

Beyond the Fun Factor: Secondary School Students' Interest and Perceptions of Gamified English Language Learning in Dungun, Malaysia

Nurhanis binti Mohd¹, Mohamad Syafiq Ya Shak^{2*}

¹Pejabat Pendidikan Daerah Dungun, Terengganu, Malaysia

²Universiti Teknologi Mara Perak Branch, Perak, Malaysia

*Corresponding Author

DOI: <https://doi.org/10.47772/IJRISS.2026.100701140>

Received: 11 August 2026; Accepted: 16 August 2026; Published: 22 August 2026

ABSTRACT

Gamification has become increasingly prominent in English language education because of its potential to support learner motivation, participation, and engagement. However, positive responses to gamified activities should not automatically be interpreted as evidence that gamification makes language learning easier or produces measurable improvements in proficiency. This study examined secondary school students' interest in and perceptions of gamified English language learning in Dungun, Terengganu, Malaysia. A quantitative survey design was employed with 60 students from four national secondary schools representing urban and rural school contexts. Data were collected using a 20 item questionnaire comprising 10 items on student interest and 10 items on perceptions of gamified English learning. The findings revealed strong reported interest ($M = 3.45$, $SD = 0.53$) and similarly positive overall perceptions ($M = 3.47$, $SD = 0.54$). Students responded particularly positively to the perceived contribution of gamification to motivation, participation, collaboration, and mastery of English. Nevertheless, comparatively lower evaluations were recorded for the extent to which gamification made English easier to learn and, most notably, for students' ability to access gamified materials without restrictions of time and place. The findings suggest that students value gamification primarily as an engaging and potentially supportive learning approach, but positive perceptions should not be equated with demonstrated language achievement or unrestricted technological access. Pedagogically, gamification appears most promising when game elements are aligned with meaningful language learning objectives and implemented with consideration for accessibility. The questionnaire is presented as a descriptive survey instrument rather than as a validated psychometric scale, and the findings are reported at item level so that divergence within an otherwise favourable response profile remains visible.

Keywords: gamification; ESL; student engagement; secondary education; Malaysia

INTRODUCTION

Digital technologies have become increasingly embedded in language education, expanding the ways in which teachers can organise practice, feedback, interaction, and learner participation. Within this broader shift, gamification has attracted sustained attention as an approach for making learning activities more engaging. Gamification is commonly defined as the use of game design elements in contexts that are not themselves games (Deterding et al., 2011). In educational settings, these elements may include points, challenges, rewards, progress indicators, badges, levels, competition, collaboration, and immediate feedback. Gamification therefore differs from game based learning. The learning task remains educational, but selected game features are incorporated into its design in order to influence how learners participate in and respond to the task.

The attraction of gamification is partly connected to a persistent challenge in education: maintaining learners' willingness to participate actively and repeatedly in learning. Meta analytic evidence has generally identified positive effects of gamification, although these effects are not uniform. Sailer and Homner (2020) reported

significant positive effects on cognitive, motivational, and behavioural learning outcomes, while also noting substantial variation across studies. Bai et al. (2020) similarly found a positive overall effect on learning performance, but their synthesis also showed that learners did not respond uniformly to gamified environments. Some valued enthusiasm, feedback, recognition, and goal setting, while others perceived little additional educational utility or experienced negative emotions.

Huang et al. (2020), pooling 30 independent studies involving 3,083 participants, likewise reported an overall advantage for gamified conditions ($g = 0.464$), an effect they characterise as small to medium rather than transformative. Evidence specific to school aged learners is more encouraging but also more revealing. Furkan Kurnaz and Koçtürk (2025), synthesising 41 effect sizes from 31 experimental and quasi experimental K-12 studies, reported a moderate to large overall effect on motivation ($g = 0.654$) that was strongest among secondary school students ($g = 1.015$). Notably, the effect was larger for extrinsic motivation ($g = 0.713$) than for intrinsic motivation ($g = 0.638$), which suggests that gamification may move the more externally regulated forms of motivation most readily. Earlier still, Hamari et al. (2014) concluded that gamification can work, but that outcomes depend substantially on the context of implementation and on the qualities of the users involved. These findings suggest that the educational value of gamification depends not merely on the presence of game elements, but on how they are designed, how learners experience them, and how closely they are connected to instructional objectives.

These considerations are especially relevant in second and foreign language learning, where progress depends on sustained exposure, practice, interaction, and repeated use of the target language. Gamified tasks may provide learners with repeated opportunities to retrieve vocabulary, respond to feedback, collaborate with peers, complete challenges, and practise language in ways that feel less repetitive. Dehghanzadeh et al. (2021), in a systematic review of digital gamification for learning English as a second language, identified enjoyment, engagement, motivation, and fun as recurring positive learning experiences. Zhang and Hasim (2023), reviewing 40 empirical studies in EFL and ESL contexts, similarly reported benefits involving language skills, attitudes, emotional responses, and learning environments, while also identifying technical problems, short lived positive effects, and negative consequences associated with competition. More recently, Ülker and Yangın Ekşi (2026) found that motivation and engagement remain among the most frequently investigated psychological constructs in English language gamification research. Together, these studies show that gamification has become a substantial area of language education research, but they also reinforce the need to distinguish positive engagement from actual learning outcomes.

This distinction is important because enjoyment, motivation, participation, perceived usefulness, and demonstrated achievement represent related but different outcomes. A learner may enjoy a gamified activity and participate enthusiastically without necessarily believing that the activity makes English easier to learn. Conversely, a learner may recognise the instructional value of an activity even when enjoyment is not the primary reason for participating. Sadeghi et al. (2022), for example, found that gamified vocabulary instruction positively influenced learners' motivation, but the gamified and comparison groups did not show a significant difference in vocabulary gains. A stronger caution comes from Hanus and Fox (2015), who followed students across a sixteen week semester and found that those in a gamified course reported declining motivation, satisfaction, and empowerment over time, with lower final examination scores mediated by reduced intrinsic motivation. Reward heavy designs, in other words, can work against the motivation they are intended to build. Such findings caution against treating visible engagement as direct evidence of improved language proficiency.

Interest and perception therefore warrant separate attention. Student interest can be reflected in enthusiasm, motivation, willingness to revise, anticipation of activities, and readiness to continue practising. Student perceptions may encompass a wider judgement about whether gamification helps learners understand, remember, collaborate, focus, access learning materials, or perceive learning as useful. Examining these responses separately provides a more precise account of how students experience gamified English learning. It also avoids reducing the evaluation of gamification to a single question of whether students like it.

The multidimensional nature of engagement further supports this distinction. Fredricks et al. (2004) conceptualise student engagement as behavioural, emotional, and cognitive, and these dimensions overlap

without being identical. A learner may display strong emotional and behavioural engagement while the cognitive demands of the subject remain substantial. The framework is set out more fully in Section 2.2; here it is sufficient to note that in gamified language learning, excitement and participation are immediately visible whereas evidence of language development requires a different form of measurement.

