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Integrating thought and language in foreign language instruction: a spiral framework

Integracja myślenia i mówienia w nauczaniu języków obcych: model spiralny

Abstract

This article proposes the communicative and cognitive model for foreign language (FL) instruction, arguing that modern FL classrooms must move beyond communicative competence (CC) to the integrated communicative and cognitive competence (CCC), which unifies language use with thought processes.

The major objective of this study is to elaborate the CCM – a structured pedagogical framework – that correlates communicative and cognitive constituents, providing an incremental methodology for classroom application.

The article was created through a scientific process combining conceptual analysis (reviewing and defining the goal), systems modeling (structuring the process into clear stages), and the application of cognitive-linguistic principles (designing stage-specific strategies based on the brain's processing language and thought).

The article delivers a feasible CCM that explicitly links communicative and cognitive processing of linguistic knowledge with independent FL production. It specifies an integrated goal – a CCC as a sought-for learning outcome; a six-stage process of its development; a practical guidance for progressing through these stages providing concrete pedagogical strategies for each stage and ensuring practical feasibility of the framework for language instructors.

This study formalizes the CCM as a distinct framework. It is also seminal in synthesizing CCC as a unified learning objective presuming a gradual progression through a spirally-structured model that directly integrates cognitive processes into the communicative practice.

The article argues that effective FL instruction requires a communicative and cognitive approach to foster CCC. The proposed spiral model offers a comprehensive practical framework. By integrating explicit cognitive processing, the CCM guides students to move beyond mechanic learning to achieving deep understanding of input and creative, contextually appropriate language output.

Keywords: foreign language instruction, communicative and cognitive competence, spiral framework, perception, initial reproduction, apperception, knowledge incubation, creative reproduction, production

Streszczenie

W artykułe zaproponowano komunikacyjno-poznawczy model nauki języka obcego (FL). Autorzy artykułu argumentują, że współczesna nauka języków obcych powinna wykraczać poza kompetencje komunikacyjne (CC) i zmierzać w kierunku zintegrowanej kompetencji komunikacyjno-poznawczej (CCC), która łączy użycie języka z procesami myślenia.

Głównym celem niniejszego badania jest opracowanie metodologii kształtowania CCC – ustrukturyzowanych ram pedagogicznych – integrujących komponenty komunikacyjne i poznawcze, zapewniając stopniowy rozwój mowy i umysłu uczniów w klasach języka obcego.

Artykuł powstał w oparciu o proces naukowy łączący analizę konceptualną (przegląd literatury i określenie celu), modelowanie systemowe (strukturyzacja procesu w celu jasnego zdefiniowania etapów nauki) oraz zastosowanie zasad kognitywno-lingwistycznych (opracowanie strategii specyficznych dla każdego etapu, w oparciu o komunikacyjne i poznawcze przetwarzanie napływających informacji przez mózg).

W artykule zaproponowano progresywny model kształtowania CQC, który wyraźnie łączy komunikacyjne i poznawcze przetwarzanie informacji językowych ze stopniową, niezależną produkcją własnych wypowiedzi. Model definiuje zintegrowany cel – CQC – jako pożądany efekt uczenia się; sześcioetapowy proces jego kształtowania; praktyczną metodologię przechodzenia przez te etapy, która oferuje konkretne strategie pedagogiczne dla każdego etapu i zapewnia praktyczną wykonalność opracowanej metodologii dla nauczycieli IM.

Niniejsze badanie formalizuje proces kształtowania CQC jako odrębnej, nowoczesnej metodologii nauczania IM. Ma on również fundamentalne znaczenie dla zdefiniowania pojedynczego celu uczenia się, który obejmuje stopniowy rozwój poprzez spiralny, ustrukturyzowany model, który bezpośrednio integruje procesy poznawcze z praktyką komunikacyjną.

W artykule dowodzi się, że efektywne nauczanie IM wymaga komunikacyjno-poznawczego podejścia do kształtowania CQC. Proponowany, odpowiadający mu model oferuje kompleksową praktyczną podstawę dla tego procesu. Poprzez integrację komponentu poznawczego CQC pomoże uczniom wyjść poza mechaniczne uczenie się i osiągnąć głębokie zrozumienie informacji wejściowych oraz kreatywną, kontekstualnie ugruntowaną produkcję wypowiedzi.

