathway from workshop attendance to sustained activity remains an empirical question.

The health rationale is well established in broader literature. Physical activity has documented health benefits (Warburton, Nicol, & Bredin, 2006), while international surveillance demonstrates the continuing relevance of insufficient activity (Guthold, Stevens, Riley, & Bull, 2018). The World Health Organization guidelines provide a population-level reference for activity and sedentary behaviour (Bull et al., 2020). Research also connects exercise with cognition and mental health, although the strength and applicability of evidence vary across populations and designs (Biddle & Asare, 2011; Donnelly et al., 2016; Hillman, Erickson, & Kramer, 2008; Rebar et al., 2015). For tertiary students specifically, emerging work on perceived physical literacy and mental health is largely observational and should not be interpreted as demonstrating causation (Leung, Sum,

& Lam, 2025). These distinctions are essential when describing an educational programme with health-related aims.

Digital technologies introduce both opportunities and design responsibilities. Technology-supported learning is shaped by relationships among learners, educators, disciplinary knowledge, and context (Casey, Goodyear, & Armour, 2017). Technological pedagogical content knowledge provides a framework for examining these relationships (Mishra & Koehler, 2006), and evidence mapping in higher education shows that engagement itself has behavioural, affective, and cognitive dimensions (Bond, Buntins, Bedenlier, Zawacki-Richter, & Kerres, 2020). Recent physical education reviews extend this discussion to intelligent technologies, assessment tools, and implementation challenges (Müller & Wagner, 2026; Tohănean, Vulpe, Mijaica, & Alexe, 2025; Zhong et al., 2025). Nevertheless, accessible presentation and design applications can provide a practical starting point where the immediate aim is to create clear teaching materials rather than introduce advanced analytics.

This report examines a programme combining holistic physical education with digital material development at the University of Malaya. It addresses three questions: What activities are documented as delivered? Which outputs can be distinguished from planned deliverables and unmeasured outcomes? How can the programme be strengthened through an explicit theoretical and evaluation framework? The purpose is to provide a transparent practice account and a basis for subsequent evaluation, rather than estimate programme effectiveness from incomplete records.

METHODS

Report Design and Setting

A descriptive documentary appraisal was undertaken to develop this practice report. The programme was delivered by an eleven-member academic team from Universitas Negeri Surabaya at the University of Malaya, Kuala Lumpur, Malaysia, on 28 October 2025. Its reported theme was “Promoting Holistic Physical Education for University Students: Improving Student Fitness through Sports and Physical Activities.” The title expresses an intended direction; it does not establish that fitness changes were measured or achieved. Document analysis can support contextual interpretation while requiring attention to the origin, purpose, and limitations of source materials (Bowen, 2009). The present appraisal is confined to the supplied records. It is not a participant-level intervention study, a systematic review, or an evaluation based on direct observation. No interviews, surveys, tests, attendance verification, or new health measurements were conducted for this manuscript.

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Documentary Sources and Appraisal Procedure

The corpus contained two sources: an institutional document titled "LA - PKM SILPAKON.docx" and an attached PDF reproduction of a Kempalan.com news article titled "UNESA Bawa Transformasi Pendidikan Jasmani ke University of Malaya, Perkuat Agenda SDGs melalui Inovasi Digital." The latter carries a publication date of 28 October 2025. The institutional document includes programme objectives, planned methods, team information, and intended outputs, but also retains references to a previous partner and inconsistent administrative periods. These inconsistencies were retained as limitations rather than silently converted into verified implementation facts.

Information was organized under setting, educational content, delivery activities, outputs, evaluation evidence, and follow-up. Statements were then classified as planned, reported as delivered, documented as disseminated, or not established by the available records. Narrative interpretation was informed by principles of transparent qualitative analysis (Braun & Clarke, 2006), without claiming a complete thematic study, multiple independent coders, saturation, or formal reliability testing. The news article was treated as a programme account with a dissemination purpose; agreement with the institutional document was not considered independent verification of outcomes.