The Malaysian context provides an important setting for examining these issues. The Ministry of Education Malaysia's Digital Education Policy places emphasis on digitally fluent students, educational infrastructure and infostructure, quality digital content, and wider participation in digital education (Ministry of Education Malaysia, 2023). At the same time, national connectivity remains uneven. The Department of Statistics Malaysia (2026) reported household internet access of 99.0% in urban areas and 90.7% in rural areas in 2025. These national figures do not describe the participants in the present study directly, but they illustrate why positive attitudes towards digital learning should not automatically be equated with identical access conditions across learners. Digital inequality research reinforces this point. van Deursen and van Dijk (2019) argue that even where connection rates approach saturation, inequalities persist in what they term material access: the range and quality of devices available, the peripherals that accompany them, and the recurring cost of maintaining hardware, software, and subscriptions. High headline connectivity is therefore compatible with meaningful differences in what learners are actually able to do.

Recent Malaysian research also indicates growing interest in gamification within secondary ESL settings. Jimmy (2025), for example, examined motivation and perceptions among Form 1 and Form 2 ESL learners following gamified English lessons. Earlier, Tan et al. (2019) surveyed 57 Malaysian ESL students after a semester of weekly quiz based gamified sessions and reported that participants regarded the platform as beneficial both for inducing motivation and for reinforcing learning. Such work suggests that Malaysian secondary learners are increasingly encountering gamified practices, but there remains value in examining their responses at a more detailed level. In particular, analysing individual questionnaire items can reveal whether motivational, participatory, perceived learning, and accessibility aspects receive equally positive evaluations.

Against this background, the present study examines secondary school students' interest in and perceptions of gamified English language learning in Dungun, Terengganu. Rather than assuming that positive engagement represents pedagogical effectiveness, the study focuses on what students report valuing about gamified English learning and on the aspects they evaluate comparatively less positively.

The study makes three specific contributions relative to existing Malaysian gamification research. First, it reports results at item level rather than only as scale composites. Malaysian studies in this area, including Jimmy (2025) and Tan et al. (2019), have generally reported favourable aggregate outcomes; the present analysis shows that a uniformly positive composite can conceal substantial internal divergence, since the highest and lowest rated items in this dataset are separated by more than a full scale point. Second, it treats accessibility as a measured dimension of student perception rather than as an infrastructural assumption in the background of the study. Malaysian gamification research has typically assumed that access is a precondition already satisfied; here it is an outcome variable, and it produces the single weakest result in the dataset. Third, the sample deliberately spans two urban and two rural national secondary schools, so that the accessibility result reported below arises from a mixed rather than a uniformly urban or uniformly rural district sample. Taken together, these features move the analysis beyond the question of whether Malaysian secondary students like gamified English learning towards the more discriminating question of which aspects of it they endorse and which they do not.

The study addresses the following research questions:

1. What is the reported level of secondary school students' interest in gamified English language learning?
2. How do secondary school students perceive the use of gamification in English language learning?
3. Which aspects of gamified English language learning are perceived most and least positively by secondary school students?

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

Gamification in English Language Learning

Gamification uses selected characteristics of games to shape participation in activities that remain fundamentally non game based (Deterding et al., 2011). In educational contexts, common mechanisms include points, levels, feedback, badges, rewards, challenges, progress indicators, leaderboards, narratives, collaboration, and competition. These mechanisms can alter the structure and experience of a learning task without transforming the task into a complete educational game. The distinction matters because a gamified grammar exercise, vocabulary review, or speaking task still pursues an instructional objective. The game elements are intended to influence learners' attitudes or behaviours in ways that support that objective.

Landers (2014) provides a useful theoretical basis for this interpretation. His theory of gamified learning proposes that gamification primarily influences learning related behaviours and attitudes, which can in turn affect learning outcomes. This formulation discourages a simplistic assumption that game elements directly create learning. Instead, their value depends on whether they promote behaviours such as practice, persistence, attention, participation, or feedback seeking. For language classrooms, this is particularly relevant because opportunities to retrieve, produce, notice, revise, and interact with language are central to learning.

As outlined in Section 1, the meta analytic literature supports the potential of gamification while consistently showing that its effects vary (Bai et al., 2020; Huang et al., 2020; Sailer & Homner, 2020). Reviews within language education report the same pattern. Dehghanzadeh et al. (2021) found enjoyment, engagement, motivation, and satisfaction to be common outcomes of digital gamification for learning English, and Zhang and Hasim (2023) documented benefits across multiple language skills alongside recurring drawbacks involving technical difficulties, competition, and short lived effects. Ülker and Yangın Ekşi (2026) identified points, feedback, leaderboards, badges, rewards, narratives, and avatars as the elements most frequently studied between 2020 and 2025. Two syntheses are more directly relevant to the present argument. Zainuddin et al. (2020) concluded that reported benefits for motivation and engagement are widespread while the evidence linking specific game elements to learning gains is considerably less consistent, and Wang and Tahir (2020), across 93 studies of a single classroom quiz platform, reported positive effects on performance, classroom dynamics, and attitudes alongside technical problems, time pressure, and fear of losing.

More recent syntheses have shifted attention from whether gamification works to the conditions under which it works. Li et al. (2023) pooled 41 studies involving more than 5,000 participants and reported a large overall effect ($g = 0.822$), but found that user type, educational discipline, design principles, duration of the gameful experience, and learning environment all moderated the outcome. Dai et al. (2025), analysing 182 effect sizes across 37 randomised or quasi randomised trials, reported a medium effect ($d = 0.566$) and found that particular combinations of game elements outperformed others, with learning domain and intervention duration acting as significant moderators. Within language education specifically, Liu et al. (2025) meta analysed 38 experimental studies involving 4,102 participants and reported a large effect for mobile games on language learning outcomes ($g = 0.962$), while noting that effects were not uniformly positive across the included studies.

Taken together, this literature suggests that asking whether gamification works is too broad. A more productive question concerns what type of learner response is produced, through which design features, and in relation to which learning objective. Gamification may be successful in increasing participation yet less successful in supporting deep processing. It may motivate some students through competition while discouraging others. Toda et al. (2018) documented precisely this pattern in a systematic mapping of negative effects, tracing outcomes such as indifference, loss of performance, and undesired competitive behaviour back to particular design decisions rather than to gamification as a general approach. It may support repeated practice but still depend on reliable access to technology. The strength of the evidence base is itself uneven. Shortt et al. (2023), reviewing 35 studies of the most widely used gamified language learning application, found that research in this area has been predominantly design focused, has relied heavily on non probability sampling, and has frequently left confounding variables such as motivation, language background, and concurrent classroom activity unaccounted for when attributing language gains to the application. Claims

about gamification and language achievement therefore warrant careful reading. These distinctions provide the rationale for examining students' interest and perceptions at item level rather than relying only on an overall favourable or unfavourable judgement.

