Teaching English as a Second Language Quarterly (TESLQ)
(Formerly Journal of Teaching Language Skills)
45(1) 2026, pp. 51-80
https://doi.org/10.22099/tesl.2025.52744.3393
Online ISSN: 2981-1546
Research Paper

The Triad of Instructional Design: Comparing Impacts on EFL Speaking Proficiency and Engagement

Hamed Badpa [1] **Leila Alinouri** [2]

Abstract

This study employed a concurrent triangulation mixed-methods design to examine the impact of backward design (BD), central design (CD), and forward design (FD) on the speaking proficiency and engagement of 75 intermediate-level Iranian EFL learners, aged 18–21, selected through convenience sampling at Arak University, Iran. Participants attended nine weekly 105-minute sessions over one semester, with intermediate proficiency verified by the Oxford Quick Placement Test. Pre-tests established baseline speaking abilities, and participants were divided into three groups of 25: BD group (BDG), CD group (CDG), and FD group (FDG). Data were gathered using IELTS speaking pre- and post-tests, a student engagement scale (SES), and semi-structured interviews. The BDG focused on defining learning outcomes and using assessments such as observations and recorded speeches to track progress and adjust instruction. The FDG prioritized structured activities targeting specific speaking skills, using formative and summative assessments to evaluate mastery. The CDG adopted a learner-centric approach, incorporating personas, scenarios, and open educational resources to create collaborative, engaging activities emphasizing social context and emotional growth. Post-intervention results revealed CD as the most effective in enhancing speaking proficiency and engagement, followed by BD, with FD being the least effective. These findings underscore CD's strength in fostering interactive, meaningful learning experiences for Iranian EFL learners. The study suggests that curriculum developers and educators should prioritize learner-centered approaches, such as CD, to improve EFL speaking outcomes and engagement.

Keywords: Backward Design, Central Design, Engagement, Forward Design, Speaking Ability

The primary aim of learning a language is to achieve effective communication. Learners often prioritize speaking proficiency over other language skills (Gan, 2012). According to Thornbury (2007), speaking encompasses a multi-faceted ability that requires real-time interactive communication, allowing little room for extensive planning. This complexity

* Review History:
Received: 18/03/2025 Revised: 01/08/2025 Accepted: 27/08/2025

1. Ph.D., Candidate, Department of English Language and Literature, Faculty of Literature and Languages, Arak University, Arak, Iran, (Corresponding Author) hamedbadpa1377@gmail.com
2. Assistant Professor, Department of Foreign Languages, Isf.C., Islamic Azad University, Isfahan, Iran, leila1362@iau.ac.ir

How to cite this article:
Badpa, H. and Alinouri, L. (2026). A Comparative Study on the Impact of Backward, Central, and Forward Design on the Speaking Proficiency and Engagement of Iranian EFL Learners. *Teaching English as a Second Language Quarterly*, *45*(1), 51-80. https://doi.org/10.22099/tesl.2025.52744.3393

necessitates proficiency in various aspects of the language (Hughes, 2013). Moreover, improvements in speaking abilities are closely linked to individuals' affective states.

Research has underscored the vital role of learner engagement in achieving success in communicative language learning (Dornyei & Otto, 1998). A lack of inspiration in learning environments can significantly impede motivation and progress (Richards, 2001; Nation, 2008). Consequently, educators strive to create engaging, effective classroom experiences. Notably, EFL learners prioritize speaking proficiency, viewing it as a fundamental goal in their English language development, as they aspire to engage actively in conversations and exchange information (Richard & Renandya, 2002; Segalowitz, 2010). Therefore, teachers must implement effective strategies that immerse learners in speaking activities and encourage discussions on various topics.

As Nunan (1999) emphasizes, teachers play an essential role in facilitating students' interpersonal communication skills. In speaking classes, instructors should design activities that accommodate students' diverse levels and consider their introverted or extroverted traits, as well as their motivation for speaking (Harmer, 1998; Tam, 2000). Given the importance of speaking, effective instruction is essential for enabling students to converse with native speakers. Additionally, engaging speaking activities in the EFL classroom can enhance learners' motivation and make the learning process enjoyable (Nunan, 1999; Celce-Murcia, 2001). However, EFL teachers and learners face substantial challenges in achieving success in speaking. These challenges stem from various factors, including the limited opportunities for EFL learners to use English in foreign environments (Akbari, 2015; Ebrahimzadeh & Ebadi, 2025). Consequently, students often struggle in class to apply real-world situations, which diminishes their motivation and makes them perceive little value in speaking English. Additionally, textbooks often prioritize grammar, leaving teachers to foster communicative competence. As Teaching practices must not only cover the fundamental aspects of the English language but also incorporate its pragmatic norms, neglecting this aspect can hinder effective communication (Bulusan, 2024; He & He, 2025).

Teachers should create assessments that accurately diagnose students' needs. Alsubaie (2016) argues that effective curriculum design must encompass goals, objectives, learning experiences, instructional resources, and assessment methods tailored to a specific educational program. However, language teachers often encounter top-down curriculum changes, which create significant challenges for learners, particularly EFL students, in mastering specific language skills (Al-khresheh et al., 2025).

This study is grounded in three theoretical frameworks: **Understanding by Design** (Wiggins & McTighe, 2005), which informs Backward Design (BD), emphasizing goal-oriented instruction by starting with desired learning outcomes. Additionally, **Constructivist Learning Theory** (Biggs, 2003) informs the central design approach, emphasizing learner-centered activities that foster deeper understanding through engagement and collaboration. The forward design model aligns with **Traditional Curriculum Theory** (Richards, 2013), which

follows a linear progression from content delivery to assessment. These frameworks collectively guide the examination of how different design models influence speaking ability and engagement, providing a structured basis for evaluating their pedagogical effectiveness in EFL contexts.

The study seeks to examine the effectiveness of three curriculum design models, backward design (BD), central design (CD), and forward design (FD), in enhancing the speaking proficiency and engagement of Iranian EFL learners. Given the challenges Iranian students face in developing speaking skills due to limited exposure to English outside the classroom and traditional teaching methods that prioritize grammar over communication, this research seeks to determine which design model best facilitates meaningful learning and active participation. By comparing these approaches, the study provides empirical evidence to guide EFL instructors, curriculum developers, and policymakers in adopting more effective instructional strategies. The findings will contribute to the broader discourse on language education by addressing gaps in research on curriculum design in the Iranian context, ultimately improving teaching methodologies and fostering better learning outcomes for EFL students.

Speaking Ability

The primary focus of language instruction and learning involves four key abilities: listening and reading, used to understand information, and speaking and writing, used to express thoughts and ideas. Speaking enables verbal interaction and effective message conveyance. Essentially, speaking is a skill that enables people to articulate their thoughts and ideas in spoken words to convey messages effectively. Bygate (2009) argues that speaking, along with literary skills in second languages, requires special attention (Lai, 2025).

Brown (2007) suggested that speaking ability consists of fluency, accuracy, and complexity. Khromov and Munakova (2014), who included intonation as a key element, support this view. Researchers such as Nguyen and Newton (2020) and Tejedor-García et al. (2020) highlight the role of pronunciation. Nevertheless, each component is equally important for effective communication in the target language. Therefore, this study examines teaching methods that comprehensively integrate speaking ability.

Conversations serve either transactional or interactional purposes. In transactional discourse, the focus is on the message's meaning, such as explaining something to a new friend or describing issues to a doctor. In interactional discourse, the focus is on maintaining social connections through greetings, compliments, and casual conversation with friends. Many conversations serve both purposes (Fries, 1945; Alvarez & Win, 2022).

According to Nunan (1999), casual conversation flows more freely. It is less predictable than structured communication, such as making a phone call to request a taxi, which is influenced by the specific needs of the parties involved in achieving a successful exchange of information, goods, or services. When designing classroom teaching materials and activities, it is vital to address both casual conversation and structured communication (Comings et al.,

2023; Haque et al., 2025). Communication with a structured purpose, such as transmitting information, primarily focuses on conveying a message, as seen in news broadcasts and lectures. On the other hand, casual communication generally serves to fulfil participants' social needs, such as engaging in small talk and conversation.

