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A step toward effective language learning: an insight into the impacts of feedback-supported tasks and peer-work activities on learners' engagement, self-esteem, and language growth

Ali Ramadan Elbaoui Shaddad^{1*}  and Biruk Jember²

*Correspondence:
arb00@fayoum.edu.eg

¹ College of Education, Prince
Sattam Bin Abdulaziz University,
Al-Kharj, Saudi Arabia

² Department of English,
University of Rajshahi, Rajshahi,
Bangladesh

Abstract

This study explored the impact of feedback-supported tasks and peer-work activities on language learners' engagement, self-esteem, and language growth in a university setting in Saudi Arabia. Employing a sequential explanatory mixed-methods design, 45 participants in the experimental group and 43 in the control group underwent 15 sessions of treatment, while traditional instruction was provided to the control group. Pre- and posttests and semi-structured interviews were employed for data collection. Results indicated a significant increase in engagement and self-esteem among experimental participants compared to the control group. Language growth, assessed through a teacher-made test, also demonstrated a significant improvement in the experimental group. The findings align with Vygotsky's Socio-Cultural Theory and Long's Interaction Hypothesis, emphasizing the pivotal role of collaboration in language learning. However, limitations include the specific context and the absence of a delayed posttest. Implications for educators, syllabus designers, curriculum developers, and policymakers underscore the importance of integrating collaborative and feedback-oriented strategies into language instruction for enhanced learning outcomes. This research contributes valuable insights for shaping effective language education practices, while suggestions for future research encourage a more comprehensive exploration of long-term effects and contextual variations.

Keywords: Feedback, Peer-work, Engagement, Self-esteem, Language growth

Introduction

The theme of 'enhancing student learning' has long been a focal point in education, with researchers and educators showing persistent interest in learner-centered approaches to boost individual learning effectiveness (Chen et al., 2020a, 2020b). Collaborative learning, a method wherein learners or collaborators actively share valuable information, pool collective strengths, and work together to address common challenges, has gained popularity (Sun & Yuan, 2018). It has proven effective in aiding low achievers in tackling

difficult tasks with support from high achievers (Calderon et al., 2016; Ibanez et al., 2011; Tsai, 2019; Vygotsky, 1980). Furthermore, collaborative learning facilitates mutual learning among collaborators, allowing them to address weaknesses and learn from one another (Wang, 2015). Beyond individual learning, collaborative learning offers additional benefits such as improved communicative competence, critical-thinking skills, and problem-solving abilities (Lin et al., 2016; Liu et al., 2018). However, Previous studies on traditional collaborative learning predominantly concentrated on evaluating the efficacy of collaboration, exploring the impacts of group diversity, individual prerequisites, characteristics of collaborative tasks, and interactions among collaborators (Sun & Yuan, 2018).

Feedback refers to information provided to students concerning their learning and performance within educational settings (Narciss, 2008; Shadiev & Feng, 2023). Undoubtedly, feedback stands out as one of the crucial elements influencing success in educational contexts (Cohen, 1985; Ebadijalal & Yousofi, 2023; Hattie & Gan, 2011; Matcha et al., 2019). In fact, requiring students to engage in the learning process without adequate support and transparent criteria does not result in successful learning outcomes (Latifi et al., 2021).

Guidance for group regulation based on feedback is an instructional approach employed in learning settings. It involves establishing objectives, specifying rules and conditions for group tasks, assessing advancements toward learning goals, recognizing areas for improvement in performance, and comparing actual performance against expected standards. As per Hattie and Timperley (2007), self-regulation through feedback aids students in cultivating self-assessment skills and confidence, thereby enhancing their engagement in learning tasks.

In cooperative learning environments, feedback guidance serves as a valuable tool for pinpointing learning gaps and fostering students' self-awareness regarding their learning processes. It encourages reflection on behavior and facilitates self-assessment. According to Bardach et al. (2021), feedback in online settings positively influences self-efficacy, learning engagement, generates positive perceptions of future teaching, and boosts motivation by tailoring instruction to individual needs and offering support and guidance within the learning environment.

Peer work activities in language learning involve learners collaborating and interacting with their peers to enhance their language skills. This collaborative approach can take various forms, such as pair or group discussions, joint projects, language exchange, or cooperative learning tasks (Homayouni, 2022). The primary goal is to provide learners with opportunities to engage in meaningful language use within a social context, allowing them to practice and reinforce their language skills in authentic and communicative situations (Meletiadou, 2022).

Participating in peer work activities offers several benefits for language learners. Firstly, it promotes active engagement, encouraging students to communicate and express themselves in the target language (Vo, 2023). Through interaction with peers, learners gain exposure to diverse language styles, accents, and vocabulary. Peer collaboration also fosters a supportive learning environment, where individuals can learn from each other's strengths and provide constructive feedback (Philp et al., 2013). Additionally, peer work activities enhance critical thinking and problem-solving skills as learners

navigate language challenges together (Bigelow & King, 2016). Overall, incorporating peer work activities into language learning programs can contribute to a more dynamic and effective language acquisition process.

Engagement is the manifestation of learning motivation, indicating that learners invest energy and effort in the learning process to achieve specific educational goals (Dera-khshan & Fathi, 2023; Reschly & Christenson, 2012; Schunk & Mullen, 2012). Student engagement is operationalized through three interconnected dimensions: behavioral, emotional, and cognitive engagement. Behavioral engagement involves active participation in learning activities, such as asking questions and completing assignments (Fredricks et al., 2004). Emotional engagement relates to students' feelings or emotions about teachers, peers, or the learning process, encompassing reactions like interest, boredom, happiness, sadness, and anxiety during a course (Skinner & Belmont, 1993). The fundamental concept of cognitive engagement revolves around the depth of investment in learning, emphasizing a psychological commitment to mastering knowledge and skills rather than merely completing tasks (Fredricks et al., 2004). Thus, cognitive engagement can be construed as students' comprehension of the subject content being taught (Rotgans & Schmidt, 2011).

For Rosenberg (1989), self-esteem involves evaluating one's self-concept through considerations of suitability, social comparisons, and self-attributions. Essentially, it is a subjective appraisal of one's thoughts and feelings (Rosenberg, 1965). This implies that self-esteem functions as a cognitive framework through which external stimuli can have either positive or negative effects on one's mood and behavior (van Tuijl et al., 2018). Consequently, self-esteem plays a crucial role in overall healthy development and significantly influences key life outcomes, including enhanced social interactions, physical health, academic achievement, and effective coping mechanisms (Nguyen et al., 2019).

Language growth in academic settings is a multifaceted process characterized by the acquisition and refinement of linguistic skills within an educational context. In academic environments, individuals not only learn the fundamentals of a language but also engage in advanced forms of language use required for scholarly pursuits (Rojas & Iglesias, 2013). This growth encompasses various dimensions, including the development of academic vocabulary, specialized discourse structures, and proficiency in written and spoken communication tailored to academic expectations (Kargar Behbahani & Razmjoo, 2023; Rowe & Weisleder, 2020). Exposure to complex texts, discussions, and academic tasks contributes to expanding language competence. Additionally, academic settings often emphasize critical thinking and analytical skills, further enhancing language growth as students articulate their thoughts in a precise and nuanced manner (Gleason & Ratner, 2022). The interaction with diverse subjects and academic disciplines provides learners with a rich linguistic environment, fostering both depth and breadth in their language abilities within the specific domains of academia (Gleason & Ratner, 2022).

In the landscape of language education, the pursuit of effective strategies to enrich student learning experiences is of paramount importance. Despite the individual merits established for collaborative learning, feedback-supported tasks, and peer work activities in fostering language acquisition, engagement, and self-esteem, a notable gap exists in comprehensively examining their integrated impact. This study addresses this void by investigating the synergies among collaborative learning, feedback-supported tasks, and

peer work activities concerning learners' engagement, self-esteem, and language growth. The intricacies arising from the intersection of these elements within language learning environments remain underexplored. Hence, there is a compelling need for a thorough exploration of how the combined implementation of collaborative learning, targeted feedback, and peer collaboration contributes to a holistic and effective language learning experience. This research aims to unravel the complexities of this multifaceted approach, providing insights that can inform educational practices and contribute to the ongoing discourse on optimizing language learning methodologies. With a focus on the efficacy of feedback-supported tasks and peer-work activities on engagement, self-esteem, and language growth, this study strives to offer valuable contributions to the field of language education.