Student Interest and Engagement in Gamified Learning

Interest is especially important in language education because language development requires sustained engagement over time. Learners need to practise, revisit content, respond to feedback, and repeatedly interact with linguistic forms and meanings. Gamification can potentially make these repeated activities more attractive by introducing challenge, progress, social interaction, immediate responses, and a sense of accomplishment. Self determination theory offers one account of why such features may matter. Ryan and Deci (2000) argue that intrinsic motivation is supported when activities satisfy basic psychological needs for autonomy, competence, and relatedness, and that extrinsic motivators vary considerably in the extent to which learners internalise them. Read through this lens, progress indicators and immediate feedback may support perceived competence, collaborative structures may support relatedness, and opportunities for choice may support autonomy. The same theory also predicts that controlling or heavily reward driven designs can undermine motivation, which is consistent with the longitudinal decline reported by Hanus and Fox (2015).

Student engagement is multidimensional rather than a single observable behaviour. Fredricks et al. (2004) distinguish behavioural, emotional, and cognitive engagement. Behavioural engagement involves participation and involvement in learning activities. Emotional engagement concerns responses such as interest, enjoyment, enthusiasm, and boredom. Cognitive engagement concerns investment in understanding, strategy use, and mastery. This framework is useful for interpreting gamification because an activity can be emotionally engaging and behaviourally active without necessarily producing deeper cognitive engagement. Conversely, a demanding activity can support learning even when it is not experienced primarily as entertainment.

Research on alternative gamification structures also suggests that design matters. Qiao et al. (2024) compared competitive, cooperative, and collaborative gamification among secondary school students learning English as a foreign language. Their findings showed differences in learning outcomes across conditions, while qualitative evidence indicated that gamification could contribute to behavioural, emotional, and cognitive engagement. The study also showed that cooperative and collaborative structures require careful design to ensure that game mechanics do not interfere with learning. This is important because gamification should not be treated as one uniform intervention.

Within Malaysia, Jimmy (2025) examined gamification and motivation among secondary ESL learners, considering learner perceptions related to accomplishment, challenge, competition, guided experience, immersion, playfulness, and social interaction. That study organises learner response around design affordances and reports outcomes at the level of those affordances. The present study differs in three respects that bear on the reviewer relevant question of what it adds. It separates interest from perception as two measured scales rather than treating learner response as a single construct; it reports every item individually, so that divergence within an otherwise favourable profile becomes visible; and it includes accessibility among the perception items, which allows a practical constraint on participation to surface from the same instrument that captures enthusiasm.

Students' Perceptions of the Learning Value of Gamification

Interest provides only part of the picture. Students may enjoy a gamified task while remaining uncertain about whether it helps them understand, remember, or use English. Student perception is therefore important because it reflects how learners evaluate the wider educational experience associated with gamification. Such perceptions may influence willingness to participate, persistence, and acceptance of a particular instructional approach, even though they do not constitute direct evidence of achievement.

Previous research shows why this distinction matters. The dissociation reported by Sadeghi et al. (2022), in which gamified vocabulary instruction improved motivation without producing a significant between group difference in vocabulary development, is the clearest demonstration that motivation and measurable language

gains can follow different patterns. Shortt et al. (2023) add a methodological caution: much of the published evidence linking gamified language applications to achievement rests on small samples and designs that do not control for competing explanations, so learner enthusiasm has often been better documented than learner attainment. Positive perceptions are therefore meaningful, but they should be interpreted as one dimension of the learning experience rather than as proof that learning has improved. Malaysian evidence points in the same direction. Tan et al. (2019) found that ESL learners distinguished between the motivational appeal of a gamified quiz platform and its perceived contribution to reinforcing learning, treating these as related but separable benefits. That learners themselves make this distinction supports examining interest and perception as separate constructs rather than collapsing them into a single measure of approval.

The present study's Perception items cover a broad set of experiences, including understanding, remembering lesson content, enjoyment, attention, perceived effectiveness, collaboration, contemporary relevance, accessibility, and reduced paper use. This breadth permits a more nuanced interpretation than a general statement that students approve of gamification. In particular, it allows motivational and participatory reactions to be considered alongside perceptions of learning support and the practical conditions surrounding access.

Accessibility and the Conditions for Gamified Learning

The increasing use of digital platforms in gamified learning creates an additional consideration: students must be able to access the technology through which the activity is delivered. A learner may be motivated by a gamified lesson in school but have less reliable access to the same materials outside the classroom. Device availability, internet connectivity, data costs, platform requirements, and home learning conditions can therefore shape the practical experience of digital gamification.

This issue is relevant in Malaysia even though national connectivity is high. The Digital Education Policy identifies infrastructure, infostructure, quality digital content, and equitable participation as important components of national digital education (Ministry of Education Malaysia, 2023). The Department of Statistics Malaysia (2026) reported that household internet access in 2025 was 99.0% in urban areas and 90.7% in rural areas. Research on digital inequality suggests that connection rates alone are an incomplete indicator. van Deursen and van Dijk (2019) demonstrate that inequalities in material access, including device quality and diversity, peripheral equipment, and the recurring cost of maintaining connectivity, persist even in highly connected societies and continue to shape what users are able to achieve. Platform level evidence points the same way: technical problems were among the most frequently reported challenges across the 93 studies reviewed by Wang and Tahir (2020). Comparative evidence from school settings is also instructive. Liao et al. (2024) implemented an augmented reality game based English application with elementary EFL learners in both rural and urban schools and found that learning and motivational outcomes differed between the two settings, indicating that the same gamified intervention may not be experienced identically by learners in different locations. National statistics of this kind cannot explain individual students' responses in the present study, but together with the comparative evidence above they demonstrate that high national connectivity can coexist with meaningful variation in access conditions, and that the variation may fall along urban and rural lines.

Accessibility is therefore treated in this article as one component of students' perceptions rather than as a direct measure of the digital divide. The questionnaire did not comprehensively assess device ownership, internet quality, affordability, digital literacy, or home learning conditions. Any lower accessibility rating must therefore be interpreted as a perceived constraint rather than as evidence of a specific technological or socioeconomic cause.

Conceptual Framework

The conceptual framework is grounded primarily in the structure of the questionnaire. The instrument distinguishes two central constructs: student interest in gamified English language learning and student perceptions of gamified English language learning. These two constructs form the principal organising components of the study. The engagement literature, particularly the multidimensional framework proposed by Fredricks et al. (2004), is used as an interpretive lens rather than as a model being directly tested.

