

TIRASPOL STATE UNIVERSITY

Cu titlu de manuscris
C.Z.U.:373.3.015:81/82(043.2)

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**INTERCONNECTION IN LINGUISTIC, READING AND
WRITING COMPETENCES TRAINING OF LOW SCHOOL
STUDENTS**

SPECIALTY 531.01. GENERAL THEORY OF EDUCATION

Abstract of the PhD thesis in Pedagogical Sciences

CHIȘINĂU, 2019

The doctoral thesis was elaborated at the Department of Psychopedagogy and Pre-school Education, Tirapol State University

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The public defence will take place at the 5th of February at 14.00 at the meeting of the Specialized Scientific Council D 36.531.01 - 03 at Tiraspol State University ,blocul 1, hall 108, Iablocikin str. 5: Chișinău, Republic of Moldova. The doctoral thesis and the abstract can be consulted at the National Library of the Republic of Moldova and on the website of the ANACEC (www.ust.md) The doctoral thesis abstract was sent at 05. of January 2019

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CONCEPTUAL HIGHLIGHTS OF THE STUDY

The research theme relevance: Mother tongue mastery is essentially determined by linguistic, reading and writing competences, which have always been a special preoccupation for the education of the developing personality. The training of children's previously mentioned competences represents a major resonance problem for modern education, as it addresses phenomena that start and run continuously long before formal studies begin in school [9;56]. According to the unanimously accepted contemporary approach in the field, it is a perpetual life-learning process in which the teacher holds the key position, facilitating the progress of the nominated process, providing the inevitable support in overcoming the critical stages inevitable in its development. The child evolves concurrently in the possession of linguistic, reading and writing competences, which develop in reciprocity and is exerted in the natural everyday reality of the child. Children learn to read and write while simultaneously improving their linguistic competence, or in the process of acquiring the written language, children assimilate the letters, assimilate new words, formulate various types of sentences that gradually become significant units and are ultimately applied to transmit and consciously receive messages [43, p.90]. In the context of dealing with the problem of training the reading and writing competences, the term literacy is now used, a concept taken from the Anglo-Saxon pedagogical literature, especially from the North American one. Also, in most educational systems around the world, there is an idea that the first time students learn to read and write, and then read and write to learn. In fact, these are two concurrent and mutually supportive processes: as students read better, they are better able to learn from what they read. As they learn from what they read, they naturally enrich their knowledge, vocabulary and apply reading competences to a wider variety of written materials [54, p.7]. The literacy level is currently considered an indicator of a country's international competitiveness. International comparative studies of pupil reading competences, such as PISA (The International Student Assessment Program) and PIRLS (Progress in International Reading Literacy Studies) are taken into account with seriousness of governments.

Description of the situation in the research field and identification of research problems.

The problem of approaching the standardization of reading and writing competences, including written language, which is based on the development of cognitive mechanisms responsible for language processing, has been investigated by: JRHayers, L.Flower [33; 35], U. Frith [34], RT Kellogg [36], M. Scardamalia, C. Bereiter [41], M. Norel [23], N. Silistraru [29].The issue of integrative learning approach to reading through the incorporation of all key components:

decoding, diacritical reading, precision in word recognition and reading, reading fluency, writing encouragement, language cultivation and objective anthology were studied by: F.Smith [49], D. Poulsen, E. Kintsch, W. Kintsch, D. Premack [40], V. Molan [19; 20], C. Munteanu, E. Munteanu [21], I. Gantea [13], etc. The problem of linguistic characteristics that change according to genres which define the circumstances of written communication has been studied by D.S.McNamara, S.A. Crossley, P.M. McCarthy [39]. The issues related to enriching the lexicon and the simultaneous learning of written language have been investigated by E. Shatil, D.I.Share, I. Levin [42], V. Botnari, D. Stah [6]. The holistic approach in the training of competence is attested in the works of V. Botnari [2; 3; 4]. The problem of continuity in the training of linguistic competences of children of high school and early childhood was elucidated by Botnari researchers [5]; Milsitchi [18]. The problem of the related training of various categories of goals is addressed in the works of the scholars of the Republic of Moldova: L. Cuznețov [10], D. Patrascu [24] V.Goraș-Postică [15], V. Andrițchi, T. Callo [1] A.Potang, V. Botnari [27], N. Garstea [14], etc. In the Republic of Moldova the prerequisites for the training of the reading and writing competence are formed in the preschool institution, starting with 2008, the specific competencies specific ones being transposed into the curricular area of linguistic and communication development. This argues the perspective of the ability to read and write in interconnection with language. But the methodical support for such an intention remains to be modest. In the educational system of Israel, the acquisition of reading competence is done in the kindergarten [36; 50], while the processes of writing acquisition are formally made in the first grade [37; 56]. Children are interested in writing and experiencing it before reaching a formal study setting, preparing for writing by starting out in the kindergarten [38]. Therefore, this tendency must be constantly cultivated by creating the easy contexts for practicing the hand and the eye for writing. Initially, the writing process in children does not refer to agreed standard writing, but reflects initiation in "know how to do", knowledge that is monitored to progress continually. The analysis of the educational practice of training pupils in reading and writing competences attests to the observance of certain interdependencies in their training, but not in the training of linguistic competence, which contradicts the rationale for interconditioning the progress of the three nominated competences. These prerequisites and contradictions have led to the formulation of **the research problem**: What is the impact of interconnection on the efficiency of language competences, literacy and writing competences in low-school students? **The research purpose** consists in conceptualizing, elaborating and experimentally approving the *HIVE Pedagogic Model* aimed at intertwined training of low school students' linguistic,

reading and writing competences and, implicitly, the *Intervention Program* focused on the simultaneous training of linguistic, reading and writing competences.

Research objectives:

1. Establish the epistemological highlights of the concepts of competence, linguistic, reading, and writing competences.
2. Substantiate the interconnection between linguistic, reading and writing competences.
3. Justify and elaborate the HIVE Pedagogic Model for intertwined training of linguistic, reading, and writing competences of low school students.
4. Elaborate and implement the Intervention Program (based on the HIVE Pedagogic Model) for facilitating the concurrent progress of linguistic, reading, and writing competences.
5. Determine the applicative impact of the Intervention Program on linguistic, reading and writing competences.
6. Develop general conclusions and practical recommendations.

Scientific research methodology consists of: 1. Theoretical methods: analysis, synthesis, comparison, generalization, classification, systematization. 2. Empirical methods: observation, conversation, questioning, testing. 3. Methods of data processing and interpretation: mathematical and statistical methods - Alpha Cronbach test (Cronbach's), T-Student test for independent samples, T-Student test for one sample, analysis of variance indicators, etc.

The scientific novelty and originality consists in substantiating and elaborating the HIVE Pedagogical Model of Interconditioned Training of Linguistic, Reading, Writing competences in early School Students, respecting the *interconnection* concept as a principle status; consists in substantiating and elaborating the HIVE Pedagogic Model for intertwined training of linguistic, reading, and writing competences of low school students; lies in the validation of the Intervention Program focused on the simultaneous training of linguistic, reading and writing competences, elaborated on the basis of the HIVE Pedagogical Model, which directed the pedagogical intervention towards the juxtaposition of the competence training stages to the laws of learning from the perspective of the connectionist current, ensuring the interconnection between the dimensions of the teaching strategies proposed by the Israeli Ministry of Education in 2014. **The important scientific problem solved in the field** lies in elucidating the value of interconnection in ensuring the progress of the linguistic, reading and writing competences by developing and validating the HIVE Pedagogical Model, implemented in the context of the natural experiences of training them.