Słowa kluczowe: nauka języków obcych, kompetencja komunikacyjno-poznawcza, model spiralny, percepcja, reprodukcja pierwotna, apercepcja, inkubacja wiedzy, reprodukcja twórcza, produkcja

Introduction

The major focus of this study is to expose the methodological framework for enhancing the CCC of University students in FL classrooms.

Interestingly, the concept of *competence* was introduced into scientific discourse by Noam Chomsky who has nothing to do with FL pedagogy. Initially, this concept meant the ability requisite for performing a specific, primarily linguistic, activity in one's first language. Chomsky distinguishes between knowledge of the language system (idealized competence) and language proficiency (performance or actual production and comprehension of language).¹

Scholars, including Robin Campbell and Roger Wales, while partially agreeing with this distinction, note that Chomsky's understanding of these terms does not

¹ N. Chomsky, Aspects of the theory of syntax, The MIT Press 1965.

include any reference to the appropriateness of an utterance to a particular situation or its sociocultural significance, and therefore, it does not reflect the full depth of their meaning and is not a true competence.²

With that in view, D. Hymes introduces the concept of *communicative competence* (CC) defining it as the inherent human knowledge and skills for successful and effective communication³.

Extending this concept, Sandra J. Savignon characterizes CC as an ability of one or more interlocutors to function in a truly communicative environment, in a dynamic exchange, during which linguistic competence must adapt to specific input, both linguistic and paralinguistic. The researcher distinguishes between competence and language proficiency viewing *competence* as a presumed underlying ability, and *language proficiency* as the overt manifestation of that ability: competence is what a person knows, and performance is what they do. Although only performance is observable, and only through performance can competence be developed, maintained, and assessed. Moreover, Savignon regards competence as a relative, not absolute, concept; therefore, in her opinion, one should only speak of the degree of CC proficiency.⁴

Ukrainian scholars (see, for example, V. Skalkin, N. Sklyarenko, S. Nikolayeva, O. Vovk) interpret CC as an ability to: adequately use language in various socially determined communication situations; correlate linguistic means with communication goals and conditions; understand relationships between communicators; build communication considering social norms of behavior and the system of cultural perceptions and values of a particular language.⁵

Despite different views on the structure of CC, all researchers emphasize the necessity of its advancing in FL learners and pinpoint that in communication, the constituents of CC act in an integrated manner.⁶

² R. Campbell, R. Wales, *The study of language acquisition* [in:] *New horizons in linguistics*, ed. J. Lyons, Penguin Books 1970.

³ D.H. Hymes, *On communicative competence* [in:] *Sociolinguistics: Selected readings*, eds. J. B. Pride, J. Holmes, Penguin Books 1972.

⁴ S.J. Savignon, *Communicative competence: theory and classroom practice*, Center for Curriculum Development 1983.

⁵ O. I. Vovk, (2013), Комунікативно-когнітивна компетентність студентів-філологів: нова освітня парадигма, Yu. A. Chabanenko 2013; ідет, Теоретичні і методичні основи формування комунікативно-когнітивної компетентності майбутніх філологів [Doctoral dissertation], 2014; ідет, Комунікативно-когнітивна методика навчання англійської мови. Навчально-методичний посібник, FOP O. F. Nechytaylo 2023; O. I. Vovk, R. H. Shcherbukha, Second language acquisition: A neurocognitive and methodological perspective, AZBOOKA 2025

⁶ O. I. Vovk, *Teopemuчні і методичні основи…; idem, Комунікативно-когнітивна методика…*; O. Budnyk, P. Mazur, L. Matsuk, L. Berezovska, O. Vovk, *Development of professional creativity of future teachers (Based on comparative research in Ukraine and Poland)*, "Amazonia Investiga" 2021, No. 10(44), pp. 9–17, https://doi.org/10.34069/AI/2021.44.08.1; O. Budnyk, I. Nikolaesku, N. Stepanova, O. Vovk, A. Palienko, T. Atroshchenko, *Organization of the educational process in*

Respectively, as a multifaceted phenomenon, CC comprises linguistic, speech, sociocultural, strategic (compensatory), discourse, illocutionary, pragmatic, sociolinguistic, informative, social, and other competences each aiming at ensuring a definite aspect of successful communication. They require brief specification since they significantly foster the effectiveness of FL communication.