Literature Use and Evidentiary Boundaries

Sixty journal articles were selected for their relevance to physical literacy, university physical activity, digital pedagogy, feedback, behaviour change, sustainability, and evaluation. Targeted title and DOI retrieval, publisher pages, and bibliographic registry records supported source checking. The literature selection was purposive and narrative, not exhaustive. No database screening totals, protocol registration, risk-of-bias ratings, or meta-analysis were generated. The literature was used to interpret educational design and propose evaluation priorities. It was not used to fill missing programme data. Guidance on intervention description and process evaluation informed the distinction between what was planned, delivered, and measured (Hoffmann et al., 2014; Moore et al., 2015). Counts of references should not be interpreted as an indicator of the strength of the programme evidence.

Ethical and Reporting Considerations

The appraisal used supplied institutional and publicly disseminated documentary material. No identifiable participant records were analysed, and no participant quotations or photographs are reproduced. The supplied records do not establish research ethics approval, participant consent for research, or approval for secondary analysis of learner products. Any future collection or publication of participant-level data should obtain the appropriate institutional ethics determination and consent before research procedures begin.

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Documented Programme Implementation and Outputs

Programme Team and Educational Orientation

The institutional document identifies an eleven-member academic team covering curriculum, pedagogy, learning innovation, assessment, sport management, and health-related expertise. The programme combined two educational intentions: understanding physical education holistically and translating related content into digital teaching materials. The reported content included sport, movement activities, fitness, and student health. This combination establishes the programme's educational scope, but the records do not provide a detailed session timetable, verified contact hours, or a participant demographic profile. The news account locates delivery at the University of Malaya and describes academic exchange between Indonesian and Malaysian participants. The international setting is therefore part of the documented context. However, the evidence does not establish a signed partnership instrument, a continuing joint curriculum, or an evaluated institutional impact. Such developments remain separate from the occurrence of the activity itself.

Conceptual Instruction and Media Development Practice

Reported delivery began with an introduction to holistic physical education and principles for preparing teaching materials. Participants encountered instructional design and the relationship between educational objectives and content presentation. Practical work used PowerPoint and Canva to translate concepts into visual learning materials. The accessible software selection is identifiable; the records do not establish which application versions, subscription features, devices, connectivity conditions, or accessibility settings were used. Participants were given opportunities to develop learning designs, discuss their work, and receive input from the academic team. These reported opportunities support an account of practice-oriented delivery. They do not, on their own, demonstrate that every participant completed a product, met a competency threshold, or subsequently used the materials in teaching. No archived product inventory, scored rubric, or independently reviewed sample is available in the supplied corpus.

Feedback and Dissemination

Discussion of draft materials and academic feedback are described in the news account. The documented focus included the pedagogical appropriateness and communication of content. The record does not contain feedback transcripts, revision histories, participant ratings, or examples linking a specific comment to an improved product. Accordingly, feedback is reported as a delivery activity rather than a measured mechanism of learning gain. The clearest dissemination output is the Kempalan.com article dated 28 October 2025. It communicates the programme theme, team involvement, educational approach, and sustainability connections. The PDF establishes the existence and content of the published account. It does not establish its reach, readership, influence on practice, or contribution to subsequent collaboration.

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Status of Intended Outputs and Outcomes

The institutional document lists digital teaching materials, a scientific article, online publicity, a programme video, intellectual property, and partnership documentation among intended outputs. The available corpus establishes publicity and describes work on draft learning materials. It does not establish the completion, publication, registration, or approval of all remaining outputs. This manuscript is a subsequent writing product and cannot be described retrospectively as an already published programme article. Participant numbers, attendance rates, product completion rates, knowledge scores, digital competence scores, physical activity measures, and fitness measurements are absent. No effect size, statistical significance claim, or before–after comparison can therefore be reported. The principal documented achievement is the delivery of an integrated learning opportunity, accompanied by draft-material discussion and public dissemination.