The theoretical significance of the work is marked by the elucidation of scientific arguments regarding the importance of linguistic competence acquisition in mastering reading and writing competences by the students of low school age; the argumentation of the need to establish the correlation between the stages of competence training and the laws of learning from the perspective of the connectionist current; the elaboration of the HIVE Pedagogic Model for intertwined training of linguistic, reading, and writing competences of low school students.

The applicative value of the research consists in the implementation and validation of the Intervention Program that includes special didactic strategies derived from the HIVE Pedagogical Model of Interconnected training of Reading, Writing and Linguistic competences in Low School Students; Validation of technologies for implementing the "Reader's Power" and "Magic Key" strategies to interconnect linguistic, reading and writing competences not only for Teaching Hebrew but also for other languages, including those studied in educational institutions Republic of Moldova

Main scientific results offered for defense:

1. The interconnection in the training of low school students' linguistic, reading and writing competences demonstrates that the progress of reading and writing competences is more significant if their training takes place simultaneously with the training of linguistic competence.
2. Writing competence training, aimed at rendering the graphic model of the word, reaches high levels in terms of form and content if it is achieved in accordance with the evocation of reading competence, that facilitates the comprehension offered by the linguistic competence, in its turn ensuring the phonetic, lexical and grammatical expectations, and as a result, the correct text gets meaning and value.
3. Child's acquaintance with new linguistic phenomena, in case of text activity, creates contexts that facilitate the simultaneous practice of linguistic, reading and writing competences.
4. The conceptualization of strategies at the theoretical and applicative levels derived from the connectionist current that presents a relevant support for intertwined training of linguistic, reading and writing competences through the functionality of the HIVE Pedagogical Model and the Intervention Program.

Implementation of scientific results. The scientific results were implemented in Israeli primary schools, through the achievement of the Intervention Program focused on the simultaneous training of linguistic, reading and writing competences, by using the "Power to the reader" and "Magic Key" strategies during 2012-2015.

The scientific results were approved within the meetings of the Department of Psychopedagogy and Pre-school Education of Tiraspol State University and within the Teachers' Councils of the educational institutions where the experiment was carried out. Also, the scientific value of the research was confirmed within national and international scientific conferences: Scientific and Methodological Conference "Pre-university and university prerogatives in the context of a knowledge-based society". Chisinau: Tiraspol State University, 2014; International Conference "Education from Values Perspectives: Ideas, Concepts, Models." Alba-Iulia: "1 Decembrie 1918" University, 2013; International Scientific Conference "Education for Sustainable Development: Innovation, Competitiveness, Efficiency." Chişinău: Institute of Education Sciences, 2013.

Publications on the research topic: The results of the research are reflected in 8 scientific papers, including: 3 articles in profile magazines, 3 papers that are materials of national and international conferences and 2 electronic publications.

Volume and structure of the thesis. The paper consists of introduction, 3 chapters, general conclusions and recommendations, annotation (in Romanian, Russian and English), abbreviations, bibliography (216 titles), 17 appendixes. The volume of the thesis consists of 131 basic text pages, 8 tables, 5 figures.

Keywords: competence, linguistic competence, reading, writing competence phases, interconnection, interconnection dimensions, learning laws from the perspective of the connectionist current, children of low school age.

Lista abrevierilor: HIVE, CEO [43] - Chief executive officer, e.g. – Meaning, etc. - Et cetera, IRA - International Reading Association, MANOVA - Multivariate analysis of variance or multiple analyses of variance, No- Number, SD - Standard Deviation, TV- Television, PDP- Neuropsychological model – PDP model of crossing channels.

CONTENT OF THE THESIS

In the **Introduction** the concepts of interconnection, competence, linguistic competence, reading and writing competences, the relationship between linguistic, reading and writing competences, as well as the mutual effects of interconnective training, have been present

The interconnection aims at connecting the many elements that act as a whole, involves relationships of interdependence, similarity between objects or ideas. The connection concept introduces, in its current use, a dynamic nuance, referring to structural and / or functional relationships that connect two or more concrete objects or abstract entities and is used in the

cognitive sciences to designate the relationships between the elements of a treatment system ; is the origin of the connection name given to the research currents that aim to model the cognitive systems that play a significant role in the connectivity between the elements of a network, in its efficient operation [12, p.167].

In **Chapter 1** there were presented the theoretical foundations of interconnection in the training of linguistic, reading and writing competences in pupils of low school age ;we also detailed the approaches of the concepts of interconnection, competence, linguistic competence, reading and writing competence, the relation between language competences, reading and writing, as well as reciprocal effects in the case of their interconnection training. Interconnection aims at connecting the many elements that act as a whole, involving relationships of interdependence, similarity between objects or ideas. The connection concept introduces, in its current use, a dynamic nuance, referring to structural and / or functional relationships that connect two or more concrete objects or abstract entities and is used in the cognitive sciences to designate the relationships between the elements of a treatment system ; is the origin of the connection name given to the research currents that aim to model the cognitive systems that play a significant role in the connectivity between the elements of a network, in its efficient operation [12, p.167].

In the context of the European Qualifications Framework, competence is described from the perspective of responsibility and autonomy. Competence is an individual or collective feature to select, mobilize, combine and use effectively, in a given context, an integrated set of knowledge, competences and attitudes. As integrated knowledge, competences and attitudes of application, operation and transfer of acquisitions, competencies allow the successful pursuit of an activity, an effective solution to a problem or a class of problems / situations. Competence has cognitive / intellectual, affective-attitude and psychomotor components; it uses, integrates and mobilizes knowledge, cognitive resources, but also affective and contextual contexts, in order to successfully deal with a situation, but does not confuse them with these resources [16, p. 78].

We join the ideas of the researchers V. Botnari and V. Milsitchi in whose view the linguistic competence has two perspectives of interpretation: one general and another one special. From a general perspective, linguistic competence represents immanent integrity of the phonetic, lexical and grammatical system of the language, which calls for the motivated mobilization of a structured set of knowledge, capacities and attitudes that are in a relationship of interdependence and manifested through mutual influences the personality aims to achieve the purpose of communication. From a special perspective, linguistic competence represents immanent completeness of specific acquisitions specific to the subject phenomenon (knowledge, abilities,

attitudes) that are in a relationship of interdependence and manifest in an unusual way since it intends to encode exactly and accurately the message [32, p. 87]. Forging the writing competence involves performing a complex process, much more difficult than reading. The difficulty lies in the fact that writing does not reduce the recognition of phonemes and graphs, but synthesizes the complex combinations of graphic signs and their correct and aesthetic reproduction. Based on the fact that writing is a complex cognitive process, the scholars express their views on various perspectives of the writing, especially opinions referring to the scriptural system and the written discourse system, such as: structures and genres, vocabulary and syntax, spelling and punctuation. In order for pupils to choose logically and consciously the written content, the way they are organized, the vocabulary and the linguistic register appropriate for the purpose for which they write and for their recipients, much writing experience is needed in different contexts, subjects and genres. In the context of dealing with the problem of reading and writing, the term literacy is now used, a concept taken from the Anglo-Saxon pedagogical literature, especially from the North American one. Also, in most educational systems around the world, there is an idea that the first time students learn to read and write, and then read and write to learn. In fact, these are two concurrent and mutually supportive processes: as students read better, they are better able to learn from what they read. As they learn from what they read, they naturally enrich their knowledge, vocabulary and apply reading competences to a wider variety of written materials [54, p.7]. In conclusion, we note that the results attested in the theoretical studies demonstrate the presence of simultaneity and recursiveness present in the comprehensive reading and correct writing, which have as reference the linguistic performance of the subject involved in acquiring the complex processes described.