Luoma (2004) suggests that developing speaking ability is challenging, leading many EFL learners to believe that it is. Nazara (2011) also notes that EFL students consider themselves successful if they can communicate effectively in English (Ambawani et al., 2025).

Fluency

Fluency is a learner's ability to communicate effectively in real time, as highlighted by Ellis (2005). Fillmore (1979) identified four aspects of fluency that people consider when assessing fluency. These include the ability to speak continuously, the skill to convey messages in a succinct and meaningful manner, the capacity to communicate effectively in various situations, and the aptitude to use language creatively and innovatively by expressing ideas in new ways, using humor, puns, and metaphors. Although these four types of fluency may seem distinct, they all indicate fluidity and flow in language use. It's important to note that their effectiveness depends on delivering them within the evolving communication context, showing that they are all based on the temporal flow of language, as observed by Segalowitz (2010).

Speaking is a critical skill for effective communication, and L2 learners often view speaking as the primary outcome of L2 learning. Dasgupta (2015) suggests proficient L2 speakers can appropriately engage in various speaking contexts. Richards (2006) divides speech sections into three parts: talk as interaction, talk as transaction, and talk as performance. Talk-as-interaction refers to informal conversations, emphasizing the social aspect of communication. Talk-as-a-transaction focuses on the content. Talk as performance pertains to formal public speaking. In a qualitative study conducted, L2 learners' oral academic ability was examined in the context of oral presentations in a TESL program. The results demonstrated improvement in oral academic discourse through peer and instructor negotiations. In research, the efficacy of task-based instruction in enhancing L2 learners' speaking performance was examined, with experienced learners in task-based principles demonstrating superior performance compared to inexperienced learners. Various factors contribute to poor performance among L2 learners, as identified through a survey and observation by Shen (2019).

Curriculum Design Models

Curriculum design plays a crucial role in shaping language instruction, with three predominant models, backward design (BD), central design (CD), and forward design (FD), offering distinct approaches to teaching speaking skills. BD, emphasizes starting with desired learning outcomes before planning assessments and instructional activities. This model has gained traction in language education for its focus on aligning classroom practices with real-world communicative goals (Richards, 2013). In contrast, CD prioritizes teaching methods and

learner interactions, allowing for greater flexibility in adapting to students' emerging needs (Biggs, 2003). Meanwhile, FD follows a traditional linear progression, beginning with content selection before moving to methodology and assessment, often resulting in a more structured but less adaptive approach (Richards, 2013; Alvarez et al., 2024). Understanding these models is essential for evaluating their effectiveness in improving EFL learners' speaking proficiency and engagement.

Backward Design. BD's strength lies in its clarity of objectives and alignment with communicative language teaching principles. By defining speaking outcomes first—such as fluency, accuracy, and discourse competence—teachers can design targeted assessments and activities that mirror real-life communication (Wiggins & McTighe, 2011). Research indicates that BD enhances learner engagement by making goals transparent and relevant. However, critics argue that its rigid structure may limit spontaneity in classroom interactions, particularly in cultures where teacher-led instruction is the norm. Despite these challenges, BD remains a promising approach for systematically developing speaking skills in EFL contexts.

Central Design. CD shifts the focus from pre-defined syllabi to dynamic, activity-driven instruction, making it particularly suitable for fostering spontaneous speaking practice. Rooted in constructivist pedagogy (Biggs, 2003), CD encourages task-based learning, in which activities such as debates, role-plays, and collaborative projects dictate content adaptation (Richards, 2011). This model supports engagement by empowering learners to co-construct knowledge through interaction (Boud & Solomon, 2001). However, its success depends heavily on teacher expertise in balancing structure with flexibility—a potential hurdle in settings like Iran, where traditional methods dominate (Akbari, 2015).

Forward Design. FD, the most conventional of the three models, follows a linear sequence from input to output, often prioritizing grammatical accuracy over communicative fluency (Richards, 2013). While this approach ensures systematic content coverage, studies highlight its shortcomings in promoting meaningful speaking practice (Nunan, 1999; He & He, 2025). In many EFL classrooms, FD leads to disengagement, as learners struggle to apply isolated grammar rules in spontaneous conversations. Despite these drawbacks, FD persists where standardized testing and textbook reliance overshadow communicative teaching (Aramaki, 2025; Latifah et al., 2025).

The Current Study

While theoretical comparisons of BD, CD, and FD exist (Richards, 2013; Biggs, 2003; Nguyen, 2020), empirical studies assessing their impact on speaking skills remain scarce, especially in under-researched contexts like Iran. This study addresses this gap by experimentally evaluating each model's effectiveness in enhancing Iranian EFL learners'

speaking proficiency and engagement. Findings will inform curriculum decisions, helping educators adopt the most effective design for fostering communicative competence. The following research questions guided the present study:

RQ1. Does backward design enhance Iranian EFL learners' speaking ability?

RQ2. Does central design enhance Iranian EFL learners' speaking ability?

RQ3. Does forward design enhance Iranian EFL learners' speaking ability?

RQ4. *To what extent do backward, central, and forward design differ in their effectiveness for improving the speaking skill of Iranian EFL learners?*

RQ5. Are there significant differences in the impact of backward, central, and forward designs on enhancing the engagement of Iranian EFL learners?

RQ6. What are the Iranian EFL learners' stances on implementing backward, central, and forward designs?

Method

This study utilized a concurrent triangulation mixed-methods approach, collecting, analyzing, and integrating data to explore learners' stances towards different design models and their impact on improving speaking ability and engagement. Three groups, each comprising 25 EFL learners, participated in the study. The study spanned eleven weeks during the summer of 2024.

Participants

This study involved 75 intermediate EFL learners aged 18-21, selected through convenience sampling. The participants were from Arak, Iran, and attended 9 weekly, 1-hour and 45-minute sessions over 1 semester. To determine their intermediate proficiency level, the Oxford Quick Placement Test (OQPT) was run. First, a pre-test was administered to assess participants' existing speaking abilities. The participants were divided into three groups of 25: the backward design group (BDG), central design group (CDG), and forward design group (FDG).

Instruments

Oxford Quick Placement Test (OQPT). The Oxford Quick Placement Test (OQPT) demonstrates strong psychometric properties, with established reliability and validity for assessing English language proficiency. Studies confirm its high internal consistency (Cronbach's $\alpha > 0.85$) and test-retest reliability ($r = 0.89$), indicating consistent measurement across administrations. As a joint product of Oxford University Press and Cambridge ESOL, the OQPT's content validity is ensured through rigorous alignment with CEFR standards. In contrast, its concurrent validity is supported by significant correlations ($r = 0.78–0.82$) with standardized tests like IELTS and TOEFL (Allan, 2004). The test's adaptive design and

discrete-point structure further enhance its discriminative validity, effectively differentiating proficiency levels among EFL learners.

At first, the researchers conducted an OQPT. The OQPT stands for Oxford and Cambridge ESOL- an adaptive, flexible indicator of English language proficiency. It is used for selecting specific levels of proficiency within this group. This test consists of 60 items in the form of multiple-choice, including vocabulary (30 items) and grammar (30 items): a learner scoring 0-10 is classified to be a beginner, 11-17 is around breakthrough, a score between 18-29 suggests that the learner is at elementary level, at pre-intermediate level the learner achieves 30-39 points, at intermediate level a learner score 40-47, and at upper-intermediate level a learner gets between 48 and 54, while an advanced level student scores between 55 and 60. Based on the students' scores, they were intermediate learners.

IELTS Speaking Pre-test and Post-test. To measure speaking ability, two questions taken from the *Speak Out* book served as the data source. The two questions were carefully selected to comprehensively assess different aspects of speaking ability (fluency, accuracy, and coherence) while maintaining practicality in test administration and scoring reliability. The selected questions were at an intermediate level. The speaking test was designed to be used as a pre-test and a post-test. To achieve a high level of reliability, the test was piloted with 15 learners using a few criteria included in the test design. During the pilot stage, any problems or concerns identified during testing were addressed. Results from the pilot trial indicated good reliability for the research tool in the pre-test and post-test, with Cronbach's alpha coefficients of 0.79 and 0.78, respectively.

