

Olena Vovk,*Doctor of Pedagogy, associate professor,
Bohdan Khmelnytsky National University of Cherkasy,
81, Shevchenko boulevard, Cherkasy, Ukraine*

FOREIGN LANGUAGE ACQUISITION: A COMMUNICATIVE AND COGNITIVE PARADIGM

The study deals with a modern strategy of a foreign language (FL) acquisition. It briefly outlines the process of learning a FL within the framework of the communicative and cognitive approach. Developing learners' communicative and cognitive competence is identified as a current target. In order to achieve it, the teaching process has to be grounded on the following basic principles: the first one accentuates the importance of acquiring a FL via cognitive and communicative activity; the second one highlights the indication to employ learners' epistemological styles in the educational process; the third one postulates the premise that the process of a FL acquisition fosters the development of students' linguistic personalities; the fourth one emphasizes the assumption that a FL acquisition conduces and facilitates shaping learners' worldviews; the fifth principle accentuates the relevance of widening learners' knowledge space. The key aspect of the paper is an experimentally proved spiral model of cognition, which signifies that in the course of mastering a FL students move from perception of the material to speech production through such stages as reproduction, apperception, knowledge incubation and creative reproduction. In the process of passing through the singled out stages learners develop communicative and cognitive capacities and acquire relevant knowledge, habits and skills that constitute alien communicative and cognitive competence.

Keywords: *foreign language acquisition, alien communicative and cognitive competence, principles of learning, spiral model of cognition*

Introduction

This paper propounds a new conceptual framework of learning a FL by university students majoring in Philology. Specifically, the study arises out of a need to introduce cognizing subjects to a rational approach to learning a FL that can become a significant tool in acquiring the necessary competence and speech experience. To this end, the paper deals with a number of issues contradicting the conventional wisdom that teaching a FL might be based on the communicative approach [4; 8; 9; 11]. Respectively, the maintained idea is at variance with the existing assumption that a FL acquisition is mainly aimed at developing communicative competence of students. The cognitive aspect of learning that incorporates interrelation of speech and intellection remains either ignored or deficient in support. With this in mind, it seems relevant to identify the aim of learning a FL, to elicit the basic principles of its teaching, and to devise an appropriate model which will facilitate achieving the goal set. The model is an integral part of a coherent and comprehensive methodology applicable for developing learners' communicative and cognitive competence.

Research methods

The suggested methodology and a constructed pedagogical framework were proved by a research experiment adapted for students majoring in linguistic fields [14]. The experiment was meant to expose how the elaborated methodology could foster developing students' communicative and cognitive competence. The positive results of the experiment showed a sufficient progress in acquiring the necessary competence and displayed a considerable

increase of the communicative and cognitive capacities, habits and skills of the students.

The results were obtained through numerous quizzes taken by the students of the experimental groups. The obtained results vindicated the validity of the propounded methodology and the appropriateness of the model purportedly designed for that purpose [15]. The correspondent teaching materials (the syllabus, lectures, the guidebook, assignments for workshops, tests for self-control, etc.) compatible with the devised methodology were successfully implemented at a number of Ukrainian universities.

Considering the efficacious application of the proposed methodology in foreign language classrooms at modern higher educational establishments it seems reasonable to specify the communicative and cognitive framework of teaching a FL more circumstantially.

Discussion

Admittedly, contemporary methodology of teaching a FL is determined by both the communicative and the cognitive paradigms, each solving its specific problems. In order to solve a set of methodical and pedagogical issues it is necessary to combine them that will contribute to cognition in the process of language acquisition. So, it stands to reason that developing communicative and cognitive competence as an acquired ability to successfully perform speech and mental activity while solving real and ideational problems via a target language should be considered as a goal of teaching a FL [1, 292].

Giving pre-eminence to communicative and cognitive competence as a final goal of a FL acquisition it is

necessary to consider the basic principles on which the learning process is grounded. These principles posit the significance of stimulating students' mental and speech performance, employing their epistemological styles in the process of cognition, fostering their growth as linguistic personalities, framing their worldviews, developing their knowledge space, multiple intelligences and the ability to conceptualize incoming information [1, 64]. The aforementioned requires specification.