Chapter 2 - Study of contexts and values acquired by low school students for linguistic, reading and writing competences- includes an analysis of teachers' experiences focused on low school students' linguistic, reading and writing competences. The chapter describes the results of the experiment regarding the initial level of the linguistic, reading and writing competences in the subjects from the experimental group and the control group. Teachers emphasize the role of phonetic analysis and synthesis exercises, supported by the articulated expression of the words, also mentioned in the literature: "This operation is a good means of simultaneous practice of the visual analyzer with the verbo-motor; it is a particularly effective tool for self-control for each student during the practice of reading. That is why the articulated expression of the sound units of the words (sounds, syllables) must accompany any reading, word-writing or writing alphabet. Explicit articulation must be introduced into each student's work system, not only when required

by the teacher, but especially in his independent work as a self-control tool "[30, p. 94]. Reading-writing simultaneously calls for cognitive, volitional, affective and psychomotor processes, which makes reading and writing tasks difficult for children, and requires a careful choice of teaching strategies. Regarding the acquisition of the competence to write, there are two types of practices in the Romanian educational institutions. Teachers formed in a postmodern pedagogical paradigm focus on the semantic component of writing. Instead, most of the over twenty-year-old educators, whose initial training was made in the paradigm of Soviet pedagogy, emphasize the calligraphic composition of writing. In their view, children have to participate in as many graphic or even writing activities as possible. Small child development specialists declare in unison that mass-writing activities are not at all recommended, with a negative impact on child development. The art of being a good educator is not to systematically impose on children what and how to write. On the contrary, it consists in creating and capitalizing on individual learning opportunities, so that every child enjoys writing when he feels the need. In this context, not the hardness, but the subtlety of the methods, certify the degree of competence of the teacher. Scientists point out the relationship between language specificity and reading and writing learning, specifying that "the act of reading and writing acts with language facts" [30, p. 58]. The particular features of a language, in this instance of its orthography, determine to a great extent the choice of the most appropriate learning methods used in the process of initiating students with reading and writing. We should mention that some languages are based on an etymological spelling and some are phonetic. Etymological spelling marks the words not as they are today, but as they were pronounced in an earlier phase of the language, possibly in a language from which they were borrowed, the value of which is the global method. In the Romanian language, as well as in other languages having a phonetic spelling, the phonetic, analytical-synthetic method is suitable.

The pedagogical experiment consisted of three classic parts: 1) the initial diagnostic approach of linguistic, reading and writing competences in pupils of low school age; 2) Aplicative approach by valorising the HIVE Pedagogical Model in the context of applying the "Magic Key" and "Reader Power" strategies; 3) the final diagnosis of the pupils' acquisitions in the two groups - the control group vis-à-vis the experimental group. In order to identify the methodology of language, reading and writing competences training by teachers in Israel and the Republic of Moldova, individual and group conversations were maintained. As a result, it has been found that Israel's teachers apply the methodology of nominated competences training, as described in the works of the authors: B. Zvi, M. Shani, Y. Cohen [52], R.A. Berman [31], E. Shatil, D.L. Share,

I. Levin [42], N. Shtral [43; 45, 46; 47; 48; 53]. The didactic technologies of teachers of the Republic of Moldova, used in the training of linguistic, reading and writing competences, refer to the theoretical and methodological works of the authors: I. Șerdean [30], M. Peneș [25], V. Molan [19; 20] C. Munteanu, E. Munteanu [21], C. Macri-Gologan [17], M. Buruiana, S. Cotelea, A. Ermicioi [7], S. Cemortan [8], V. Botnari [2; 6], V. Milsitchi [18], etc. At the initial stage of the diagnostic approach of reading, writing and linguistic competence, there were 200 first-year pupils with the age limit of 6 to 7 years old. All subjects come from families with medium economic background, are physically healthy and have adequate behavior, Israeli natives whose parents are Israeli natives or emigrants who have emigrated for at least 10 years. All students study in state religious schools. From a gender perspective, the groups were homogeneous. All the students in the experimental sample were given the same diagnostic methods. Students were divided into four study groups: 50 students who studied through the "Reader Power" strategy with the intervention program and 50 students who studied through the same strategy without the intervention program. Another 50 students studied through the "Magic Key" strategy, with an intervention program and 50 students who studied through the same strategy without the intervention program. The Reading Assessment Test for First Class Students was developed by the Reading Teaching Committee and the Coordination Committee for Reform in Teaching Reading and Literacy Education. This test presents a standardized national tool for assessing reading literacy and implicitly comprehension of reading in first grade students developed by the Office of the Chief Scientific Coordinator at the Ministry of Education in Israel in cooperation with the National Center for Examinations and Assessment. The writing competence test included dictating and further examining the number of words spoken by children and spelling them correctly. The test for language competence assessment was taken from a set of tests existing in previous studies. The analysis of the story was based on the criteria offered by R.A. Berman [31], L. Kozminski and A. Kozminski [38]. The analysis of the results of the test in relation to the story in the order of the images was done according to the model proposed by D. Poulsen, E. Kintsch, W. Kintsch and D. Premack [40]. Testing Reading and Writing Level Tests for First Class Students have been approved by the Shomron Committee of the Ministry of Education of Israel, whose pedagogical mission is to promote reform in reading and writing. National standards have been developed to assess these competences. In the current study, the results of the students involved in the experiment were compared. The study was approved for execution by the Scientific Director of the Ministry of Education in Israel and was done after receiving the parents' agreement. The survey provided data confidentiality as well as

the anonymity of the participants. The analysis of the contexts of linguistic, literacy and writing competencies in low-school pupils, as well as the level of initial ownership of nominated competences, highlights the de facto situation in the field. After the individual and group conversations with the teachers, it was found that the subjects involved in the experimental experiment had the methodology of reading, writing and linguistic competences, largely rallied to the exigencies of the curricula [56; 57] and derived from the works of the researchers in the field. At the same time, the general algorithm of action of teachers in Israel and the Republic of Moldova is being developed, which attests to the training of reading and writing competences in the initial stages in an isolated way, then in contextual training contexts, while the training of linguistic competence is not time affiliated with the practice of reading and writing competences. This fact, as well as the rationale of the current research, based on the theoretician's opinion, highlights the necessity of developing a Pedagogical Model that would elucidate the praxology of the interconnectional training of linguistic, reading and writing competences in pupils of small school age through a possible experimental program.

