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Pedagogical Rationale for Language Games in English Vocabulary Teaching: Insights from Second Language Acquisition and Educational Psychology

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Abstract

Language games are among the most widely used techniques in English vocabulary teaching, but they are often justified by their popularity with learners rather than by a clear pedagogical rationale. This conceptual paper asks what second language acquisition (SLA) research and educational psychology together say about why, when and how language games can support vocabulary learning. It reviews five SLA perspectives – noticing and input, interaction and output, depth of processing and involvement, incidental and intentional learning with repetition, and sociocultural theory and five perspectives from educational psychology – active and scaffolded learning, memory (retrieval and spacing), cognitive load, motivation and self-efficacy, and emotion and feedback. From these the paper derives a set of five pedagogical criteria that a vocabulary game should meet to be defensible as teaching and not just entertainment: *purposeful word use, deep processing, planned recycling, supportive challenge and informative feedback*. It then translates the criteria into a three-phase lesson sequence, a guide for matching game types to learning aims, and implications for assessment, and discusses practical and ethical challenges such as competition, off-task behaviour and unequal resources. The paper concludes with a research agenda. It offers teachers, teacher educators and researchers an evidence-informed basis for selecting, designing and evaluating vocabulary games.

Keywords: language games; English vocabulary teaching; second language acquisition; educational psychology; pedagogical rationale; game-based learning; motivation

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1. Introduction

Teachers of English as a second or foreign language use games constantly: guessing games, word bingo, card and board games, quizzes, charades and, increasingly, digital games. Handbooks of classroom activities give hundreds of examples (Wright, Betteridge & Buckby, 2006), and studies report that learners enjoy such activities and often remember words better afterwards (Huyen & Nga, 2003; Uberman, 1998; Yip & Kwan, 2006). Yet when teachers ask a game to carry curriculum time, they need more than enjoyment. A game that is lively but allows learners to win without attending to the target words wastes time; a game that overloads learners with rules or competition may even harm learning. Choosing wisely requires a pedagogical rationale – a reasoned account of the learning processes the game is meant to activate.

Such a rationale exists in pieces. SLA research has studied how vocabulary is noticed, processed and retained (Nation, 2013; Schmitt, 2008). Educational psychology has studied memory, cognition, motivation and feedback in classrooms. The literature on games, however, rarely draws on both systematically. This paper brings them together around three questions: (1) What does SLA research imply for vocabulary games? (2) What does educational psychology add? (3) How can the combined rationale guide selection, design, sequencing and assessment of games in classrooms?The focus is on learners in school education, and especially on the middle stage (ages 11–14), where vocabulary demands rise and attitudes towards English consolidate. In India this stage is formally recognised in the National Education Policy 2020 (Ministry of Education, 2020), and the National Curriculum Framework for School Education 2023 (NCERT, 2023) emphasises active, experiential and competency-based learning, to which well-designed games can contribute.

2. What a Vocabulary Game Must Accomplish

To evaluate games one first needs a clear idea of the learning task. Knowing a word involves form, meaning and use – spelling and pronunciation, the link between form and concept, and grammatical behaviour, collocations and register – each at receptive and productive levels (Nation, 2013). Size matters too: roughly 8,000–9,000 word families are needed for comfortable reading of novels and newspapers, and 6,000–7,000 for informal speech (Nation, 2006). School learners also

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face academic vocabulary that cuts across subjects (Coxhead, 2000). Because such numbers cannot be reached by direct teaching alone, a classroom technique must help learners (a) notice new words, (b) establish and enrich form–meaning links, (c) retain them over time, and (d) use them productively. These four tasks provide the yardstick against which the theories below are read.

A *language game*, as used here, is a rule-governed activity with a goal, challenge and feedback in which learners must process or use English words in order to play. This differs from *gamification*, which adds game elements such as points and badges to existing activities (Deterding, Dixon, Khaled & Nacke, 2011); gamification may or may not change the language processing that learners do.

3. The Rationale from Second Language Acquisition

3.1 Noticing and input

Schmidt (1990) argued that input becomes intake only when learners consciously notice features of it. For vocabulary, this means a new word must be attended to before it can be learned. Games can direct attention to target words by making them the currency of play – the words on the cards, in the clues or in the answers. Krashen (1982) emphasised comprehensible input and low anxiety; although his strong claims are debated, the principle that input must be understandable and the climate non-threatening is widely accepted (Lightbown & Spada, 2013). Games supply repeated, contextualised input provided that the words are made comprehensible by pictures, gestures, examples or peer explanation.