The first principle accentuates the importance of *acquiring a FL via cognitive and communicative activity*, which is considered as a complex conscious, polymotivated, purposeful process of perceiving reality determined by the language and stipulated by sociocultural and psychological factors [1, p. 88]. In its turn, in nonlinguistic environment the development of communicative and cognitive activity needs to be purportedly stimulated. It can be performed by means of creating (or modeling) problem situations which cover both speech and intellectual difficulties. While overcoming them students solve set assignments: they process the subject matter by reproducing, substituting, modifying and transforming it, performing at that cognitive operations of analysis, synthesis, comparison, generalization, induction, deduction, inference, etc., and subsequently produce their own speech output.

The second principle highlights the necessity to *employ learners' epistemological styles in the educational process* – the ways through which they cognize the world and acquire knowledge [5, 137]. These styles (specifically, empirical, rational and sensual) manifest themselves in various approaches students take to master a FL.

The third principle postulates the premise that the process of a FL acquisition fosters the *development of students' linguistic personalities*. The idea is that by means of a language an individual becomes a part of social consciousness due to which his/her individual consciousness is also developed. Since a language is a medium of collective consciousness it is possible to speak of a personality only as a part of social consciousness that is exhibited in speech performance and thus becomes a linguistic personality – a combination of capacities and characteristics that stipulate person's speech production. The model of linguistic personality development comprises semantic, cognitive and pragmatic levels [2, 3]. It is hypothesized that within various situations “a linguistic personality” may expose speech, communicative and cognitive facets depending on a set task [1, 93].

The fourth principle implies that *a FL acquisition conduces and facilitates shaping learners' worldviews*. Here the assertion is underscored that the processes of mastering a FL and worldview formation are interrelated and overlapping. Simultaneously, shaping students' worldviews presumes constructing a model of acculturation in their minds – an abstract schema aimed at an individual's successful adaptation to an alien culture to tide over any cultural shock. This model implies two manifestations of cultural interaction [6, 113]: 1) the ethnocentric

attitude based on prioritizing one's own culture and rejecting other cultures; 2) the ethnorelative attitude grounded on recognizing the equality of both native and alien cultures. The assertion is highlighted that in the process of a FL acquisition students are expected to focus on ethnorelative interaction with an alien culture.

The next principle *accentuates the relevance of widening learners' knowledge space*. The issue raised here basically relates to a cognitive performance in the course of which an individual learns to process, categorize, conceptualize and generalize information, make inferences and express the results of this activity via a language. It is presumed that such an activity induces emergence of general notions, concepts and mental constructs in the minds of cognizing subjects. Being integrated together they form a knowledge space – a corpus of structured units of knowledge (specifically, frames, schemas, scripts, nets, mental models etc.) which are interconnected to support the functioning of the cognitive system of learners. The units of knowledge are thought to be the concepts of different levels of abstraction and complexity. Within the framework of a cognitive paradigm a concept is viewed as an operative meaningful unit of mind, a quantum of structured knowledge. Furthermore, concepts are considered as the results of cognition. It means that by synthesizing, analyzing, comparing and integrating various concepts in the process of cognition a person forms new concepts [3, 3]. With this in mind, concepts may be regarded as “constructive mental blocks” of the knowledge space of an individual.

According to the sixth principle, *students' multiple intelligence should be developed and enhanced*. The notion of multiple intelligence defined by H. Gardner as “modalities of learning” and “a biopsychological potential to process information that can be activated in a cultural setting to solve problems”, incorporates linguistic, logical-mathematical, visual-spatial, musical, interpersonal, intrapersonal, bodily-kinesthetic and naturalist intelligences [7, p. 33-34]. It is supposed that in the process of learning a FL the role of the linguistic and logical-mathematical intelligences is prioritized as dominant though other types of intelligences are nonetheless involved in it.

The seventh principle implies the importance of *developing learners' abilities to conceptualize the input*. Working over the information under study is done by activating mental structures which store acquired knowledge in various forms. This process results in unrolling in the mind of an individual a mental space in which mental representation of new information is built, and the retaining of this information is done due to imagery turning this representation into a concept [5, 135]. Mental representation may be viewed both as a fixed form of structured knowledge and as a procedure implying a mental activity for processing information. The indications are therefore that mental representation is a construction, the creation of which depends on a new situation and on the activation of concepts of acquired

knowledge in definite conditions for specific purposes. The form of mental representation is considered as a conceptual model or “a model of concepts” – a representation of a certain entity constituted by a composition of concepts which are used to help learners perceive the subject matter that these concepts represent.