Different types of competencies aimed at ensuring successful communication

Linguistic competence is the ability to understand and produce linguistically correct sentences using acquired linguistic signs and rules for their combination. Such interpretation relates to developed linguistic knowledge and lexical, grammatical, phonetic, and orthographic habits.

Speech competence is viewed as a complex, multi-stage human ability for meaning-encoding/decoding activity and adaptive-informational orientation in a communication situation. Speech competence covers four major types of skills: listening, speaking, reading, and writing.

Sociocultural competence comprises country-study competence and linguistic country-study competences, which allow non-native speakers to associate the same information with a linguistic unit that native speakers associate, and thus achieve effectual communication.

Strategic (compensatory) competence implies the ability to replenish missing linguistic knowledge, as well as speech and social experience of FL communication, in the process of communication per se.

Discourse competence (textual competence) indicates the understanding of various types of communicative utterances, constructing coherent, cohesive, and logical messages of different functional styles, as well as choosing linguistic means depending on the type of utterance in order to achieve formal cohesion in form and coherence in thought.

Pragmatic competence purports the ability to convey communicative meaning in a communication situation. It also includes illocutionary competence, which means the functional use of language, and sociolinguistic competence, which requires the language to correspond to the context in which it is used.

Illocutionary competence is responsible for controlling the functional properties of language, such as the ability to express thoughts and emotions (ideational functions), to use language for learning and problem-solving (heuristic functions), and to be creative in language use (creative functions).

Sociolinguistic competence as the ability to adequately understand and use a FL in different contexts to express specific communicative functions (description,

the rural school of the mountain region: a case study, "Revista Brasileira de Educação do Campo" 2021, No. 6, pp. 1–19, https://doi.org/10.20873/uft.rbec.e12647.

⁷ O. I. Vovk, *Теоретичні і методичні основи…*; *idem, Комунікативно-когнітивна методика…*; O. I. Vovk, R. H. Shcherbukha, *Second language…*

narration, persuasion, generalization, etc.) implies mastering registers and communication styles from formal to informal in both oral and written discourse.

Informative competence is considered the ability to master the content subject matter of communication. Developing informative competence, students also form: information frames; background knowledge; general knowledge; formed knowledge, or schemata; language representation of the world in its FL form.

Social competence is aimed at the ability to enter into communicative relationships with other people. This ability requires an individual to be able to orient themselves in a social situation and manage it.

A special role is assigned to *cognitive competence*, which is perceived as an ability to effectively perform communicative and mental activity, i.e. to solve speech and mental tasks using a set of speech actions and mental operations. Speech actions are ensured by formed speech skills and abilities, and students' interlanguage. Mental operations are ensured by current knowledge, understanding, and awareness of the issue to be solved, as well as the skills of solving intellectual tasks employing definite cognitive operations. This refers primarily to *cognitive skills* – mental abilities through which a subject processes external stimuli. In FL acquisition, this is input in the form of tasks that stimulate cognitive processes.⁸

The advancement of cognitive skills involves progressing through three coherent *stages*: 1. *Initial, or cognitive stage*: understanding the speech and mental task and concentrating attention on the necessary information. 2. *Intermediate, or associative stage*: attempts to use techniques that help to understand and recall necessary information more quickly, correct errors, and accelerate the speech and mental performance. 3. *Highest, or autonomous stage*: correct answers become more automatic, and the rate and error-free performance of actions increase. Further development of the autonomous stage implies that to foster the flexibility of a cognitive skill, it is necessary to create a variety of situations and tasks that stimulate students' both mental and speech activity.⁹

Clearly, the communicative and cognitive approach to FL acquisition reflects both communicative and cognitive components in equal measure, and therefore, it makes no sense to consider them separately, because speech and thought are interconnected and interdependent.