DISCUSSION

A Holistic Orientation Requires Explicit Educational Outcomes

The programme's combination of physical education and digital material development is educationally plausible, but its mechanisms need to be specified. Physical literacy research supports attention to competence, understanding, motivation, and confidence (Cairney et al., 2019; Edwards et al., 2017). Intervention evidence further shows why programme effects should be assessed across defined domains rather than assumed from a broad label (Carl et al., 2022). In the present case, content knowledge and material design are more directly connected to the workshop activities than physiological adaptation.

This distinction helps prevent a common mismatch between programme titles and measured results. Designing a presentation about exercise is not equivalent to undertaking a sufficient exercise dose. Knowledge may support active living, but opportunities, resources, goals, and social conditions influence whether it becomes behaviour (Brown et al., 2024). A future iteration should separate learning objectives for material development from behavioural objectives for physical activity and physiological objectives for fitness. Each requires a different assessment strategy and follow-up period.

Digital Competence should be Interpreted through Instructional Quality

The use of PowerPoint and Canva creates a concrete production task. Its educational merit depends on how software choices serve content and pedagogy (Mishra & Koehler, 2006). Constructive alignment offers a useful design principle: intended learning outcomes, learning activities, and assessment tasks should reinforce one another (Biggs, 1996). For example, a material intended to help students plan safe movement activities should be assessed for the accuracy and usability of that guidance, rather than for decorative sophistication alone.

Multimedia learning research provides specific design considerations. Learners must select and integrate verbal and visual information (Mayer, 1997), while unnecessary processing demands can obstruct learning (Sweller, 1988). Reducing irrelevant material, presenting content coherently, and avoiding competing information streams are therefore defensible principles for future product review (Mayer & Moreno, 2003). These are proposed assessment criteria, not documented features of every draft produced in the workshop.

Recent reviews of digital and intelligent technologies in physical education broaden the available options (Tohănean et al., 2025; Zhong et al., 2025). Their relevance here is primarily cautionary and developmental: a presentation-based workshop should not be described as an artificial intelligence intervention or a motor-analysis system. Further technological development should follow an identified learning need, adequate infrastructure, and an evaluation plan. Evidence concerning digital formative assessment in motor learning offers a possible future direction when recording and analysing movement becomes an explicit objective (Müller & Wagner, 2026).

Practice and Interaction are Plausible Mechanisms rather than Proven Effects

Participants reportedly moved beyond listening to create and discuss materials. This is consistent with the emphasis on active participation in higher education (Prince, 2004). A large meta-analysis in undergraduate STEM supports active learning, but its disciplinary and assessment context differs from the present workshop (Freeman et al., 2014). The evidence therefore supports the pedagogical rationale for practice, without supplying an effect estimate for this programme.

The ICAP framework provides a further distinction between passive, active, constructive, and interactive engagement (Chi & Wylie, 2014). Producing an explanation or revising a design may involve different cognitive demands from copying a template. Future observations could document these differences. Likewise, student-centred physical education still requires educator decisions about guidance, content, and responsibility (Goodyear & Dudley, 2015). The current records establish opportunities for interaction, but not its frequency, quality, or distribution across participants.

Feedback Needs to Become Usable Information

Discussion and feedback are strengths of the reported delivery model, but their educational value depends on how learners use them. Feedback can have different effects depending on its focus and delivery (Hattie & Timperley, 2007), while formative feedback research stresses task-relevant, specific information (Shute, 2008). Assessment should therefore document whether participants understand the comments, act on them, and improve a subsequent version.

A future workshop could require an initial draft, a feedback response, and a revised product. The comparison should use a transparent rubric and, where possible, independent raters. This would connect formative assessment with demonstrable revision (Black & Wiliam, 1998; Sadler, 1989). It would also make room for self-assessment and self-regulated

learning (Nicol & Macfarlane-Dick, 2006). Feedback literacy and learner participation in feedback design are relevant because improvement requires judgement and action from the recipient, not simply the transmission of expert comments (Boud & Molloy, 2013; Carless & Boud, 2018).