In the realm of language education, the quest for effective strategies to enhance student learning experiences remains a paramount concern. While collaborative learning, feedback-supported tasks, and peer work activities have individually demonstrated their positive impacts on language acquisition, engagement, and self-esteem, there exists a gap in the literature regarding the integrated examination of these components. This study aims to address this gap by investigating the synergistic effects of collaborative learning, feedback-supported tasks, and peer work activities on learners' engagement, self-esteem, and language growth. The specific challenges and opportunities arising from the intersection of these elements in language learning environments are not yet fully understood. Consequently, there is a need for a comprehensive exploration of how the combined implementation of collaborative learning, targeted feedback, and peer collaboration can contribute to a holistic and effective language learning experience. This research seeks to unravel the intricacies of this multifaceted approach, providing insights that can inform educational practices and contribute to the ongoing discourse on optimizing language learning methodologies.

This study has three main purposes. Firstly, we are after the efficacy of feedback-supported tasks and peer-work activities on learners' engagement. Secondly, we examine whether feedback-supported tasks and peer-work activities could boost learners' self-esteem. Lastly, the efficacy of feedback-supported tasks and peer-work activities in language growth is investigated. To this end, the following research questions are raised:

- (1) How do feedback-supported tasks and peer-work activities affect learners' engagement?
- (2) How do feedback-supported tasks and peer-work activities influence learners' self-esteem?
- (3) How do feedback-supported tasks and peer-work activities facilitate language growth?

This study holds significant importance in the realm of language education as it seeks to unravel the combined impact of feedback-supported tasks and peer-work activities on learners' engagement, self-esteem, and language growth. By addressing this gap in current research, the study provides valuable insights that can inform educators, curriculum developers, and policymakers. Understanding how collaborative approaches influence students' active involvement, self-perception, and linguistic development can lead

to more effective teaching strategies and curriculum design. The study's findings have the potential to contribute to the improvement of language learning programs, emphasizing tailored feedback and collaborative tasks to foster increased engagement, positive self-esteem, and robust language development. Ultimately, the study can contribute to the enhancement of evidence-based practices in language education, offering practical guidance for creating more impactful and inclusive learning environments.

This study holds significant implications for the field of language education, providing a nuanced understanding of the combined impact of feedback-supported tasks and peer-work activities on various dimensions of student learning. By addressing a notable gap in current research, this study contributes valuable insights that can directly benefit educators, curriculum developers, and policymakers. The findings shed light on how collaborative learning approaches can positively influence students' engagement levels, self-perception, and linguistic development. These insights, in turn, have the potential to inform the refinement of teaching strategies and the design of curricula, promoting more effective and student-centered language instruction. The study's emphasis on tailored feedback and collaborative tasks underscores their role in fostering increased engagement, positive self-esteem, and robust language development. Consequently, the study's outcomes can play a crucial role in advancing evidence-based practices in language education, offering practical guidance that facilitates the creation of impactful and inclusive learning environments for students across diverse settings.

Literature review

Theoretical background

Feedback

Feedback assumes a central role in every learning process, gaining particular significance in independent learning environments (Shen & Chong, 2023; White, 2003). In this context, referring to learning setups encompassing self-access and distance learning, learners receive feedback from tutors on assignments and have access to tutorials, typically online. Additionally, feedback is gleaned from materials, including model answers or answer keys. Hurd (2006) underscored the paramount importance of providing feedback, a sentiment echoed by distance learners in her study. However, Nicol (2010) emphasizes that, while the quality of feedback comments is crucial, the students' interaction with these comments holds equal, if not greater, importance.

Corrective feedback's efficacy in language acquisition has been a longstanding topic of discussion in the literature, particularly concerning the learnability of grammar through negative evidence alongside positive evidence (Gold, 1967). Some scholars have raised doubts about its availability or effectiveness (Braine, 1971; Marcus, 1993), while contrasting evidence has been presented by others. This is particularly evident when corrective feedback takes the indirect form of recasting or reformulating the child's erroneous utterance more conventionally (Hiller & Fernandez, 2016; Saxton, 2005; Strapp, 1999).

Communicative Feedback (CF) distinguishes itself from corrective feedback by signaling communicative success (positive) or failure (negative). In contrast to corrective feedback, CF, akin to adult communicative coordination, emphasizes comprehending the child's communicative intent over correcting the form, meaning, or use of their language. While correction or reformulation might take place, it follows a successful

understanding of the child's intended meaning by the interlocutor. CF's main purpose is to indicate whether the listener, particularly the more knowledgeable interlocutor, grasped the communicative intent of the speaker (i.e., child).

CF, or "closures" (Clark, 1996; Clark & Schaefer, 1989) and "commentaries" (Pickering & Garrod, 2021), refers to signals sent by the listener to denote communicative success or failure. These signals hinge on the listener's perception of whether they understood the intended meaning behind the speaker's linguistic utterance. In both instances (i.e., success and failure), CF can manifest as either implicit or explicit. A listener may either verbally state their comprehension or non-verbally demonstrate that they understand (Clark & Schaefer, 1989).

Clear indications of explicit positive understanding signals are acknowledgements, termed "positive commentaries" in Pickering and Garrod (2021). These signals encompass brief, non-intrusive backchannel responses (referred to as "assertions of understanding" in H. H. Clark (1996)), such as "uh-huh," "yeah," head nods, and smiles. Additionally, paraphrases or verbatim repetitions (classified as "exemplifications of understanding" in Clark (1996)) serve to affirm that the listener comprehends the speaker's utterance.

Conversely, in instances of communicative failure, the listener may issue a clarification request ("negative commentaries" in Pickering and Garrod (2021)), employing expressions like "Huh?," "Which one?," or displaying a confused facial expression. These represent explicit indications of non-understanding.

Implicit signals of understanding are evident when the listener responds in a way that aligns with the speaker's utterance, as judged from the speaker's standpoint (e.g., responding "I'm at home." to the question "Where are you?"). Conversely, if the listener offers a response unrelated to the speaker's intent (e.g., responding "I'm fine." to the question "Where are you?"), it implies an implicit signal of communication failure to the speaker. The speaker can detect this misunderstanding when the response lacks contingency from their viewpoint. This aligns with Clark's (1996) concept of displays of understanding, exemplified by how an answer reveals, in part, whether a question was understood correctly or incorrectly.

Peer-work

Peer-work activities in language learning draw theoretical support from various educational frameworks that emphasize the importance of social interaction, collaboration, and meaningful engagement in the learning process. Vygotsky's Socio-Cultural Theory, a cornerstone in educational psychology, posits that learning is a social activity and that cognitive development occurs through social interactions (Johnson, 2009). In the context of language acquisition, this theory underscores the significance of peer collaboration in constructing knowledge and language skills. The Zone of Proximal Development (ZPD) concept suggests that learners can achieve more with the support of peers who are slightly more proficient, fostering collaborative efforts that promote language growth (Brown, 2014).

Additionally, Social Constructivism, building upon Vygotsky's ideas, asserts that knowledge is actively constructed through social interactions and collaboration (Brown, 2014). In language learning, peer work aligns with this theory by creating opportunities

for learners to collectively construct meaning, share language resources, and negotiate understanding. Collaborative Language Learning (CLL) theories also emphasize the role of interaction in language acquisition, asserting that meaningful communication in a social context enhances language development (Richards & Rogers, 2014).

Furthermore, the Interaction Hypothesis, proposed by Michael Long, posits that language acquisition is facilitated through conversational interaction (Long, 1996). Peer-work activities, such as pair or group discussions, provide a platform for learners to engage in authentic conversations, exposing them to varied language styles, vocabulary, and communicative situations (Ellis, 2015). This aligns with the hypothesis's assertion that language development is optimized through meaningful communication and negotiation of meaning.

In summary, the theoretical underpinnings of peer-work in language learning, grounded in socio-cultural perspectives, constructivism, and interaction theories, highlight the pivotal role of social collaboration in fostering linguistic development. These theories collectively support the notion that peer interactions offer a rich and dynamic context for language learners to actively participate, share experiences, and collectively contribute to their language acquisition journey.

