Survey of Video-Based Learning Practices among Primary School Teachers

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ABSTRACT

This paper surveys the use of video-based learning (VBL) by primary school teachers in Malaysia, with a focus on instructional video creation, pedagogical value, engagement strategies, and system-wide challenges (another survey was carried out with secondary school teachers and reported in a different journal paper). Data were gathered for three semesters in 2025 using an online instrument involving 319 postgraduate Diploma in Education students, aged between 26 and 38, representing a diverse mix of Malaysian ethnicities including respondents from Sabah and Sarawak. All of them hold undergraduate degrees from public or private universities and are considered student-teachers, as most were completing their final in-school placements during the study. The survey instrument comprised 32 items organised around four key research questions. Findings indicate that whilst some teachers engage in creating original instructional videos such as explainer clips and micro-learning segments, the majority rely on curated resources like YouTube and the Ministry of Education's 'DELIMa' platform. Respondents rated VBL as highly effective in simplifying complex curriculum content and enhancing visual comprehension for students in Standards 1 through 6. Design features such as short video duration, conversational tone, humour, and gamification were perceived as particularly impactful in maintaining student attention and cognitive engagement. Still, significant barriers to VBL integration were identified, including limited technical infrastructure, lack of administrative support, and insufficient training in rapid video production. These findings highlight the need for targeted professional development and system-wide support to enable meaningful VBL adoption in Malaysian primary education.

Keywords: video-based learning, primary school, education research, survey, Malaysia

INTRODUCTION

The rapid digitalisation of education in Malaysia has prompted significant shifts in pedagogical approaches, particularly in primary education where foundational learning practices are being reimagined through technology-enhanced methods (Aspandi & Muttaqin, 2025; Chang et al., 2013; Mistretta, 2024; Peter et al., 2025). Video-based learning (VBL) has emerged as a particularly promising tool, offering opportunities to simplify complex concepts, enhance visual literacy, and accommodate diverse learning paces amongst young learners. Whilst the Malaysian Ministry of Education has invested considerably in digital infrastructure and platforms such as DELIMa, questions remain about how effectively teachers are integrating VBL into their classroom practices (Ahmad et al., 2019; Mohd Adnan, 2020; Sablić et al., 2021; Yusof et al., 2019).

Primary school teachers face distinct challenges when adopting VBL. Creating pedagogically sound videos requires technical competence and understanding of age-appropriate design principles suited to Standards 1 through 6 pupils (see Karim, Adnan, Salim, et al., 2020; Karim, Adnan, Tahir, et al., 2020; May et al., 2023; Mustafa Kamal et al., 2019; Shah et al., 2025). Yet many rely predominantly on curated resources rather than developing original contents tailored to their specific classroom contexts. Despite growing institutional interest in VBL, systematic research examining teachers' actual usage patterns, perceived effectiveness, and implementation barriers remains limited (Adnan, 2020; Adnan et al., 2020; Adnan & Ahmad et al., 2019; Adnan & Karim et al., 2019; Mohd Kamal et al., 2019). This study addresses that gap by surveying 319 postgraduate Diploma in Education students to explore four critical dimensions: content creation practices, perceived pedagogical value, engagement design features, and system-wide obstacles.

LITERATURE REVIEW

VBL varies across contexts, particularly in developing nations where infrastructure and teacher preparedness remain inconsistent (Alazmi, 2023; Snoeyink, 2010). This section examines existing research through four interconnected dimensions that frame the current study's investigation into primary teachers' VBL usage.

Teachers' VBL content creation and resource ecology

In the context of digital learning settings, Meng et al. (2022) and Yousef et al. (2014) have conducted research that differentiates between teachers who create materials and those who curate contents. Studies have shown that teacher-created content frequently results in superior learning outcomes due to contextual alignment and curricular specificity (de Araujo et al., 2017; Pegrum & Bower, 2021; Torrington et al., 2021). This is despite the fact that platforms such as YouTube and institutional repositories offer vast libraries of educational videos. The production of materials, on the other hand, necessitates time, technical expertise, and institutional support, all of which are lacking in many sites. According to Tembrevilla and Milner-Bolotin (2025), instructors in Southeast Asian nations notably demonstrate a significant dependence on external resources, which raises problems regarding the appropriateness and significance of the knowledge being disseminated.

Perceived usefulness and cognitive clarity

Based on Granić and Marangunić's 2019 research, the Technology Acceptance Model proposes that perceived usefulness is a strong predictor of technology acceptance amongst practitioners in the field of education. They argue that visual representations improve comprehension of abstract topics, particularly for younger students who benefit from multimodal education (McTighe & Ferrara, 2021; Shih, 2010). VBL proponents argue that this helps the students better understand abstract concepts. Costley et al. (2021) and Faber et al. (2024) conducted research on cognitive load and found that video clips that are well-designed assist in knowledge scaffolding whilst simultaneously reducing the amount of cognitive processing that occurs. In Malaysia, there is a dearth of empirical data about teachers' perceptions of VBL's pedagogical usefulness in comparison to more conventional teaching approaches.

Effectiveness of engagement features for primary students

Research suggests that children of primary school age should watch instructional videos that are no more than three minutes in length (Allen, 2016; Omar, 2025). The design guidelines for effective educational videos include a focus on brevity. It has been demonstrated that signalling strategies, such as arrows, highlights, and texts displayed on the screen, can guide attention and boost recall (Currie, 2013; Mercier & Higgins, 2013). Additionally, the use of conversational tone and humour have the potential to promote engagement although the appropriateness of these elements is influenced by culture (Bernad-Mechó & Girón-García, 2023; Qamar et al., 2025). Whilst gamification aspects are becoming increasingly popular, they must be implemented with caution in order to prevent cognitive distraction (Mistry, 2022).