In Chapter 3, The process of interconnected training of linguistic, reading and writing skills in young pupils - we present the process of interconnected training of students' linguistic, reading and writing competences - the conceptual, epistemological and praxiological milestones of the optimal reading and writing teaching strategies with obvious linguistic approaches implemented in the context of the HIVE Pedagogical Model interconnected training of linguistic, reading and writing competences in low school age pupils. Reading and writing are processes that complement each other and focus on the comprehension of the read, the oral and graphic reproduction of messages. Our research has demonstrated that respect for interconnection in the training of language competences, reading and writing competences in low school pupils ensures the progress of reading and writing competences, especially if their training is carried out simultaneously and in correlation with the training of linguistic competence. Therefore, the teacher must first teach sounds and letters and at the next stage apply reading exercises and focus on the interpretation and comprehension of the written message, developing the ability to understand the text while exercising linguistic competence. Our goal was to train language literacy, reading and writing competences at low school age students. In order to achieve the research goal, the HIVE Pedagogical Model of Interconnectional Training of Linguistic, Reading and Writing Competences was developed in the pupils of small school age. According to E.L. Thorndike, the mind appears as a connection system that forms continuous connections between stimuli so that human knowledge, feelings, desires, and behaviors make up a whole resulting

from the many adjustments of the Stimulus-Answer associations Throughout her life. From the theory of E.L. Thorndike derived a series of laws, value for the present research: the law of readiness, the Law of Exercise, the law of effect, the law of belonging [apud 22, p.17] Researchers Ph. Jonnaert, M. Ettayebi, R. Defise speak of the existence of three phases of competence building: deconstruction, construction and reconstruction. Deconstruction involves bringing into question knowledge, beliefs, beliefs, beliefs, mentalities, individual or collective representations of reality and its knowledge. Building is the process by which learners build their own meanings and meanings of perceived reality, acquire knowledge that affects them affectively, verifies their viability and adheres to them. Reconstruction is, in fact, a new construction that reflects structural change in the subject's cognitive experiences, in the ways of interpreting reality, in problem-solving strategies, in behaviors and in the conduct of the subject [16, p. 101]. In developing the Pedagogical Model, we took into account the strategic suggestions outlined above and the recommendations of the Ministry of Education in Israel on the implementation of the objectives of the study of Hebrew in the first grade, which outline the components that need to be addressed during the teaching of primary school writing. In our Model, these strategies relate to the dimensions of the interconnection referring to : writing a written text; writing opportunities; organizing teaching; the means of education; partnership with parents; feed-back and observation (Figure 3.1). On the basis of the results obtained at the diagnostic stage, an intervention program for the development of language competences, reading and writing developed on the basis of the HIVE Pedagogical Model was implemented in order to improve pupils' performance, which focused on three directions of action: 1) improving the system continuous teacher training, 2) monitoring pupils' results throughout the experiment; 3) rallying time to achieve performance at the students' own rhythm of learning. The teacher training system has been refined by completing the curricular content, reorganizing the time and training of the learners. In this context, continuous training has co-authored different forms of teaching: individual, group, frontal.

Teachers dealt with the teaching of writing throughout the school day and every discipline. Pedagogues have initiated different writing contexts while paying attention to reading, correct writing and linguistic competence in various forms, creating special educational situations requiring pupils to engage in verbal and written communication, which has facilitated the simultaneous progress of linguistic competences , reading and writing. The development of writing competences was aimed at producing written text; writing practice; text planning; updating graphical representations; transcribing texts, etc. Various writing opportunities have

been provided: writing experiences; the writing assignment; text-based questions; intraining following an observation; writing stories. The organization of the teaching was focused on the following aspects: the time allocated to writing and reading; promoting writing / reading; monitored actions; the learning environment; learning contexts. The means of education used were: domain dictionaries; storage stands; computer, recorder device; product panel; writing accessories. Parents were partners in the interconnection training process of nominated competences. The partnership with parents was achieved through various forms of inclusion in the activities organized with the children, the publication of the products; cooperation for writing and writing development; the anthology of writing; encouraging students to write and read.

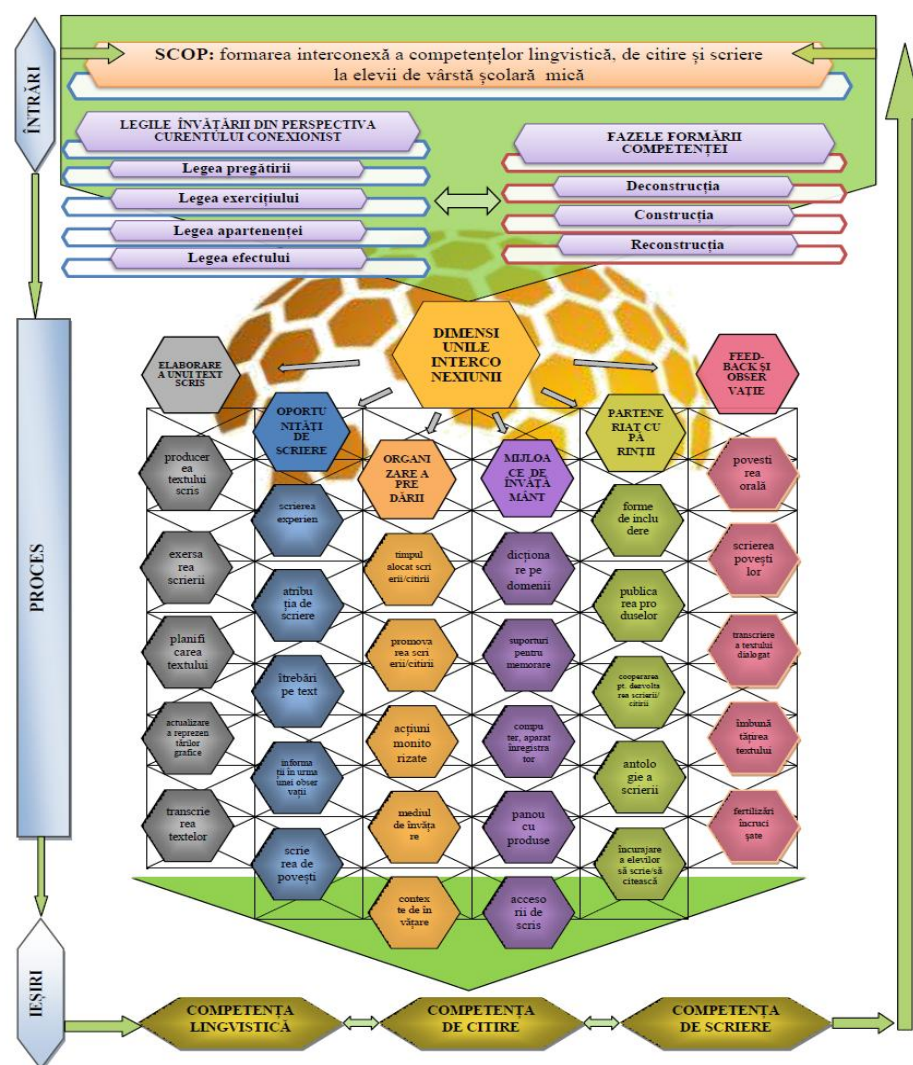


Fig. 3 The HIVE Pedagogical Model of Interconnected Training of Linguistic, Reading and Writing competences in Low School Students.