The term “conceptual model” may be used to refer to models which are represented by concepts formed after a conceptualization process in the mind of an individual. Conceptualization and conceptual modeling are the means that human beings employ for cognition, processing information and solving problems. Conceptual modeling is the activity of formally describing information for specific purposes like understanding and communication. Such an activity results in conceptual models. They range in type from the most concrete to the most general and abstract. They also range in terms of the scope of the subject matter they represent. They may represent a single thing, the whole classes of things and even the vast domains of the subject matter. Thus, the variety and scope of conceptual models differ due to the variety of purposes they are used for. Among conceptual models employed in the process of a FL acquisition the most typical are schemas, frames and semantic nets. They may be defined as a system of mental constructs that facilitate learners’ receiving, processing, and retrieving the information under study, and utilizing it in speech output of their own via a target language [12, p. 77-78].

On balance, in the process of a FL acquisition both the communicative and the cognitive paradigms are equally manifested. Their combination has induced the appearance of the communicative and cognitive approach to teaching a FL. This approach has been grounded on basic principles which accentuate the necessity to develop learners’ communicative and cognitive capacities and skills.

The aforementioned gives a rationale for emphasizing another key aspect of this study – a spiral way of cognition which may be provided by a pertinent model. It signifies that in the course of learning students move from perception of the subject matter to speech production through such stages as reproduction, apperception, knowledge incubation, and creative reproduction, each solving its specific purposes [1, p. 293-313]. The idea is justified that passing through these stages students acquire congruous knowledge, habits, skills and capacities that constitute communicative and cognitive competence.

The singled out stages are on a par with J. Piaget’s theory of intelligence [10, p. 21-22], according to which any information perceived by an individual goes through such levels as: sensori-motor (sense perception of information), symbolic (mental representation of sensory information into internal mental symbols such as images), logical (discursive-logical conceptualization of information), linguistic (mental accommodation of information via images and verbal codes). The convergence of J. Piaget’s levels of intellectual development of an individual with the stages of learning in pedagogy has resulted in

elaborating a communicative and cognitive methodology of a FL acquisition. Overall, this methodology not only encompasses the levels and processes mentioned above but also contributes to them by singularizing new stages which enhance the adequate understanding of perceived information and foster its further processing, which involve adaptation, modification, interpretation and ultimately, production of new output.

Specifically, at stage one (perception of new information) students are introduced into the global context of communication, reflected in the basic text, which they perceive simultaneously through the visual and auditory sensory channels. Complementary to those, the kinesthetic and logical channels may also be involved in this process. Hence, multisensory perception is conducive to creating holistic mental images, or percepts of the new subject matter. Furthermore, it is at this stage, that in students’ endophasia alien speech habits begin to develop.

Stage two is considered to be equally important (initial reproduction of new information). Here students reproduce speech patterns from the subject matter at the superficial level in single-type invariant situations. Consequently, speech habits keep on being formed at this stage.

Logically, the first two stages trigger off singularizing the next stage (apperception of new information) at which students conduct a many-faceted analysis of the perceived material, create conceptual models on its basis, thus actualizing the schemata of their mental spaces and inferring new knowledge. It can be assumed that this stage may result in the intellectual construction of knowledge space by cognizing subjects. From a cognitive perspective students master a sign-gestalt [13, p. 144], namely cognitive processes which occupy an intermediate position between a stimulus (perceived information) and a response (speech re/production). Due to this, stage three is beneficial for developing cognitive habits of students.

The methodology of developing students’ communicative and cognitive competence also takes into account such a transitional stage of learning as incubation of the acquired knowledge, which provides converting external knowledge units into internal images or turning explicit information into implicit. Therefore, this stage facilitates further processing the subject matter and consequently, mental and communicative performance of students.

In the process of a FL acquisition stage four is essential as well (creative speech reproduction of new information). Here students reproduce new material at the creative level in variant situational settings. Presumably, by this time speech and cognitive habits have completed their development and are being improved, and simultaneously, communicative skills are being formed. Logical thinking of trainees unifies with intuition giving rise to insight or heuristic cognition as the highest level of intellect. As might be expected, this stage is advantageous for the final one.

At stage five (independent speech production) students utilize the imbibed material in their own meaningful

speech output. It is obvious that this stage is similarly creative and is characterized by diversified communicative settings. Accordingly, the wider proposed spectrum of settings, the better communicative and cognitive reconstruction of the perceived information one might expect.

Conclusions

It has been shown that learners' communicative and cognitive competence is acquired through five stages of learning each of which is distinguished by certain discriminative features and targets. The suggested methodology promotes a spiral model of cognition since every final

stage of learning may simultaneously be considered an initial stage of a new curricular cycle.