Motivation and Self-Regulation Connect Learning with Later Use

The workshop's practical format may offer opportunities to develop confidence, but confidence was not measured. Social cognitive theory suggests that mastery experiences can inform self-efficacy (Bandura, 1977), while self-determination theory highlights autonomy, competence, and relatedness (Ryan & Deci, 2000). These frameworks identify hypotheses that can be assessed rather than effects that can be presumed. Recognition and incentives also require care because their motivational effects depend on their type and context (Deci, Koestner, & Ryan, 1999).

Transfer into practice could be supported by participant-defined goals, reflection on implementation, and follow-up review. Self-regulated learning research provides a basis for examining planning, monitoring, and adjustment (Pintrich, 2004; Zimmerman, 2002). For this programme, useful transfer indicators would include whether participants revise a material, test it with learners, identify difficulties, and explain subsequent changes. Such evidence would strengthen the account of educational application beyond immediate workshop participation.

Health Promotion Needs A Behavioural Pathway

The programme connects teaching materials with active living, but the link needs an operational pathway. The COM-B model distinguishes capability, opportunity, and motivation as conditions influencing behaviour (Michie, van Stralen, & West, 2011). A digital material might strengthen understanding while leaving time constraints, access to space, or social support unchanged. University-specific reviews reinforce the importance of these contextual influences (Brown et al., 2024; Johannes et al., 2024). Consequently, any future active-living component should assess barriers and match its strategies to the intended behaviour.

If goal setting, self-monitoring, or social support are introduced, their content should be specified rather than described only as motivation enhancement. A behaviour change taxonomy can make the proposed components more reproducible (Michie et al., 2013). Reviews of interventions in university populations support continued testing while also demonstrating variation in designs and outcomes (Maselli et al., 2018; Plotnikoff et al., 2015; Yuan et al., 2024). Guideline-consistent activity measurement and appropriate fitness assessment would be necessary before claiming health effects (Bull et al., 2020).

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Partnership and Sustainability require Follow-Through

Delivery in a partner university creates an opportunity for shared educational development, but international location alone is not evidence of reciprocal benefit. Future collaboration should identify joint priorities, local responsibilities, product ownership, and routes for adapting content to different student populations. Sustainability scholarship in higher education emphasizes the need to integrate commitments with institutional practice (Lozano, Lukman, Lozano, Huisingh, & Lambrechts, 2013). Work on sustainability-related competencies also highlights the importance of capacities that extend beyond a single event (Rieckmann, 2012).

In practical terms, partnership continuity could be demonstrated through co-developed materials, jointly agreed evaluation procedures, recurring mentoring, and evidence that the products are used. Connections with Sustainable Development Goals 3, 4, and 17 are therefore best framed as intended alignment with health, education, and partnership. Measured contributions require indicators of activity, learning, health, or institutional change; they cannot be inferred from publicity alone.

A Prospective Evaluation Framework

The next programme cycle should connect its educational theory with a feasible evidence plan. Professional development research emphasizes coherent design and appropriate measurement (Desimone, 2009). Intervention reporting guidance suggests documenting the rationale, materials, procedures, providers, mode, setting, dose, adaptations, and fidelity (Hoffmann et al., 2014). For this programme, a session plan, verified attendance register, facilitator record, and product inventory would substantially improve reproducibility.

Evaluation should first distinguish implementation from learning outcomes. Implementation outcomes such as acceptability, appropriateness, feasibility, and fidelity should be defined separately from effectiveness (Proctor et al., 2011). A process evaluation can examine what was delivered, how participants responded, and which contextual factors shaped implementation (Moore et al., 2015). Brief feedback forms may be useful, but participant satisfaction should not be treated as evidence of competence or behaviour change.

Second, learning evaluation should combine a knowledge measure with a product-quality rubric. The rubric could assess substantive accuracy, alignment, readability, accessibility, usability, and appropriate use of visuals. Baseline and final tasks should be comparable, and scoring procedures should be documented. Independent scoring, where feasible, would reduce dependence on facilitator impressions. Results should include the number of eligible participants, the number assessed, missing data, and the distribution of scores, rather than only a success percentage.