Among the interventions with the greatest impact on optimizing the interconnecting of linguistic, reading and writing competences we nominate parents' cooperation in children's

writing competences by explaining the importance of that process, including parents in encouraging and reassuring their child for writing and writing the publication of materials and instructions that enabled the teacher to use educational means such as: the notice board, the congratulatory birthday pane, the placement map for publishing products.

I have emphasized the motivation of parents to actively participate in the development of the child's writing, noting the importance of writing, including them in encouraging and supporting their child for writing and publishing materials, describing classroom learning processes and presenting students' writing products, for example: by presenting an anthology of the writings of their children, the publication and distribution of written stories by pupils, etc. Important in organizing teaching for efficient and consistent writing of writing were the contexts in which the teacher assigned a certain amount of time per day for writing and provided accurate writing monitoring activities. The experimenter created writing opportunities and various activities that were relevant to the child and asked for the writing competences such as: writing excursion experiences, the impressions of a play, stories, invitations, etc. At the same time, students were encouraged to produce written texts, while the teacher guided the organization and planning of editing them; has initiated collaborative text-based learning and provided effective feedback on writing. Also, emphasis was placed on the idea that teachers should talk with students about the text, strengthen the correctly formed purchases, point out points for product promotion and plan a new product in the same way; to maintain in the macrogroup a constructive discussion based on a text for learning through experience and cooperation. The intervention program developed on the basis of the HIVE Pedagogical Model complied with the provisions of the national document: "Teaching program for the implementation of the objectives of the study of the Hebrew language in the first class" [56]. The elaborated program aimed at interconnecting the linguistic, reading and writing competences with special educational interventions to ensure the simultaneous progress of the nominated competencies. Implementation of the Intervention Program based on the HIVE Pedagogical Model has rallied to two basic strategies attested in the pedagogical practice in Israel: "The Magic Key" and "The Power of the Reader". The "Magic Key" strategy includes a modern content whose purpose is to teach basic reading and writing competences to first class students. The strategy highlights the amount of speech spoken, the teaching of the alphabet, the enhancement of the reading fluency and the understanding of the contents read; integrates the advantages of the phonetic method for acquiring the language as a whole and provides a unique and effective way to teach and learn reading. As part of the strategy, there are integrated texts that students can read on their own and texts for listening to

understand them. The goal of the strategy is to build basic reading and writing competences in first-class pupils, confronting them with basic language structures, while using quality texts of different genres. The strategy cultivates literary discourse, strengthens the fluency of reading, and promotes reading comprehension by emphasizing the meaning of lexema read and vocabulary development. The strategy outlines the particularities of the learning environment and the efficient organization of teaching, and in order to achieve the objectives of efficient acquisition of Hebrew, there has been a need to elucidate the time allocated to teaching, especially the one reserved for feedback and observation, providing writing opportunities. The "Reader Power" strategy is characterized by metacognition. The central principle of this strategy is the understanding of the meaning and meaning of the word read, as well as the decoding of the message.

It has been demonstrated that the underlying objectives of facilitating and enhancing literacy are successful by providing an adequate learning environment and the planned and explicit delivery of content. The ongoing feed-back and observation during the program was aimed at: the oral story; writing stories; transcription of dialed texts; improving the proposed texts; cross-association. At the end of the intervention program, a second test battery was administered to the students involved in the experiment, in order to assess the level of linguistic, reading and writing competences.

The first diagnostic test included seven tasks through which we examined various aspects of literacy: the recognition of letters; reading combinations of consonants and vocals; reading some invented words without specific meaning; reading some words with various semantic connotations; reading loudly a text; writing.

The second test was foreseen for the assessment of linguistic competence. The task forwarded to students was focused on organizing intraining from an image to a narrative scheme that was then asked to turn it into a narrative text, later written in writing.

Another story concerned the story after a set of four pictures, presented to the children in order of action.

The comparative results regarding the level of possession by the students in the experimental group and the control group of reading competence at the initial and final stage are presented in Table 3.2.

Table 3.2. Reading competence data at the initial and final stage in pupils
in the experimental and control group

Reading competence/ tests	Control Group				Experimental Group				F (7,92)
	Pre-Test M	Pre-Test SD	Post test M	Post test SD	Pre-Test M	Pre-Test SD	M Post test M	SD Post test SD	
1	23.27	4.33	22.78	4.52	24.57	3.90	24.80	4.19	5.39*
2	23.58	4.09	21.88	4.06	24.32	3.85	24.00	4.35	6.34*
3	41.30	5.41	40.96	4.81	43.23	4.33	44.24	3.17	16.18***
4	15.12	4.41	14.98	5.08	16.53	3.87	16.86	4.14	4.12*
5	18.16	2.73	15.44	4.23	18.90	2.43	18.56	2.30	20.98***
6	62.25	16.06	59.46	15.23	64.30	13.68	63.42	13.39	3.58*

The statistical data illustrated above on the students' progress in reading literacy have been established by the Oneway Manova statistical test applied to determine the significance of positive changes in reading literacy gained from the applicative experiment. The final results for writing competences are presented in Table 3.3.

Table 3.3. Data on the ability to write in the initial and final stages in pupils
in the experimental and control group.

The writing Competence	Control Group				Experimental Group				F(3,196)
	Pre-Test M	Pre-Test SD	Post test M	Post test SD	Pre-Test M	Pre-Test SD	Post test M	Post test SD	
	10.21	3.14	10.38	3.21	11.30	2.83	11.68	2.83	

*p<0.05

The result obtained by the Oneway Manova statistical test reveals a significant difference between the control group and the experimental group following the applicative experiment. The results of language competence are presented in Table 3.4.

Table 3.4. Data on linguistic competence at the initial and final stage in pupils in the experimental and control group.

The Linguistic Competence /Tests	Control Group				Experimental Group				F (7,92)
	Pre-Test	Pre-Test	Post test	Post test	Pre-Test	Pre-Test	Post test	Post test	
	M	SD	M	SD	M	SD	M	SD	
1. Opening	3.64	1.45	3.80	1.37	4.32	1.11	4.86	1.24	5.15**
2. Body	3.27	1.24	3.26	1.41	3.92	1.15	4.08	1.16	5.52***
3. Ending	3.02	1.61	3.14	1.60	4.25	1.09	4.46	0.99	4.36***
4. Causality	1.04	1.00	1.00	1.01	1.36	0.94	1.36	0.94	1.85
5. Use of tenses	1.74	0.68	1.78	0.62	1.74	0.67	1.76	0.66	0.10