In conclusion, since communicative and cognitive FL instruction encompasses two main paradigms – communicative and cognitive – and is aimed at enhancing learners' speech and mental performance, the discussion should not be about CC, but about the *communicative and cognitive competence* (CCC) – an integrated ability to engage in effective communication and thinking built on a foundation of knowledge, habits, and skills, and demonstrated by an individual's capacity to

⁸ O. I. Vovk, R. H. Shcherbukha, Second language...

⁹ O. I. Vovk, *Теоретичні і методичні основи...*; *idem, Комунікативно-когнітивна методика...*; O. I. Vovk, R. H. Shcherbukha, *Second language...*

solve problems using linguistic and cognitive tools. This ability is applied in various personal, sociocultural, and professional situations, and is informed by a person's knowledge, worldview, multiple intelligences, critical thinking, and their linguistic and cognitive identities.¹⁰

Communicative-cognitive model and its content components

The high level of the CCC can be ensured through the application of the corresponding model. *The communicative and cognitive model* is spiral in nature; it presumes an incremental progression through six interconnected stages, moving learners from initial exposure to input to independent, creative language production. *The stages* of the communicative and cognitive model embrace:¹¹

1. Perception of the New Input

Goal: to establish a holistic understanding and mental representation of the new FL input.

Process: the teacher initiates the learning process by immersing students in a global context of communication, typically created around a foundational text (e.g., a reading passage, dialogue, or short video). This initial exposure is crucial for establishing thematic relevance and meaning.

Pedagogical Strategy: a key feature here is the <u>multi-sensory engagement</u> of students. The teacher actively combines various sensory modalities – auditory (listening), visual (reading, observing), kinesthetic (gestures, movement, writing), and logical (understanding connections, patterns) – during the introduction of the text. This multi-modal approach is theorized to facilitate the formation of comprehensive mental images or *percepts* of the new material, ensuring deeper initial encoding rather than mere superficial recognition.

2. Initial Reproduction of the New Input

Goal: to develop foundational speech habits through controlled, repetitive practice of segmental speech patterns (SPs).

Process: this stage focuses on <u>enhancing students' basic speech habits</u> through the reproduction of segmental SPs from the foundational text. The reproduction occurs at a "superficial level," meaning the emphasis is on accurate form rather than deep semantic flexibility, and it takes place in single-type, invariant situations. This stage aims to build automaticity in basic pronunciation, lexical, and grammatical structures.

¹⁰ O. I. Vovk, *Теоретичні і методичні основи...*; *idem, Комунікативно-когнітивна методика...*; O. I. Vovk, R. H. Shcherbukha, *Second language...*

¹¹ O. I. Vovk, Foreign language acquisition: A communicative and cognitive paradigm, "Science and Education" 2017, No. 6, pp. 81–85, https://scienceandeducation.pdpu.edu.ua/en/artic-les/2017-6-doc/2017-6-st13-en; idem, Communicative and cognitive framework for foreign language acquisition: Types of learning, "Scholarly Bulletin of the Bohdan Khmelnytsky Cherkasy National University" 2023, Series: "Pedagogical Sciences", No. 3, pp. 63–76; https://doi.org/10.31651/2524-2660-2023-3-63-76; O. I. Vovk, R. H. Shcherbukha, Second language...

Pedagogical Strategy: the teacher employs a diversified system of <u>drilling exercises</u>. These include various forms of patterned practice such as:

- a) imitation or repetition: direct repetition of phrases or sentences;
- b) restatement: rephrasing or repeating a given pattern;
- c) transformation: changing a pattern (e.g., singular to plural, present to past);
- d) substitution/replacement: swapping elements within a pattern;
- e) expansion: adding elements to a pattern;
- f) completion: filling in missing parts of a pattern.

This structured practice aims to solidify motor-articulatory and basic linguistic patterns.

3. Apperception

Goal: to foster cognitive habits, enabling deeper analysis, conceptual understanding, and the integration of new knowledge.