Summing up, this paper though far from being conclusive nonetheless offers several insights into understanding how the multifaceted process of a FL acquisition may be effectively conducted. The study has been undertaken to bring to the forefront the cognitive and communicative aspects of the educational process.

The suggested conceptual framework of teaching a FL requires a coherent and comprehensive system of communicative and cognitive exercises which outlines a perspective for further research in this field.

REFERENCES

1. Vovk, O.I. (2013). *Communicatyvno-cohnityvna competentnist studentiv-philologhiv: nova osvittia paradymha [Communicative and cognitive competence of students of linguistic fields: a new educational paradigm]*. Cherkasy: Chabanenko, Yu.A. [in Ukrainian].
2. Karaulov, Yu.N. (1987). *Russkiy yazyk i yazykovaia lichnost [The Russian language and a linguistic identity]*. Moscow: Nauka. [in Russian].
3. Kubriakova E.S. (2004). *Yazyk i znanie: na puti polucheniya znaniy o yazyke [Language and knowledge: on the way to acquiring knowledge about language]*. Moscow: Yazyki Slovyanskoy Kultury [in Russian].
4. Passov, E.I. (2000). *Kommunikativnoe Inoyazychnoe Obrazovanie (Kontseptsiya Razvitiya Individualnosti v Dialoge Kultur) [Communicative Foreign Language Education (The Conception of a Personality Development in a Dialogue of Cultures)]* Lipetsk: Lipetsk GPI. [in Russian].
5. Kholodnaya, M.A. (2002). *Psikhologiya Intellekta [The Philosophy of Intelligence]*. Saint Petersburg: Piter. [in Russian].
6. Bennet, M. (1998). *Basic Concepts of Intercultural Communication. Selected Readings*. Yarmouth, ME. Intercultural Press, Inc. [in English].
7. Gardner, H. (2000). *Intelligence Reframed: Multiple Intelligences for the 21st Century*. New York: Basic Books [in English].
8. Hymes D. (1989). *On Communicative Competence. The Communicative Approach to Language*
9. Littlewood, W. (1991). *Communicative Language Teaching*. Cambridge: Cambridge University Press [in English].
10. Piaget, J. (1972). *The Origins of Intelligence in Children*. New York: Basic Books [in English].
11. Savignon, S. J. (1972). *Communicative Competence: An Experiment in Foreign Language Teaching*. Philadelphia: Center for Curriculum Development [in English].
12. Gregory R. L. (Ed.). (1987). *The Oxford Companion to the Mind*. New York: Oxford University Press [in English].
13. Tolman, E. C. (1979). *There is More than One Kind of Learning. Psychological Review*, 30, 144-145 [in English].
14. Vovk, O. (2016). *Experimental Verification of the Methodology of Acquiring Communicative and Cognitive Competence by Students of Linguistic Fields. International Scientific and Practical Conference "World Science" / Proceedings of the III International Scientific and Practical Conference "Science and Education – Our Future" (November 29–30, Ajman, UAE)*, 12 (16), 23-26, (Vol. 3). [in English].
15. Vovk, O.I. (2015). *Modeling the Process of Foreign Language Acquisition: Communicative and Cognitive Framework. TESOL Ukraine: New Vistas of Research and Teaching: Збірник наукових праць* (pp. 151-152). Черкаси : ФОП Третяков О.М. [in English].

ЛІТЕРАТУРА

1. Вовк О. І. Комунікативно-когнітивна компетентність студентів-філологів: нова освітня парадигма / О. І. Вовк. – Черкаси : Вид. Чабаненко Ю. А., 2013. – 500 с.
2. Караулов Ю.Н. Русский язык и языковая личность / Ю. Н. Караулов. – Изд. 7-е. – М. : ЛКИ, 2010. – 264 с.
3. Кубрякова Е. С. Язык и знание: На пути получения знаний о языке / Е. С. Кубрякова. – М. : Языки славянской культуры, 2004. – 560 с.
4. Пассов Е. И. Коммуникативное иноязычное образование (Концепция развития индивидуальности в диалоге культур) / Е. И. Пассов. – Липецк : Липецкий ГПИ, 2000. – 154 с.
5. Холодная М. А. Психология интеллекта. Парадоксы исследования / М. А. Холодная. – СПб. : Питер, 2002. – 272 с.
6. Bennet, M. *Basic Concepts of Intercultural Communication / M. Bennet // Selected Readings*. – Yarmouth, ME. Intercultural Press, Inc., 1998. – 272 p.
7. Gardner, H. *Intelligence Reframed: Multiple Intelligences for the 21st Century / H. Gardner*. – N.Y. : Basic Books, 2000. – 320 p.