Scoring Rubric. The test sessions were recorded and subsequently rated by two raters. To score the speaking test (pre- and post-test), a scoring rubric developed by Phan and Phuong (2017) that had undergone the necessary calibration based on expert opinion was used to measure speaking ability. It assessed participants' English-speaking skills in accuracy, fluency, interaction, and coherence on a rating scale ranging from 0 to 40.

Student Engagement Scale (SES). To collect data on students' engagement levels, the researchers administered the Fredricks et al. questionnaire (2004). This established scale, with strong reliability (Cronbach's Alpha = 0.95), was translated into Persian and tested for reliability and validity in the Iranian context.

The translated questionnaire comprises 16 items, scored on a five-point Likert scale ranging from "strongly disagree" to "strongly agree." Piloting of the Persian Questionnaire indicated good internal consistency, with a Cronbach's alpha of .81.

To ensure the instrument's appropriateness for the Iranian context, the researchers implemented a rigorous validation process. Following standard translation procedures, the original English questionnaire by Fredricks et al. (2004) was forward-translated into Persian by

two bilingual experts, followed by a back-translation to verify conceptual equivalence. The translated version was then piloted with a sample of 30 Iranian EFL learners (demographically similar to but distinct from the main study participants) to assess psychometric properties. Results demonstrated strong internal consistency (α = .81), confirming the instrument's reliability in the target population. This process aligns with established cross-cultural adaptation protocols for research instruments (Beaton et al., 2001).

Semi-Structured Interview. To investigate the final research question, a semi-structured interview was conducted. To ensure the validity, they were evaluated by three experts. The interviews concentrated on examining participants' stance towards the three types of designs. Fifteen participants, 5 from each group, participated in these interviews, which were recorded for subsequent transcription and analysis.

It has to be emphasized that a pilot study on the instruments was conducted to examine validity and reliability issues; the reliability of the speaking ability pre-test, post-tests, and SES was estimated by administering the tests to 15 subjects with comparable characteristics from another English-learning institute. According to Isaac and Michael (1995), a pilot study sample of 10-30 participants provides trustworthy results.

Data Collection

Before treatment implementation, all participants completed two baseline assessments: (1) the OQPT to verify intermediate-level proficiency homogeneity (scores 40-47), and (2) an IELTS-based speaking pre-test to establish entry-level speaking abilities (assessing fluency, accuracy, and coherence). Participants were then randomly assigned to three experimental groups: backward design (BDG), central design (CDG), and forward design (FDG), ensuring equivalent starting competencies across groups. This dual-assessment approach controlled for both general language proficiency (OQPT) and specific speaking skills (pre-test), addressing potential confounding variables in the experimental design.

Backward Design Group

BD commenced by clarifying the lesson unit's desired learning outcomes. The teacher (researcher) delineated specific goals and objectives that students should attain by the end of the unit. A pre-assessment informed these outcomes of the students' current speaking abilities. Subsequently, the teacher anticipated the unit's core concepts and outlined essential knowledge for students. To foster interaction and idea generation, the teacher employed questioning strategies, encouraging class discussions centered on the unit's primary themes. This collaborative environment deepened students' comprehension. Additionally, the teacher articulated precise speaking skills that students should acquire, aligning them with desired outcomes and creating a clear learning trajectory.

The second phase involved designing performance tasks and assessment criteria to gauge the students' learning and speaking proficiency. The teacher adopted an assessor's mindset to determine if learning objectives had been met. Observations, visual representations, self-assessments, and quizzes helped track the student's progress. Recording speeches enabled the students and the teacher to analyze performance. Self-assessments were administered every four sessions to foster self-evaluation.

The final stage focused on using assessment results to inform instructional adjustments. By analyzing assessment data, the teacher identified areas where the students struggled, such as fluency or grammar. Targeted remedial instruction and feedback were provided to address these challenges. This iterative process ensured that instruction aligned with the students' specific needs, maximizing learning outcomes.

Forward Design Group

In FD, the curriculum development process begins with planning and implementing instructional activities.

The teacher first determined the specific speaking ability, functions, and contexts that would serve as the linguistic content or input for the course. This involved analyzing relevant language standards, learner needs, and the teacher's expertise. The teacher then carefully selected and sequenced the topical content, vocabulary, and grammatical structures that would form the foundation of the curriculum.

Next, the teacher chose the teaching methods, procedures, and classroom activities to deliver the pre-determined linguistic input. This may have included a variety of speaking-focused techniques, such as role-plays, discussions, debates, and oral presentations. The teacher designed these activities to provide ample opportunities for learners.

After planning and implementing the instructional activities, the teacher shifted their focus to assessing learner progress and achievement. This involved developing both formative and summative assessments to measure learners' speaking proficiency. Formative assessments, such as in-class observations and feedback sessions, allowed the teacher to monitor learner development and make any necessary adjustments to the instructional approach. Summative assessments, such as oral exams or performance-based tasks, were used to evaluate the learners' overall speaking abilities and determine their mastery of the course objectives.

Finally, the teacher conducted an evaluation of the FD curriculum, including assessment data analysis, student feedback, and reflection on the instructional activities and their success in achieving the intended learning outcomes. For this assessment, the teacher revised the curriculum as needed to maintain its relevance to learners in line with the FD program's vision.

That was the FD bottleneck for the teacher, continuously viewing all aspects of linguistic content and input as the core drivers of the curriculum, while deliberately choosing and using the instructional activities and assessments to develop students' speaking proficiency.

Central Design Group

Learning, in the view of the CDG, is always a process rather than just a content absorption process. Most understand that learning involves the formation of new knowledge through engaging students in specific contexts, activities, and processes. Ideally, all learning experiences should be capable of such constructions and promote deep understanding and retention.

The CD design did put the learner at the center. Therefore, explorations of the learner's needs, goals, and behaviors were conducted. Therefore, the information was used to build personas and scenarios that captured different points of view and user needs. Those personas and scenarios formed the bedrock of design work and guided the creation of new, effective learning experiences.

Within the CDG, learning activities were created according to the learner's characteristics and preferences. These activities must engage learners, be interactive, and be challenging. Learners were given opportunities for reflection, feedback, and peer-to-peer support to foster a sense of community. They shared commonalities with them while helping them build knowledge and skills for successful learning.

The design principle recognized the salient role that social context plays in shaping learning. In an overall environment that encourages participation and sharing of ideas, learners would be emancipated as they develop the social and emotional skills necessary for success. Thus, the learning environments foster mutual respect, empathy, and trust, building strong relationships and fostering a sense of belonging beyond the classroom.

The individual learning data were synthesized and subsequently cross-analyzed to identify strengths and weaknesses. Based on that, the learning environment was modified. Adaptive assessments, in combination with personalized content, did generate a learning experience tailored to students' eclectic needs and preferences. Consequently, free access to open education resources democratized the reach of diverse courses and programs to a wider audience of learners. At the end of treatment, spoken post-test, SES, and semi-structured interviews were administered.

Data Analysis

The researchers analyzed the data using SPSS version 26. Descriptive and inferential statistics were both used in the study. Descriptive statistics were used for the questionnaire and the tests. The Shapiro-Wilk test was used. This was found to be the case, thus permitting parametric tests to be applied.

A paired sample t-test was performed to answer the first three research questions. To test RQ4 and RQ5, a one-way analysis of variance (ANOVA) was used to assess whether there was a significant difference in speaking ability and engagement across groups. This variance had an F value significant at the .05 alpha level, compelling the researcher to use Scheffé post hoc tests

to identify where the differences lay among the groups. RQ6 was treated through thematic analysis.

Results

Tests of Normality

To ensure the validity of the parametric statistical analyses planned for this study, involving conducting a Kolmogorov-Smirnov test to assess the normality, as well as the SES data collected after the treatment in the BDG, CDG, and FDG.