Process: this stage moves beyond rote reproduction to <u>developing cognitive habits</u> in learners. It engages students in the cognitive analysis of the previously perceived input. They are encouraged to construct conceptual models based on this analysis, which involves activating and refining the schemata of their mental spaces (existing knowledge structures) and inferring new knowledge. Students are expected to manipulate information in various ways: condense, restructure, reshuffle, model, generalize, and interpret.

Pedagogical Strategy: this stage is particularly crucial for the inductive acquisition of grammar. Rather than explicit rule-giving, complex grammatical items are presented through conceptual metaphors and/or conceptual models. This approach significantly facilitates the "digestion," internalization, and assimilation of grammar, making abstract rules more concrete and understandable through analogy and conceptual mapping. For example, rather than just stating a rule for the past tense, a conceptual model might illustrate it as moving backward in time.

4. Incubation

Goal: to allow for the unconscious processing and consolidation of external linguistic knowledge into internal cognitive structures.

Process: this stage is characterized by the <u>conversion of external knowledge</u> <u>units into internal images</u> and the deeper embedding of the learned material. Students' attention remains drawn to activities related to the foundational text, but the nature of engagement shifts towards more reflective processing.

Pedagogical Strategy: the teacher and students engage with *supplementary texts, dialogues, videos, and activities* that are relevant to the topic under study. The key here is not just exposure, but the subsequent <u>processing, practice, and discussion</u> of this supplementary material. This allows for a period of mental "digestion" where the new input can be integrated with existing knowledge, often unconsciously, leading to more robust internal representations.

5. Creative Speech Reproduction

Goal: to enable learners to produce the new course material creatively and flexibly in varied communicative situations.

Process: in this stage, students are expected to <u>reproduce the new material on a creative level</u> in variant situational contexts. Having developed solid speech and cognitive habits in the preceding stages, these are now refined, and the primary focus shifts to *advancing communicative skills*. This means moving beyond merely accurate reproduction to functionally appropriate and creative use of language.

Pedagogical Strategy: activities are designed to elicit spontaneous and varied language use, such as role-plays with flexible scenarios, open-ended discussions, and problem-solving tasks that require adaptation of learned material to new situations.

6. Independent Speech Production

Goal: to achieve autonomous and meaningful use of the FL in diverse real-world communicative situations, thereby enhancing communicative and cognitive competence.

Process: this culminating stage sees students fluently and confidently <u>using the imbibed and assimilated material in individual meaningful speech outputs</u> across a wide range of diversified communicative situations. The ultimate aim is the enhancement of their overall communicative competence, allowing them to navigate genuine communicative challenges independently.

Pedagogical Strategy: activities would include authentic tasks like delivering presentations, engaging in debates, writing essays, participating in simulated real-life interactions, or even informal conversations, where the learner takes full responsibility for their message and linguistic choices.

For a better understanding of the presented communicative and cognitive model, it is symbolized in Figure 1.

The presented spiral model assumes an incremental advancement from multimodal input perception to independent output production providing students with an opportunity to progressively ascend linguistically and cognitively though a well-defined and clear-cut staged process.

Within the exposed CCM, the language instructor may employ supplementary methods and techniques to enhance the teaching process and ensure the effective assimilation of the FL input. Among such learning methods, the following may turn out beneficial:¹²

Spiral learning: the language instructor teaches input repeatedly, gradually amplifying and reinforcing it; students expand their knowledge on the assimilated topic and improve acquired skills.

Spaced learning: knowledge is revised after definite intervals, assimilation is enhanced. The breaks between the sessions allow students to embed the acquired knowledge in their memory.

 $^{^{12}}$ O. Vovk, Communicative and cognitive framework...; O. I. Vovk, R. H. Shcherbukha, Second language \dots