System-wide and training barriers to VBL integration

Hasin and Nasir (2021) and Mohd Adnan (2017) state that Malaysian schools continue to face substantial challenges in terms of infrastructural constraints. These challenges include unstable internet access and poor hardware, which both hinder the utilisation of technology. In addition to the technological obstacles, teachers reported that they have not received sufficient professional development in the creation of digital materials and that their schools have unclear regulations surrounding the integration of VBL (Major & Watson, 2018). That being said, many schools do not have specific resources or strategic frameworks for the implementation of VBL (Ketelhut & Schifter, 2011; Owston, 2007), this is despite the fact that administrative support is essential for continued adoption. In order to effectively address these system-wide difficulties, coordinated initiatives that focus on both capacity-building and infrastructure investment are desperately required.

Rationale for the study

This study aims to close critical gaps in VBL adoption amongst Malaysian primary school teachers by examining content creation practices, pedagogical effectiveness, design preferences, and implementation barriers. Whilst international research provides theoretical foundations for VBL efficacy, empirical evidence specific to the Malaysian primary context remains limited, particularly regarding teachers' lived experiences as both content creators and curators. This investigation surveyed 319 postgraduate Diploma in Education students, all practising or prospective primary teachers, to capture authentic perspectives within localised classroom realities. Four research questions guided the collection, analysis, and discussion of empirical data:

RQ1: To what extent do Malaysian teachers create original instructional videos compared to relying on curated resources from YouTube or DELIMa?

RQ2: How effectively does VBL simplify complex curriculum concepts and enhance visual comprehension for Standards 1 to 6 students compared to traditional methods?

RQ3: Which VBL design elements (video duration, signalling, conversational tone, humour, gamification) most effectively maintain student attention and cognitive engagement?

RQ4: What system-wide barriers (infrastructure, administrative support, training) most significantly hinder teachers' integration of VBL into primary teaching practices?

METHODOLOGY

Research design

The research employed a quantitative survey design to investigate Malaysian primary teachers' VBL adoption patterns, perceptions, and challenges. The cross-sectional approach enabled systematic data collection across diverse geographical and demographic contexts, providing a detailed snapshot of current practices and attitudes towards VBL integration in primary education.

Respondents of the study

Data were collected in 2025 from 319 postgraduate Diploma in Education students at a renowned Malaysian university. Respondents ranged in age from 26 to 38 years, with over 70% identifying as female. The sample represented diverse Malaysian ethnicities, including participants from Sabah and Sarawak, ensuring broad geographical representation. All of the respondents possess undergraduate degrees from public or private universities, satisfying the minimum entry requirement for the postgraduate programme. Critically, most of the participants were completing their school placements, positioning them as student-teachers with recent and direct classroom experience in primary schools (Standards 1 to 6).

Data collection procedure

The online survey comprised 32 items organised around four research questions, utilising a five-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). The instrument was structured into four thematic constructs: content creation and resource ecology (RQ1, 8 items), perceived usefulness and cognitive clarity (RQ2, 7 items), effectiveness of engagement features (RQ3, 9 items), and system-wide / systemic and training barriers (RQ4, 8 items). Items were designed to elicit both behavioural patterns (e.g., frequency of original content creation) and attitudinal data (e.g., perceived effectiveness of specific design elements). The instrument underwent pilot testing with 45 similar respondents at the end of 2024 to ensure clarity and appropriateness before full deployment. Following the pilot testing, wording adjustments were made to improve item comprehension to prospective respondents.

Internal consistency reliability for each construct was assessed using Cronbach's alpha: RQ1 ($\alpha = 0.96$), RQ2 ($\alpha = 0.97$), RQ3 ($\alpha = 0.98$), and RQ4 ($\alpha = 0.98$). All of the constructs demonstrated reliability ($\alpha > 0.90$), confirming the instrument's strong internal consistency. Construct validity was examined through exploratory factor analysis (EFA) using principal axis factoring with oblique rotation (Promax). The Kaiser-Meyer-Olkin measure

verified sampling adequacy (KMO = 0.94), and Bartlett's test of sphericity was significant ($\chi^2 = 9410.27$, $p < .001$), confirming the appropriateness of the factor analysis. The EFA yielded a four-factor solution accounting for 58.1% of total variance, aligning with the instrument's theoretical structure. Factor loadings ranged from 0.31 to 0.85, with all items loading significantly (> 0.40) on their respective constructs and demonstrating minimal cross-loadings (< 0.30).

Data analysis process

Descriptive statistics, including means, standard deviations, and frequency distributions, were calculated for all of the survey items. Means are reported with 95% confidence intervals to indicate precision of estimates. Inferential statistics, including skewness values to assess distribution normality, were computed to identify response patterns across the domains under study.

Effect sizes were calculated using Cohen's d to determine the practical significance of differences from the scale midpoint (neutral = 3.0). Following Cohen's (1988) conventions, effect sizes were interpreted as negligible ($d < 0.20$), small ($d = 0.20–0.49$), medium ($d = 0.50–0.79$), large ($d = 0.80–1.19$), or very large ($d \geq 1.20$). This enabled assessment of not merely statistical significance but also the magnitude of teachers' perceptions and attitudes. Data were calculated using SPSS Statistics (Version 29.0), with particular attention given to identifying trends across the research questions.

Ethical concerns and limitations

Prior to data collection, it was made clear to all respondents that participation was voluntary, and informed consent was secured from them. Anonymity and confidentiality were maintained throughout. Key limitations include reliance on self-reported data, which may be subject to social desirability bias, and the specific demographic profile of the student-teachers, whose perspectives may differ from other practitioners. Additionally, the study's focus on perceptions rather than observed classroom practices limits conclusions about actual VBL implementation effectiveness. Ultimately, it is important to note that the cross-sectional design precludes causal inferences about relationships between variables.