Three broad interpretive areas are used to organise item level patterns. The first is interest and engagement, reflected in motivation, enthusiasm, enjoyment, attention, participation, willingness to revise, and collaborative involvement. The second is perceived learning value, reflected in students' beliefs about understanding, remembering, mastery, ease of learning, and academic performance. The third is accessibility and learning conditions, particularly the perceived ability to access gamified materials without restrictions of time and place. These areas are used for interpretation and are not treated as statistically established subscales. As set out in Section 3.4, the two sections of the questionnaire are distinguished on conceptual and content grounds rather than on psychometric ones, and their dimensional structure remains a matter for validation in a larger sample.

The framework therefore positions gamified English language learning as an instructional approach that can elicit different learner responses. Strong interest indicates that students perceive the approach as motivating or engaging. Positive perceptions indicate that students believe it contributes to their learning experience. Neither response, however, should automatically be interpreted as objective evidence of increased English proficiency. This distinction between engagement, perceived learning value, and demonstrated learning provides the conceptual basis for interpreting the findings.

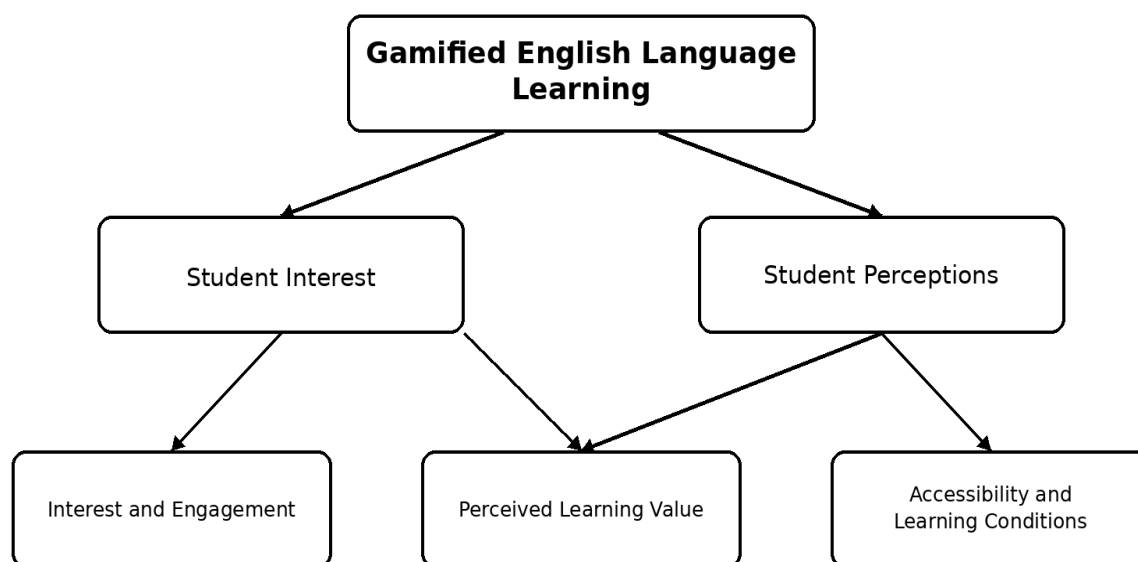


Figure 1. Conceptual framework for interpreting students' responses to gamified English language learning

METHODOLOGY

Research Design

This study employed a quantitative survey design to examine secondary school students' interest in and perceptions of gamified English language learning. A survey design was appropriate because the study focused on students' self reported responses to the use of gamification in English language learning rather than on the effects of a controlled instructional intervention. The analysis examined students' overall interest and perceptions as well as the relative strength of responses to individual aspects of the gamified learning experience.

Research Context and Participants

The study was conducted in Dungun, Terengganu, Malaysia. Participants were drawn from four national secondary schools, comprising two schools in urban areas and two in rural areas. Simple random sampling was used to select participants, and 60 secondary school students took part in the study. The participants had a mean age of 15.00 years (SD = 0.823) and included both male and female students. They also represented different socioeconomic backgrounds, classified according to the Malaysian B40, M40, and T20 household

income categories. The two urban schools and the two rural schools each contributed participants to the sample.

Because the sample was drawn from four schools within one district, the findings are interpreted as context specific. They provide insight into the responses of the participating students but should not be generalised to all Malaysian secondary school students without caution.

Research Instrument

Data were collected using a structured questionnaire consisting of three sections. Section A collected demographic information relating to age, gender, school location, and socioeconomic background. Section B contained 10 items examining students' interest in gamified English language learning. Section C comprised 10 items examining students' perceptions of gamified English language learning. The items were developed for this study and administered in Malay. The items were reviewed for clarity and comprehensibility during the pilot phase described in Section 3.4, and wording was refined on that basis. No formal expert panel review or content validity index was undertaken, and the instrument is therefore presented as a descriptive survey developed for this study rather than as a validated measure. The Malay wording was checked for comprehensibility during the pilot phase described in Section 3.4, and the English renderings shown in Tables 1 and 2 are translations prepared for presentation.

The Interest items addressed motivation, willingness to revise, enthusiasm, anticipation of activities, reduction of boredom, willingness to complete exercises, participation, perceived mastery of English, perceived ease of learning, and perceived academic performance. The Perception items addressed perceived understanding, retention of lesson content, enjoyment of game elements, attention during lessons, perceived attractiveness and effectiveness, collaborative learning, relevance to contemporary learning, accessibility, and reduced paper use.

All items in Sections B and C used a four point Likert response format: 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree. The scale omitted a neutral midpoint, requiring participants to indicate either agreement or disagreement with each statement. Chyung et al. (2017) observe that omitting the midpoint can reduce the tendency of respondents to select a neutral option for reasons unrelated to their actual attitude, such as social desirability or reluctance to commit, but that it also removes the possibility of expressing genuine neutrality and can push responses towards the agreement end of the scale. This forced choice format should therefore be borne in mind when interpreting the uniformly high means reported below. Higher mean scores therefore indicate stronger agreement with the positive statements about gamified English learning.

Instrument Validation and Reliability

Prior to the main data collection, the questionnaire was piloted with 20 secondary school students, comprising 10 students from an urban school and 10 from a rural school. These students were not included in the main study. The pilot was used to examine the clarity and comprehensibility of the questionnaire items and to assess internal consistency. The 20 Interest and Perception items together produced a Cronbach's alpha coefficient of .895, indicating high internal consistency for the complete instrument.

Because Interest and Perception are handled as separate components of the analysis, this treatment invites evidence of separate measurement, and two points should be stated plainly at the outset. First, separate reliability coefficients for the two sections were not computed at the time of analysis, and the individual response data are no longer available to the authors, so they cannot be computed retrospectively. Second, no exploratory or confirmatory factor analysis was conducted. The coefficient of .895 therefore establishes that the 20 items cohere as a set; it does not establish that they resolve into two measurable dimensions.