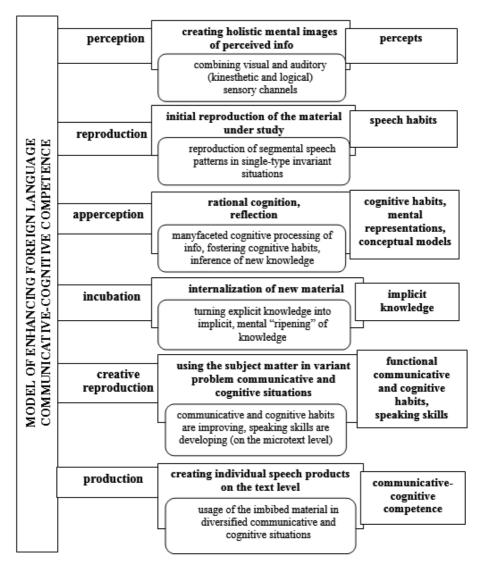


Figure 1. The Communicative and Cognitive Model of Foreign Language Acquisition

Experiential learning: the process of learning by doing. It follows the principle 'Knowledge is a consequence of experience' (Jean Piaget): students are engaged in hands-on and minds-on experiences, and are able to connect theories and gained knowledge to real-world settings.

Personalized learning: it customizes instruction for each student's profile (types of intelligence, temperament, learning and epistemic styles, strengths, skills, and interests); an educational blueprint to each student is based on their level of FL proficiency and

ways of cognition in order to keep students on track and meet FL course requirements. Students are more engaged and motivated in their learning trajectory.

Task-based learning: learners are given interactive tasks to complete. In order to do this, they need to communicate. Once the task is complete, the teacher discusses the language used.

Project-based learning: students learn by actively engaging in real-life situations and *personally meaningful projects*. Students are given the opportunity to develop knowledge and skills through engaging projects which are set around challenges and problems they may face in real world scenarios.

Mastery Learning: an instructional strategy, suggested by the American educational psychologist Benjamin S. Bloom:¹³

- a) most students can attain a high level of learning capability if the approach to learning is sensitive and systematical;
- b) students are assisted whenever they encounter learning difficulties;
- c) they are given sufficient time to attain mastery;
- d) there are clear-cut criteria of mastery constituents.

With this in mind, achievement levels and learning outcomes of *mastery learning* require:

- a) quality of instruction, students' perseverance to understand input, learning time, curricula, preconditions (clear objectives, specified and clarified content, well-established summative evaluation criteria);
- b) operating procedures (timely feedback, instructional assistance, formative evaluation [diagnostic progress tests]);
- c) alternative learning resources, tutorial assistance, revisions, audiovisuals;
- d) outcomes: cognitive (mental power), and affective (students' confidence in their capacities, the teacher's confidence in learners).

Competency-based learning: a framework for teaching and assessing learning outcomes – predetermined "competencies". Students' acquired competencies are assessed incrementally and scalably at different stages of a FL course.

Flipped learning: it prioritizes active learning during class time by assigning students the materials and presentations to be viewed at home or outside of class.

Blended learning: it combines opportunities for interaction online with physical place-based learning.

Multimodal learning: it implies teaching a FL employing multiple modes – the channels of perceiving input via: interactive elements, visual aids, text, video, audio, music, images, gestures, facial expressions, colors.

Multimodal learning activities may include:

a) *educational games* (embracing words, images, colors, shapes, speech, movement and more);

¹³ B. S. Bloom, *Taxonomy of educational objectives: The classification of educational goals*, Handbook I: *Cognitive domain*, David McKay Company 1968.

- b) *think-pair-share activity* (improves students' understanding of the study material, cooperation and expression of ideas):
 - <u>think</u> students take time *to think* about the subject matter individually;
 - pair students pair up to discuss their ideas and findings with each other;
 - share each pair shares their thoughts with the class and answers questions from classmates;
- c) *case-based strategy* (using *real-life scenarios* to supplement lessons and make relevant connections to the course syllabus);
- d) *multimedia research projects* (students find information from different media sources).

Immersion learning: students are immersed in a "language bath;" it requires their total exposure to a TL, which is both the medium of instruction and a learning objective.

Eclectic learning: it combines various approaches and methods to teach a FL depending on the objectives of the course and the abilities of learners.

The described learning methods correlate with the communicative and cognitive model of FL acquisition. The chosen method may depend on the stage of learning, targeted objectives, students' cognitive and communicative profiles, complexity of the processed material etc. (Table 1).