FINDINGS

Demographics of the respondents

The study surveyed 319 postgraduate Diploma in Education students across three academic semesters. Respondents ranged in age from 26 to 38 years, with the majority being female (over 70%). The sample demonstrated strong ethnic diversity, representing various Malaysian communities. All of the respondents held undergraduate degrees from universities, fulfilling the minimum entry criteria for the programme. Figure 1 below presents an overview of the respondents' demographics.

DEMOGRAPHIC VARIABLE	DESCRIPTION
Sample Size	319 postgraduate Diploma in Education students
Data Collection Period	Three academic semesters in 2025
Age Range	26 to 38 years
Gender Distribution	Female: >70% (n=223+); Male: <30% (n=96-)
Ethnicity	Diverse representation across Malaysian ethnicities, including participants from Sabah and Sarawak
Educational Background	All hold undergraduate degrees from Malaysian public or private universities (minimum entry requirement)
Professional Status	Student-teachers; majority completing final practicum placements in primary schools during data collection
Teaching Level	Primary education (Standards 1 to 6)
Survey Format	Online survey with 32 items using five-point Likert scale (Strongly Disagree to Strongly Agree)

Figure 1. Demographics characteristics of the respondents (n = 319)

A defining characteristic of this sample was their 'duality' as both postgraduates and educators. The majority were completing their compulsory placements in primary schools during the fieldwork period, positioning them uniquely as student-teachers with immediate, lived classroom experience. This proximity to active teaching practice ensured that their responses reflected current pedagogical realities rather than abstract theoretical knowledge. Their recent exposure to both university-based pedagogical training and school-based practical applications rendered them particularly well-suited to evaluate VBL adoption patterns, effectiveness perceptions, and implementation challenges within the contemporary Malaysian education landscape.

RQ1: Teacher VBL content creation and resource ecology

Survey responses revealed considerable hesitancy amongst teachers regarding original instructional video creation (see Figure 2). Only 9.1% strongly agreed that they regularly create their own videos, whilst 13.2% strongly disagreed. The largest proportion (27.9%) remained neutral, suggesting uncertainty or inconsistent practice. Combined disagreement responses (37.7%) substantially outweighed combined agreement responses (34.5%), indicating that self-creation of explainer videos and micro-learning clips remained relatively uncommon amongst this cohort. The mean score of 2.92 (95% CI [2.79, 3.05]) fell below the scale midpoint, reinforcing the notion that most student-teachers do not view themselves as active content creators.

This reluctance likely stems from perceived technical barriers, time constraints, and lack of confidence in video production skills. The near-zero skewness (0.08) indicates fairly symmetrical distribution across response categories, suggesting that hesitancy towards content creation is widespread rather than concentrated amongst specific subgroups. The findings highlight the gap between institutional encouragement of digital content creation and teachers' actual engagement with video production.

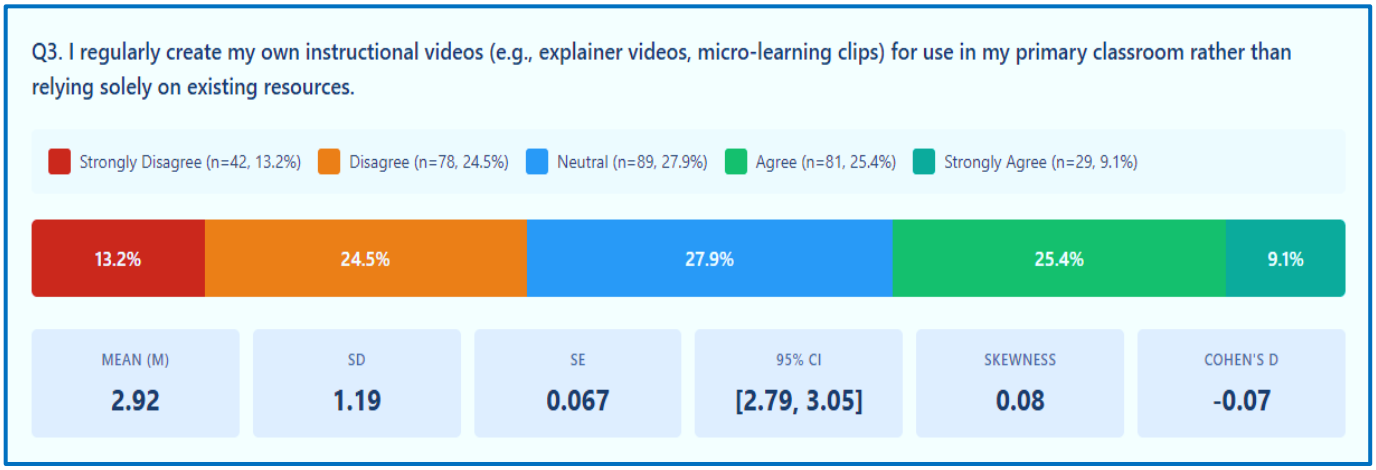

Figure 2. Original instructional video content creation by respondents (Q3)

Teacher confidence in producing pedagogically appropriate video contents for primary learners showed mixed results (Figure 3). Whilst 33.2% selected "slightly agree" as their response, combined disagreement (19.7% total) nearly matched combined strong agreement levels. The mean of 3.25 (95% CI [3.13, 3.37]) positioned responses slightly above neutral but well below strong endorsement, representing a small effect size (Cohen's d = 0.23). Notably, only 4.7% strongly agreed they felt confident, suggesting genuine self-efficacy concerns. The distribution's slight negative skew (−0.22) indicated marginally more positive than negative responses, yet the overall pattern reveals uncertainty.

This is significant given that respondents were actively completing school-based placements, meaning that they possessed recent classroom experience. If student-teachers with current pedagogical training expressed such modest confidence, established teachers with less recent professional development may face greater self-efficacy challenges. Still, the substantial neutral and slightly agree categories (63.6% combined) suggest potential receptiveness to interventions that could shift these teachers towards greater confidence in video content creation.