This has a direct consequence for how the two sections are described and for what may be claimed from them. Interest and Perception are distinguished in this study on conceptual and content grounds rather than on psychometric grounds. The distinction follows Landers (2014), whose theory of gamified learning separates the attitudes and behaviours that gamification influences from learners' wider judgements about instructional value, and Fredricks et al. (2004), whose separation of emotional from cognitive engagement implies that

liking an activity and believing it to be instructionally useful are distinguishable responses. The two sections were written to reflect that distinction: the Interest items ask about motivation, enthusiasm, anticipation, and willingness to participate, whereas the Perception items ask about understanding, retention, attention, collaboration, and access. Tan et al. (2019) report that Malaysian ESL learners themselves separate the motivational appeal of a gamified platform from its perceived contribution to learning, which provides empirical support for the distinction as a matter of content even in the absence of a factor solution here.

Accordingly, the two sections are referred to throughout as sections of a single questionnaire rather than as subscales, their totals are reported as descriptive summaries rather than as scale scores, and no claim is made that they measure statistically independent dimensions. The substantive findings of this study rest on individual item means, which do not depend on the dimensional structure of the instrument, rather than on comparisons between the two section totals, which would. Where the analysis draws a contrast, as between item B7 and item B9 or between item C9 and the remaining Perception items, the contrast is between individual items within the same section. This is a deliberate constraint on the claims made, adopted because the available evidence does not support stronger ones. Taber (2018) makes the underlying point directly: a high alpha coefficient offers limited evidence of instrument quality and cannot establish unidimensionality. Section 8 sets out the validation study that would be required before these items could properly be described as scales.

Data Collection Procedure

Permission to conduct the study was obtained prior to data collection. The questionnaire was first administered during the pilot phase in an urban and a rural school. Following the pilot, the questionnaire was refined before being administered to participants in the four schools involved in the main study. Students who participated in the pilot were excluded from the main study. A total of 60 completed questionnaires were included in the final analysis.

Data Analysis

Data were analysed using IBM SPSS Statistics Version 27. Descriptive statistics were used to examine students' interest in and perceptions of gamified English language learning. Mean scores and standard deviations were reported for each questionnaire item together with the overall reported scores for the Interest and Perception sections.

The analysis was organised according to the three research questions. For RQ1, the overall pattern of responses to the 10 Interest items was examined. For RQ2, descriptive statistics for the 10 Perception items were examined. For RQ3, individual item means across both sections were compared descriptively to identify the aspects that received the strongest and weakest evaluations. Items were subsequently discussed through the broad interpretive areas of interest and engagement, perceived learning value, and accessibility and learning conditions. These categories were used for interpretation and were not treated as empirically validated factors or independent subscales. Responses were not disaggregated by school location. The rationale and implications of this are set out in Section 7.

Because the study relied on self reported questionnaire responses, statements concerning mastery, understanding, academic performance, and other learning benefits are interpreted as perceived learning outcomes. They are not presented as objective evidence that gamification produced measurable improvements in English language proficiency.

FINDINGS

The findings are presented according to the three research questions. The analysis first considers students' reported interest, followed by their perceptions of gamified English learning, and then compares the strongest and weakest item level responses.

Students' Interest in Gamified English Language Learning

The first research question examined students' reported level of interest in gamified English language learning. Overall, the 10 Interest items produced a mean of 3.45 (SD = 0.53) on the four point scale, indicating strong

agreement with positive statements about gamification. Individual item means ranged narrowly from 3.38 to 3.52, showing consistently favourable responses across motivation, enthusiasm, participation, revision, perceived mastery, and perceived academic support.

The highest rated item was B7, which concerned students' belief that they could master English better when teachers used gamified learning materials (M = 3.52, SD = 0.504). B1, concerning increased interest and motivation, followed closely (M = 3.50, SD = 0.504). Students also responded strongly to B4 and B5, which addressed excitement about gamified activities and reduced boredom in English lessons (both M = 3.47).

The lowest rated Interest item was B9, which asked whether English was easier to learn when teachers used gamified learning materials (M = 3.38, SD = 0.555). Although the score still reflected strong agreement, its position relative to the other items suggests that students were slightly more positive about the motivational and participatory qualities of gamification than about the claim that gamification made English itself easier to learn.

Table 1 *Students' Interest in Gamified English Language Learning*

Item	Statement	M	SD
B1	Gamified learning increases my interest and motivation in learning English	3.50	0.504
B2	I am interested in revising English lessons when gamified materials are involved	3.45	0.534
B3	I feel enthusiastic about learning when my English teacher uses gamified materials	3.45	0.534
B4	I feel excited while waiting for gamified activities in English lessons	3.47	0.536
B5	English lessons are not boring when the teacher uses gamified learning materials	3.47	0.536
B6	I am interested in completing exercises involving gamified English learning	3.43	0.533
B7	I can master English better when the teacher uses gamified learning materials	3.52	0.504
B8	Gamified learning increases my participation in English lessons	3.43	0.563
B9	English is easier to learn when the teacher uses gamified learning materials	3.38	0.555
B10	Gamified learning can help improve my academic performance in English	3.43	0.563
	Overall	3.45	0.53

Note: Item wording has been translated and slightly condensed for presentation while preserving the meaning of the questionnaire items.

Students' Perceptions of Gamified English Language Learning

The second research question examined students' perceptions of gamified English language learning. The 10 Perception items produced an overall mean of 3.47 (SD = 0.54), again indicating strongly positive perceptions. However, the Perception section showed more variation than the Interest section because one accessibility item was rated noticeably lower than the others.

The highest recorded perception was C10, concerning the reduction of paper use, with a mean of 4.00 and no reported variation (SD = 0.000). Among items more directly related to the learning experience, C3 was rated

particularly highly ($M = 3.52$, $SD = 0.504$), indicating strong student preference for teachers to use gamified materials involving game elements. C6 and C7 also received strong evaluations (both $M = 3.48$), reflecting positive perceptions of gamified materials as interesting and effective and as supportive of group activity.

The clear exception was C9, concerning the ability to access gamified learning materials without restrictions of time and place. This item recorded a mean of 2.72 ($SD = 0.613$), substantially below the other Perception items. Students therefore remained broadly positive about gamified learning, but access appeared to be a comparatively weaker aspect of the experience.