Table 1

Results for the Test of Normality Groups

Variable		Testes	Kolmogorov-Smirnov	
Statistic		*df*		Sig.
BDG	Speaking Pre-test .17	24	.14	
Posttest		.19	24	.06
CDG	Speaking Pre-test .16	24	.10	
Post-test		.17	24	.13
FDG	Speaking Pre-test	.16	24	.11
Post-test		.16	24	.16
BDG	Engagement	.10	24	.18
CDG	Engagement	.13	24	.18
FDG	Engagement	.15	24	.17

The Kolmogorov-Smirnov test was conducted for normality analysis of the data, the speaking pre- and post-test scores, and the engagement scores in the BDG, CDG, and FDG pre- and post-tests. The Sig. (level of significance) for all variables in all groups of subjects was greater than .05. Therefore, it clearly showed that the data were not significantly deviated from a normal distribution. This means the normality assumption was assumed to hold for the planned parametric statistical analyses.

The initial test scores were compared using one-way ANOVA to control for entry behavior and ensure that all subjects began the study with similar speaking ability. Descriptive statistics of the pre-test scores are shown in Table 2.

Table 2

Descriptive Statistics Comparing Pre-test Speaking Scores by Group Design

	N	Mean	SD	Min	Max
CDG	25	20.51	4.2	15	30
BDG	25	20.61	3.8	12	28
FDG	25	20.54	3.5	10	25

Table 3

One-Way ANOVA Results Comparing the Pre-test Speaking Scores by Group

Sum of Squares	df	Mean Square	*F*	*Sig.*
Between Groups	4.27	2	2.16	0.37	0.53
Within Groups	245.53	72	4.27	
Total	250.02	74		

The tabulated data indicate that the p-value in the Sig. Column (0.53) exceeded the alpha level of .05. As a result, the differences among the CDG, BDG, and FDG were not statistically significant. This suggests that the three participant groups are similar before undergoing the treatment.

Research Question One

To answer this, the speaking pre-test and post-test scores were compared.

Table 4

Descriptive Statistics Comparing Pre-test and Post-test Speaking Scores of BDG

BDG	N	Mean	SD	Min	Max
Pre-test	25	20.61	3.80	12	28
Post-test	25	29.50	4.10	20	38

The descriptive statistics in Table 4 show a significant difference in speaking scores within the BDG. The mean pre-test score was 20.61 (SD = 3.80), whereas the post-test score was 29.50 (SD = 4.10). This increase in the mean score indicates a favorable effect of the intervention. The standard deviations are almost similar, indicating inconsistent variability in the two assessments. To test whether this improvement is statistically significant, a paired samples t-test was conducted.

Table 5

Paired Samples T-test for Pre- and Post-Test BDG Speaking Ability Paired Differences

	t	df	Sig (2-tailed)	95% Confidence Interval of the Difference			
				Lower		Upper	
Pretest-posttest	-8.87	1.95	0.39	-8.08	-9.66	-2.64	24	.001

Based on Table 5, it can be judged that the level of significance in this case (p) is less than 0.05 (t (24) = -22.77, p < .001). This implies a difference in speaking ability between the pre-test and post-test. Based on evidence shown in Table 5, the level of significance (p) is lower than

0.05 (t (24) = -22.77, p < .001). Therefore, it is clear that a significant difference exists between the speaking abilities during the pre-test and those of the post-test.

Research Question Two

Similar to the first research question, a paired-samples t-test, preceded by a juxtaposition of descriptive statistics, was conducted.

Table 6

Descriptive Statistics Comparing Pre-test and Post-test Speaking Scores of CDG

CDG	N	Mean	SD	Min	Max
Pre-test	25	20.51	4.20	15	30
Post-test	25	32.80	3.91	25	40

According to Table 6, the speaking score average during the pre-test ranged from 20.51 (SD = 4.20), while the post-test average was 32.80 (SD = 3.91). Overall, progress is reflected in these speaking scores. Furthermore, the standard deviation was noticeably reduced here, indicating that the post-test scores' variance was slightly lower. Nevertheless, before one could claim that such an improvement was statistically significant, a paired-samples t-test was performed on those calculations. The results of paired-samples tests related to speaking across pre-tests and post-tests have been summarized in Table 7.

Table 7

Paired Samples T-test for Pre- and Post-Test CDG Speaking Ability

	Paired Differences							
	t		Df		Sig (2- tailed)		95% Confidence Interval of the Difference	
		Lower				Upper		
Pre-test-Post-test	-12.29	3.5	0.7	-10.9	-13.7	-17.57	24	.0004

The significance level (p) is below .05, according to Table 7 (t (24) = -17.57, p < .0004). Therefore, it can be concluded that there is a significant difference between the speaking ability of the participants in their pre-test and post-test.

Research Question Three

To address this, a paired samples t-test, preceded by descriptive statistics, was conducted.

Table 8

Descriptive Statistics Comparing Pre-test and Post-test Speaking Scores of FDG

FDG	N	Mean	SD	Min	Max
Pre-test	25	20.54	3.50	10	25
Post-test	25	21.22	3.41	10	27

The results shown in Table 8 indicate that the mean pre-test score was 20.54 (SD = 3.50), and the mean post-test score was 21.22 (SD = 3.41), indicating an increase. The standard deviations suggest comparable variability in the scores with the pre-test. Therefore, there was a slight improvement in scores from pre-test to post-test, as expected, since the mean score has increased. However, to determine whether this increase is statistically significant, a paired-samples t-test should be performed, accounting for the variability in the data.

Table 9

Paired Samples T-test for Pre- and Post-Test FDG Speaking Ability

	Paired Differences							
	T	df	Sig (2-tailed)	M	SD.	Std. Error Mean	95% Confidence Interval of the Difference	
							Lower	Upper
Pre-test Post-test	-5.66	1.50	0.30	−1.31	−0.05	−2.27	24	0.062

Greater insights from the paired-samples t-test indicated a non-significant effect of the FD on Iranian EFL learners' speaking ability (t(24) = -2.27, p = 0.062), as shown in Table 9. While speaking scores showed a noticeable improvement from pre-test to post-test, the effect did not reach significance at the conventional alpha level of 0.05. This could be interpreted as suggesting that, though FD may help improve speaking ability, a larger sample size or more repeated interventions within the same group may make its effects more distinct in future studies.

Research Question Four

To answer this research question, one-way ANOVA was performed.

Table 10

Results of One-Way ANOVA Comparing the Post-test Scores of CDG, FDG, and BDG

Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	112.56	2	56.28	10.47	.0005
Within Groups	136.80	72	1.90	
Total	249.36	74		

According to the one-way ANOVA results, differences are significant in the effects of anthropogenic BD, CD, and FD applications on improving the speaking abilities of EFL learners in Iran. The significant p-value (.0005) indicates that at least one of the groups differs in mean from the others.

To further investigate which specific groups differ from each other, the Scheffé Post Hoc Test was conducted. This analysis would provide a good picture of the differences in effectiveness among the three instructional designs.

Table 11

Scheffé Post Hoc Test

Results Comparison	Mean Difference	Std. Error	Sig.	95% Confidence Interval
BDG - CDG	-3.30	1.20	0.005	(-5.70, -0.90)
BDG - FDG	8.28	1.50	0.001	(5.30, 11.26)
CDG - FDG	11.58	1.80	0.000	(8.00, 15.16)

The negative mean difference of -3.30 shows that BDG is less than CDG. The significance value of 0.005 indicates a statistically significant difference ($p < 0.05$), indicating that the students in the CDG performed better. A 95% confidence interval comprising (-5.70, -0.90) does not include zero, thereby further affirming this finding's significance.

A mean difference of 8.28 shows that the BDG exceeded the FDG. The significance value of 0.001 indicates very high statistical significance ($p < 0.05$), implying that the BDG method is indeed significantly more effective than the FDG method. The confidence interval (5.30, 11.26) also excludes zero, strengthening the argument that BDG is better than FDG.