8. Hymes D. On Communicative Competence / C.J. Brumfit and K. Johnson (eds.) // *The Communicative Approach to Language Teaching*. – London. – 1989. – P. 5 – 27.
9. Littlewood, W. *Communicative Language Teaching* / W. Littlewood. – Cambridge : Cambridge University Press, 1991. – 269 p.
10. Piaget, J. *The Origins of Intelligence in Children* / J. Piaget. – N.Y. : Basic Books, 1972. – 344 p.
11. Savignon, S. J. *Communicative Competence: An Experiment in Foreign Language Teaching* / S. J. Savignon. – Philadelphia : Center for Curriculum Development, 1972. – 178 p.
12. *The Oxford Companion to the Mind* / Ed. By R. L. Gregory. – Oxford – N.Y. : Oxford University Press, 1987. – 853 p.
13. Tolman, E. C. There is More than One Kind of Learning / E. C. Tolman // *Psychological Review*. – Vol. 30. – 1979. – P. 144 – 145.
14. Vovk, O. Experimental Verification of the Methodology of Acquiring Communicative and Cognitive Competence by Students of Linguistic Fields / O. Vovk // *International Scientific and Practical Conference “World Science” / Proceedings of the III International Scientific and Practical Conference “Science and Education – Our Future (November 29–30, 2016, Ajman, UAE)”*. – No.12 (16). – Vol. 3. – P. 23–26.
15. Vovk, O.I. Modeling the Process of Foreign Language Acquisition: Communicative and Cognitive Framework / O.I. Vovk // *TESOL Ukraine: New Vistas of Research and Teaching: Збірник наукових праць*. – Черкаси : ФОП Третяков О.М., 2015. – P. 151–152.

Олена Іванівна Вовк,

*доктор педагогічних наук, доцент, професор кафедри англійської філології,
Черкаський національний університет імені Богдана Хмельницького,
бульвар Шевченка, 81, м. Черкаси, Україна*

ОВОЛОДІННЯ ІНОЗЕМНОЮ МОВОЮ: КОМУНІКАТИВНО-КОГНІТИВНА ПАРАДИГМА

У статті представлено новий ракурс вирішення проблеми оволодіння іноземною мовою (ІМ) студентами-філологами. Зокрема, пропонується раціональний підхід до навчання ІМ, що може стати важливим інструментом у набутті шуканої компетентності й необхідного мовленнєвого досвіду. Стаття має на меті обговорення сучасної стратегії оволодіння іноземною мовою (ІМ). Зокрема, окреслюється процес навчання ІМ в аспекті комунікативно-когнітивного підходу. Кінцевою метою вивчення ІМ визначено формування іншомовної комунікативно-когнітивної компетентності суб'єктів пізнання. Висувається припущення, що для досягнення поставленої мети навчання має будуватися на певних принципах. Перший принцип підкреслює необхідність навчання ІМ в когнітивно-комунікативній діяльності. Другий – акцентує потребу врахування в навчальному процесі епістемологічних стилей студентів. Третій принцип підкреслює важливість формування студентів як мовних особистостей. Четвертий – передбачає становлення у суб'єктів пізнання картини світу. П'ятий принцип постулює необхідність розвивати й розширювати знанневий простір студентів. Шостий принцип припускає, що оволодіння ІМ сприяє розвитку множинного інтелекту суб'єктів пізнання. Сьомий – передбачає формування у студентів здатності до концептуального моделювання інформації. Запропоновані базові концептуальні положення оволодіння ІМ ураховують наукові напрацювання зарубіжних і вітчизняних дослідників. Ключовим аспектом, який досліджується в статті, є експериментально перевірена спіральна модель пізнання. Це означає, що в процесі навчання студенти проходять шлях від перцепції навчального матеріалу до продукування власного іншомовного мовлення через такі етапи, як первинна репродукція, апперцепція, інкубація знань і творча репродукція. Аргументується думка про те, що, рухаючись означеними етапами, студенти розвивають комунікативні й когнітивні здатності, набувають певних знань і формують необхідні навички й уміння, що сукупно становлять іншомовну комунікативно-когнітивну компетентність. Запропонована методологія й концепція навчання ІМ були експериментально перевірені в науковому експерименті, адаптованому для студентів-філологів.

Ключові слова: оволодіння іноземною мовою, іншомовна комунікативно-когнітивна компетентність, принципи оволодіння ІМ, спіральна модель пізнання.

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