Table 2 *Students' Perceptions of Gamified English Language Learning*

Item	Statement	M	SD
C1	English is easier to understand when technology is incorporated	3.33	0.629
C2	Gamified learning helps me remember lesson content better	3.43	0.533
C3	I like my English teacher using gamified materials with game elements	3.52	0.504
C4	I enjoy it when the teacher includes game elements in English lessons	3.43	0.563
C5	I can pay attention when the teacher uses gamified learning materials	3.43	0.563
C6	Gamified learning materials are interesting and effective	3.48	0.537
C7	I can participate in group activities through game elements	3.48	0.504
C8	Gamified learning materials are suitable for contemporary learning	3.40	0.558
C9	I can access gamified learning materials without restrictions of time and place	2.72	0.613
C10	Gamified learning can help reduce paper use in English lessons	4.00	0.000
	Overall	3.47	0.54

Note: Item wording has been translated and slightly condensed for presentation while preserving the meaning of the questionnaire items.

Most and Least Positively Perceived Aspects

When the 20 Interest and Perception items were considered together, students' strongest responses clustered around motivation, enjoyment, perceived learning support, participation, and collaboration. In the Interest section, perceived mastery (B7) and increased interest and motivation (B1) were among the strongest responses. In the Perception section, preference for teachers to use game elements (C3) and positive evaluations of the attractiveness, effectiveness, and collaborative potential of gamification (C6 and C7) were also prominent.

Two comparatively weaker areas emerged. First, B9 and C1 suggest that students were somewhat more cautious about the extent to which gamification made English easier to learn or easier to understand. Second, accessibility was the clearest area of concern. C9 was substantially lower than every other Perception item. The overall pattern therefore indicates that students valued gamification most strongly for its motivational, participatory, and perceived learning support, while accessibility and the idea that gamification directly reduces the difficulty of English received comparatively less enthusiastic evaluations.

DISCUSSION

Gamification as a Source of Interest and Engagement

The consistently strong Interest scores indicate that students responded favourably to gamified English language learning. Motivation, enthusiasm, anticipation of activities, reduced boredom, and perceived mastery all received strong evaluations. This pattern aligns with broader research identifying motivation and engagement as central outcomes of educational gamification. Sailer and Homner (2020) reported positive

motivational and behavioural effects, while Dehghanzadeh et al. (2021) identified enjoyment, engagement, motivation, and fun as recurring learner experiences in gamified English learning. Zhang and Hasim (2023) likewise found positive attitudes and emotional responses across EFL and ESL studies.

These findings suggest that gamification can create conditions that students perceive as more stimulating than routine instructional tasks. Challenge, progression, immediate feedback, collaboration, and a sense of accomplishment can potentially make practice more attractive and sustain participation. However, the results should not be interpreted as evidence that any gamified activity will produce the same response. Meta analytic and review evidence consistently demonstrates variation across studies, learner groups, and designs (Bai et al., 2020; Hamari et al., 2014; Huang et al., 2020; Sailer & Homner, 2020). Two recent findings sharpen this point for the present sample. Furkan Kurnaz and Koçtürk (2025) found gamification to be most effective for motivation among secondary school learners, the age group studied here, but also found the effect to be stronger for extrinsic than for intrinsic motivation. Cheng et al. (2025), meanwhile, reported gains in both reading proficiency and foreign language learning enjoyment in a gamified EFL setting, while noting that lower ranked students described the competitive structure as diminishing their enjoyment. Strong aggregate enthusiasm can therefore coexist with uneven individual experience. The educational question is therefore not whether a teacher should add game elements in general, but which elements best support the intended language task.

The present pattern also fits the multidimensional view of engagement proposed by Fredricks et al. (2004). Students' positive responses to motivation, excitement, participation, and reduced boredom largely reflect emotional and behavioural engagement. These are valuable outcomes because active participation can create more opportunities to practise language. Nevertheless, they are not identical to cognitive engagement or measurable language achievement. This distinction becomes particularly important when interpreting the perceived learning benefits reported by the students.

Beyond Enjoyment: Gamification as Perceived Learning Support

A notable feature of the findings is that the strongest responses were not limited to enjoyment. The highest Interest item concerned students' belief that they could master English better when gamified materials were used. Students also reported positive perceptions concerning memory, attention, participation, and academic performance. This indicates that they viewed gamification not simply as entertainment, but as an approach that they believed could support learning.

The finding is consistent with Bai et al. (2020), whose synthesis showed that learners may value gamification because it provides enthusiasm, feedback, recognition, and goal setting. However, the current results also reveal a useful tension. While perceived mastery was rated very highly, the statement that gamification made English easier to learn received the lowest Interest mean. This relative difference suggests that students may perceive gamification as helping them engage with, practise, or develop English without believing that it removes the difficulty inherent in language learning.

This distinction strengthens the central argument of the study. Language learning remains cognitively demanding even when the learning environment is enjoyable. Learners still need to notice linguistic patterns, retrieve vocabulary, construct meaning, produce language, and respond to feedback. Gamification may make students more willing to invest in these processes, but it does not eliminate the processes themselves. Its pedagogical contribution may therefore lie less in simplifying English and more in increasing students' willingness to engage with the work required to learn it. Framed in self determination terms, gamification may strengthen learners' sense of competence and relatedness during practice without altering the intrinsic difficulty of the target language itself (Ryan & Deci, 2000).

Positive Perceptions Are Not Evidence of Improved Proficiency

The findings require a clear distinction between perceived learning benefits and demonstrated learning outcomes. Students reported that gamification helped them understand, remember, participate, and potentially improve their performance. These perceptions are educationally meaningful because learners' beliefs about an

instructional approach can influence acceptance, effort, and participation. Nevertheless, they remain self reported judgements.

The study did not use achievement tests, pretest and posttest comparisons, or an experimental control condition. It would therefore be inappropriate to conclude that gamification objectively improved English proficiency. The findings indicate that students believed gamification was supportive, not that measurable proficiency gains were established.

This caution is supported by Sadeghi et al. (2022), who found that gamified vocabulary instruction positively affected learner motivation but did not produce a significant between group advantage in vocabulary gain. Similarly, Zhang and Hasim (2023) reported both positive outcomes and limitations across gamification studies. Meta analytic evidence points in the same direction: the pooled advantage reported by Huang et al. (2020) was small to medium rather than decisive, and Hanus and Fox (2015) found that a gamified course could yield lower examination performance than a comparable non gamified course. Perceptions that gamification supports learning are therefore compatible with a wide range of actual outcomes. Shortt et al. (2023) make the corresponding methodological point: where gamified language applications have been credited with improving proficiency, the underlying studies have often used small samples and left obvious confounds uncontrolled. Perception data such as those reported here are not a weaker substitute for achievement data. They answer a different question. The present study contributes evidence about how students experience gamified English learning; whether those experiences correspond to measurable gains in vocabulary, grammar, reading, writing, or speaking is a question the present design cannot address, and Section 8 sets out how it should be pursued.

Accessibility as a Qualification to the Positive Picture

The most striking departure from the generally positive pattern concerned accessibility. Students were less positive about being able to access gamified materials without restrictions of time and place. The mean of 2.72 for C9 was substantially lower than the other Perception items. This result suggests that enthusiasm for gamified learning does not necessarily mean that students experience equally convenient access to the resources required for participation.