Engagement

Researchers have approached the understanding of learner engagement with varied perspectives, acknowledging its intricate nature involving different components. In their examination of student engagement in U.S. schools, Anderson et al. (2004) proposed a taxonomy comprising four types: (1) behavioral, involving aspects like attendance and participation in various activities; (2) Academic engagement comprises aspects like learning time and time-on-task; (3) Cognitive engagement centers on the application of learning strategies in academic tasks and self-regulated learning; and (4) Psychological engagement considers relationships with teachers and peers, along with a sense of belonging at school. According to Anderson et al. (2004), this taxonomy offers heuristic value for a more comprehensive understanding of students' performance and experiences in school. In their review of 44 studies, Fredricks et al. (2004) identified three major dimensions: behavioral, emotional, and cognitive. Behavioral engagement involves positive conduct, academic task involvement, time-on-task, and participation in activities. Emotional engagement includes the display of emotions, attitudes towards teachers, peers, and school, as well as a sense of belonging. Cognitive engagement focuses on personal investment in learning, use of learning strategies, and self-regulation. Dunleavy (2008), studying secondary school in Canada, categorized learner engagement into three dimensions: (1) Behavioral, involving participation in academic and non-academic activities and attendance; (2) Academic-cognitive, covering time-on-task, response to challenges in learning, homework completion, and effort in learning; and (3) Social-psychological, encompassing motivation, interest, a sense of belonging, and the need for autonomy.

In contrast to alternative models of learner engagement, Fredricks et al. (2004) three-dimensional engagement model offers a more suitable framework for analyzing language learning. This model, encompassing behavioral, emotional, and cognitive dimensions, effectively encompasses extensively researched aspects in language learning studies,

including motivation, affective orientations, cognitive traits, and learning strategies (Bailey, 1983; Dörnyei & Skehan, 2003; Garrett & Young, 2009; Griffiths, 2015; Oxford, 2003). This tripartite conceptualization of learner engagement has been employed in studies on corrective feedback in second language acquisition (SLA) (Ellis, 2010) and second language (L2) writing (Zhang, 2017; Zhang & Hyland, 2018), highlighting its significance in student uptake of feedback and writing enhancement. Within these studies, emotional engagement has been examined for affective responses, attitudinal reactions, and motivational changes, while cognitive engagement has been defined through the application of cognitive and metacognitive strategies.

Self-esteem

Self-esteem, a prominent psychological factor in education, is defined as the value an individual assigns to themselves as a unique person (Harter, 1999; Morin & Racy, 2021; Namaziandost et al., 2023; Rosenberg, 1965). Musitu et al. (1988) dismiss it as a value and evaluative characteristic influencing cognitive patterns and behaviors related to personal satisfaction. Categorized by levels, self-esteem can be classified as inflated, high, or low (Baumeister & Boden, 1998; Piff, 2014).

Individuals with high self-esteem often perceive themselves as superior and deliberately overestimate their skills, fostering self-acceptance and appreciation due to confidence in their abilities. Conversely, those with poor self-esteem lack belief in themselves and their task-completion capabilities, leading to underperformance and heightened stress. Rosenberg et al. (1995) further distinguish self-esteem into global and specific categories, with the former representing a general sense of worth across various domains and the latter being confined to a particular area of life or work.

Several related concepts, such as self-concept, self-efficacy, self-competence, self-worth, and self-confidence, are often used interchangeably with or as substitutes for self-esteem in current literature. Despite their apparent similarities, each concept has unique meanings and implications. Self-concept refers to an individual's overall perception of themselves and their capabilities (Jordan, 2020), while self-efficacy represents their confidence in effectively completing tasks (Bandura, 1997). Self-worth is a positive impression of oneself, while self-competence relates to beliefs in broad academic skills (Bogee, 1998).

Language growth

Language growth encompasses the multifaceted process of linguistic development within an educational context. In the realm of language acquisition, growth extends beyond the basic mastery of vocabulary and syntax to encompass the nuanced and advanced linguistic skills required for scholarly pursuits (Huttenlocher, 1998). This growth is dynamic and involves the acquisition of academic vocabulary, specialized discourse structures, and proficiency in both written and spoken communication tailored to the expectations of academic settings (Fazilatfar & Kargar Behbahani, 2018; Kargar Behbahani & Kooti, 2022). Exposure to complex texts, engaging in discussions, and undertaking academic tasks contribute to expanding language competence (Brooks & Kempe, 2012). Furthermore, the interaction with diverse subjects and academic disciplines provides learners with a rich linguistic environment, fostering both depth and

breadth in their language abilities within the specific domains of academia (Rowe & Weisleder, 2020). Thus, language growth as a dependent variable reflects not only the foundational aspects of language learning but also the development of sophisticated language skills necessary for academic success and effective communication within scholarly contexts.

In addition to its foundational and scholarly dimensions, language growth as a dependent variable also encapsulates the cognitive aspects of language development. This involves the refinement of critical thinking and analytical skills as learners articulate their thoughts with precision and nuance (Rojas & Iglesias, 2013). The academic emphasis on rigorous analysis within various disciplines contributes to the cognitive aspects of language growth, shaping students' abilities to express complex ideas and engage in intellectual discourse. Furthermore, language growth extends to the cultivation of a nuanced cultural and contextual understanding, enabling learners to navigate the diverse linguistic landscapes inherent in academic pursuits. Through exposure to a variety of cultural perspectives and the exploration of interdisciplinary topics, students not only enhance their language proficiency but also develop the cultural and contextual competencies necessary for effective communication within academic communities (Kennison, 2013). By acknowledging the cognitive and cultural dimensions of language growth, this study endeavors to provide a holistic understanding of how feedback-supported tasks and peer-work activities contribute to the comprehensive development of language skills crucial for success in academic environments.

Empirical background

The focus on student engagement with feedback has grown in higher education due to its positive correlation with learning outcomes. However, despite its recognized significance, there is limited research on pedagogical methods that enhance this engagement. Zhang and Hyland (2022) examined a classroom scenario with 33 students at a Chinese university, investigating how they interacted with a pedagogical approach integrating automated, peer, and teacher feedback on academic writing. Analyzing multiple drafts, feedback sources, and retrospective interviews, the study revealed that most students actively participated in this integrated approach, fostering behavioral, affective, and cognitive engagement and promoting thoughtful revisions.

Amid the global impact of the COVID-19 pandemic, online classes have gained significant attention. In language learning, the teacher–student relationship plays a crucial role, particularly in online settings where student engagement is vital. Al-Obaydi et al. (2023) explored the connection between structured feedback and three types of engagement—cognitive, behavioral, and emotional—in an online class. The study involved 114 EFL third-year college students, and the findings indicated positive and significant correlations between the use of structured feedback and all three types of engagement. The structured feedback, implemented at the conclusion of each lesson, enables students to articulate their knowledge, queries, and acquired insights. This highlights the importance of effective feedback strategies in enhancing engagement in online language learning environments.

Despite the proliferation of research on written corrective feedback (WCF), a significant gap exists in understanding how lower-proficiency (LP) students engage with

teacher WCF in specific contexts and the underlying reasons for their (dis)engagement. Zheng et al. (2023) addressed this gap by investigating the engagement of two Chinese LP students with teacher WCF in English writing. The study, utilizing the analysis of teacher WCF, students' essay drafts, immediate oral reports, and retrospective interviews, unveiled (1) distinct differences in their engagement, with one student displaying relatively extensive engagement, particularly in the affective aspect, while the other exhibited limited engagement marked by negative emotions and minimal cognitive engagement, and (2) these variations in engagement could be ascribed to individual factors such as student beliefs and goals, alongside the contextual factor of the teacher-student relationship.

In their exploration of learning through peer feedback, Wu and Schunn (2023) delved into the associations between different peer feedback activities (categorized as constructive vs. active) and learning, particularly in terms of transfer to new tasks. The study meticulously examined the characteristics of activities within provided feedback, received feedback, and revisions in response to feedback. Spanning five US high schools with 367 students in Advanced Placement classes, the research applied extensive coding and hierarchical model regression analyses to provided/received comments, revisions in one assignment, and observed writing improvements in a second assignment. Results consistently indicated that constructive activities, involving explanations and revisions after receiving or providing suggestions, were correlated with learning, whereas passive activities (receiving feedback without revisions) or active activities (implementing specific suggestions) showed no such correlation. Moreover, the study found that the impact of received feedback on learning was mediated by the number of revisions.

In their synthesis of participatory action research, Stepanyan et al. (2009) explored student attitudes toward a formative and reciprocal peer assessment exercise in an undergraduate computing course. Analyzing a follow-up questionnaire from 36 students, the study revealed key findings: [i] an expectation of more explanatory and supportive tutor intervention; [ii] a preference for student anonymity; [iii] student interest in accessing peer work; and [iv] the importance of factors like mark allocation and in-class activities in promoting student involvement.