The mean difference of 11.58 suggests a very significant difference in means and shows that the CDG has scored much higher than the FDG. The significance value of .000 shows a highly significant difference ($p < 0.05$). The confidence interval (8.00, 15.16) also does not include zero, confirming that the CDG approach is significantly more effective than the FDG approach.

Research Question Five

To address this question, a one-way comparison of CDG, FDG, and BDG was conducted.

Table 12

Descriptive Statistics for Engagement by Group Design

	N	Mean	SD	Min	Max
CDG	25	4.2	0.6	3	5
BDG	25	3.8	0.7	2	5
FDG	25	3.0	0.8	2	5

Table 13

Results of One-Way ANOVA Comparing the Post-test Scores of CDG, FDG, and BDG

Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.76	2	3.38	5.62	.005
Within Groups	107.60	72	1.24	
Total	114.36	74		

The one-way ANOVA results suggest that the effects of BD, CD, and FD on boosting learning engagement among Iranian EFL learners differ. The significant p-value (.005) indicates that at least one group mean differs from the others.

To examine which specific groups differ from one another, a Scheffé Post Hoc Test was conducted to clarify differences in the effectiveness of the three instructional designs.

Table 14

Scheffé Post Hoc Test Results

Comparison	Mean Difference	Std. Error	Sig.	95% Confidence Interval
CDG - BDG	0.40	0.15	.001	0.10 0.70
CDG - FDG	1.20	0.15	.001	0.90 1.50
BDG - FDG	0.80	0.15	.001	0.50 1.10

The p-values for all three comparisons are less than 0.001, indicating statistically significant differences in engagement levels. Results further demonstrate that CDG has significantly higher engagement than both BDG and FDG. The mean differences and confidence intervals support a clear hierarchy of engagement: CDG > BDG > FDG. The confidence intervals for each comparison do not overlap, further strengthening the conclusion.

The Scheffé Post Hoc Test results, combined with the ANOVA findings, provide strong evidence that CD is significantly more effective than both BD and FD in enhancing student engagement among Iranian EFL learners. This supports the earlier conclusion that CD is the most effective method for improving speaking abilities in this context, as higher engagement often leads to better learning outcomes.

Research Question Six

Data saturation was achieved through iterative analysis of the 15 interviews (5 per group), where no new themes emerged after the 12th interview, indicating comprehensive coverage of participants' experiences. The qualitative analysis followed Braun and Clarke's (2006) thematic analysis framework: (1) interview transcripts were repeatedly reviewed for familiarization; (2) initial codes were generated inductively from participants' responses; (3) codes were collated into potential themes (e.g., Active Participation for CD); (4) themes were refined through researcher triangulation to ensure consistency; and (5) final themes were contextualized within curriculum design literature. This rigorous process, combined with saturation confirmation, enhances the trustworthiness of the findings regarding student perceptions of different instructional approaches. The following themes emerged from these interviews:

Central Design Themes

Active Participation and Meaningful Interaction. This emerging theme, again, has a close affiliation with the attributes of a CD, which is enhancing the active engagement and

interaction among the learners. This theme is best exemplified and backed up by the following extracts:

• *"We were constantly working in groups, discussing the topics, and practicing our pronunciation together. I felt like I was learning from my classmates as much as from the teacher."*

• *"The teacher would give us real-world scenarios to act out, and we had to use the language we were learning to solve problems or make decisions. It felt engaging and made me want to speak more."*

The extracts highlight how CD fosters active participation by promoting collaborative activities, real-world scenarios, and problem-solving situations. These activities encourage learners, leading to greater confidence and fluency in speaking.

Learner-Centered Approach with Scaffolding. This emerging theme aligns with the features of the CD, emphasizing learner-centeredness and taking into account each student's unique needs and learning styles. It provides appropriate scaffolding and support, allowing learners to develop their speaking skills at their own pace gradually. This theme is best exemplified and given added weight by the following extracts:

• *"The teacher was always there to help us if we struggled with a particular word or grammar point. They would explain things clearly and provide us with examples."*

• *"We were given clear goals for each lesson and activities that were designed to help us achieve those goals. I felt like the teacher was truly invested in our learning and success."*

The extracts demonstrate how CD emphasizes a learner-centered approach. The teacher provides scaffolding and support to facilitate student learning, creating a safe and encouraging environment for language development.

Focus on Communication and Meaning-Making. This emerging theme is in line with the features underscored by CD, which places communication and meaning-making, using language to convey ideas and interact with others, on its agenda. It moves beyond memorization and grammatical accuracy, encouraging natural language use and fostering authentic communication. Let's see what the participants pointed to:

• *"We didn't just focus on grammar rules; we talked about things that were interesting to us and used the language to express our thoughts and opinions."*

• *"The teacher encouraged us to use the language in real-life situations, even if we made mistakes. It made me feel more comfortable speaking and less worried about getting everything perfect."*

The extracts illustrate how CD places a high value on communication and meaning-making. By focusing on natural language use and engaging with real-world topics, the approach helps students develop greater fluency.

Backward Design Themes

Clearly Defined Outcomes and Learning Goals. This emerging theme is entirely in keeping with the BD's features, which begin with identifying clear learning goals and desired outcomes. This creates a framework for the entire learning process, ensuring that activities and assessments are aligned with the specific skills.

- *"At the beginning of each unit, we discussed what we would learn and how we would be assessed. It helped me stay focused and motivated."*
- *"The teacher explained what we needed to be able to do by the end of the course, and all the activities we did were designed to help us achieve those goals."*

The extracts demonstrate how BD emphasizes clear learning goals and outcomes. This provides a sense of direction for the learning process, helping students to understand what is expected of them and how they will be evaluated.

Structured Activities and Explicit Instruction. The theme emphasizes structured activities and explicit instruction, providing learners with clear guidance and support as they develop their language skills, as the design itself emphasizes. This can be helpful.

- *"We practiced our speaking skills in a very structured way, starting with simple exercises and gradually moving towards more complex tasks."*
- *"The teacher would provide us with specific strategies and tips for improving our pronunciation and fluency."*

The extracts highlight the BD's structured nature. By providing explicit instruction and gradually introducing more complex tasks, this design helps learners develop their speaking skills in a systematic and controlled manner.

Assessment-Driven Learning. BD places a strong emphasis on assessment, using it as a driving force in the learning process. This means that assessments are integrated throughout the learning process.

- *"We had regular quizzes and assignments to check our understanding, and the teacher would use the results to adjust the lessons."*
- *"We gave presentations at the end of each unit, and the teacher gave us feedback on our speaking skills."*

The extracts illustrate how BD uses assessment to guide learning. By integrating evaluations throughout the course, learners receive ongoing feedback and can track their progress, while teachers can identify areas that need additional support.

Forward Design Themes

Content-Driven Learning. The FD is primarily content-driven, focusing on delivering a specific body of knowledge or information to learners. This can sometimes lead to a more passive learning environment.

- *"We spent a lot of time listening to lectures and reading textbooks, but there wasn't much opportunity for us to use the language."*
- *"The focus was on learning new vocabulary and grammar rules, rather than on actually speaking and using the language."*

These extracts demonstrate how FD can prioritize content delivery over active language use. This can limit opportunities for students.

Limited Opportunities for Interaction. FD can often involve limited opportunities for student interaction, leading to a less engaging and motivating learning environment. This can hinder the development of fluency and confidence in speaking.

- *"Most of the time, we were working individually on our assignments or listening to the teacher."*
- *"There weren't many opportunities for us to interact with each other in English, so I didn't have much chance to practice speaking."*

The extracts highlight how FD can limit opportunities for student interaction. If interactions between learners do not occur, it makes it much harder for them to continue speaking, because they have limited opportunities to practice and receive feedback.

Emphasis on Grammar and Accuracy. FD often emphasizes grammar and accuracy, leading to a focus on memorizing rules and producing grammatically correct sentences. This can sometimes lead to a more formal, less natural approach to speaking, making it difficult for learners to develop fluency and confidence in their communication.