The result is relevant because contemporary gamification is often delivered through digital platforms, mobile applications, or online quiz systems. Reviews of EFL and ESL gamification have identified technical difficulties as a recurring constraint (Wang & Tahir, 2020; Zhang & Hasim, 2023). Malaysian policy also recognises digital infrastructure and participation as important components of educational digitalisation (Ministry of Education Malaysia, 2023), while national data continue to show a gap between urban and rural household internet access (Department of Statistics Malaysia, 2026). As van Deursen and van Dijk (2019) argue, near universal connection rates can nevertheless mask persistent inequalities in the devices, peripherals, and recurring costs that determine what learners can actually do, particularly outside supervised classroom settings. Liao et al. (2024) provide a concrete illustration from school based EFL instruction, reporting that an identical gamified application produced different learning and motivational outcomes for rural and urban learners. Since the present sample was drawn from two urban and two rural schools, this is a plausible source of variation that the current design was not equipped to isolate.

The current study does not establish why C9 was rated lower. It did not directly measure device ownership, connection quality, data affordability, or home learning conditions. Attributing the result specifically to poor internet access or socioeconomic disadvantage would therefore exceed the evidence. The defensible conclusion is narrower: accessibility was perceived less positively than most other aspects of gamified learning.

One further question cannot be settled here. The sample was drawn from two urban and two rural schools, and Liao et al. (2024) report that an identical gamified application produced different learning and motivational outcomes for rural and urban learners. Whether the accessibility deficit observed in this study is concentrated in the rural schools or distributed across both settings is therefore a reasonable question, and it is one the present analysis cannot answer, since responses were not disaggregated by school location and the individual response data are no longer available for reanalysis. The distinction matters practically: a location specific

constraint would call for targeted infrastructure and resourcing decisions, whereas a constraint common to both settings would point instead to the general conditions of out of school access, including shared devices, data cost, and competing demands at home. Section 8 treats this as a priority for subsequent work rather than as a matter the present findings can resolve.

This qualification nevertheless has practical importance. A learning activity may be highly engaging for students who can access it, while becoming less inclusive if participation depends on continuous connectivity, individual device ownership, or access outside school hours. Accessibility should therefore be considered at the design stage through classroom based access, shared devices, low bandwidth alternatives, downloadable materials, or non digital gamification where appropriate.

Designing Gamification for Pedagogical Purpose

Taken together, the findings suggest that gamification has considerable potential as an engagement strategy in secondary English classrooms, but its value depends on design. Gamification is not a single uniform treatment. Qiao et al. (2024) demonstrated that competitive, cooperative, and collaborative approaches can produce different patterns of learning and engagement. The structure of goals, feedback, rewards, collaboration, and competition therefore matters. Dai et al. (2025) go further, showing that specific combinations of game elements produce measurably different learning outcomes and that intervention duration moderates the effect, and Li et al. (2023) similarly identified design principles and duration among the significant moderators of gamification's impact. The consequences of getting that structure wrong are documented rather than hypothetical. Toda et al. (2018) traced negative effects including indifference, loss of performance, and undesired competitive behaviour back to specific design decisions, while Hanus and Fox (2015) showed that a reward heavy design sustained across a full semester can erode the intrinsic motivation on which continued engagement depends.

The findings support a shift from asking whether teachers should use gamification to asking how gamification should be used for a particular language objective. Vocabulary retrieval may benefit from repeated challenges and immediate feedback. Speaking practice may benefit from collaborative missions that require purposeful interaction. Reading or grammar tasks may use progression systems to sustain practice. In each case, the game elements should be selected because they support the language task rather than because a particular application is popular or visually attractive.

Teachers should also avoid evaluating success solely through visible excitement. Students cheering during a quiz, competing for points, or requesting another game indicates engagement, but it does not by itself demonstrate language learning. Follow up tasks, formative assessment, language production, or reflection can help determine whether students are able to apply what they practised. In this sense, gamification should serve pedagogy rather than pedagogy serving the game.

Contribution Relative to Previous Malaysian Gamification Research

Malaysian research on gamification in English language learning has established, fairly consistently, that learners respond well to it. Tan et al. (2019) reported that ESL students found a gamified quiz platform beneficial for motivation and for reinforcing learning, and Jimmy (2025) found comparable motivational benefits among lower secondary ESL learners. The present findings are consistent with that body of work at the aggregate level, and simply adding another favourable set of composite means would contribute little.

The contribution lies in what the item level analysis reveals underneath the composite. Two results in particular are not visible in scale scores. The first is the position of B9: students rated their belief that they could master English better through gamification (B7, $M = 3.52$) above their belief that gamification made English easier to learn (B9, $M = 3.38$). Learners appear to distinguish between an approach that helps them engage with difficulty and one that removes it, and they do not claim the latter. The second is C9, where perceived access without restrictions of time and place ($M = 2.72$) sits more than a full scale point below the highest rated item. Reported only as part of an overall Perception mean of 3.47, that result disappears entirely.

This has a methodological implication for the field. Where Malaysian gamification studies report composite endorsement, the present analysis suggests that composites in this domain may be systematically optimistic,

because the motivational items that dominate such instruments are also the items learners rate most highly. Instruments that include practical constraints among the perception items, and analyses that report those items separately, are likely to yield a more accurate picture of how gamification is actually experienced. The accompanying substantive contribution is the finding itself: in a district where national statistics indicate high household connectivity, secondary students nonetheless identified access as the weakest aspect of their gamified English learning.

PEDAGOGICAL IMPLICATIONS

The findings point to three practical priorities for English teachers. First, gamification should be designed around a clear language learning objective. Students' strong responses to motivation, participation, collaboration, and perceived mastery suggest that gamification can be useful for increasing willingness to engage with practice. However, game mechanics should reinforce vocabulary, grammar, reading, writing, speaking, or revision goals rather than function as an unrelated reward system. The instructional objective should determine the game structure.

Second, teachers should evaluate gamification beyond enjoyment. Visible enthusiasm can be an important indicator of emotional and behavioural engagement, but it should be followed by evidence that learners practised or applied the target language. Brief exit tasks, retrieval activities, oral production, written application, or formative assessment can help teachers check whether a gamified activity has supported the intended learning.

Third, accessibility should be considered during planning. The comparatively low C9 score indicates that unrestricted access cannot be assumed. Teachers can reduce participation barriers by allowing classroom based completion, shared devices, flexible timing, low bandwidth options, or non digital alternatives. Gamification is most defensible pedagogically when it increases meaningful participation without making access to technology a prerequisite that some learners cannot consistently meet.