Table 1. Correlation of the Communicative and Cognitive Model with Supplementary Learning Methods in Foreign Language Acquisition

Stages of the	Learning	Types
communicative and	objectives	of learning
cognitive approach		
Perception	holistic images (percepts)	multimodal
	of perceived input	
Initial	speech habits, implicit	immersion, spiral, spaced, task-
reproduction	memorization of the input	based, personalized
Apperception	cognitive habits, conceptual	immersion, personalized, task-
	models, inferential knowledge,	based, mastery, experiential
	mental representations	
Incubation	implicit knowledge, expanded	multimodal, immersion, flipped,
	knowledge space	blended, experiential, eclectic
Creative	functional communicative and	multimodal, immersion, mastery,
reproduction	cognitive habits, speaking	task-based, flipped
	skills	
Production	communicative and cognitive	competency-based, project-
	competence	based, eclectic, blended, task-
		based, experiential

Conclusion

The contemporary FL classrooms require a paradigm shift, moving beyond the traditional focus on mere CC to embrace a holistic objective, i.e. CCC. The analysis presented in this article formalizes this necessity, arguing that effective FL instruction must be anchored in the inextricable link between language use and higher-order thought processes. The communicative and cognitive model, which is a spiral six-stage pedagogical framework, may provide language instructors with a systematic and practical roadmap for enhancing CCC in students.

The article established CCC as a unified, sought-for learning outcome – an integrated ability to engage in effective communication and critical thinking by drawing on a foundation of knowledge, habits, skills, and capacities. This competence is not a static phenomenon but a dynamic integrated ability, applied across personal, sociocultural, and professional contexts, and informed by an individual's cognitive identity. The developed cyclic model explicitly targets the gradual evolution of CCC by integrating deliberate cognitive processing with communicative practice.

The established framework embodies the structured, incremental communicative and cognitive approach, which guides learners from initial exposure to FL input to genuine, independent output. The proposed six stages of the CCM – Perception, Initial Reproduction, Apperception, Knowledge Incubation, Creative Speech Reproduction, and Independent Speech Production – represent a gradual, spiraling ascent in linguistic and cognitive mastery.

The suggested model begins with Perception, emphasizing multi-sensory engagement to create holistic mental representations of the new linguistic input, moving beyond superficial recognition toward deep initial encoding. This is followed by Initial Reproduction, where a system of diverse drilling exercises fosters foundational speech habits and speech patterns automaticity in invariant communicative situations. The Apperception stage then introduces the crucial cognitive element, shifting focus to the development of cognitive habits. Here, complex grammatical items are internalized not through rote rules, but through conceptual models, advancing structural analysis and inductive acquisition.

The Incubation stage promotes unconscious processing and consolidation, turning external linguistic knowledge into internal cognitive structures through engagement with supplementary, thematically relevant materials. This foundation is followed by the two culminating stages – Creative Speech Reproduction, where the assimilated linguistic material is flexibly adapted to variant situational contexts, refining communicative skills, and Independent Speech Production, the final stage where students demonstrate autonomous, meaningful use of the target language across a wide range of diversified, real-life communicative scenarios. This systematic progression ensures that language production is not a mere replication of the

learned input, but a product of its deep understanding and creative communicative and cognitive navigating.

The formalization of the communicative and cognitive framework is a seminal contribution to FL pedagogy. By synthesizing CCC as a unified objective and structuring its development through a clearly defined, staged process, this research offers a practical solution to the persistent challenge of bridging the gap between linguistic knowledge and its communicative-cognitive application. Such framework is compatible with a diverse array of supplementary pedagogical methods – multimodal, spiral, spaced, immersion, personalized, task- and competence-based, mastery, flipped, blended, experiential, and eclectic. This attests to its practical feasibility and methodological flexibility for language instructors.

The successful implementation of the communicative and cognitive approach with its spiral framework offers implications for further investigation. Future research may prioritize longitudinal studies to observe and quantitatively assess language development and the increment of CCC over an extended period. Given the global trend toward digital FL instruction, exploring the broader integration of technology, specifically how AI and advanced digital learning environments can be optimally mapped to the CCM, could further enrich this domain, ensuring the communicative and cognitive framework remains at the forefront of pedagogical innovation.

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