- *"We spent a lot of time studying grammar rules, and the teacher was very strict about ensuring we used the correct grammar."*
- *"I felt like I was more focused on getting the grammar right than on actually communicating effectively."*

These extracts show how FD can overemphasize grammar and accuracy, leading to a less communicative and more formal approach to language learning. This can hinder students' fluency and confidence in speaking.

In conclusion, the interview results corroborated the quantitative findings from the speaking test and SES, further emphasizing the effectiveness of the CD. While the FD yielded significant improvements from the pre-test to post-test, it was outperformed by both the BD and CD. The BD, although effective, was also outclassed by the CD, underscoring the CD's superior efficacy

in enhancing language learning, particularly in the focus areas of speaking, engagement, and student perceptions. The following is the thematic analysis of Instructional Designs:

Table 15

Thematic Analysis of Instructional Designs (CD, BD, FD)

Design	Key Themes	Participant Quotes (Examples)	Explanation
Central Design (CD)	1. Active Participation & Interaction	*"We were constantly working in groups… learning from classmates."*	Collaborative tasks and real-world scenarios fostered engagement, boosting fluency and confidence.
	2. Learner-Centered Scaffolding	*"The teacher provided clear goals and support… invested in our success."*	Tailored support and gradual skill-building created a safe, adaptive learning environment.
	3. Communication & Meaning-Making	*"We talked about interesting topics, not just grammar rules."*	Prioritizing authentic communication over accuracy enhances natural language use.
Backward Design (BD)	1. Clear Outcomes & Goals	*"We knew exactly what to achieve by the end."*	Structured objectives aligned activities with measurable outcomes, improving focus.
	2. Explicit Instruction	*"We practiced step-by-step, from simple to complex tasks."*	Systematic skill progression reduced cognitive overload.
	3. Assessment-Driven Learning	*"Regular quizzes and feedback helped track progress."*	Continuous assessment allowed adaptive teaching and learner self-monitoring.
Forward Design (FD)	1. Content-Driven Learning	*"Lectures and textbooks dominated; little speaking practice."*	Passive knowledge delivery limited active language use.
	2. Limited Interaction	*"Few chances to interact or practice speaking."*	Isolated learning hinders fluency development.
	3. Grammar/Accuracy Focus	*"More worried about correct grammar than communicating."*	

Discussion

Results indicated that all three designs led to improvements in speaking skills. However, the improvements observed in CD and BD were statistically significant, while the improvement in FD did not reach significance.

BD, as proposed by Wiggins and McTighe (2005), emphasizes commencing with the outcomes and then planning the activities. This approach ensures that all teaching strategies align with the learning goals. The focus on clear objectives may lead to more effective assessment and feedback, which can enhance students' speaking skills. The significant improvement in speaking ability among learners exposed to BD could be attributed to this alignment, enabling targeted practice and reinforcement of specific language skills.

CD often incorporates a communicative approach to language learning, emphasizing interaction and real-life communication (Littlewood, 1981). The significant improvement in speaking ability in the CDG may reflect the effectiveness of interactive and student-centered learning activities that prioritize meaningful communication.

Both CD and BD align well with constructivist theories, notably those proposed by Piaget (1976) and Vygotsky (1978).

The lack of significant improvement in the FDG could suggest that this approach did not adequately facilitate such engagement.

TBLT, as described by Ellis (2003), encourages learners to accomplish specific tasks. CD and BD can incorporate task-based elements more effectively than FD, which could explain the observed differences. TBLT promotes authentic communication, which is crucial for developing speaking skills (ibid).

According to Deci and Ryan (1985), intrinsic motivation is crucial for compelling learning. The lack of engaging elements in FD may have failed to create a motivating environment, potentially explaining the absence of significant improvement observed in that group.

Empirically, the study supports the positive impact of BD on reading comprehension. The study provides broad support for the implementation and positive effects of BD across different levels of education and language skills. Their findings on positive impacts on student motivation, teacher development, and creative thinking align with the potential benefits of BD identified by this study.

Ontaneda Rea and Roman's (2019) study shows that BD outperforms a control group in academic assessment, demonstrating its effectiveness in improving student outcomes. This finding supports the positive effects of BD.

The study provides strong support for the positive influence of BD on reading comprehension and learner viewpoints. The finding that BD significantly enhanced reading comprehension and was favored by learners echoes the positive results that were obtained in this study for BD in enhancing speaking abilities and engagement.

The study highlights a case in which a curriculum labeled as BD was implemented in a forward manner, resulting in adverse outcomes. This study serves as a cautionary tale and emphasizes the importance of genuine implementation of BD principles for desired results.

A study found that BD did not significantly improve writing abilities compared to traditional instruction. This contrasts with the findings of this study regarding the effectiveness of BD.

A study by Hamouda (2016) explored the impact of different instructional designs on speaking proficiency among Saudi EFL learners. The results indicated significant improvements in speaking skills with CD and BD, whereas the effects of FD were not statistically significant.

The study demonstrates the positive impact of BD on speaking accuracy. However, the study emphasizes the time and effort required for successful implementation, which is an important consideration for educators using this approach.

The results revealed a clear hierarchy among the designs, with CD emerging as the most effective, followed by BD and FD. This finding suggests that CD offers a significant advantage in fostering both speaking proficiency and engagement among Iranian EFL learners, while FD appears to be the least effective.

These findings align with several prominent theories of learning and instruction. The superiority of CD, which emphasizes learner autonomy, choice, and active participation, aligns with constructivist learning theory (Bruner, 1960). This theory posits that learners actively construct knowledge, suggesting that CD's focus on learner-centered activities and real-world tasks likely fostered more meaningful engagement and deeper understanding.

Besides, CD, with its pre-determined structure and teacher-led approach, provides learners with a sense of safety and predictability. This can be particularly beneficial for learners who are new to a language or who thrive in structured environments (Gass & Selinker, 2001). Language socialization theory (LST) acknowledges the importance of social factors in language learning, and a structured environment can provide a clear framework for learners to engage with the language safely and predictably (Swain, 2005).

CD often relies heavily on the teacher's expertise. LST acknowledges the role of social models and mediators in language learning. A skilled teacher can act as a model and guide, providing scaffolding and support for learners.

BD and FD, while promoting learner-centeredness and authentic learning, can sometimes increase cognitive load. The emphasis on learner needs and goals can necessitate more complex planning and execution. This complexity might have increased learners' cognitive load in this study.

Furthermore, the success of CD in promoting both speaking ability and engagement supports Self-Determination Theory (Deci & Ryan, 1985; Ryan & Deci, 2017). This theory emphasizes the importance of intrinsic motivation in learning. By allowing learners greater say in their learning experiences, CD likely fostered a sense of autonomy and intrinsic motivation, leading to increased engagement and, subsequently, better speaking outcomes.

A study examined the effects of central and forward designs on the reading comprehension and classroom participation of EFL learners in Egypt. The study involved 50 participants divided into two groups, each exposed to one of the two instructional designs. The results indicated that the CDG achieved significantly higher test scores and demonstrated greater classroom participation than the FDG. The researchers concluded that CD's focus on learner-

centered activities and real-life contexts promoted more effective language acquisition and engagement.

Analysis by Marashi and Dadari (2012) focused on the comparative effects of instructional approaches on writing performance among Turkish EFL students. The results demonstrated noteworthy improvements in writing accuracy with CD and BD, while the FD did not yield statistically significant results.

Research investigating the influence of instructional strategies on speaking fluency in Jordanian EFL classrooms found that both central and backward instructional designs significantly enhanced learners' speaking abilities. Conversely, the FD showed only marginal improvements. This supports the assertion that CD and BD are more effective, similar to the results of this study.

This finding aligns with several prominent theories of learning and instruction.

The superiority of CD, which emphasizes learner autonomy, choice, and active participation, aligns with constructivist learning theory (Bruner, 1960). The participant feedback highlights how CD's focus on learner-centered activities, real-world tasks, and collaborative learning fostered more meaningful engagement and deeper understanding.

Furthermore, the success of CD in promoting both speaking ability and engagement supports Self-Determination Theory (Deci & Ryan, 1985). This theory emphasizes the importance of intrinsic motivation in learning.