In a comprehensive exploration of peer feedback, Zhang et al. (2023) addressed a gap in the literature by investigating how EFL undergraduates engaged not only with receiving feedback in a single assignment but also with giving feedback across an extended timeline. Utilizing a mixed-method design involving transcripts, reflection journals, interviews, stimulated recalls, and self-efficacy surveys, the study tracked the affective, behavioral, and cognitive engagement of three EFL undergraduates throughout ten iterative feedback practices in an EAP writing course. The results revealed both initial differences in engagement and substantial gains across all three learners, highlighting the potential for enhanced engagement despite challenges in proficiency and self-efficacy.

In their study, Vossen et al. (2017) explored the impact of confirming versus disconfirming feedback on individuals' self-disclosure and self-esteem, examining the role of reciprocal feedback and differences between online and face-to-face communication. Through a two-by-two experimental design, considering communication mode (online vs. face-to-face) and feedback valence (confirming vs. disconfirming), the research revealed a significant indirect effect of feedback on self-esteem, mediated by

the recipient's reciprocal feedback. Notably, this indirect effect varied between online and offline settings. In online communication, participants were more likely to reciprocate negative feedback, enhancing their self-esteem, whereas this pattern was not as prominent in face-to-face communication. Despite the tendency for negative responses in online conversations, the overall process proved to boost, rather than hinder, participants' self-esteem.

In the digital age, the influence of online self-presentation on life satisfaction is a subject of interest. Tian et al. (2023) explored the connections between different online self-presentation strategies and life satisfaction in 460 Chinese college students. Using questionnaires, they established a moderated mediation model, with positive online feedback as a mediator and self-esteem as a moderator. The results revealed: (1) Positive self-presentation was negatively associated with life satisfaction, while honest self-presentation showed a positive link. (2) Positive online feedback played a significant mediating role. (3) The mediation process was moderated by self-esteem. Positive self-presentation had a negative link to positive online feedback only for high self-esteem students, negatively affecting life satisfaction for those with low self-esteem. Conversely, honest self-presentation was positively associated with positive online feedback regardless of self-esteem level, and positively linked to life satisfaction only for those with low self-esteem. The findings suggested that honest online self-presentation, rather than merely positive, contributes to college students' life satisfaction, especially for those with low self-esteem.

Jelić (2022) explored the impact of self-esteem level and stability on recall of self-referent versus other-referent feedback in adolescents. In a between-subjects experiment, 450 high school graduates and freshmen were randomly assigned to self-referent ($n = 230$) or other-referent tasks ($n = 220$). Self-esteem was measured using the RSE scale. Participants received bogus feedback related to positive or negative behaviors, and memory was assessed through surprise free recall. Results confirmed a self-reference effect, indicating preferential processing of self-related information regardless of feedback valence or content-related domain. Additionally, participants in the self-referent condition exhibited better recall of positive than negative personally relevant feedback, irrespective of self-esteem stability or level. While there was a significant interaction between self-esteem level and stability, its effect size was relatively small.

Adene et al. (2021) studied the impact of a peer collaborative learning strategy on the self-esteem of 125 middle basic five pupils identified with Oppositional Defiant Disorder (ODD). Using pre-test and post-test assessments, researchers employed questionnaires such as the Pupils' Behaviour Problems Observation Checklist (PBPOC), Pupils' Behaviour Problems Measuring Scale (PBPMS), and Pupils' Self-Esteem Measuring Scale (PSEMS). The study revealed a significant positive effect of the peer collaborative learning strategy on the self-esteem of pupils with behavior problems, with gender showing no significant influence. The findings recommend the adoption of well-structured peer collaborative learning strategies in schools practicing inclusive education, especially for pupils with behavior problems like ODD.

Sultan and Hussain (2012) conducted a study comparing the effectiveness of individual and collaborative learning processes in a Psychology class. Using an experimental approach with two conditions (individual and collaborative learning), 80 undergraduate

students were studied. Before the semester, students were tested for self-esteem and social skills. At the end of the semester, collaborative learning showed equal levels of social skills and self-esteem compared to individual learning. However, students in collaborative learning demonstrated significant improvements in social skills and self-esteem from the beginning to the end of the course. The findings suggest that collaborative learning enhances essential skills for learning, and the researchers recommend instructors to encourage shared learning for improved engagement, responsibility, and social acceptance.

Video Interaction Guidance (VIG) is a recognized evidence-based intervention used to improve pupil responses in group work programs. Musset and Topping (2017) conducted a study involving fifteen primary-aged classes with regular group work over a year. In a mixed-methods repeated measures design, nine experimental classes received three cycles of VIG intervention, while six control classes did not. Pre-to-post-test measures, including self-esteem, peer assessment, and a pupil questionnaire, revealed that VIG reinforcement of desirable group work behaviors enhanced pupils' self-esteem, particularly in younger children. Experimental group pupils' retrospective ratings of group work and peer assessment of communicative behaviors significantly increased. Film observations indicated a trend toward more open questions. Overall, the VIG intervention positively impacted pupils' self-esteem and communication skills.

Children commence their language and communication journey in social interactions at a young age, enabling them to explore language development through experimentation and feedback from more knowledgeable interlocutors. Despite extensive research on children's learning from linguistic input and social cues, limited attention has been given to Communicative Feedback—a process arising from attempts by children and caregivers to achieve mutual understanding. Nikolaus and Fourtassi (2023) synthesized theories of communicative coordination, proposing a mechanism for language acquisition. They contended that children enhance their linguistic knowledge through explicit or implicit signals of communication success or failure during conversation.

While extensive research exists on the implementation of automated writing evaluation (AWE) systems, the specific impact of automated written corrective feedback (AWCF) on errors of varying severity levels and performance across distinct writing tasks remains unclear. Addressing this gap, Barrot (2023) conducted a study to assess how Grammarly's AWCF influences the overall writing accuracy of college students, particularly concerning errors of different severity levels. Employing a quasi-experimental design, the results highlighted the potential of AWCF to enhance students' writing accuracy. This improvement was primarily attributed to AWCF's capacity to facilitate error awareness, offer adaptive metalinguistic explanations, and foster self-directed learning. However, challenges such as overcorrection, cognitive overload, and limited metalinguistic explanation were identified in the study.

Scholars in second language acquisition (SLA) from various theoretical perspectives assert the crucial role of interaction in supporting the development of learners in a second or foreign language (L2). While sociocultural theory-driven L2 research typically explores either peer-to-peer or teacher-learner interactions, this study, conducted in collaboration with a university teacher of L2 Japanese writing, investigates how these interactions can complement each other to create a mediating classroom environment.

Poehner and Leontjev (2022) demonstrated that, although peer interactions may differ in quality from teacher mediation, collaborative efforts among learners provide opportunities to collectively uncover partial understanding and synthesize knowledge. This positions them to benefit from subsequent interactions with the teacher while also assisting the teacher in identifying areas of learner difficulty.

The literature review highlights several empirical studies that delve into the multifaceted aspects of student engagement with feedback across diverse educational contexts. Zhang and Hyland (2022) investigate an integrated approach to feedback in academic writing, revealing its positive impact on behavioral, affective, and cognitive engagement. Al-Obaydi et al. (2023) explore the connection between structured feedback in online language learning and cognitive, behavioral, and emotional engagement, emphasizing the importance of effective feedback strategies. Zheng et al. (2023) address the gap in understanding how lower-proficiency students engage with teacher feedback, uncovering individual and contextual factors influencing engagement. Wu and Schunn (2023) provide insights into the correlation between different peer feedback activities and learning outcomes, emphasizing the role of constructive activities. Stepanyan et al. (2009) explore student attitudes toward formative and reciprocal peer assessment, uncovering preferences for tutor intervention and student anonymity. Zhang et al. (2023) extend the exploration of EFL undergraduates' engagement with both receiving and giving feedback, showcasing gains in engagement over time. Vossen et al. (2017) examine the impact of confirming versus disconfirming feedback on self-esteem, considering variations between online and face-to-face communication. Tian et al. (2023) explore the relationship between online self-presentation, positive online feedback, and life satisfaction, with self-esteem moderating the effects. Jelić (2022) investigates the impact of self-esteem on recall of self-referent feedback in adolescents, highlighting preferential processing of self-related information. Adene et al. (2021) focus on the positive effects of a peer collaborative learning strategy on the self-esteem of pupils with Oppositional Defiant Disorder. Sultan and Hussain (2012) compare individual and collaborative learning processes, finding that collaborative learning enhances social skills and self-esteem. Musset and Topping (2017) demonstrate the positive impact of Video Interaction Guidance on pupils' self-esteem and communication skills. Nikolaus and Fourtassi (2023) synthesize theories on communicative coordination, proposing a mechanism for language acquisition through explicit or implicit signals of communication success or failure. Barrot (2023) assesses the impact of Grammarly's Automated Written Corrective Feedback on college students' writing accuracy, highlighting its potential to enhance self-directed learning. Poehner and Leontjev (2022) investigate the complementary nature of peer interactions and teacher mediation in the context of L2 Japanese writing, emphasizing the collective uncovering of partial understanding and synthesis of knowledge. Together, these studies contribute diverse perspectives to the understanding of student engagement with feedback, informing educational practices across different levels and disciplines.

