

INPLASY

Effects of Explicit EFL Reading Comprehension Strategy Interventions on Reading Comprehension and Self-Efficacy among University Students

INPLASY202690126

doi: 10.37766/inplasy2026.9.0126

Received: 29 September 2026

Published: 30 September 2026

Tamarín-Tamarín, N; Díaz-Larenas, C; Cuevas-Aburto, J.

Corresponding author:

Nicolás Tamarín-Tamarín

nicotamarin2026@udec.cl

Author Affiliation:

Universidad del Bio-Bio, Chillán.

ADMINISTRATIVE INFORMATION**Support** - No external funding is declared. The study is conducted using the research team's own resources within the scope of their institutional academic duties.**Review Stage at time of this submission** - The review has not yet started.**Conflicts of interest** - None declared.**INPLASY registration number:** INPLASY202690126**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 30 September 2026 and was last updated on 30 September 2026.**INTRODUCTION**

Review question / Objective This review will synthesise evidence on the effects of explicit reading-comprehension strategy interventions delivered in English as a foreign language or a comparable second-language context to university students. The first objective is to estimate effects on English reading comprehension. The second is to estimate effects on reading-related or academic self-efficacy. The third is to examine whether effects vary by intervention content, disciplinary setting, baseline English proficiency, intervention duration and intensity, study design, and outcome instrument. Reading comprehension and self-efficacy will be treated as distinct primary outcome domains; a study may be eligible when it reports at least one of them.

Rationale Academic reading in English is central to participation in higher education because

students frequently encounter scientific literature, disciplinary texts, and academic-literacy practices mediated through English. In EFL contexts, difficulties in comprehension reflect more than general language proficiency. They also involve the ability to select, apply, monitor, and regulate cognitive and metacognitive strategies, to manage academic vocabulary, and to recognise cohesion and discourse structure (Grabe, 2020; Koda, 2005; Nation, 2019; RAND Reading Study Group, 2002). Self-efficacy may influence whether students attempt demanding texts, persist when comprehension breaks down, and use strategies deliberately. However, the available intervention literature varies in the strategies taught, intensity of instruction, disciplinary setting, design, comparison group, and outcome measures. A systematic review is therefore needed to distinguish findings related to reading comprehension from those related to reading self-efficacy, identify which intervention features have been evaluated, and provide a structured

qualitative synthesis of the available evidence across intervention types, contexts, and outcomes (Bandura, 1997; Schunk and DiBenedetto, 2020). The review is also needed because the initial search conducted for this project was methodologically restrictive: it required self-efficacy as a mandatory concept even though the eligibility criteria permit studies reporting reading comprehension without self-efficacy. Validation against known and boundary studies showed that this structure could miss relevant intervention evidence. The search will therefore be corrected, peer reviewed, tested by source, and documented before the corpus is frozen.

Condition being studied The condition of interest is difficulty in comprehending academic or educational texts in English among university students learning English as a foreign language or in a comparable L2 context. The review focuses on teachable reading processes rather than a clinical disorder. Eligible interventions must explicitly teach or train one or more strategies intended to support comprehension, including cognitive strategies, metacognitive monitoring and regulation, strategic vocabulary work, use of textual cohesion or discourse structure, inferencing, summarising, questioning, visualisation, or integrated multicomponent approaches. Mere exposure to reading, descriptive measurement of strategy use, or correlational associations without an instructional intervention are outside the review question.

METHODS

Search strategy Searches will combine three mandatory concept blocks with AND: (1) reading comprehension and reading strategies; (2) English as a foreign language or comparable L2 reading; and (3) university or higher education. Intervention terms will be used to improve precision where the source and syntax allow. Self-efficacy terms will not be a mandatory retrieval block because reading comprehension alone is an eligible primary outcome. Within each block, controlled vocabulary where available and English- and Spanish-language free-text synonyms, spelling variants, truncation, and proximity operators will be combined with OR. Each strategy will be translated to the database-specific platform, fields, and syntax rather than pasted unchanged across sources.

Before definitive complementary searches, Nicolás Tamarín and Jorge Cuevas will review the operational criteria and database adaptations. The master strategy and its translations will then undergo independent PRESS review. Each

database strategy will be tested against a prespecified set of known eligible studies and boundary cases. Failure to retrieve an indexed validation study will trigger documented revision and retesting; retrieval will not determine eligibility. Full strategies, dates, platforms, fields, limits, yields, validation results, and amendments will be retained and reported in accordance with PRISMA-S.

Initial searches and current evidence record

Initial searches were conducted on 29 August 2026. Six preserved exports contain 170 raw bibliographic records before deduplication: Scopus 35, Web of Science 31, ERIC 49, APA PsycArticles 4, EBSCO multibase 10, and LLBA 41. An expanded EBSCO export dated 22 September contains 15 records, reproducing the earlier 10 and adding five titles. The protocol had stated larger or different counts for EBSCO and LLBA, and a claimed set of 200 Google Scholar records has not been located as a verifiable export. These discrepancies remain under reconciliation. The verified files must not yet be represented as a closed corpus or as PRISMA study counts.