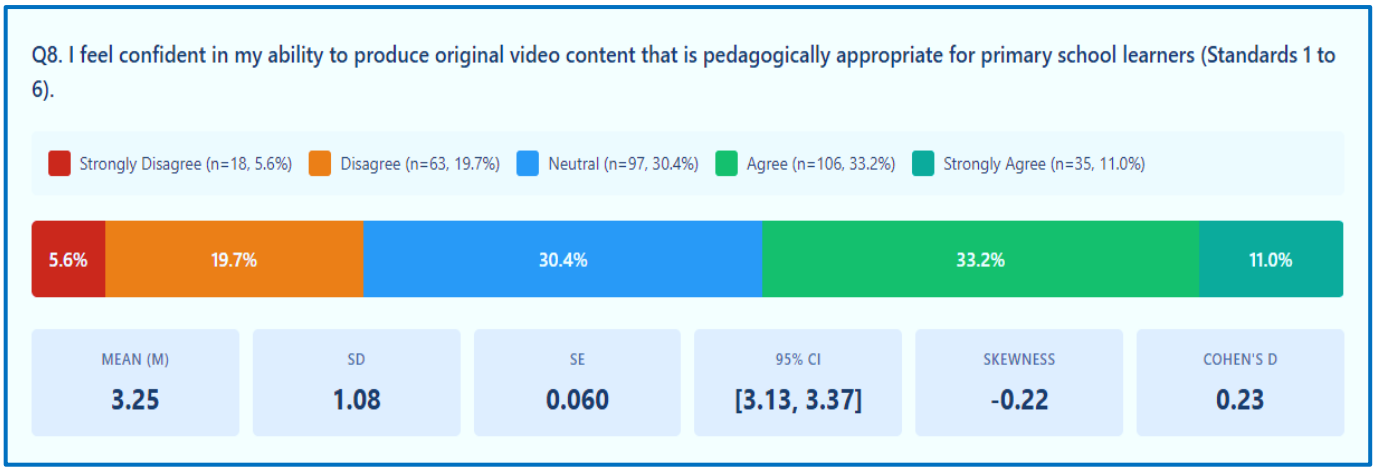

Figure 3. Confidence in producing pedagogically appropriate videos by respondents (Q8)

RQ2: Perceived usefulness and cognitive clarity

The teachers demonstrated strong convictions regarding VBL's capacity to simplify complex curriculum concepts compared to traditional methods (see Figure 4). Half of them (49.8%) slightly agreed, with an additional 33.2% expressing stronger agreement levels, yielding combined endorsement of 83%. Only 5.1% disagreed to any extent. The mean of 4.10 (95% CI [4.01, 4.18]) exceeded the scale midpoint, indicating robust perceived usefulness. The negative skewness (−0.89) confirmed that responses clustered heavily towards agreement, with relatively few neutral or negative assessments.

Thus, the teachers recognise VBL's pedagogical value even if they lacked confidence creating contents themselves, an important distinction with practical implications. The Cohen's d value of 1.39 indicates large practical significance according to Cohen's (1988) conventions, meaning that the perceived advantage of VBL over traditional teaching aids is not merely statistically significant but represents a substantial perceived improvement. The teachers appear convinced that visual representations and dynamic explanations offered through video formats provide clearer pathways to understanding than static worksheets or verbal explanations, particularly for abstract concepts that might be too challenging for younger learners.

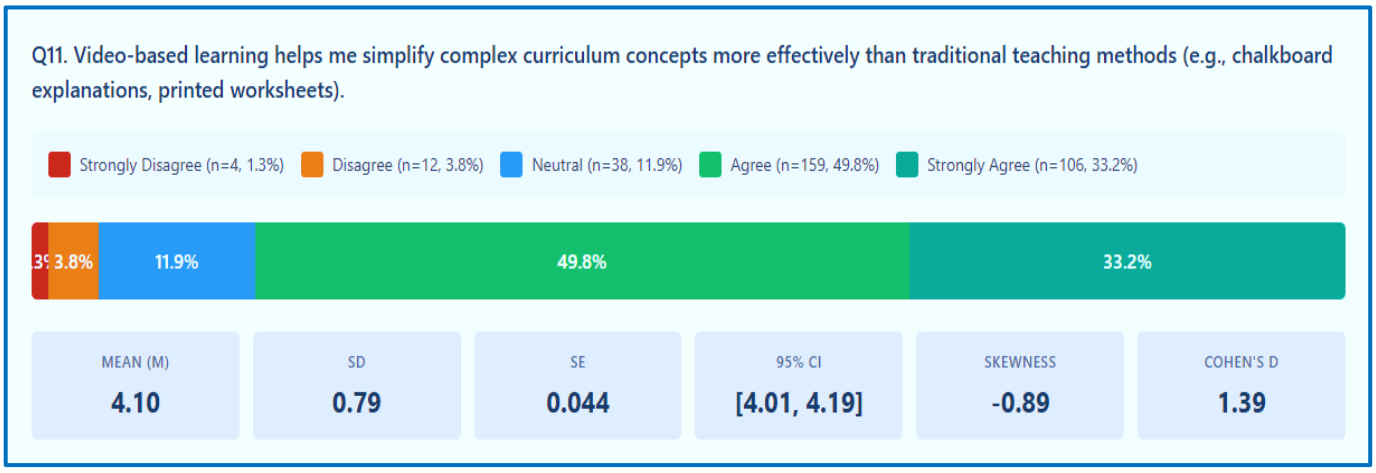

Figure 4. VBL effectiveness in simplifying complex concepts according to respondents (Q11)

Responses regarding visual representations' impact on pupil comprehension proved even more positive than general VBL effectiveness ratings (Figure 5). Combined agreement reached 87.7%, with only 3.1% expressing any disagreement. The mean of 4.26 (95% CI [4.18, 4.34]) represented the highest score amongst all items, whilst the strong negative skewness (−1.12) indicated pronounced clustering towards strong agreement. Teachers clearly perceived that visual elements in instructional videos significantly enhance students' grasp of challenging topics across subjects including Mathematics, Science, and Bahasa Malaysia.