The focus on student engagement with feedback has garnered increased attention in higher education due to its positive correlation with learning outcomes. Despite its recognized significance, a conspicuous gap exists in the research landscape concerning pedagogical methods that effectively enhance this engagement. Current

literature emphasizes the impact of feedback-supported tasks on engagement, as demonstrated in studies by Zhang and Hyland (2022), Al-Obaydi et al. (2023), and Zheng et al. (2023), among others. However, there is a need for a more comprehensive understanding of how students, particularly those with lower proficiency, interact with teacher feedback, and the factors influencing their engagement. Additionally, the exploration of peer-work activities, as highlighted in studies by Wu and Schunn (2023), Zhang et al. (2023), and others, indicates a promising avenue for promoting engagement in language learning. This study seeks to address the existing gap in the literature by investigating the impact of feedback-supported tasks and peer-work activities on learners' engagement, self-esteem, and language growth. Through an exploration of these pedagogical approaches, the research aims to contribute valuable insights to inform instructional practices and enhance the effectiveness of language learning environments, particularly in the context of the evolving landscape of online education and the diverse needs of language learners.

Method

Design

This study adopted a sequential explanatory mixed-methods research design, employing both qualitative and quantitative methodologies to investigate the impact of feedback-supported tasks and peer-work activities on learners' engagement, self-esteem, and language growth.

The qualitative component involved an in-depth exploration of participants' experiences and perceptions regarding the influence of feedback-supported tasks and peer-work activities on engagement and self-esteem. Through methods such as interviews, the study aimed to capture the nuanced and context-specific aspects of learners' responses to these pedagogical approaches. This qualitative phase sought to unveil the subjective dimensions of the learning process, providing a rich and detailed narrative that complements the quantitative findings.

In the quantitative phase, the study utilized statistical analyses to quantitatively measure the impact of feedback-supported tasks and peer-work activities on learners' language growth. This involved the systematic collection and analysis of numerical data, including pre-and posttests of language achievement through teacher-made tests. By applying established measurement tools and statistical techniques, the quantitative phase aimed to identify statistically significant relationships and patterns between the pedagogical approaches and language development. This numerical perspective enhanced the generalizability and broader applicability of the study's findings.

The qualitative and quantitative findings were integrated to offer a comprehensive understanding of how feedback-supported tasks and peer-work activities interact with engagement, self-esteem, and language growth. This mixed-methods design ensured a holistic examination of the multifaceted aspects of language learning, providing valuable insights without relying solely on numerical data. The integrated approach enriched the study's depth and applicability, offering a nuanced exploration that can inform educational practices and policies.

Setting and participants

This study was conducted in the context of a large university in Saudi Arabia (Prince Sattam Bin Abdulaziz University), where the language learning environment encompasses diverse academic disciplines. The university provided a suitable backdrop for investigating the impact of feedback-supported tasks and peer-work activities on language learners' engagement, self-esteem, and language growth. The educational infrastructure and cultural context of Saudi Arabia contributed to the unique dynamics of the language learning experiences of the participants.

The study involved a total of 88 participants, with 45 individuals assigned to the experimental group and 43 to the control group. These participants were selected from two intact classes within the university setting. All participants share a similar proficiency level, as determined by the Oxford Quick Placement Test, placing them at the pre-intermediate level in English language proficiency. The homogeneity in proficiency ensured a consistent baseline for the study.

The age range of the participants spanned from 18 to 32 years, reflecting a diverse yet relatively young cohort engaged in academic pursuits. All participants shared Arabic as their native language, providing a common linguistic background that facilitates communication and understanding within the study. Notably, none of the participants had visited an English-speaking country before the commencement of the study, ensuring a shared experience of language learning within the academic setting.

The inclusion of participants from intact classes enhanced the ecological validity of the study, capturing the dynamics of real classroom interactions and learning experiences. The diverse yet homogenous nature of the participant pool contributed to the robustness and applicability of the study's findings within the specific cultural and educational context of Saudi Arabia.

In this study, participants provided informed consent through a two-step process. Initially, they were provided with a detailed information sheet outlining the study's purpose, procedures, and potential risks and benefits. Following a thorough review of the information, participants were given the opportunity to ask questions and seek clarification. Subsequently, participants were presented with a written consent form explicitly stating their voluntary participation in the research, assurance of confidentiality, and their right to withdraw at any stage without consequences. Only after participants expressed understanding and willingness to participate by signing the consent form were they officially enrolled in the study. This process ensured that participants made an informed decision to engage in the research, emphasizing transparency and ethical considerations in obtaining their consent.

Instruments

Qualitative instruments

Interviews The study employed semi-structured interviews to explore in-depth the participants' experiences and perceptions regarding the impact of feedback-supported tasks and peer-work activities on their engagement and self-esteem. These interviews provided a rich and contextualized understanding of the subjective dimensions of the learning pro-

cess, allowing participants to articulate their thoughts, emotions, and reflections on the pedagogical approaches.

Quantitative instruments

Teacher-made test for language growth A teacher-made test was developed to quantitatively measure the effect of feedback-supported tasks and peer-work activities on learners' language growth. This test assessed language proficiency and growth through a range of linguistic skills, including vocabulary, grammar, reading comprehension, and writing. The development of the test involved careful consideration of the learning objectives, alignment with the curriculum, and relevance to the specific content covered by feedback-supported tasks and peer-work activities.

Validation technique The validation process of the teacher-made test adhered to the known-group technique, as per the guidelines delineated by Ary et al. (2019). Implementation of this technique involved the administration of the test to distinct groups categorized as high-proficiency and low-proficiency. An evaluation of the performance disparity between these recognized groups facilitated the assessment of the test's validity. Notably, the discernible superiority of the high-proficiency group over the low-proficiency group served to affirm the construct validity of the test. This outcome substantiates that the test effectively captures the intended constructs associated with language growth resulting from feedback-supported tasks and peer-work activities.

Rationale for instrumentation

The use of interviews allowed for a nuanced exploration of learners' perspectives, shedding light on the intricacies of engagement and self-esteem in response to feedback-supported tasks and peer-work activities.

The teacher-made test served as a reliable and context-specific quantitative measure, aligning with the study's focus on language growth. The validation process ensured the test's accuracy and appropriateness for assessing the targeted constructs.

Data collection procedures

The participants in the experimental group received a 15-session treatment involving feedback-supported tasks and peer-work activities. Feedback-supported tasks included assignments where students received timely and constructive feedback from both the teacher and peers. Peer-work activities encompassed collaborative learning tasks, such as pair or group discussions, joint projects, language exchange, and cooperative learning tasks. These activities were designed to promote active engagement, mutual learning, and the application of language skills in authentic and communicative situations.

The control group, in contrast, received traditional instruction without the specific feedback-supported tasks and peer-work activities introduced to the experimental group. The control group's instruction adhered to conventional teaching methods prevalent in the academic setting.

Before the onset of the treatment, both the experimental and control groups underwent a pretest using the teacher-made test. This initial assessment established a baseline measurement of participants' language proficiency and served as a point of comparison

for post-treatment evaluation. The treatment, consisting of 15 sessions, unfolded over the course of the study. Feedback-supported tasks and peer-work activities were strategically integrated into the experimental group's instructional sessions during this period. Following the completion of the 15-session treatment, both groups underwent a posttest using the same teacher-made test administered in the pretest. This posttest allowed for the measurement of language growth and the assessment of the impact of feedback-supported tasks and peer-work activities on the experimental group.

The teacher-made test, designed to measure language growth, assessed various linguistic skills such as vocabulary, grammar, reading comprehension, and writing. The test was carefully developed to align with the learning objectives of the study and to effectively capture the impact of the pedagogical interventions. The pretest was administered to both the experimental and control groups before the initiation of the treatment, providing a baseline measurement of participants' language proficiency. The identical teacher-made test was administered as a posttest to both groups after the completion of the 15-session treatment. This posttest allowed for the assessment of language growth and the quantification of the impact of feedback-supported tasks and peer-work activities.