3.2 Interaction and output

Long's (1996) interaction hypothesis proposes that negotiation of meaning – checking, clarifying and rephrasing when communication breaks down – makes input more comprehensible and draws attention to unknown forms. Swain (1985) added the output hypothesis: producing language forces learners to process it more fully and to notice gaps in their knowledge. Swain and Lapkin (1998) showed in a study of two adolescent immersion learners how collaborative dialogue produced language-related episodes in which learners solved lexical and grammatical problems together.

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Information-gap and describe-and-guess games create the same conditions deliberately: the describer must find words, the guesser must ask for clarification, and the pair must settle on a meaning.

3.3 Depth of processing and involvement

Craik and Lockhart (1972) proposed that memory depends on the depth of processing. For vocabulary, Laufer and Hulstijn (2001) and Hulstijn and Laufer (2001) specified an *involvement load* with three components: *need* (the word is required by the task), *search* (the learner must find its meaning or form) and *evaluation* (the learner must compare it with alternatives or judge its fit). Tasks with a higher involvement load tend to yield better retention. This is the most directly applicable criterion for game design: a game in which learners must choose, justify and compare words has a higher load than one in which they simply match or copy. Laufer (2005) similarly urges that vocabulary teaching include focus on form, that is, attention to the properties of words, within meaningful activities.

3.4 Incidental and intentional learning, and repetition

Vocabulary can be learned incidentally while attending to meaning and intentionally through deliberate study; both contribute, and the balance depends on word frequency, learner level and task (Hulstijn, 2001; Schmitt, 2008). Whichever route, words are rarely acquired from one encounter. Repetition improves knowledge of form, meaning and use, although the number of encounters required varies (Webb, 2007). Games, which are inherently repeatable and variable, offer a way of recycling words without the tedium of drills.

3.5 Sociocultural theory

In sociocultural theory, learning arises in socially mediated activity and development occurs in the zone of proximal development (ZPD), the gap between independent performance and performance with assistance (Vygotsky, 1978; Lantolf & Thorne, 2006). Vygotsky (1967) saw play as creating a ZPD because rules lead children to behave beyond their usual level. Scaffolding (Wood, Bruner & Ross, 1976) – temporary support that is withdrawn as competence grows – can be built into

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games as hint cards, picture clues, sentence frames and peer help, and team games create the social interdependence in which learners explain and negotiate word meanings.

4. The Rationale from Educational Psychology

4.1 Active and scaffolded learning

Constructivist views hold that learners build understanding through active engagement, not passive reception. Games embody this: learners make decisions, test hypotheses about word meanings, and see consequences. Gee (2003) argued that good games embody sound learning principles, such as graded challenge, active participation and feedback, which classrooms often lack. The proviso, emphasised by Plass, Homer and Kinzer (2015), is that the game mechanics must be aligned with the learning objective; engagement alone does not guarantee learning.

4.2 Memory: retrieval and spacing

Memory research shows that retrieving information strengthens retention more than re-reading it (Roediger & Karpicke, 2006) and that spacing practice over time improves long-term recall (Cepeda, Pashler, Vul, Wixted & Rohrer, 2006). These findings, popularised for teachers by Brown, Roediger and McDaniel (2014), imply that vocabulary games are most useful when they require learners to recall words from memory and when the same words return across weeks. A one-off game used to introduce words, unreinforced, is unlikely to yield durable knowledge.

4.3 Cognitive load

Working memory is limited, and instruction that imposes unnecessary load impairs learning (Sweller, 1988). Elaborate rules, complicated scoring, crowded screens and time pressure can consume the capacity needed to process target words. Design should therefore keep rules simple and make the language, and not the game mechanics, the main challenge. Dual-coding and multimedia research suggests that pairing words with relevant images supports learning (Paivio, 1986; Mayer, 2009), provided the images are relevant and not decorative.

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4.4 Motivation and self-efficacy

Self-determination theory identifies autonomy, competence and relatedness as basic needs whose satisfaction sustains intrinsic motivation (Ryan & Deci, 2000). Expectancy-value theory stresses that effort depends on learners' expectation of success and the value they attach to a task (Eccles & Wigfield, 2002), and Bandura (1997) showed that self-efficacy grows from mastery experiences. A game with graded levels and visible progress offers repeated small successes; choice of role or strategy supports autonomy; teamwork supports relatedness. Csikszentmihalyi's (1990) flow, in which challenge and skill are balanced, and empirical work showing that appropriately challenging games enhance engagement and flow (Hamari et al., 2016) support the same design logic. In language learning, motivation is also shaped by the classroom situation (Dörnyei, 2001), which teachers control.