LIMITATIONS

Several limitations should be considered when interpreting the findings. First, the study involved 60 students from four secondary schools in one district in Terengganu. Although the schools represented urban and rural settings, the sample was geographically limited. The results should therefore be treated as context specific rather than as representative of all Malaysian secondary school students. Studies involving larger samples across different states and school contexts would strengthen generalisability. A related limitation concerns the composition of that sample. Although participants were drawn deliberately from two urban and two rural schools, responses were analysed as a single pooled group and were not disaggregated by school location. Given that accessibility produced the weakest result in the dataset, and that Liao et al. (2024) report divergent outcomes for rural and urban learners using the same gamified application, a disaggregated analysis would have been informative. It is not available: the individual response data are no longer retained by the authors, so the comparison cannot be produced retrospectively. The accessibility finding reported here should therefore be read as a district level pattern across a mixed urban and rural sample, not as a statement about either setting individually.

Second, the study relied on self reported questionnaire data. Statements concerning mastery, understanding, memory, and academic performance reflect students' perceptions rather than direct observations or objective learning measures. Future research could combine student perceptions with classroom observation, interviews, learning analytics, or achievement measures.

Third, the survey examined students' experiences of gamification broadly rather than evaluating one standardised gamification intervention. Different participants may therefore have encountered different

platforms, activities, or combinations of game elements. Future studies could compare specific designs and examine how particular mechanisms influence motivation, engagement, and language learning.

Fourth, and most consequentially for how the findings should be read, the measurement framework is weaker than the analysis would ideally require. The reported Cronbach's alpha of .895 applies to the complete 20 item instrument. Separate coefficients for the Interest and Perception sections were not computed at the time of analysis and cannot now be obtained, and no exploratory or confirmatory factor analysis was undertaken. Two consequences follow. The sections cannot be described as validated subscales, and their totals should not be treated as scale scores or compared with one another as though they indexed independent constructs. The analysis has been constrained accordingly, resting on individual item means rather than on section level comparisons, but readers should treat the two part structure of the instrument as a conceptual organising device that awaits empirical confirmation. It is worth adding that even had the data been retained, a sample of 60 respondents across 20 items could not have supported stable factor recovery (MacCallum et al., 1999); validation requires a new and substantially larger sample rather than reanalysis of these responses. That study is the first item in the agenda set out in Section 8.

Finally, accessibility was represented by a limited number of questionnaire indicators, with the clearest signal arising from the item on access without restrictions of time and place. The study did not measure device ownership, internet quality, affordability, digital literacy, or home learning conditions, which van Deursen and van Dijk (2019) identify as the components of material access most likely to differentiate users in otherwise well connected settings. The accessibility result should therefore be interpreted as a perceived constraint rather than proof of a specific form of digital inequality.

DIRECTIONS FOR FUTURE RESEARCH

The limitations above translate into a specific and sequenced research agenda rather than a general call for further work.

The first priority is instrument validation. The Interest and Perception scales should be administered to a substantially larger sample, drawn from multiple districts and ideally from more than one state, and submitted to exploratory factor analysis to establish whether the items resolve into the two dimensions assumed here, followed by confirmatory factor analysis on an independent sample to test that structure. Because the required sample size depends on communality and on how well each factor is determined by its indicators rather than on any fixed ratio (MacCallum et al., 1999), a target in the range of 300 to 500 respondents would be prudent for an instrument of this length. Such a study would also settle whether accessibility functions as a distinct dimension or as a single divergent item, which the present data cannot determine, and would yield the separate section level reliability coefficients that the present study is unable to report.

The second priority is the incorporation of objective language achievement measures, which the present design lacks entirely. A pretest and posttest quasi experimental design comparing gamified and conventional instruction on the same syllabus content would allow perceived and demonstrated learning to be examined together. Suitable outcome measures include vocabulary tests aligned to the taught items, discrete point grammar tests, and performance based tasks such as rated speaking or writing samples, which capture productive ability that discrete point testing does not. Delayed post tests administered several weeks after instruction would address the short lived effects reported by Zhang and Hasim (2023). The most informative design would administer the Interest and Perception questionnaire alongside the achievement measures to the same students, so that the correspondence between perceived and measured learning can be estimated directly. That correlation is the central unanswered question raised by the present study: students here reported believing that gamification supports their mastery of English, and whether that belief tracks attainment remains unknown. Given that Sadeghi et al. (2022) found motivational gains without corresponding vocabulary gains, and that Hanus and Fox (2015) found motivational decline alongside lower examination performance, the correspondence cannot be assumed in either direction.

The third priority concerns accessibility, which produced the weakest result in this dataset but was measured with a single item. Future work should measure the components of material access identified by van Deursen

and van Dijk (2019) directly: device ownership and whether the device is shared, connection type and reliability at home, data affordability, and the physical conditions available for study outside school. Pairing these measures with the accessibility perception item would establish whether the low rating reflects infrastructure, cost, competing household demands, or something else. Sampling that stratifies by school location and by household income category would allow the urban and rural question raised but not answered by the present study to be addressed directly.

Finally, because participants in this study encountered gamification through varied platforms and activities rather than a single standardised intervention, future designs should specify and control the gamified condition. Given evidence that particular combinations of game elements produce measurably different outcomes and that intervention duration moderates the effect (Dai et al., 2025; Li et al., 2023), comparing defined designs against a specified language objective would be considerably more informative than further studies of gamification in general.

CONCLUSION

This study examined secondary school students' interest in and perceptions of gamified English language learning in Dungun, Terengganu. Overall, students reported strong interest and highly positive perceptions. They responded particularly positively to motivation, enthusiasm, participation, collaboration, and perceived mastery of English. These findings indicate that students see gamification as more than a source of entertainment and associate it with a potentially supportive learning experience.

At the same time, the item level patterns provide important qualifications. The comparatively lower rating for the statement that gamification makes English easier to learn suggests that students do not necessarily equate enjoyment and engagement with reduced learning difficulty. Gamification may increase willingness to participate in language learning without removing the cognitive and linguistic demands involved in developing proficiency.

Accessibility also emerged as a notable concern. The item concerning access to gamified materials without restrictions of time and place received a substantially lower rating than the other Perception items. Although the study cannot identify the cause of this pattern, it highlights the need to consider practical access alongside motivational appeal.

The study therefore supports a more nuanced interpretation of gamification in English language education. Positive learner perceptions should not automatically be treated as evidence of improved proficiency, and visible enjoyment should not be the sole criterion for evaluating an activity. Gamification appears most promising when it encourages students to participate, practise, collaborate, and persist in meaningful language tasks while remaining accessible to the learners expected to use it. Moving beyond the fun factor requires teachers and researchers to ask not only whether students enjoy gamified learning, but also what they engage with, what they believe they are learning, and whether the conditions for participation are equitable. Answering the middle question properly will require achievement measures this study did not collect; answering the last will require direct measurement of access rather than inference from national connectivity statistics.

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