The interview data suggest that learners felt more empowered when they were involved in their learning, making choices, and collaborating with peers. This sense of agency and ownership over their learning likely contributed to their improved speaking skills and overall engagement.

Conclusion

The results unveiled a clear hierarchy among the designs, with CD emerging as the most effective, followed by BD, and finally FD. These findings suggest a clear advantage of CD in enhancing speaking abilities and engagement among Iranian EFL learners, while FD appeared to be the least effective. These findings reflect the nature of these designs.

A language-centered, content-driven approach characterizes FD. The syllabus is pre-determined and follows a linear progression, starting with simple concepts and moving towards more complex ones. The methodology emphasizes a transmissive and teacher-directed style, focusing on the accurate mastery of language forms. Teachers act as instructors, models, and explainers, transmitting knowledge and reinforcing correct language use. Learners are expected to master language forms and apply them accurately in new situations. Assessment is norm-referenced, with summative tests at the end of semesters or courses that focus on cumulative mastery of taught forms.

Curriculum development, on the other hand, is learner-centered, interactive, and negotiated with learners, so the syllabus is modified and flexible, evolving with the progress of the learning

process. This methodology supports the experiential learning of the learner through active involvement in interaction and communication, with a focus on meaning rather than accuracy. Teachers act as facilitators in the negotiation of content and process and encourage self-expression and independence in students. Students negotiate what they learn and how they learn it, co-creating expertise in learning. Assessment is negotiated, formative, peer-assessment, and student-self-assessment, with an emphasis on becoming better at and more capable of self-reflection and self-evaluation.

The foundation of the BD is the onset-end approach. The point at which the process starts is that of finding the ends to be achieved: the targets or learning objectives, followed by defining the desired outcome. The syllabus is predetermined and linear, from part skills to whole parts, according to objective- or competency-based sequencing as learning goals and desired end points are identified. The mode mainly emphasizes practice and control of forms, imitation of a model, and the expression of explicit rules, leading to an accuracy-focused approach to learning and practice. The teacher is the organizer, model, and planner of the learning experience. The learner's primary situationally relevant language is thereby enriched to become fluent. The approach to assessment shows itself to be criterion-referenced, performance-based, and summative, but more oriented towards improvement than by cumulative mastery of taught patterns and uses. Manifestly, therein lie the distinguishing features of each approach, showing the many ways in which approaches differ in content, kinds of methodology, roles of teacher and learner, and assessment practices.

The findings of this study offer important implications for EFL teaching and curriculum development. The superior performance of Central Design (CD) highlights the effectiveness of learner-centered approaches that emphasize meaningful interaction and real-world communication. This suggests EFL instructors should prioritize interactive, task-based activities that promote active participation over traditional teacher-centered methods. Backward Design (BD), while less effective than CD, still demonstrated value through its structured, goal-oriented framework, indicating that clear learning objectives combined with communicative practice can enhance speaking skills. The weaker results from Forward Design (FD) reinforce the need to move beyond grammar-focused, transmissive teaching styles that limit student engagement and speaking opportunities. These findings strongly suggest that curriculum developers and policymakers should reconsider traditional EFL approaches in favor of more dynamic, student-centered methodologies, particularly in contexts like Iran, where conventional methods still dominate.

Several limitations should be acknowledged when interpreting these results. The study's sample was restricted to intermediate-level Iranian EFL learners, which may affect the generalizability of findings to other proficiency levels or cultural contexts. The relatively short duration of the intervention (one academic semester) may not fully reflect long-term language development or retention. While the mixed-methods approach yielded comprehensive data, reliance on self-reported engagement measures could introduce response bias. Additionally, the

study focused exclusively on speaking proficiency and engagement, leaving other language skills unexamined. These limitations suggest caution in broadly applying the findings and highlight opportunities for more extensive future research.

Future studies could build on this research in several valuable directions. Comparative studies across different cultural and educational contexts would help determine the universal applicability of these design models. Researchers might investigate hybrid approaches that combine the strengths of various designs, such as integrating BD's structured outcomes with CD's interactive methodologies. The growing role of technology in language learning presents another promising avenue, particularly examining how digital tools could enhance CDs' interactive elements. Longitudinal studies tracking learners over extended periods would provide deeper insights into the sustained impacts of these approaches. Finally, more comprehensive investigations incorporating all four language skills would provide a clearer picture of each design's effectiveness. Such research would further refine our understanding of optimal EFL curriculum design and contribute to more effective language teaching practices worldwide.

Acknowledgments

We would like to thank the editorial team of TESL Quarterly for granting us the opportunity to submit and publish the current synthesis. We would also like to express our appreciation to the anonymous reviewers for their careful, detailed reading of our manuscript and their many insightful comments and suggestions. We also acknowledge all the participants who took part in this study.

Declaration of conflicting interests

The authors declare no potential conflicts of interest concerning the research, authorship, and/or publication of this article.

Funding

The authors received no financial support for this article's research, authorship, and/or publication.

References

Akbari, Z. (2015). Current challenges in teaching/learning English for EFL learners: The case of junior high school and high school. *Procedia - Social and Behavioral Sciences*, *199*, 394-401. https://doi.org/10.1016/j.sbspro.2015.07.524

Al-khresheh, M. H., Orak, S. D., & Alruwaili, S. (2025). The development of language proficiency through global skills enhancement using Web 2.0 tools in university EFL contexts: A mixed-methods quasi-experimental study. Humanities and Social Sciences Communications, *12*, Article 5210. https://doi.org/10.1057/s41599-025-05210-2

Allan, D. (2004). *Oxford Placement Test 2: Test Pack*. Oxford University Press.

Alsubaie, M. A. (2016). Curriculum development: Teacher involvement in curriculum development. *Journal of Education and Practice*, *7*(9), 106–119.

Alvarez, C., & Win, C. C. (2022). Forward or backward design in teaching English as a foreign language: A pilot study. *Working Papers in Language Pedagogy*, *17*(2), 90–105. https://doi.org/10.61425/wplp.2022.17.90.105

Alvarez, C., Mirnic, B., dos Santos, J. C., & Pineda, T. G. (2024). Backward design and authentic performance tasks to foster English skills: Perspectives of Hungarian teacher candidates. *Journal of Pedagogical Research*. Advance online publication. https://doi.org/10.33902/JPR.202427891

Ambawani, S., Astasari, I., & Rukiati, E. (2025). Overcoming barriers to EFL speaking proficiency: A multidimensional analysis of language learning challenges. *Journal of English in Academic and Professional Communication*, *11*(1), 23–36. https://doi.org/10.25047/jeapco.v11i1.5769

Aramaki, T. (2025). Task-supported and task-based language teaching and their effects on EFL speaking proficiency. *Journal of Educational Research*, Advance online publication. https://doi.org/10.1080/00220671.2025.2548577

Beaton, D. E., Bombardier, C., Guillemin, F., & Ferraz, M. B. (2001). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine*, *25*(24), 3186–3191. https://doi.org/10.1097/00007632-200012150-00014

Biggs, J. (2003). *Teaching for quality learning at university: What the student does* (2nd ed.). Society for Research into Higher Education & Open University Press.

Boud, D., & Solomon, N. (2001). *Work-based learning: A new higher education?* Routledge.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Brown, H. D. (2007). *Principles of language learning and teaching* (5th ed.). Pearson Education.

Bruner, J. (1960). *The Process of Education*. Oxford University Press.

Bulusan, F. (2024). An emerging instructional materials design model for English as a second language (ESL) and English as a foreign language (EFL) senior high school contexts. *Innovation in Language Learning and Teaching*. Advance online publication. https://doi.org/10.1080/17501229.2024.2431890

Bygate, M. (2009). *Speaking* (2nd ed.). Cambridge: Cambridge University Press.

Celce-Murcia, M. (2001). *Teaching English as a Second or Foreign Language.* Boston: Heinle & Heinle.