Third, transfer should be assessed after participants have had an opportunity to use the materials. A follow-up interval agreed with the partner could capture actual use, learner feedback, and revisions. Blended learning research suggests the value of examining the whole instructional arrangement rather than attributing outcomes to the delivery medium alone (Means, Toyama, Murphy, & Baki, 2013). Follow-up mentoring should therefore have defined tasks, accessible communication channels, and clear facilitator responsibilities.

Fourth, any physical activity or fitness component needs its own protocol. Activity behaviour, fitness, physical literacy, and mental well-being are related but distinct outcomes. Adult health evidence and reviews of cognition or mental health justify investigation, not substitution of one outcome for another (Biddle & Asare, 2011; Donnelly et al., 2016; Hillman et al., 2008; Rebar et al., 2015; Warburton et al., 2006). Instruments should be appropriate to the population, and the activity exposure must be sufficient for the intended outcome. Ethics review, consent, data protection, and adverse-event procedures should be addressed before participant-level research begins.

Finally, programme maintenance should be assessed at both individual and institutional levels. The RE-AIM framework provides a way to consider reach, effectiveness, adoption, implementation, and maintenance (Glasgow, Vogt, & Boles, 1999). An adapted application could document who participates, which educators use the materials, how implementation differs across settings, and whether collaboration continues. Such an evaluation would convert a descriptive practice account into a more informative programme study without overstating what the present records establish.

LIMITATIONS

The documentary corpus is small and has unequal evidentiary functions. The institutional document contains planning information and administrative inconsistencies, while the news article is a dissemination account rather than an independent outcome evaluation. No raw participant data, product archive, assessment scores, interviews, direct observations, or follow-up records were supplied. The appraisal cannot establish intervention fidelity, representativeness, causal mechanisms, or effectiveness. It also cannot determine the completion status of outputs not evidenced in the records.

The literature synthesis is purposive and combines university-specific evidence with broader school, adult-health, educational, and implementation research. Applicability differs across these domains. The inclusion of sixty references does not remove contextual differences or compensate for absent programme measurements. Interpretive statements should therefore be treated as theoretically informed explanations and recommendations. A future prospective evaluation would provide a stronger basis for conclusions about educational and health outcomes.

CONCLUSION

The documented programme brought holistic physical education and digital teaching-material development together in an international university setting. Reported activities comprised conceptual instruction, PowerPoint and Canva practice, discussion, and academic feedback. A dated online publication provides evidence of dissemination. These records support an account of delivery and educational opportunity, but do not demonstrate competence gains, increased physical activity, improved fitness, or the completion of every intended output.

The contribution of the report lies in connecting the practice approach with established educational and implementation frameworks while maintaining clear evidentiary boundaries. Future cycles should align objectives with measurement, preserve learner products, document feedback and revisions, and assess subsequent use. Where health improvement is an explicit objective, a separately specified behavioural and fitness evaluation is required. Sustained university collaboration can support these developments through shared design, mentoring, and transparent reporting.

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The supplied programme document refers to a Universitas Negeri Surabaya non-APBN community engagement scheme. The grant identifier and actual financial support for this activity require author confirmation before submission.

COMPETING INTEREST

A declaration from every listed author must be completed before submission; no author-specific competing-interest information was available in the documentary corpus.

ETHICS AND CONSENT

This report does not analyse individual participant data. The authors should obtain the institutional determination applicable to publication of the documentary account and to any subsequent participant-level evaluation.

DATA AVAILABILITY

The documentary account is based on the supplied institutional programme document and a publicly published news article. No participant-level dataset was available for this report. Access to non-public institutional documents is subject to institutional authorization.

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AUTHOR CONTRIBUTIONS

The listed names follow the programme team in the supplied institutional document. Final authorship, order, contributions, manuscript approval, and accountability must be confirmed by all contributors before submission.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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