This observation aligns with cognitive load theory principles, which posit that multimodal presentations reduce extraneous cognitive processing whilst supporting meaningful learning. The large Cohen's d (1.73) underscores the magnitude of perceived benefit. Teachers evidently believe that showing concepts visually, whether through animations, demonstrations, or illustrative examples, provides primary-aged children with cognitive scaffolding that verbal explanations alone cannot achieve. This endorsement suggests that VBL's visual affordances constitute its most valued pedagogical feature from the perspectives of the teachers.

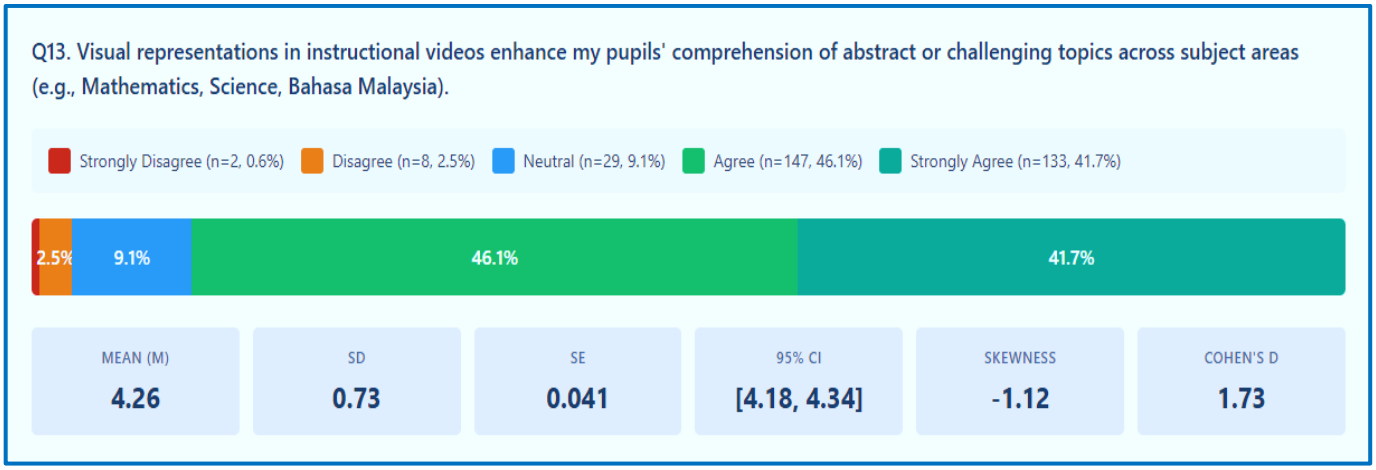

Figure 5. Visual representations enhancing comprehension according to respondents (Q13)

RQ3: Effectiveness of engagement features for primary students

The teachers strongly endorsed brief video durations as crucial for maintaining primary pupils' attention and cognitive engagement (see Figure 6). Combined agreement responses totalled 82.7%, with only 6.0% disagreeing. The mean of 4.14 (95% CI [4.05, 4.23]) and negative skewness (−1.03) demonstrated substantial consensus that videos of approximately one to three minutes proved most effective for Standards 1 through 6 learners. The large effect size (Cohen's d = 1.36) confirmed the magnitude of this perception. This perception aligns with research on children's attention spans and cognitive load management, which cautions against over-lengthy videos that overwhelm young learners or lead to disengagement. The strong endorsement of brevity accordingly reflects practical classroom wisdom: primary students require frequent changes in instructional format and cannot sustain focus through extended video presentations.

This carries important implications for content creators and curators, suggesting that lengthy videos, regardless of production quality, may prove pedagogically ineffective for primary level children. Teachers evidently prefer micro-learning approaches that deliver focused instructional content in digestible segments, allowing for interspersed discussion, activity, or consolidation before introducing subsequent concepts.

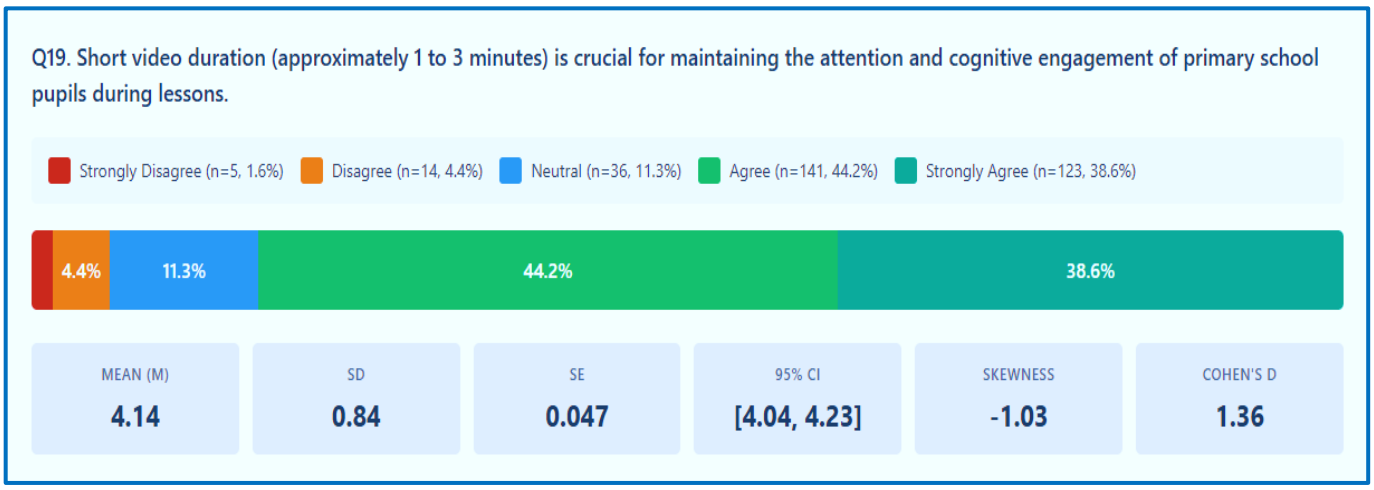

Figure 6. Video duration to maintain students' attention according to respondents (Q19)