In preparation for the interviews, participants from both the Experimental Group and Control Group were provided with comprehensive information about the study's objectives and their voluntary participation. Consent was obtained, ensuring participants' awareness of their rights and the confidentiality of their responses. Interview sessions were scheduled at mutually convenient times, allowing for a relaxed and focused conversation. The semi-structured format of the interviews featured a common set of open-ended questions and predetermined prompts, fostering participant expression while covering specific topics related to engagement, self-esteem, and perceptions of instructional methods. Probing questions were incorporated to delve deeper into participants' responses, seeking clarification and additional details. Each participant underwent an individual interview session to maintain the confidentiality of responses. Audio recording, with participants' consent, facilitated accurate documentation and later transcription for in-depth analysis. After the interviews, participants received debriefing sessions to address any questions or concerns, reinforcing the voluntary nature of their participation and the confidentiality of their responses.

The qualitative data obtained from these interviews will undergo thematic analysis, aiming to identify and categorize recurring themes, patterns, and insights. This analysis will provide a nuanced understanding of participants' experiences with the instructional methods, shedding light on the impact on engagement and self-esteem. The qualitative findings will complement the quantitative results obtained from the teacher-made test, offering a comprehensive and holistic exploration of the effects of feedback-supported tasks and peer-work activities on language learning outcomes. Through this mixed-methods approach, the study endeavors to provide valuable insights into the interplay between pedagogical strategies and learner experiences within the distinct contexts of the Experimental and Control Groups.

Data analysis procedures

In examining the quantitative data, the research utilized an independent sample t-test, following the methodology described by Pallant (2020). This statistical approach assesses

whether a significant difference exists in the mean scores between two independent groups, specifically the experimental group and the control group. By comparing the pretest and posttest scores of the two groups, the t-test assesses whether the observed changes in language proficiency are statistically significant. A lower p -value resulting from the t-test indicates a higher likelihood that the observed differences are not due to chance, providing insights into the effectiveness of the feedback-supported tasks and peer-work activities in fostering language growth.

For the qualitative data obtained from the interviews, a thematic analysis approach was employed. Thematic analysis encompasses the identification, examination, and reporting of patterns (themes) inherent in the data. The process commenced with data familiarization, where transcripts of the interviews were thoroughly reviewed to gain a comprehensive understanding of participants' responses. Initial codes were then generated, highlighting significant features, and these codes were subsequently organized into potential themes. Themes were refined through an iterative process of review and discussion, ensuring they accurately captured the essence of participants' experiences and perceptions. The final themes were then systematically defined and named, providing a coherent and comprehensive representation of the qualitative findings. This thematic analysis allowed for a nuanced exploration of engagement, self-esteem, and learner experiences in response to feedback-supported tasks and peer-work activities.

Results

The effect of feedback-supported tasks and peer-work activities on learners' engagement

Among the participants in the Experimental Group (EG), a substantial majority of 40 learners expressed that their engagement significantly increased as a result of the feedback-supported tasks and peer-work activities. This notable response highlights a positive correlation between the implemented instructional methods and heightened engagement levels within the experimental cohort. In contrast, within the Control Group (CG), only 5 participants reported a perceived increase in engagement, indicating a comparatively lower impact of traditional instruction on learners' active involvement in the learning process.

Responses from the experimental participants

Learner A

Participating in the collaborative projects and receiving constructive feedback not only made the learning experience more interactive but also motivated me to actively contribute to group discussions. I found myself more immersed in the learning tasks, and the continuous feedback loop encouraged me to consistently strive for improvement. This engagement boost not only enhanced my understanding of the subject matter but also made the entire learning process more enjoyable and rewarding.

Learners B

The peer-work activities, especially the language exchange sessions, provided a platform for authentic communication. Engaging in conversations with peers not only improved my language skills but also created a supportive learning community. The constructive feedback from both peers and the teacher helped me identify areas

for improvement, boosting my confidence in using the language. This collaborative approach made me more enthusiastic about the language learning process, and I felt a heightened sense of engagement throughout the sessions.

Obtained themes

(1) Positive impact on engagement

A prominent theme emerges, indicating a substantial positive impact on engagement within the Experimental Group. The majority of learners express an increase in engagement attributed to the feedback-supported tasks and peer-work activities. This theme underscores the efficacy of these pedagogical interventions in fostering active participation and involvement in the learning process.

(2) Differential engagement levels between the two groups

Another discernible theme is the noticeable difference in reported engagement levels between the Experimental Group and the Control Group. While a significant number of experimental participants highlight increased engagement, only a limited number of control participants share similar sentiments. This theme suggests that the specific instructional methods implemented in the experimental group contribute to a more engaging learning experience compared to traditional instruction.

(3) Motivation through feedback loop

Within the Experimental Group, learners attribute their heightened engagement to the continuous feedback loop established through feedback-supported tasks. This theme underscores the motivational aspect of receiving constructive feedback, driving learners to actively contribute, participate in discussions, and consistently seek improvement. The feedback mechanism emerges as a key factor in sustaining learner engagement.

(4) Collaborative learning community

A recurring theme in the responses from the Experimental Group is the creation of a collaborative learning community. Peer-work activities, such as group discussions and language exchange sessions, contribute to the formation of a supportive environment. This theme highlights the role of collaborative learning in fostering engagement by providing learners with opportunities for authentic communication and mutual support.

(5) Enjoyable and rewarding learning experience

Learners from the Experimental Group frequently mention that the implemented instructional methods made the learning experience more enjoyable and rewarding. This theme reflects the positive affective dimension of engagement, suggesting that when learners find the learning process enjoyable, their engagement levels are likely to increase.

These identified themes collectively portray a comprehensive picture of the multifaceted impact of feedback-supported tasks and peer-work activities on learners' engagement within the Experimental Group, emphasizing the positive outcomes compared to traditional instruction in the Control Group.

The effect of feedback-supported tasks and peer-work activities on learners' self-esteem

Among the participants in the Experimental Group, a substantial majority of 38 learners reported a perceived increase in self-esteem following the implementation of feedback-supported tasks and peer-work activities. This noteworthy response suggests a positive correlation between the applied instructional methods and enhanced self-esteem within the experimental cohort. In contrast, within the Control Group, only 6 participants expressed a similar increase in self-esteem, indicating a comparatively lower impact of traditional instruction on learners' self-perception.

Responses from the experimental participants

Learner A

Engaging in collaborative learning and receiving constructive feedback significantly boosted my self-esteem in using the target language. Knowing that my contributions were valued and receiving positive feedback from both peers and the teacher made me feel more confident in expressing myself. The supportive learning environment created through peer-work activities played a crucial role in building my self-assurance, making me believe in my ability to communicate effectively in the language.

Learner B

The individualized feedback on my language proficiency provided a clear roadmap for improvement, contributing to a positive shift in my self-perception. Recognizing areas of strength and receiving guidance on areas for development increased my confidence in my language abilities. The collaborative nature of the activities allowed me to see my progress over time, reinforcing a sense of accomplishment. This positive feedback loop not only elevated my self-esteem but also motivated me to actively participate in language learning with a newfound belief in my capabilities.

Obtained themes

(1) Positive impact on self-esteem

The predominant theme revolves around the positive impact of feedback-supported tasks and peer-work activities on learners' self-esteem within the Experimental Group. The majority of experimental participants express a perceived increase in self-esteem, indicating that these instructional methods contribute positively to how learners view their language abilities and contributions.

(2) Recognition and valuation of contributions

Learners from the Experimental Group frequently mention that their self-esteem was positively influenced by the recognition and valuation of their contributions. This theme underscores the importance of feedback, both from peers and the teacher, in

Table 1 One-Sample Kolmogorov–Smirnov Test

	Group	Pretest scores	Posttest scores
N	88	88	88
<i>Normal parameters</i>			
Mean	1.488	3.738	7.988
Std. Deviation	.502	1.410	4.914
<i>Most extreme differences</i>			
Absolute	.346	.167	.205
Positive	.346	.166	.205
Negative	– .334	– .167	– .111
Kolmogorov–Smirnov Z	3.244	1.564	1.920
Asymp. Sig. (2-tailed)	.000	.153	.112

Table 2 Group statistics on the pretest

Group	N	Mean	Std. deviation	Std. error mean
<i>Pretest scores</i>				
Experimental	45	3.777	1.565	.233
Control	43	3.697	1.244	.189

building learners’ confidence by acknowledging the value of their language use and contributions to collaborative activities.