The data from the table obtained by the Oneway Manova statistical test reveals significant differences in 3 linguistic competence tests, but in two cases (causality and use of tenses) data are insignificant, being justified by the limited linguistic experience of children and the specificity of cognitive processes of age small school. The results of the study demonstrated that the Intervention Program focused on the interconnectedness of linguistic, reading and writing competence facilitated the successful training of those competencies in young school children. The experimental results demonstrated that the students in the groups in which the Intervention Program was developed, based on the HIVE Pedagogical Model, achieved better results in different variables of linguistic, reading and writing competences compared to the students who studied after another programs. Students who have been studying through the "Reader Power" strategy with the Writing Competence Intervention Program have achieved significantly greater results in linguistic and writing competences compared to students who have studied under the Traditional Program and students who have studied through the "The magical key" without intervention has achieved significantly lower results in these variables. In addition, the differences in the writing competence were examined and it was determined that the results attested to having the writing competences by applying the two strategies in the context of the intervention program were higher compared to the results of the pupils who studied outside the Program of intervention. Therefore, we can say that students have been confronted with a certain word, both during reading and writing, while reflecting on its semantic and morphological components, the ways of using its various meanings. The experimental results

obtained have shown that the development during the reading and writing of the vocabulary, implicitly of the grammatical and phonetic dimension of the speech, are arguments that can conclude that in the given contexts the linguistic competence is indisputably exercised. This experimental study has made it possible to elucidate that the implementation of effective strategies and means of teaching in the process of teaching reading and writing, providing enough time for writing and reading, providing various reading and writing opportunities, facilitating the spelling contexts, the valorisation of the educational partnership with the parents is a key element in optimizing the process of literacy improvement in pupils of low school age. One of the objectives was to identify the competence to read in students studying through a teaching strategy with an intervention program that integrates the development of writing competences would improve reading competences compared to students studying through a teaching strategy similar, but without emphasis on the development of writing competences. In this respect, we examined through six tasks the differences in the competence to read both the accuracy in the execution of the tasks and the time required for their execution and also the level of comprehension of the reading was assessed. The results showed that in the groups where the intervention program was carried out, pupils achieved higher results on various reading indices compared to the students who had studied without the intervention program. However, these differences did not reach a statistical significance, with the exception of an index of reading literacy, combining reading, in which it was found that students who had studied through the "Reader Power" strategy with the intervention program had higher results compared with the other three groups. However, it could happen that the difference that was recorded in that index is in terms of an acceptable alpha error, which means that since 12 statistical comparisons were made for the examination of the evaluation, significant differences in a single index may be incidental. Consequently, according to these results, the idea of differences in reading literacy according to teaching methods was not confirmed. In addition, there were no significant differences in reading comprehension among students in the groups involved in the experiment. The second objective was aimed at confirming that the students who study in a teaching strategy with an intervention program focused on training interconnections language competences, reading and writing would improve their Writing competence compared to students studying through a strategy of similar teaching without emphasis on the development of writing competences. Analysis of experimental data approved the finding that the experimental group pupils' results in writing competence who studied by the two standard strategies in the context of the intervention were higher compared to those who studied by the strategies without program

intervention. The third objective was to confirm / refute the fact that students studying through a teaching strategy with the intervention program would improve linguistic competence. The results obtained on examining the differences in writing clues: opening, body, closing, causality and use tenses indicated significant differences between teaching strategies in writing clues, except index index causality and use tenses. The pattern of differences between teaching strategies has been repeated at all points, which means that pupils who have studied through the "Reader Power" strategy in the context of the intervention program have achieved significantly higher scores at the writing index compared to students who have studied in another way. Students who studied through the "Key Magic" strategy without intervention had the lowest score on nominated clues. The fourth objective was to examine the correlation between linguistic competence and reading and writing competences in pupils of low school age. Indeed, the presence of the linear positive correlation between the respective competencies has been confirmed, which indicates that the high level of linguistic competence implies a high level of reading and writing competences, with the exception of the use of verbal time, probably caused by the linguistic immaturity of small pupils. Pearson correlation tests have been applied to the performance of students who have studied under the Intervention Program.

Table 3.5. Pearson correlation coefficients on the relationship between linguistic, reading and writing competences.

Types of competences/tests	Linguistic Competence <i>Opening</i> test)	Linguistic Competence <i>(Body</i> test)	Linguistic Competence <i>(Ending</i> test)	Linguistic Competence <i>(Causality</i> test)	Linguistic Competence (<i>use of tenses</i> test)
Reading Competence (test 1)	0.96***	0.73***	0.85***	0.69***	0.54*
2) Reading Competence(test 2)	0.97***	0.62***	0.77***	0.63**	0.50*
Reading Competence (test 3)	0.84***	0.78***	0.90***	0.61**	0.46*
(test 4) Reading Competence	0.81***	0.91***	0.88***	0.77***	0.36
Test 5) Reading Competence	0.91***	0.84***	0.87***	0.81***	0.47*
Reading Competence (test 6)	0.77***	0.80***	0.69***	0.80***	0.45*
Writing Competence (test)	0.70***	0.87***	0.66***	0.73***	0.60**

*p<0.05 **p<0.01 ***p<0.001

The research clarified and confirmed that there is a significant positive correlation between language competences, reading and writing competences, and the children gradually notice the specific characteristics of an experienced reader through speed, ease of reading, comprehension and elucidation of the meaning of read and written content. The data obtained demonstrates the positive correlation between the linguistic competence and the reading and writing competences obtained in the case of the students who have been implemented the Intervention Program (based on the HIVE Pedagogical Model). In conclusion, the intervention program focused on the thorough design of the taught content, the provision of a favorable learning environment, the depth of intervention through the implementation of the relevant strategies, taking into account the potential of each child, the involvement of the parents in the process of supporting the efforts children on new acquisitions, attention to products of children's activity, facilitated the process of the simultaneous evolution of linguistic, reading and writing competences in pupils of low school age.

GENERAL CONCLUSIONS AND RECOMMENDATIONS

The progress of current civilization is sometimes difficult to track since there is now more change than we can process. Contemporary man is often disoriented, seeking identity and existential meaning. To avoid alienation, we are forced to learn constantly. Culture is the great source of our identity. The possession of cultural values as well as the attestation of a level of education, acquires the natural holding of reading and writing competences interconnected with the linguistic one.

The current research implies a connectionist approach in the integrated training of linguistic, reading and writing competences in low school age students. The results obtained by the theoretical foundation, the praxiological modeling of the process of interconnected training of the forementioned competences, experimentally and experientially validated, come to prove the opportunity of the HIVE Pedagogical Model and allow the following conclusions and recommendations to be made:

1. Interconnection is a system of connections that form continuous bonds, interdependence ratios, similarities between many elements acting as a whole [28, p. 182-190]
2. The ontogenetic evolution of the child's personality records early the acquisition of values, implicitly linguistic competence, simultaneous common pre-acquisition but also particular for reading and writing competence.
3. The existing strategies attested in the theory and practice of linguistic, reading and writing competences do not place sufficient emphasis on interconnecting the nominated competences.
4. Findings reveal a different level of literacy, reading and writing competences among pupils of low school age [43, p.507-511].
5. The HIVE Pedagogical Model developed by us certifies the methodology of the interconnecting process of linguistic, reading and writing competences [47, p.72-79, 213].
6. Respecting the stages of competence training - deconstruction, construction, reconstruction - ensures the progress of linguistic, reading and writing competences from the level of competence to situational, reflection and explanation, then to conceptualized and generalized competence [44, p.69- 79].
7. Respecting the laws of learning from the perspective of the connectionist current: the law of training, the law of exercise, the law of belonging, the law of effect facilitates the interconnection of linguistic, reading and writing competences in pupils of small school age [48, p.243-246; 45, pp. 50-55].