4.5 Emotion, anxiety and feedback

Fear of error and of peer evaluation can suppress participation, particularly among early adolescents. Games can reduce anxiety by making errors part of the play and by shifting attention from individuals to teams. Feedback is another decisive factor: its effect on learning depends on whether it tells learners where they are, where they are going and how to proceed (Hattie & Timperley, 2007). Games provide immediate feedback by nature (a score, a correct guess), but this feedback is informative for vocabulary only if it identifies *which* word or aspect was wrong and why, which usually requires a brief teacher or peer explanation.

5. Synthesis: Five Pedagogical Criteria

The ten perspectives converge on five criteria. They are offered as a practical checklist, and each is grounded in the research above.

1. **Purposeful word use.** The target words must be necessary to play and used for communication, not merely displayed (Schmidt, 1990; Long, 1996; Swain, 1985).
2. **Deep processing.** The game should require learners to select, justify, compare or evaluate words, giving a high involvement load (Craik & Lockhart, 1972; Laufer & Hulstijn, 2001).

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3. **Planned recycling.** Words should return in varied forms over time with retrieval demands (Webb, 2007; Cepeda et al., 2006; Roediger & Karpicke, 2006).
4. **Supportive challenge.** Rules should be simple, challenge graded, support available and withdrawn gradually, and the social climate safe (Vygotsky, 1978; Sweller, 1988; Ryan & Deci, 2000; Csikszentmihalyi, 1990).
5. **Informative feedback.** Learners should learn what was right or wrong with their word use and what to do next (Hattie & Timperley, 2007).

Table 1. Pedagogical criteria, supporting theory and classroom conditions

Criterion	Main sources	Classroom condition	Example of failure
Purposeful word use	SLA: noticing, interaction, output	Words needed to complete the task; information gaps	Learners win by guessing without using the target words
Deep processing	Levels of processing; involvement load	Choosing, justifying, comparing words	Matching games with no meaning decisions
Planned recycling	Memory research; repetition studies	Same words in new rounds over weeks; retrieval	One-time game after which words are not revisited
Supportive challenge	Sociocultural theory; load theory; SDT; flow	Simple rules; hints; team roles; graded levels	Complex rules or one-sided competition
Informative feedback	Feedback research; SLA	Teacher or peer explanation of errors; debrief	Score given with no explanation of mistakes

6. Evidence from Research on Games and Language Learning

Studies of language games for vocabulary generally report positive effects on motivation and often on recall (Huyen & Nga, 2003; Uberman, 1998; Yip & Kwan, 2006). A systematic review of gamification in second language learning found mostly favourable results on learning outcomes and motivation while noting weaknesses in the methods of many studies (Dehghanzadeh, Fardanesh, Hatami, Talaee & Noroozi, 2021). General syntheses are more cautious: serious games outperformed conventional instruction in learning and retention but were not more motivating (Wouters, van Nimwegen, van Oostendorp & van der Spek, 2013), and gamification showed small to moderate benefits that depended on design and context (Sailer & Homner, 2020). Overviews of

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game-based language learning highlight both its opportunities and its challenges (Godwin-Jones, 2014; Reinhardt, 2019).

Two features of this literature are consistent with the rationale developed here. First, effects vary with design, as predicted if the criteria matter: games that engage learners in processing words benefit learning, whereas games added on top of unchanged tasks do less. Second, the literature is dominated by short interventions, immediate tests and adult or university learners, so that evidence for the middle stage and for long-term retention is thin. The criteria should therefore be treated as theoretically grounded hypotheses that need testing, not as proven laws.

7. From Rationale to Classroom Practice

7.1 A three-phase lesson sequence

Before the game – the teacher selects a small set of target words (for example, 8–12), pre-teaches meaning with pictures, examples or short definitions, explains the learning purpose, and demonstrates the rules in one practice round. *During the game* – learners play in pairs or teams; the teacher circulates, scaffolds, notes errors and ensures that target words are actually used. *After the game* – a debrief of five to ten minutes recalls the words, corrects errors, and asks learners to use the words in a sentence or short writing or speaking task. The debrief is where criteria 3 and 5 are mainly satisfied and where playing is converted into learning.