(3) Guided improvement and clear feedback

Another recurring theme in experimental group responses is the positive effect of guided improvement and clear feedback on self-esteem. The individualized feedback provided learners with a clear roadmap for enhancement, contributing to a positive shift in their self-perception. This theme emphasizes the role of constructive feedback in fostering a sense of direction and achievement.

(4) Supportive learning environment

Learners attribute the collaborative and supportive learning environment created through peer-work activities to an increase in self-esteem. This theme suggests that the social dynamics and encouragement within the collaborative setting contribute to learners feeling more confident in their language abilities and more positive about their overall language learning experience.

(5) Motivation and belief in language abilities

Learners frequently mention that the positive feedback loop and visible progress in language proficiency contribute to a heightened belief in their language abilities. This motivational aspect is a central theme, indicating that learners with increased self-esteem are more motivated to actively participate in language learning, fostering a positive cycle of engagement and confidence.

These identified themes collectively highlight the multifaceted ways in which feedback-supported tasks and peer-work activities positively influence learners’ self-esteem, providing a comprehensive understanding of the interplay between instructional methods and learners’ perceptions of their language abilities.

The impact of feedback-supported tasks and peer-work activities on language growth

To measure the effect of feedback-supported tasks and peer-work activities on language growth, a t-test needed to be conducted. Before that, a one-sample Kolmogorov–Smirnov test was run to determine the normality of the data.

Table 1 shows that the *p*-value on both the pretest and posttest exceeded 0.05, thus the normality of the data was verified.

As the Table 2 indicates, both experimental participants (*M* = 3.77, *SD* = 1.56) and control subjects (*M* = 3.69, *SD* = 1.244) performed similarly.

Table 3 shows that the difference between the two groups on the pretest was not significant (*t* = 0.265, *df* = 86, *p* > 0.05).

Table 3 Independent Samples Test on the Pretest

	Levene's test for equality of variances		t-test for equality of means						
	F	Sig	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
<i>Pretest scores</i>									
Equal variances assumed	2.694	.104	.265	86	.792	.0801	.302	-.520	.681
Equal variances not assumed			.266	83.294	.791	.0801	.300	-.518	.678

Table 4 Group Statistics on the Posttest

Group	N	Mean	Std. deviation	Std. error mean
<i>Posttest scores</i>				
Experimental	45	11.155	4.880	.727
Control	43	4.674	1.755	.267

Table 5 Independent Samples Test on the Posttest

	Levene's test for equality of variances		t-test for equality of means						
	F	Sig	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% confidence interval of the difference	
								Lower	Upper
<i>Posttest scores</i>									
Equal variances assumed	40.704	.000	8.214	86	.000	6.481	.789	4.912	8.049
Equal variances not assumed			8.361	55.655	.000	6.481	.775	4.928	8.034

Table 4 shows that on the posttest, the experimental learners ($M = 11.155$, $SD = 4.880$) outperformed the control participants ($M = 4.674$, $SD = 1.755$).

As demonstrated in Table 5, the difference between the treatment group significantly outperformed the control group ($t = 8.361$, $df = 55.655$, $p = 0.001$). The effect size was very large (Eta squared = 0.448).

Discussion

The study investigated the impact of feedback-supported tasks and peer-work activities on learners' engagement, self-esteem, and language growth. Results indicate a significant positive effect on engagement, as evidenced by increased participation in collaborative learning among the experimental group. Moreover, learners in the experimental group reported enhanced self-esteem, attributing it to recognition, clear feedback, and a supportive learning environment. Quantitative analysis revealed a substantial difference in language growth between the experimental and control groups, with the former outperforming on the posttest. These findings underscore the efficacy of integrating collaborative and feedback-driven approaches in language learning.

The observed positive outcomes can be attributed to the synergistic effects of feedback-supported tasks and peer-work activities. Collaborative learning, as a key component, created an environment where learners felt valued and engaged. The consistent and constructive feedback provided guidance for improvement, fostering a positive feedback loop that contributed to increased self-esteem. The recognition of individual contributions within the collaborative setting, coupled with targeted feedback, played a pivotal role in shaping learners' positive perceptions of their language abilities. Additionally, the quantitative superiority in language growth within the experimental group suggests that the combined impact of collaborative learning and feedback mechanisms contributes to more effective language acquisition. The interactive and participatory nature of the instructional methods likely facilitated a deeper engagement with language content, resulting in a more profound understanding and application of linguistic skills. Overall, these findings underscore the holistic impact of well-designed collaborative and feedback-oriented strategies in enhancing various facets of the language learning process.

The present study aligns with Zhang and Hyland's (2022) findings, emphasizing the positive impact of integrating various feedback sources on student engagement. Similar to their results, our study highlights the effectiveness of an integrated approach, combining automated, peer, and teacher feedback, in fostering behavioral, affective, and cognitive engagement among learners.

Contrasting with Al-Obaydi et al.'s (2023) exploration of online classes, our study focused on traditional classroom settings. While both studies underscore the importance of structured feedback, ours emphasizes collaborative learning within a physical classroom context. The positive correlation between structured feedback and cognitive, behavioral, and emotional engagement found by Al-Obaydi et al. aligns with our results, showcasing the universality of effective feedback strategies.

In comparison to Zheng et al. (2023), who delved into the engagement of lower-proficiency students with teacher feedback, our study encompasses a broader context, emphasizing collaborative and peer-driven engagement. While Zheng et al. concentrated on individual factors influencing engagement, our approach integrated

collaborative learning activities, creating a supportive environment that positively impacted learners' engagement and self-esteem.

Wu and Schunn's (2023) examination of peer feedback activities aligns with our focus on the impact of peer-work activities. Both studies emphasize the importance of constructive activities in the learning process. However, our study extends beyond peer feedback, encompassing collaborative activities and their holistic effect on engagement, self-esteem, and language growth.

Stepanyan et al.'s (2009) participatory action research on peer assessment resonates with our emphasis on peer-driven activities. Both studies recognize the significance of factors like tutor intervention and student preferences in fostering engagement. Our study, while sharing these aspects, goes further by incorporating feedback-supported tasks and measuring language growth.

The investigation by Zhang et al. (2023) into EFL undergraduates' engagement with feedback correlates with our study's focus on the iterative process of feedback-supported tasks and peer-work activities. Both studies highlight the potential for enhanced engagement despite challenges, emphasizing the role of well-designed instructional methods in overcoming proficiency and self-efficacy obstacles.

In contrast to Vossen et al.'s (2017) exploration of confirming versus disconfirming feedback and its impact on self-esteem, our study emphasizes the collaborative and feedback-supported learning environment. While their study primarily delves into online communication, ours extends to traditional classroom settings, showcasing the varied contexts in which feedback and engagement interact.

Tian et al.'s (2023) investigation into online self-presentation and its influence on life satisfaction offers a different perspective, emphasizing the role of self-esteem. Our study, while not directly exploring online self-presentation, aligns with the broader theme of fostering positive self-perceptions through collaborative learning and feedback-supported tasks.

Jelić's (2022) study on self-esteem level and stability in recall of feedback aligns with our exploration of self-esteem in a collaborative learning context. Both studies recognize the impact of self-referent feedback on memory and engagement, providing complementary insights into the complex interplay between self-esteem and learning.

Adene et al.'s (2021) study on the impact of a peer collaborative learning strategy on the self-esteem of pupils with Oppositional Defiant Disorder aligns with our focus on the positive effects of peer-driven activities. While our study involves older learners in a university context, both emphasize the role of collaborative strategies in positively influencing self-esteem.

Sultan and Hussain's (2012) investigation into individual versus collaborative learning aligns with our exploration of collaborative learning and its impact on self-esteem. Both studies recognize collaborative learning's potential to enhance essential skills, contributing to improved engagement, responsibility, and social acceptance.

Musset and Topping's (2017) study on Video Interaction Guidance (VIG) intervention aligns with our emphasis on the positive impact of interventions on self-esteem. While their study focuses on younger children, our results resonate with the idea that reinforcing desirable group work behaviors enhances pupils' self-esteem.

Nikolaus and Fourtassi's (2023) synthesis of communicative coordination theories aligns with our broader context of exploring the impact of feedback-supported tasks and peer-work activities on language growth. While their focus is on children's early language development, our study contributes to the understanding of these mechanisms in a university setting.

Barrot's (2023) assessment of Grammarly's AWCF aligns with our study's focus on written corrective feedback. While their study emphasizes technology-driven feedback, ours encompasses a broader approach, integrating both peer-driven and technology-supported feedback mechanisms.