The complementary search will be a new, dated execution based on corrected strategies. It will be completed before deduplication and formal screening. Original exports will remain unchanged, and each correction or new run will be preserved separately with its search string, platform, date, filters, yield, and exported file. Google Scholar will be used as a supplementary source through simple documented queries and a prespecified screening limit agreed before execution, acknowledging its reproducibility constraints.

Participant or population Eligible participants are undergraduate students enrolled in universities, colleges, or comparable higher-education institutions who learn English as a foreign language or undertake academic reading in a comparable L2 English context. Mixed samples will be included only when data for undergraduate higher-education students can be extracted separately.

Intervention Eligible interventions must deliberately teach, model, scaffold, practise, or provide feedback on English reading-comprehension strategies. Examples include cognitive strategies such as summarising, inferencing, questioning, prediction, and identifying main ideas; metacognitive strategies such as planning, monitoring, and evaluating comprehension; strategic academic-vocabulary instruction; use of cohesion and text structure; and integrated or technology-supported programmes in which strategy instruction is explicit. Delivery may be face to face, online, or blended and may

occur within EFL, EAP, ESP, or disciplinary courses. Reading practice without identifiable strategic instruction is not sufficient.

Comparator Eligible comparators within the included primary studies are usual teaching, no intervention, a waiting-list condition, an alternative educational intervention, or a pre-intervention baseline in uncontrolled pretest-posttest studies. In this systematic review, the comparator is the reference condition used by each primary study; the review team will not assign participants or deliver an intervention. Controlled studies and uncontrolled pretest-posttest studies will be synthesised narratively in separate design strata because they support different levels of causal inference.

Study designs to be included Eligible primary studies include randomised controlled trials, cluster-randomised trials, non-randomised controlled and quasi-experimental studies, and pretest-posttest intervention studies with or without a comparison group. Mixed-methods studies are eligible when the intervention and relevant quantitative outcomes can be extracted. Purely qualitative studies, correlational or descriptive studies without an intervention, reviews, theoretical papers, opinions, protocols without results, conference abstracts without sufficient methods and data, and case reports will be excluded.

Eligibility criteria Studies must involve a higher-education population; an EFL or comparable L2 English-reading context; an explicit instructional intervention targeting reading-comprehension strategies; and at least one eligible primary outcome, English reading comprehension or reading-related or academic self-efficacy. Secondary outcomes alone will not establish eligibility. Publications from 2010 through the final 2026 search date will be eligible. Earlier seminal studies may be used to explain the field but will enter the evidence corpus only through a dated, justified protocol amendment. English- and Spanish-language reports will be included. Articles, theses, dissertations, proceedings papers, and book chapters are eligible when they provide sufficient empirical data and methodological detail.

Information sources The definitive information sources will include Scopus, Web of Science Core Collection, ERIC, APA PsycINFO or the available APA database interface, Education Research Complete and related EBSCO education collections available through the institution, Linguistics and Language Behavior Abstracts via

ProQuest, and ProQuest Dissertations and Theses where access permits. Google Scholar will be searched as a supplementary source. Reference lists of included studies and relevant reviews will be examined, and forward citation searching will be documented for included reports. Platform availability, database coverage, and any substitutions will be recorded explicitly.

Main outcome(s) Primary outcome 1 is English reading comprehension measured using standardised tests, validated instruments, course-based comprehension assessments, or clearly described researcher-developed measures. Outcomes may include global comprehension, literal and inferential comprehension, main-idea identification, integration across text, or performance on academic-reading tasks. Measures with materially different constructs will not be combined without justification. Primary outcome 2 is reading-related or academic self-efficacy linked to reading in English, measured with a validated scale or a sufficiently described study-specific instrument. General self-confidence, motivation, attitudes, or anxiety without a reading-related self-efficacy construct will not be treated as this outcome. Reading comprehension and self-efficacy will be synthesised separately even when both are reported in the same study.

Additional outcome(s) Secondary outcomes may include strategy use, metacognition, vocabulary, textual knowledge, persistence, motivation, anxiety, achievement, transfer, and adverse or unintended effects. They will be mapped descriptively by construct and time.

Data management Original search files will be preserved in their native formats. Records from reconciled initial and complementary searches will be imported into Zotero for source management and then into Rayyan for deduplication and screening. Automated duplicate detection will be followed by manual verification of uncertain matches. Multiple reports from the same study will be linked under a common StudyID and retained as separate ReportIDs to avoid double counting. Before formal screening, Nicolás Tamarín and Jorge Cuevas will independently classify eight training cases and a static calibration sample comprising approximately 10% of the corpus, with a minimum operational target of 30 records unless the corpus is smaller. Disagreements will be discussed to clarify decision rules without erasing the original decisions. Title and abstract screening and full-text assessment will then be conducted independently and in duplicate using blind review. Persistent disagreements will be referred to a third

reviewer agreed before formal screening. Reasons for full-text exclusion will be recorded using a single primary reason according to a prespecified hierarchy.