Interestingly, specific VBL design elements received enthusiastic endorsement, with 86.6% of respondents agreeing that conversational tone, humour, visual signalling, and similar features significantly improve their pupils' focus and interest (Figure 7). Only 3.4% expressed disagreement. The mean of 4.23 (95% CI [4.15, 4.31]) and pronounced negative skewness (−1.05) indicated strong consensus. The teachers believe that pedagogically-sound video design extends beyond content accuracy to encompass engagement strategies that capture and retain young learners' attention. Signalling techniques such as arrows, highlights, and animations help direct students' visual attention towards salient information, whilst conversational tone and appropriate humour may reduce the psychological distance between learner and teacher, fostering relaxed engagement. The large Cohen's d (1.66) suggests that teachers perceived these design features as impactful rather than merely supplementary.

This finding challenges the notion that educational videos need only present information clearly; instead, they must actively engage primary-aged audiences through deliberate design choices that acknowledge children's developmental characteristics and learning preferences.

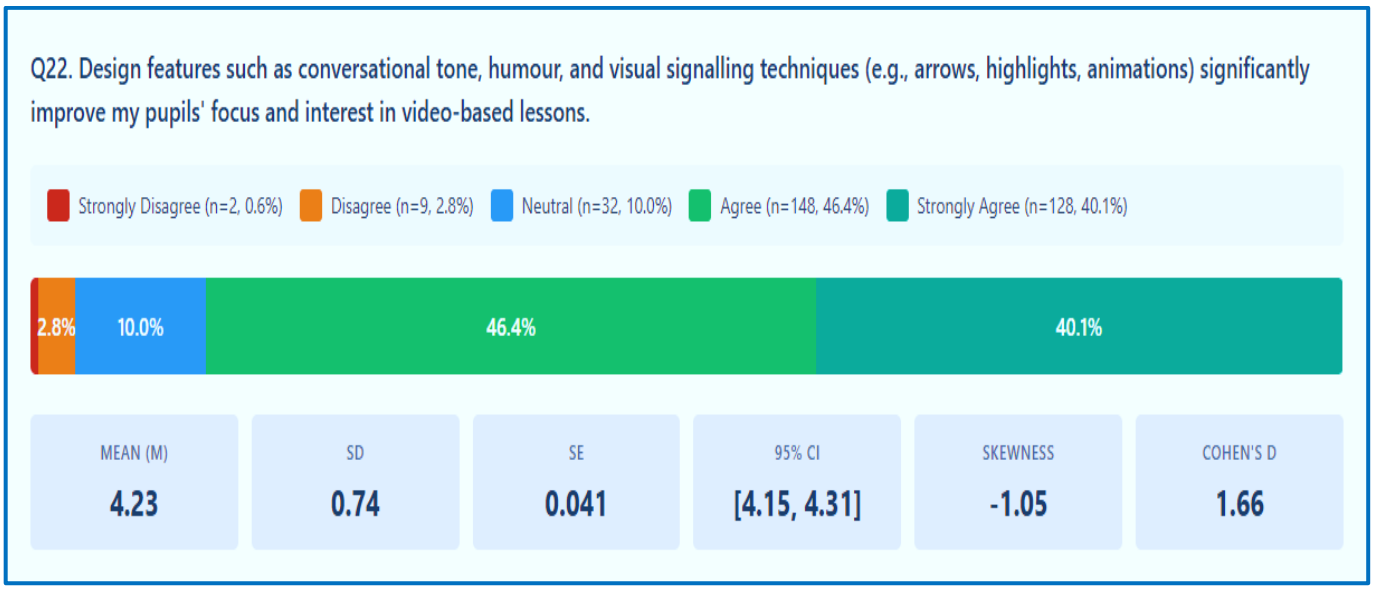

Figure 7. Video design features to improve focus and interest according to respondents (Q22)

RQ4: System-wide and training barriers to VBL integration

Infrastructural limitations emerged as significant hurdles to VBL integration, with 74.9% of respondents agreeing that inadequate technical resources prevent effective implementation (see Figure 8). The combined disagreement value stood at only 9.1%. The mean of 3.97 (95% CI [3.87, 4.07]) positioned infrastructure concerns well above the scale midpoint, with a large effect size (Cohen's d = 1.05), whilst the negative skewness (−0.74) indicated more agreement than disagreement. Teachers identified unreliable internet connectivity, limited access to recording equipment, and insufficient classroom technology as persistent barriers. These infrastructural gaps prove particularly problematic in Malaysian schools serving rural or economically disadvantaged communities, where the digital divide remains quite pronounced.

Even the teachers who might be motivated to integrate VBL and possessing requisite skills face frustration when technical infrastructure cannot support their pedagogical intentions. This finding underscores that VBL adoption requires systemic investment beyond teacher training; without reliable hardware, software, and connectivity, institutional rhetoric about digital learning remains aspirational rather than achievable. Addressing these infrastructural deficits demands coordinated policy action and sustained funding commitments, as isolated school-level initiatives cannot resolve systemic resource shortages.