8. The results of the organized training experiment denote the functionality of the HIVE Pedagogical Model within the Intervention Program focused on the implementation of the "Magic Key" and "The Power of the Reader" strategies [46, p.197-205].

9. *The important scientific problem solved* is to elucidate the significance of the interconnected training of competences between which there are natural relations of interconditioning and interrelation with significant similarities in their progressive evolution, as demonstrated by the validation of the HIVE Pedagogical Model of Interconnected Training of Linguistic, Reading and writing [46, p. 199].

*Recommendations for decision-makers:*1. Providing assessment tools and support materials for training teachers concerned with literacy, writing and linguistics competences in low school age students.

*Recommendations for school managers:*1. Establishment of partnerships between school, family and community in order to increase the quality of interconnected training of reading, writing and linguistic competences in pupils in primary education.2. Monitoring the educational interventions of pre-primary and primary education teachers focused on ensuring the continuity of literacy, writing and linguistics competences in pupils in primary school.

*Recommendations for pedagogues:*1. Linguistic competence training from the perspective of its connection with the training of reading and writing competences.2. Realization of the interconnection of linguistic, reading and writing competences by observing the laws of learning derived from the connections of the connection current: the law of preparation, the law of exercise, the law of belonging, the law of effect.3. Respecting the stages of competence training: deconstruction, construction, reconstruction.4. Involving parents in ensuring the development of linguistic, reading and writing competences.

*Recommendations for parents:*1. Manifestation of persistent motivation to ensure the progress of one's own child in possessing linguistic, reading and writing competences.2. Parents' initiation of relevant ways of giving support to child literacy, reading and writing competences.

The solved scientific problem and the obtained results allow to outline some *research perspectives*:
• Impact of interconnected training of linguistic, reading and writing competences on the quality of speech coherence;
• Valences of interconnected training of linguistic, reading and writing competences on the integrated competences of other categories of competences;
Functionality of the HIVE pedagogical model in the context of the implementation of the "Speaking Sounds, proposed by the Ministry of Education of Israel (possibly other strategies)

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ADNOTARE

**Shtral Niva, „Interconectediunea în formarea competențelor lingvistică, de citire și scriere la elevii de vârstă școlară mică”,
teză de doctor în științe pedagogice, Chișinău, 2019**

Structura tezei. Teza este structurată în adnotare, abrevieri, introducere, trei capitole, concluzii generale și recomandări, bibliografie din 216 titluri, 17 anexe, 131 pagini text de bază, 5 figuri, 8 tabele.

Publicații la tema tezei. Rezultatele cercetării sunt reflectate în 8 lucrări științifice, inclusiv: 3 articole în reviste de profil, 4 lucrări ce constituie materiale ale conferințelor naționale și internaționale și 1 publicație electronică.

Cuvinte-cheie: competență, competență lingvistică, competență de citire, competență de scriere, fazele formării competenței, interconectediune, dimensiunile interconectediunii, legile învățării din perspectiva curentului conexiunist, copii de vârstă școlară mică.

Domeniul de studiu: Teoria generală a educației cu axare pe fenomenul interconectediunii în formarea competențelor lingvistică, de citire și scriere la elevii de vârstă școlară mică.

Scopul cercetării constă în conceptualizarea, elaborarea și aprobarea experimentală a Modelului Pedagogic HIVE de formare interconectată a competențelor lingvistică, de citire, de scriere la elevii de vârstă școlară mică, implicit și a Programului de intervenție axat pe formarea concomitentă a competențelor lingvistică, de citire și de scriere.

Obiectivele cercetării: abordarea epistemologică a fenomenelor competență, competențe lingvistică, de citire, de scriere; fundamentarea interconectediunii dintre competența lingvistică și celor de citire și scriere; argumentarea și elaborarea Modelului Pedagogic HIVE de formare interconectată a competențelor lingvistică, de citire, de scriere la elevii de vârstă școlară mică; elaborarea și implementarea Programului de intervenție (în baza Modelului HIVE) pentru facilitarea progresului concomitent al competențelor lingvistică, de citire și scriere; determinarea impactului formativ al Programului de intervenție asupra competențelor lingvistică, de citire și scriere; elaborarea concluziilor generale și a recomandărilor practice.

Noutatea și originalitatea științifică constă în fundamentarea și elaborarea Modelului Pedagogic HIVE de formare interconectată a competențelor lingvistică, de citire, de scriere la elevii de vârstă școlară mică, respectând interconectediunea cu statut de principiu; rezidă în validarea Programului de intervenție axat pe formarea concomitentă a competențelor lingvistică, de citire și de scriere, elaborat în baza Modelului Pedagogic HIVE, care a direcționat intervențiile pedagogice spre juxtapunerea fazelor de formare a competenței la legile învățării din perspectiva curentului conexiunist, precum și asigurarea interconectediunii între dimensiunile strategiilor de predare propuse în 2014 de Ministerul Educației din Israel. *Problema științifică importantă soluționată* constă în elucidarea semnificației formării interconectate a unor competențe între care există relații firești de interconecționare și interrelaționare cu similitudini semnificative în evoluția progresivă a acestora, fapt demonstrat prin validarea Modelului Pedagogic HIVE de formare interconectată a competențelor lingvistică, de citire și scriere.

Semnificația teoretică a lucrării este marcată prin elucidarea argumentelor științifice privind importanța procesului de achiziție a competenței lingvistice în deținerea competențelor de citire și scriere de către elevii de vârstă școlară mică; argumentarea necesității stabilirii corelației dintre fazele formării competenței și legile învățării din perspectiva curentului conexiunist; elaborarea Modelului Pedagogic HIVE de formare interconectată a competențelor lingvistică, de citire, de scriere la elevii de vârstă școlară mică.

Valoarea aplicativă a cercetării constă în implementarea și validarea Programului de intervenție ce include strategii didactice speciale derivate din Modelul Pedagogic HIVE de formare interconectată a competențelor lingvistică, de citire, de scriere la elevii de vârstă școlară mică; validarea tehnologiilor de implementare a strategiilor „Puterea cititorului” și „Cheia magică” în vederea formării interconectate a competențelor lingvistică, de citire și scriere nu numai în cazul predării limbii ebraice, dar și a altor limbi, inclusiv a celor studiate în instituțiile de învățământ din Republica Moldova.

Implementarea rezultatelor științifice. Rezultatele științifice au fost implementate în școlile primare din Israel prin realizarea Programului de intervenție axat pe formarea concomitentă a competențelor lingvistică, de citire și de scriere cu valorificarea strategiilor „Puterea cititorului” și „Cheia magică” în perioada anilor 2012-2015.

ANNOTATION

Shtral Niva, „Interconnection in linguistic, reading and writing competences training of low school students”, Doctoral Thesis in Pedagogical Sciences, Chişinău, 2019

Thesis structure. The paper consists of introduction, 3 chapters, general conclusions and recommendations, annotation (in Romanian, Russian and English), abbreviations, bibliography including 216 titles, 17 appendixes. The volume of the thesis consists of 131 basic text pages, 8 tables, 5 figures.

Publications on the thesis. The results of the research are reflected in 8 scientific papers, including: 3 articles in profile magazines, 4 papers at national and international conferences and 1 electronic publication.