7.2 Matching game types to learning aims

Table 2. Matching game types to vocabulary learning aims

Learning aim	Suitable game types	Criterion most served
Noticing and meaning of new words	Picture bingo, mime and guess, matching with definitions	Purposeful use; dual coding
Depth: associations, collocations, word families	Word webs, odd-one-out, sentence-completion contests, "which word fits?"	Deep processing
Productive use	Describe-and-guess, twenty questions, story-building with word cards, role-play scenarios	Purposeful use; interaction and output

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Learning aim	Suitable game types	Criterion most served
Retention and recall	Rematch quizzes, memory games, "words of the week" tournaments	Planned recycling; retrieval
Spelling and form	Word-chain, scrambled letters, crossword building	Form knowledge; supportive challenge

7.3 Considerations for the middle stage

Early adolescents are capable of strategic, rule-based games, but they are also highly sensitive to peer judgement. Cooperative and team formats, recognition of improvement and the option to pass or seek a hint help maintain a safe climate. Games should gradually move from concrete nouns toward abstract, academic and subject-specific vocabulary, and should link to textbook themes so that they support, and do not compete with, the syllabus.

7.4 Assessment

Assessment should reflect what the game was meant to teach. Delayed tests (a week or more later) of meaning recall and sentence use provide better evidence of learning than same-day recognition; observation of how learners use words during the game, and short portfolio entries, add performance-based evidence consistent with competency-based assessment in the Indian curriculum framework (NCERT, 2023).

8. Challenges, Limitations and Research Directions

8.1 Practical and ethical challenges

Several challenges deserve attention. *Competition* can energise some learners and demoralise others, so team scoring and effort-based recognition are preferable in mixed-ability classes. *Off-task behaviour* is more likely if the rules do not require the target language; criterion 1 is also a classroom-management tool. *Time* is limited, and games need preparation and debriefing; short, reusable formats are most practical. *Large classes and limited resources* are common; many effective games need only paper, a board and clear rules, and digital games should not be assumed to be the default. *Validity of assessment* can be compromised if scores in a game are treated as

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evidence of learning. Finally, teachers need training in game design and debriefing, which should form part of pre-service and in-service programmes.

8.2 Research directions

Future studies should (1) test the criteria experimentally by varying involvement load, recycling and feedback in otherwise identical games; (2) use delayed tests of depth and productive use; (3) include middle stage learners in diverse, including large-class and low-resource, settings; (4) examine individual differences in reactions to competition; (5) study teachers' game design and debriefing practices; and (6) combine outcome measures with classroom discourse analysis and learner perceptions.

9. Conclusion

The pedagogical case for language games does not rest on enjoyment alone. SLA research shows that vocabulary is learned when words are noticed, negotiated, processed in depth, recycled and used; educational psychology shows that learning is strengthened by retrieval and spacing, manageable load, motivating and safe conditions, and informative feedback. A well-designed game can bring these conditions together in one activity, and the five criteria proposed here – purposeful word use, deep processing, planned recycling, supportive challenge and informative feedback – offer a practical way of judging whether a particular game does so. For teachers, the message is that a game earns its place in the timetable when it makes learners use, think about and return to words, and when the teacher frames and debriefs it purposefully.

References

Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.

Brown, P. C., Roediger, H. L., & McDaniel, M. A. (2014). *Make it stick: The science of successful learning*. Belknap Press.

Cepeda, N. J., Pashler, H., Vul, E., Wixted, J. T., & Rohrer, D. (2006). Distributed practice in verbal recall tasks: A review and quantitative synthesis. *Psychological Bulletin, 132*(3), 354–380.

Coxhead, A. (2000). A new academic word list. *TESOL Quarterly, 34*(2), 213–238.

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An International Multidisciplinary Peer Reviewed Journal
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Issue: 1
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Craik, F. I. M., & Lockhart, R. S. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior, 11*(6), 671–684.

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. Harper & Row.

Dehghanzadeh, H., Fardanesh, H., Hatami, J., Talaee, E., & Noroozi, O. (2021). Using gamification to support learning English as a second language: A systematic review. *Computer Assisted Language Learning, 34*(7), 934–957.

Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining "gamification". In *Proceedings of the 15th International Academic MindTrek Conference* (pp. 9–15). ACM.

Dörnyei, Z. (2001). *Motivational strategies in the language classroom*. Cambridge University Press.

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology, 53*, 109–132.

Gee, J. P. (2003). *What video games have to teach us about learning and literacy*. Palgrave Macmillan.

Godwin-Jones, R. (2014). Games in language learning: Opportunities and challenges. *Language Learning & Technology, 18*(2), 9–19.