Poehner and Leontjev's (2022) collaborative efforts between peer interactions and teacher mediation resonate with our study's focus on the complementary nature of peer-work activities and feedback-supported tasks. Both studies highlight the synergistic effects of these interactions in supporting learners' development.

Our study's findings resonate strongly with Vygotsky's Socio-Cultural Theory, which underscores the significance of social interactions in the process of cognitive development (Johnson, 2009; Vygotsky, 1980). According to Vygotsky, learning occurs within a social context, and ZPD is a crucial concept. Our collaborative peer-work activities and feedback-supported tasks can be viewed as mechanisms that create a social learning environment, allowing learners to operate within their ZPD. Through interactions with peers and exposure to feedback, students engage in activities just beyond their current level of competence, facilitating language growth. Vygotsky's emphasis on the role of social interactions as a vehicle for cognitive development aligns with our study, where learners' engagement, self-esteem, and language growth are interconnected within a collaborative classroom setting.

Long's (1996) Interaction Hypothesis, which is grounded in SLA research, posits that language development is facilitated through conversational interaction. The hypothesis suggests that comprehensible input is crucial, and opportunities for negotiation of meaning during interactions contribute significantly to language acquisition. In our study, the peer-driven activities and collaborative tasks inherently involve conversational interaction, providing learners with opportunities to negotiate meaning, seek clarification, and receive feedback. The interactive nature of these tasks aligns with Long's hypothesis, as learners engage in meaningful conversations and interactions that contribute to their language growth. The hypothesis also emphasizes the importance of feedback, and our study supports this by demonstrating the positive impact of feedback-supported tasks on language development. Therefore, both Vygotsky's Socio-Cultural Theory and Long's Interaction Hypothesis provide valuable frameworks to interpret and understand the dynamics of language growth observed in our study, emphasizing the central role of social interaction and feedback in the language learning process.

This research stands out in the academic landscape by offering a distinctive and comprehensive exploration that concurrently delves into collaborative learning and feedback-supported tasks. Unlike many previous studies that often examine these components in isolation, our research seeks to unravel the intricate dynamics and synergistic effects when both elements are integrated. By concurrently investigating collaborative learning and feedback-supported tasks, we aim to provide a more holistic understanding of how these intertwined factors collectively influence learners' engagement, self-esteem,

and language growth. This combined focus adds a layer of complexity and depth to the existing literature, shedding light on novel insights that can significantly contribute to the advancement of effective language education practices. The study's emphasis on the interconnected impact of collaborative learning and feedback distinguishes it as a valuable and distinct contribution to the broader discourse on language learning methodologies.

Implications of the study

The implications of the study are manifold. For teachers, our study underscores the importance of incorporating collaborative and feedback-supported tasks into language instruction. By structuring activities that promote peer interaction and providing constructive feedback, teachers can enhance students' engagement, self-esteem, and language growth. Recognizing the value of these strategies in fostering a supportive and interactive learning environment, instructors can tailor their teaching methods to align with the principles highlighted in our study. Moreover, understanding the positive outcomes associated with these approaches can empower teachers to advocate for their integration into language curricula, ultimately contributing to more effective and student-centered language instruction.

In practice, educators can enhance language learning based on the study's findings by incorporating collaborative activities. For instance, organizing group discussions, joint projects, or language exchange programs fosters an environment where students actively engage with peers. Additionally, educators should establish a feedback system that includes automated, peer, and teacher feedback, ensuring specificity, constructiveness, and timeliness. The use of technology-supported tools alongside personal feedback addresses individual learning needs effectively. Encouraging various peer work activities, such as collaborative writing or pair discussions, provides opportunities for learners to interact in the target language, exposing them to diverse language styles and enhancing critical thinking skills. Furthermore, guiding group regulation based on feedback and fostering self-assessment skills contributes to learners' self-regulation. Tailoring collaborative and feedback-supported tasks to operate within the ZPD ensures that activities challenge students just beyond their current competence, promoting meaningful engagement. Integrating technology into collaborative and feedback-driven interactions, particularly in online settings, expands opportunities for peer reviews, discussions, and collaborative projects. Emphasizing honest and positive online self-presentation on platforms contributes to increased life satisfaction. Lastly, cultivating a positive and supportive learning environment, where individual contributions are recognized, plays a crucial role in enhancing students' self-esteem within collaborative settings.

Syllabus designers can leverage our findings to inform the development of language learning materials and instructional sequences. Integrating collaborative tasks and feedback mechanisms into syllabi can be instrumental in enhancing the overall language learning experience. By incorporating these elements, syllabus designers can create well-rounded and dynamic language programs that not only address linguistic competencies but also prioritize engagement and self-esteem. Additionally, syllabus designers can explore ways to scaffold activities that gradually challenge learners within their ZPD, aligning with Vygotsky's Socio-Cultural Theory, as highlighted in our study.

Curriculum developers have an opportunity to reconsider and refine broader educational frameworks to emphasize the integration of collaborative and feedback-driven approaches. Our study suggests that a curriculum that prioritizes social interaction, constructive feedback, and collaborative tasks can significantly contribute to language growth. This highlights the need for curriculum developers to recognize the interconnectedness of engagement, self-esteem, and language development and design programs that foster these elements holistically. Integrating such strategies into curriculum frameworks can provide a more comprehensive and effective language learning experience for students.

Policymakers play a crucial role in shaping the educational landscape, and our study offers insights that can guide language education policies. Policymakers can consider advocating for professional development opportunities for educators to enhance their skills in implementing collaborative and feedback-supported strategies. Furthermore, policies can be designed to promote research and innovation in language education, encouraging the continuous refinement of teaching methods. By aligning policies with the principles highlighted in our study, policymakers can contribute to creating an educational environment that maximizes students' language learning potential, ultimately fostering a more proficient and engaged community of language learners.

Conclusion

In conclusion, our study contributes valuable insights into the realm of language education by investigating the impact of feedback-supported tasks and peer-work activities on learners' engagement, self-esteem, and language growth. The positive outcomes observed in the experimental group underscore the importance of integrating collaborative and feedback-oriented strategies into language instruction. This study aligns with contemporary educational theories, such as Vygotsky's Socio-Cultural Theory and Long's Interaction Hypothesis, highlighting the significance of social interaction in the language learning process. As educators, policymakers, and curriculum developers consider these findings, they can play pivotal roles in shaping language education practices that foster a supportive, engaging, and effective learning environment.

While this study has provided valuable insights, it is crucial to recognize its limitations. The study's generalizability may be limited due to its specific context within a university in Saudi Arabia. Additionally, the absence of a delayed posttest in our research design restricts our ability to assess the long-term sustainability of the observed effects. Furthermore, the study's reliance on self-report measures for engagement and self-esteem introduces potential biases. For future research, we recommend exploring the long-term impact of feedback-supported tasks and peer-work activities on language development. Further investigations could also delve into the potential differences in the effectiveness of these strategies across various proficiency levels and cultural contexts, providing a more nuanced understanding of their applicability in diverse educational settings.

To conclude, our study significantly advances our understanding of language education by examining the influence of feedback-supported tasks and peer-work activities on learners' engagement, self-esteem, and language growth. The positive outcomes observed in the experimental group emphasize the importance of incorporating collaborative and feedback-driven approaches into language instruction. Aligned with

contemporary educational theories like Vygotsky's Socio-Cultural Theory and Long's Interaction Hypothesis, the study underscores the pivotal role of social interaction in language learning. Educators, policymakers, and curriculum developers can leverage these insights to enhance language education practices and create supportive, engaging, and effective learning environments. However, recognizing the study's limitations, including its specific context and the absence of a delayed posttest, is crucial. Future research should explore the long-term effects of these strategies, considering diverse proficiency levels and cultural contexts for a more comprehensive understanding of their applicability.

Abbreviations

ODD	Oppositional defiant disorder
PBPOC	Pupils' behaviour problems observation checklist
PBPMS	Pupils' behaviour problems measuring scale
PSEMS	Pupils' self-esteem measuring scale
VIG	Video interaction guidance
AWE	Automated writing evaluation
AWCF	Written corrective feedback
SLA	Second language acquisition
EG	Experimental group
CG	Control group

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Author contributions

All authors had equal contribution.

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Availability of data and materials

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Declarations

Ethics approval and consent to participate

The study involving human participants did not require ethical review and approval, as it complied with local legislation and university requirements of Saudi Arabia. Written informed consent was obtained from all participants prior to their participation in the study.

Consent for publication

Not applicable.

Competing interests

On behalf of all authors, the corresponding author states that there is no conflict of interest.

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