A standardised extraction form will be piloted on three to five heterogeneous studies or on all studies if fewer are eligible. It will capture study and report identifiers, country, institution, participant characteristics, baseline English level, design, intervention components and intensity, comparator, outcome instruments, measurement times, numerical results, funding, conflicts of interest, and information required for risk-of-bias assessment. Critical outcomes and interpretive judgements will be extracted independently by two reviewers; any streamlined procedure for non-critical descriptive fields will be documented before use.

Quality assessment / Risk of bias analysis Two reviewers will independently assess risk of bias at the result level where the tool requires it. RoB 2 will be used for randomised trials. ROBINS-I will be used for non-randomised studies with an eligible concurrent comparison. Uncontrolled before-after studies will be appraised with a design-appropriate instrument fixed before formal appraisal; the NHLBI Quality Assessment Tool for Before-After Studies with No Control Group is the current candidate and must be confirmed in the final protocol. Disagreements will be resolved through discussion or third-reviewer adjudication. Tool-specific domain judgements and supporting quotations or page references will be retained; scores will not replace domain-level judgements when the tool does not recommend scoring. Certainty in the evidence for reading comprehension and self-efficacy will be considered separately, taking into account risk of bias, consistency, directness, precision, and potential publication bias. Controlled studies and uncontrolled before-after studies will be interpreted separately because they provide different levels of causal inference.

Strategy of data synthesis The review will first produce a structured narrative synthesis organised by outcome domain, intervention strategy, comparator, design, context, duration, and instrument. Study characteristics and results will be tabulated without treating statistical significance as a measure of effect magnitude. Controlled and uncontrolled designs will remain separate. Where studies are sufficiently comparable in population, intervention, comparator, outcome construct, design, measurement time, and available numerical data, random-effects meta-analysis will be considered.

For continuous outcomes measured on different scales, standardised mean differences using Hedges' g will be calculated with 95% confidence intervals. Mean differences may be used when a common instrument and interpretable units are shared. Post-intervention and change-score effects will not be combined without an explicit conversion and sensitivity assessment. Clustered and multi-arm designs will be adjusted to avoid unit-of-analysis errors. Between-study heterogeneity will be described using tau-squared and I-squared together with clinical and methodological interpretation. Prediction intervals will be reported when sufficiently estimable. Small-study effects or publication bias will be examined only when the number and structure of studies make the method interpretable.

Subgroup analysis Prespecified subgroup or structured heterogeneity analyses will examine strategy type, disciplinary area, baseline English proficiency, intervention duration and intensity, delivery mode, controlled versus uncontrolled design, and outcome instrument. Formal subgroup tests will be used only when the number and comparability of studies support them.

Sensitivity analysis Differences in statistical significance between separate subgroups will not be treated as evidence of interaction. Sensitivity analyses may exclude studies at high risk of bias, uncontrolled before-after studies, studies using poorly described instruments, and influential outliers where justified.

Language restriction Reports in English and Spanish will be eligible. Studies in other languages will be excluded when the team cannot assess them rigorously. Search terms may include Spanish-language equivalents.

Country(ies) involved Reports in English and Spanish will be eligible. Studies in other languages will be excluded when the team cannot assess them rigorously. Search terms may include Spanish-language equivalents, and language.

Other relevant information This review is prospectively registered in INPLASY before the initiation of any review-related activities that could influence study selection or evidence synthesis. At the time of registration, work was limited to protocol drafting and methodological planning. No formal literature searches, eligibility screening, data extraction, quality appraisal, or synthesis procedures had been conducted. A version-controlled protocol will be maintained in the Open Science Framework (OSF) to provide a transparent

documentary record of the review process and any subsequent protocol amendments.

Keywords Reading comprehension; reading strategies; EFL; academic reading; self-efficacy; university students; higher education; educational intervention.

Dissemination plans The completed review will be prepared for submission to a peer-reviewed journal in education, applied linguistics, language teaching, or evidence synthesis. Findings may also be incorporated into doctoral work and presented at academic conferences or seminars. Search strategies, decision rules, extraction forms, risk-of-bias records, and analysis materials will be deposited in an appropriate open repository, subject to copyright and data-sharing constraints. Any publication or preprint will be linked to the public protocol record when available.

Contributions of each author

Author 1 - Nicolás Tamarín-Tamarín - Corresponding author; review coordination; INPLASY registration; protocol development; manuscript organization, team leader, management of authorship.

Email: nicotamrin2026@udec.cl

Author 2 - Claudio Díaz-Larenas - Senior researcher, methodological supervision; third-reviewer adjudication of unresolved disagreements; guidance on review design; critical manuscript revision; and approval of the final version.

Email: claudiodiaz@udec.cl

Author 3 - Jorge Cuevas-Aburto - Independent title/abstract and full-text screening; study selection; data extraction and verification; risk-of-bias assessment; participation in discrepancy resolution; and contribution to manuscript development. adviser on PRISMA-S, PRISMA-P, MECIR, and Cochrane Handbook compliance; led the PRESS review of the master search strategy and the correction of database-specific search syntax; contributed to revision.

Email: jorgecuevas@santotomas.cl