Key words: competence, linguistic competence, reading competence, writing competence, competence development phases, interconnection, interconnection dimensions, learning laws from the perspective of the connectionist current, students of low school age.

The field of study: The General Theory of Education focused on the phenomenon of interconnection in the training of linguistic, reading and writing competences in students of low school age.

Research purpose consists in conceptualizing, elaborating and experimentally approving the *HIVE Pedagogic Model* aimed at intertwined training of low school students' linguistic, reading and writing competences and, implicitly, the *Intervention Program* focused on the simultaneous training of linguistic, reading and writing competences.

Research objectives: establish the epistemological highlights of the concepts of competence, linguistic, reading, and writing competences; substantiate the interconnection between linguistic, reading and writing competences; justify and elaborate the HIVE Pedagogic Model for intertwined training of linguistic, reading, and writing competences of low school students; elaborate and implement the Intervention Program (based on the HIVE Pedagogic Model) for facilitating the concurrent progress of linguistic, reading, and writing competences; determine the applicative impact of the Intervention Program on linguistic, reading and writing competences; develop general conclusions and practical recommendations.

Scientific novelty and originality consists in substantiating and elaborating the HIVE Pedagogical Model of linguistic, reading, writing competences intertwined training of low school students; lies in the validation of the Intervention Program focused on the simultaneous training of linguistic, reading and writing competences, elaborated on the basis of the HIVE Pedagogical Model, which directed the pedagogical intervention towards the juxtaposition of the competence training stages to the laws of learning from the perspective of the connectionist current, ensuring the interconnection between the dimensions of teaching strategies proposed by the Israeli Ministry of Education in 2014.

The important scientific problem solved consists in elucidating the significance of the intertwined training of some values between which there are natural relations of interconditioning and interrelation with significant similarities in their progressive evolution, as demonstrated by the validation of the HIVE Pedagogical Model of Linguistic, Reading and Writing competences intertwined training

The theoretical significance of the work is marked by the elucidation of scientific arguments regarding the importance of linguistic competence acquisition in mastering reading and writing competences by the students of low school age; the argumentation of the need to establish the correlation between the stages of competence training and the laws of learning from the perspective of the connectionist current; the elaboration of the HIVE Pedagogical Model of linguistic, reading, writing competence intertwined training of low school students.

The applicative value of the research is justified by the implementation and validation of the Intervention Program, which includes special teaching strategies derived from the HIVE Pedagogical Model of Linguistic, Reading, Writing competences intertwined training of low school students; the validation of technologies aimed at implementing the "Power to the reader" and "Magic Key" strategies for interconnex training of low school students' linguistic, reading and writing competences, not only for Hebrew teaching, but for other languages as well, including those studied in the educational institutions of Republic of Moldova.

Implementation of scientific results. The scientific results were implemented in Israeli primary schools, through the achievement of the Intervention Program focused on the simultaneous training of linguistic, reading and writing competences, by using the "Power to the reader" and "Magic Key" strategies during 2012-2015.

АННОТАЦИЯ

Shtral Niva, „Взаимосвязь формирования компетенции чтения, письма и лингвистической у школьников младшего возраста”, диссертация доктора педагогических наук, Кишинёв, 2019.

Структура диссертации: Диссертация состоит из введения, трёх глав, общие выводы и рекомендации, библиографии (216 назв.) и 17 приложений. Объём основного текста диссертации охватывает 131 страницу, 5 рис., 8 таблиц.

Публикации по теме диссертации: результаты исследования освещены в 8 научных работах, включительно 3 статьи в профильных журналах, 4 работы в сборниках научных интернациональных и национальных конференциях и 1 электронная публикация.

Ключевые слова: компетенция, лингвистическая компетенция, компетенция чтения, компетенция письма, фазы формирования компетенции, взаимосвязь, аспекты взаимосвязи, закономерности учения в свете коннекционистской школы, школьники младшего возраста.

Область исследования: общая теория образования с фокусировкой на феномен взаимосвязи формирования компетенции чтения, письма и лингвистической у школьников младшего возраста.

Цель исследования заключается в концептуализации, разработки и экспериментальной апробации Педагогической Модели HIVE взаимосвязного формирования компетенции чтения, письма и лингвистической у школьников младшего возраста, включительно Экспериментальной Программы ориентированной на параллельное формирование компетенции чтения, письма и лингвистической.

Задачи исследования: научное обоснование феноменов: компетенция, лингвистическая компетенция, компетенция чтения, письменная компетенция; обоснование и разработка Педагогической Модели HIVE; разработка и внедрение экспериментальной программы (на основе Модели HIVE) для содействия параллельного прогресса компетенции чтения, письма и лингвистической; определение формационного воздействия экспериментальной программы на компетенции чтения, письма и лингвистической; разработка общих выводов и практических рекомендаций.

Научная новизна и оригинальность исследования заключается в обосновании и разработки Педагогической Модели HIVE, соблюдая взаимосвязь в качестве принципа; представлена в валидации Экспериментальной Программы ориентированная на параллельное формирование компетенции чтения, письма и лингвистической, созданная на основе разработанной Педагогической Модели которая направляла педагогические воздействия на подчинение поэтапности формирования компетенции закономерностям учения предложенными коннекционистской школы, а также обеспечения взаимосвязи между стратегиями преподавания предложенными в 2014 году Министерством Образования Израиля.

Решение важной научной проблемы заключается в освещении значения взаимосвязного формирования отдельных компетенций между которыми существует естественные отношения взаимообусловленности и взаимосвязанности важными идентичными их признаками прогрессивного развития, что и было доказано посредством валидации Педагогической Модели HIVE.

Теоретическая значимость исследования представлена в освещении научного обоснования относительно важности процесса приобретения лингвистической компетенции в освоении компетенции чтения и письма школьниками младшего возраста; обосновании необходимости установления корреляции между поэтапности формирования компетенции и закономерностями учения, предложенными представителями коннекционистской школы, разработки Педагогической Модели HIVE.

Практическая значимость исследования заключается во внедрении и валидации Экспериментальной Программы, которая включает дидактические специальные стратегии исходящие из Педагогической Модели HIVE; валидации технологии внедрения стратегий „Сила читателя” и "Волшебный ключ" в целях взаимосвязного формирования компетенции чтения, письма и лингвистической не только в случае обучения иврита, но и других языков, в том числе языков, преподаваемых в учебных учреждениях Республики Молдова.

Внедрение научных результатов. Научные результаты были внедрены в начальных школах Израиля в ходе реализации Экспериментальной Программы направленной на взаимосвязного формирования компетенции чтения, письма и лингвистической с применением стратегий „Сила читателя”, „Волшебный ключ” в период 2012-2015гг.

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Autoreferatul tezei de doctor în științe pedagogice

Aprobat spre tipar: 28.12.2018

Coli de tipar: 2.3

Formatul hârtiei: A5

Tirajul:4

Comanda nr.1

Tipografia "Pulsul Pieței", Chișinău, str. Gh.Iablocikin 5

UNIVERSITATEA DE STAT DIN TIRASPOL

Cu titlu de manuscris
C.Z.U.:373.3.015..81/(043.2)

SHTRAL NIVA

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