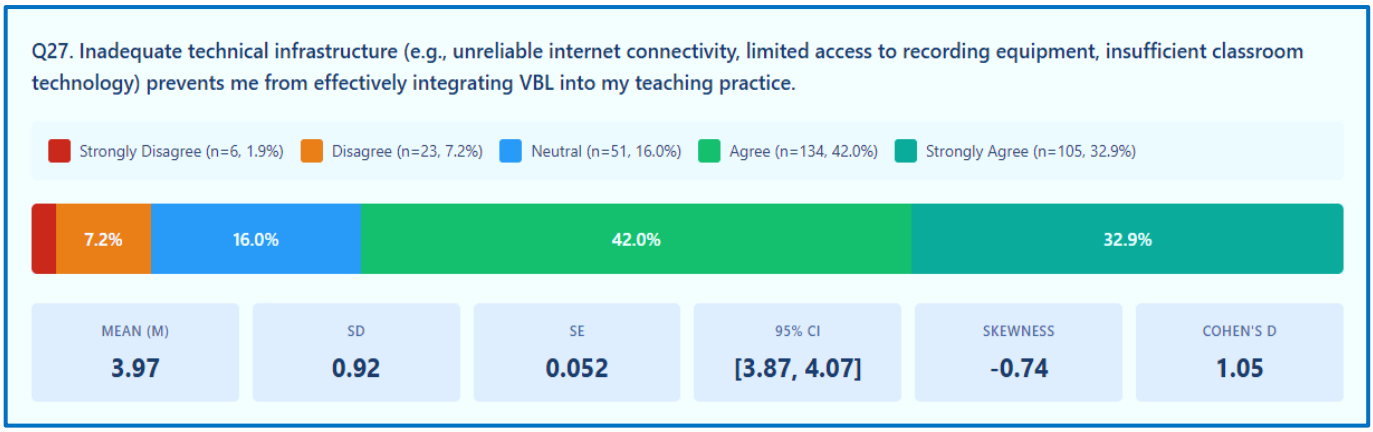

Figure 8. Inadequate technical infrastructure issues experienced by respondents (Q27)

Training deficits constituted another critical barrier, with 79.4% of respondents agreeing that insufficient professional development in rapid video creation and pedagogically sound VBL design limit their capacity to produce high-quality instructional videos (Figure 9). Only 7.2% disagreed. The mean of 4.05 (95% CI [3.95, 4.14]) reflected strong consensus, whilst the negative skewness (−0.86) showed clustering towards agreement. The large effect size (Cohen's d = 1.21) highlighted the substantial magnitude of perceived training needs. This proves particularly noteworthy given that the respondents are postgraduate students who were actively receiving pedagogical training; if even this cohort reports inadequate preparation, experienced teachers likely face even greater training gaps.

The teachers evidently recognise their need for specific technical and pedagogical guidance in video production, editing, and instructional design. Generic professional development proves insufficient; teachers require targeted training addressing rapid content creation workflows suitable for busy practitioners, age-appropriate design principles for primary learners, and practical strategies for integrating student-created or teacher-created videos into existing curricular structures. This substantial perceived training need highlights opportunities for targeted intervention through structured professional development programmes.

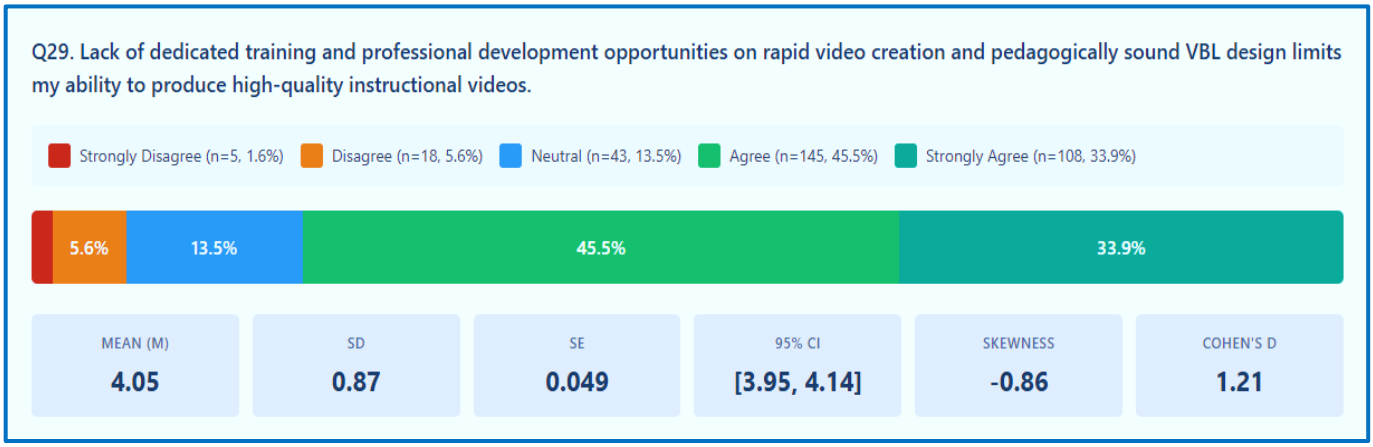

Figure 9. Lack of dedicated training on video creation perceived by respondents (Q29)

DISCUSSION

Teacher adoption patterns and the 'content creator-curator divide'

The data revealed several realities (see Figure 10 below), amongst them a gap between teachers' VBL consumption and creation practices. Whilst 81% rely heavily on curated external resources, only 34.5% regularly create original content, with mean scores indicating substantially more confidence as curators than creators (M = 4.03 vs M = 2.92). This asymmetry is pedagogically significant. Although curated videos from platforms like YouTube and DELIMa may offer convenience and professional production quality, they might lack contextual

alignment with specific classroom needs, curricular emphases, or cultural nuances relevant to Malaysian learners. The large effect size for external resource reliance (Cohen's d = 1.09) alongside weak self-creation confidence suggests that teachers recognise VBL's value but feel inadequately equipped to translate that recognition into content production. This pattern indicates that VBL adoption has progressed further as a consumption practice than as a creative pedagogical skill, leaving teachers dependent on others' interpretations of curricular content rather than developing tailored instructional materials.