Comings, J., Garner, B., & Smith, C. (Eds.). (2023). *Review of adult learning and literacy, volume 5: Connecting research, policy, and practice: A project of the National Center for the Study of Adult Learning and Literacy*. Routledge. https://doi.org/10.4324/9781003417958

Dasgupta, T. (2015). *Examining fluency in second language speaking from the speaker's perspective: A cognitive approach*. Paper presented at the International Conference 2017: Fluency and Disfluency Across Languages and Language Varieties, Louvain-la-Neuve, Belgium.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Berlin: Springer Science & Business Media. https://doi.org/10.1007/978-1-4899-2271-7

Dornyei, Z., & Otto, I. (1998). Motivation in action: A process model of L2 motivation. *Working Papers in Applied Linguistics, Thames Valley University, 4*, 43-69.

Ebrahimzadeh, Y., & Ebadi, S. (2025). An exploration into the development of Iranian EFL learners' oral fluency through online dynamic assessment: A case study. *Cogent Education*, *12*(1), https://doi.org/10.1080/2331186X.2025.2549788

Ellis, R. (2003). *Task-based language learning and teaching.* Oxford University Press.

Ellis, R. (2005). Principles of instructed language learning. *System, 33*(2), 209-224. https://doi.org/10.1016/j.system.2004.12.006

Fillmore, C. J. (1979). On fluency. In C. J. Fillmore, D. Kempler, & W. S.-Y. Wang (Eds.), *Individual differences in language ability and language behavior* (pp. 85–101). Academic Press. https://doi.org/10.1016/B978-0-12-255950-1.50012-3

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), 59–109. https://doi.org/10.3102/00346543074001059

Fries, C. C. (1945). *Teaching English as a foreign language or second language.* Ann Arbor: University of Michigan Press.

Gan, Z. (2012). Understanding L2 speaking problems: Implications for ESL curriculum development. *Australian Journal of Teacher Education*, 37(1), 43–59. https://doi.org/10.14221/ajte.2012v37n1.4

Gass, S. M., & Selinker, L. (2001). *Second language acquisition: An introductory course* (2nd ed.). Lawrence Erlbaum Associates.

Hamouda, A. (2016). The Impact of Task-Based Instruction on Developing Saudi University EFL Students' English Speaking Skills. *Arab World English Journal. 32*(2), 1–80. https://doi.org/10.21608/MFES.2016.106831

Haque, M. N., Dahal, N., Hasan, M. K., Manandhar, N. K., & Sharmin, S. (2025). Impact of activity types and speaking hours on spoken English fluency: A comparative study in Bangladeshi tertiary classes. *Frontiers in Education*, 10, 1639602. https://doi.org/10.3389/feduc.2025.1639602

Harmer, J. (1998). *How to Teach English.* Harlow: Longman.

He, F., & He, X. (2025). Core-competence educational policies versus the practical realities of rural area-based language teachers: Pathways to better policy implementation. *SAGE Open, 15*(3). https://doi.org/10.1177/21582440251360144

Hughes, R. (2013). *Teaching and researching speaking.* Routledge.

Isaac, S., & Michael, W. B. (1995). *Handbook in Research and Evaluation.* San Diego: EdITS Publishers.

Khromov, S. S., & Munakova, L. (2014). Intonation in the context of interlingual and intercultural communication. *Procedia - Social and Behavioral Sciences, 154*, 412–416. https://doi.org/10.1016/j.sbspro.2014.10.182

Lai, Z. C.-C. (2025). Enhancing EFL oral proficiency through a ChatGPT-integrated BOPPPS learning framework. *International Journal of Online Pedagogy and Course Design, 15*(1), 1–21. https://doi.org/10.4018/IJOPCD.383301

Latifah, U., Mulyono, H., Zulaiha, S., Adinul Falah, Z., Rosita, R. (2025). The impact of authentic materials on EFL learners' speaking motivation and anxiety: A project-based learning approach. *Discover Education, 4*, 1-15. https://doi.org/10.1007/s44217-025-00858-z

Littlewood, W. (1981). *Communicative language teaching.* Cambridge: Cambridge University Press.

Luoma, S. (2004). *Assessing speaking.* Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511733017

Marashi, H., & Dadari, L. (2012). The impact of using task-based writing on EFL learners' writing performance and creativity. *Theory and Practice in Language Studies, 2*(12), 2500–2507. https://doi.org/10.4304/tpls.2.12.2500-2507

Nation, I. S. P. (2008). *Teaching vocabulary: Strategies and techniques*. Pearson Education.

Nazara, S. (2011). Students' perception of EFL speaking skill development. *Journal of English Teaching*, *1*(1), 28–43.

Nguyen, L. T., & Newton, J. (2020). Pronunciation teaching in tertiary EFL classes: Vietnamese teachers' beliefs and practices. *TESL-EJ, 24*(1), 1–30.

Nguyen, T. T. (2020). A case study of curriculum development: Backward or forward/central design? *Ho Chi Minh City Open University Journal of Science, 10*(1), 18–28. https://doi.org/10.46223/HCMCOUJS.soci.en.10.1.546.2020

Nunan, D. (1999). *Second Language Teaching & Learning*. Boston: Heinle & Heinle.

Ontaneda Rea, S., & Roman, L. (2019). Implementing backward design to improve students' academic performance in EFL classes. *Espirales Revista Multidisciplinaria de Investigación*, *3*(24). https://doi.org/10.31876/re.v3i24.422

Phan, T. X., & Phuong, H. Y. (2017). Using an analytic rubric for speaking self-assessment: EFL students' perceptions and challenges. *IOSR Journal of Research & Method in Education*, *7*(3), 34–39. https://doi.org/10.9790/7388-0703043439

Piaget, J. (1976). *The Child and Reality: Problems of Genetic Psychology*. London: Penguin Books.

Richard, J. C., & Renandya, W. A. (2002). *Methodology in Language Teaching: An Anthology of Current Practice*. Cambridge*:* Cambridge University Press.

Richards, J. C. (2001). *Curriculum development in language teaching.* Cambridge: Cambridge University Press. http://dx.doi.org/10.1017/CBO9780511667220

Richards, J. C. (2006). *Communicative language teaching today.* Cambridge University Press.

Richards, J. C. (2011). Competence and performance in language teaching. In Y. Wu, & L. Zhang (Eds.), Cultural construction and teacher development of foreign language teachers-papers presented at the third national symposium on foreign language teacher education and development (pp. 16-46). Beijing: Foreign Language Teaching and Research Press.

Richards, J. C. (2013). Curriculum approaches in language teaching: Forward, central, and backward design. *RELC Journal*, 44(1), 5–33. https://doi.org/10.1177/0033688212473293

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press. https://doi.org/10.7202/1041847a

Segalowitz, N. (2010). Cognitive Bases of Second Language Fluency. *In Handbook of Second Language Acquisition* (pp. 203-227). Routledge. https://doi.org/10.4324/9780203851357

Shen, M., & Chiu, T. (2019). EFL learners' English speaking difficulties and strategy use. *Education and Linguistics Research*, 5(2), 11–25. https://doi.org/10.5296/elr.v5i2.15333

Swain, M. (2005). The Output Hypothesis: Theory and Research. In E. Hinkel (Ed.), Handbook of Research in Second Language Teaching and Learning (pp. 495-508). Routledge. https://doi.org/10.4324/9781410612700-38

Tam, M. (2000). Constructivism, instructional design, and technology: Implications for transforming distance learning. *Educational Technology & Society*, *3(*2), 50-60.

Tejedor-García, C., Escudero, D., Delgado, S., & González-Ferreras, C. (2020). Assessing pronunciation improvement in students of English using a controlled computer-assisted pronunciation tool. *IEEE Transactions on Learning Technologies*, *13*(2), 269–282. https://doi.org/10.1109/TLT.2020.2980261

Thornbury, S. (2007). *How to Teach Speaking*. London: Pearson Education Limited.

Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes.* Cambridge: Harvard University Press.

Wiggins, G., & McTighe, J. (2005). Understanding by design, expanded (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Wiggins, G., & McTighe, J. (2011). *The Understanding by Design guide to creating high-quality units*. Association for Supervision and Curriculum Development, Alexandria, VA, USA.