Hamari, J., Shernoff, D. J., Rowe, E., Coller, B., Asbell-Clarke, J., & Edwards, T. (2016). Challenging games help students learn: An empirical study on engagement, flow and immersion in game-based learning. *Computers in Human Behavior, 54*, 170–179.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research, 77*(1), 81–112.

Hulstijn, J. H. (2001). Intentional and incidental second language vocabulary learning: A reappraisal of elaboration, rehearsal and automaticity. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 258–286). Cambridge University Press.

Hulstijn, J. H., & Laufer, B. (2001). Some empirical evidence for the involvement load hypothesis in vocabulary acquisition. *Language Learning, 51*(3), 539–558.

GYANBODH
An International Multidisciplinary Peer Reviewed Journal
ISSN:3048-9792
Volume: 3
Issue: 1
January-February: 2026

Huyen, N. T. T., & Nga, K. T. T. (2003). The effectiveness of learning vocabulary through games. *Asian EFL Journal*, *5*(4), 90–105.

Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Pergamon.

Lantolf, J. P., & Thorne, S. L. (2006). *Sociocultural theory and the genesis of second language development*. Oxford University Press.

Laufer, B. (2005). Focus on form in second language vocabulary learning. *EUROSLA Yearbook, 5*, 223–250.

Laufer, B., & Hulstijn, J. (2001). Incidental vocabulary acquisition in a second language: The construct of task-induced involvement. *Applied Linguistics, 22*(1), 1–26.

Lightbown, P. M., & Spada, N. (2013). *How languages are learned* (4th ed.). Oxford University Press.

Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413–468). Academic Press.

Mayer, R. E. (2009). *Multimedia learning* (2nd ed.). Cambridge University Press.

Ministry of Education, Government of India. (2020). *National Education Policy 2020*. Government of India.

Nation, I. S. P. (2006). How large a vocabulary is needed for reading and listening? *Canadian Modern Language Review*, *63*(1), 59–82.

Nation, I. S. P. (2013). *Learning vocabulary in another language* (2nd ed.). Cambridge University Press.

NCERT. (2023). *National Curriculum Framework for School Education 2023*. National Council of Educational Research and Training.

Paivio, A. (1986). *Mental representations: A dual coding approach*. Oxford University Press.

Plass, J. L., Homer, B. D., & Kinzer, C. K. (2015). Foundations of game-based learning. *Educational Psychologist, 50*(4), 258–283.

Reinhardt, J. (2019). *Gameful second and foreign language teaching and learning: Theory, research, and practice*. Palgrave Macmillan.

GYANBODH
An International Multidisciplinary Peer Reviewed Journal
ISSN:3048-9792
Volume: 3
Issue: 1
January-February: 2026

Roediger, H. L., & Karpicke, J. D. (2006). Test-enhanced learning: Taking memory tests improves long-term retention. *Psychological Science, 17*(3), 249–255.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68–78.

Sailer, M., & Homner, L. (2020). The gamification of learning: A meta-analysis. *Educational Psychology Review, 32*(1), 77–112.

Schmidt, R. W. (1990). The role of consciousness in second language learning. *Applied Linguistics*, *11*(2), 129–158.

Schmitt, N. (2008). Review article: Instructed second language vocabulary learning. *Language Teaching Research, 12*(3), 329–363.

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235–253). Newbury House.

Swain, M., & Lapkin, S. (1998). Interaction and second language learning: Two adolescent French immersion students working together. *The Modern Language Journal, 82*(3), 320–337.

Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science, 12*(2), 257–285.

Uberman, A. (1998). The use of games for vocabulary presentation and revision. *Forum, 36*(1), 20–27.

Vygotsky, L. S. (1967). Play and its role in the mental development of the child. *Soviet Psychology, 5*(3), 6–18.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Webb, S. (2007). The effects of repetition on vocabulary knowledge. *Applied Linguistics, 28*(1), 46–65.

Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry, 17*(2), 89–100.

GYANBODH
An International Multidisciplinary Peer Reviewed Journal
ISSN:3048-9792
Volume: 3
Issue: 1
January-February: 2026

Wouters, P., van Nimwegen, C., van Oostendorp, H., & van der Spek, E. D. (2013). A meta-analysis of the cognitive and motivational effects of serious games. *Journal of Educational Psychology*, *105*(2), 249–265.

Wright, A., Betteridge, D., & Buckby, M. (2006). *Games for language learning* (3rd ed.). Cambridge University Press.

Yip, F. W. M., & Kwan, A. C. M. (2006). Online vocabulary games as a tool for teaching and learning English vocabulary. *Educational Media International*, *43*(3), 233–249.