Perceived pedagogical value and design principles

Despite modest content creation rates, the teachers demonstrated consensus regarding VBL's pedagogical effectiveness. The exceptionally large effect sizes for visual comprehension enhancement (Cohen's d = 1.73) and concept simplification (Cohen's d = 1.39) indicate strong conviction that video-based instruction offers substantial advantages over traditional methods. They particularly valued specific design elements, with brief durations and engagement features receiving pronounced endorsement (Cohen's d = 1.36 and 1.66 respectively). This distinction between recognising effective design principles and implementing them personally warrants attention. The teachers can identify pedagogically sound VBL characteristics yet struggle to operationalise that knowledge in their own productions, suggesting that appreciation of quality design does not automatically translate into production capability. Future professional development must bridge this 'knowing-doing gap' through hands-on training that moves beyond theoretical principles to address technical workflows, equipment accessibility, and rapid production strategies suitable for time-constrained schoolteachers (see Mohd Adnan, 2025a, 2025b, forthcoming).

System-wide barriers and infrastructure imperatives

Infrastructure deficits and training gaps emerged as significant barriers, with large effect sizes (Cohen's d = 1.05 and 1.21) indicating substantial perceived obstacles. Critically, these barriers operate synergistically rather than independently. Even motivated teachers with strong pedagogical understanding cannot implement VBL effectively without reliable internet connectivity, adequate hardware, and technical support. The findings underscore that meaningful VBL integration requires coordinated systemic intervention addressing both capacity-building and infrastructural investments. Isolated initiatives prove insufficient when schools lack functioning equipment or dependable internet access. Policymakers must recognise that rhetoric encouraging digital pedagogy remains hollow without sustained funding commitments that ensure equitable access to technological resources across urban and rural contexts. The student-teacher cohort's strong identification of these barriers, despite their recent pedagogical training, suggests that obstacles transcend individual teacher preparedness, demanding institutional and governmental action to create positive conditions for authentic VBL adoption in Malaysian primary education.

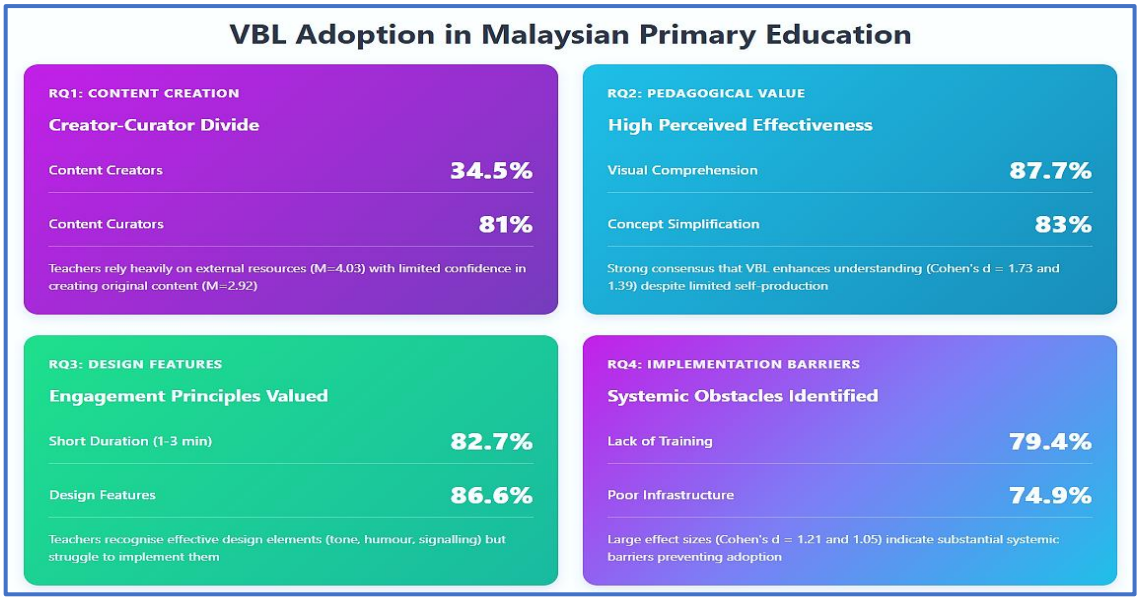

Figure 10. Empirical data on VBL practices by Malaysian primary level teachers

CONCLUSION

This empirical paper illuminates the realities of VBL adoption amongst Malaysian primary level teachers, revealing disparities between pedagogical conviction and practical implementation. Whilst they recognised VBL's capacity to enhance visual comprehension and simplify complex concepts, their engagement remains predominantly as content curators rather than creators. This asymmetry highlights a critical challenge: acknowledging pedagogical value does not automatically translate into confident, autonomous practice. The findings further demonstrate that teachers possess understanding of effective VBL design principles, particularly regarding brevity and engagement features, yet lack the self-efficacy and technical competence to operationalise that knowledge in their own instructional contexts. The pronounced infrastructure and training barriers identified demand attention. Malaysian primary education cannot achieve meaningful digital transformation through rhetoric alone; it requires coordinated investment in reliable technological infrastructure, accessible equipment, and sustained professional development. The student-teacher cohort's identification of these obstacles, despite their cutting-edge pedagogical training, underscores that individual teacher motivation proves insufficient when systemic support is inadequate.

Going forward, teachers' professional development initiatives must prioritise hands-on training that builds genuine production confidence rather than presenting theoretical frameworks. Equally critical is infrastructural investments that ensure equitable access across urban and rural environments, recognising that digital pedagogy remains aspirational without functioning technological foundations. VBL holds considerable promise for enhancing primary education in Malaysia, as evidenced by the teachers' pedagogical endorsements. Realising that promise, however, requires moving beyond adoption rhetoric towards comprehensive system-wide support that empowers teachers as confident content creators capable of producing contextually relevant, pedagogically sound instructional videos tailored to their students' specific learning needs. Only through such integrated approaches can VBL fulfil its transformative potential in Malaysian primary classrooms.

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