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**THE PEDAGOGICAL MODEL FOR INTEGRATING MUSICAL ACTIVITIES INTO
THE EDUCATIONAL PROCESS IN PRIMARY EDUCATION**

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Abstract of the Doctoral Thesis in Education Sciences

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CONCEPTUAL FRAMEWORK OF THE RESEARCH

Relevance and significance of the research topic. Since Antiquity, philosophers have attributed fundamental importance to music. Pythagoras spoke of the “music of the spheres,” considering the universe to be a system of harmonious vibrations. Plato and Aristotle emphasized the educational and moral value of music: it shapes the soul, cultivates sensitivity, and guides individuals toward harmony and inner balance [28].

The song has several fundamental functions: *the communicative function*, as a universal form of communication that expresses feelings, thoughts, and inner states, sometimes being more suggestive than articulated language. From lullabies to wedding songs and funeral laments, singing has always been a means of expressing collective emotions; *the aesthetic and expressive function*—through the combination of sound and poetry, the song becomes a complex artistic creation. M. Stoica [49] defines it as “a creation born from the perfect combination of music and poetry,” while D. Salade [45] and R. Ciurea [15] emphasize the organic unity between text and melody; *the formative and educational function*. In Ancient Greece, singing was used as an educational means. Children learned to sing before learning to read or count because *music was considered a pedagogy of the soul* [29]. Today, too, singing develops musical hearing, memory, creativity, and the ability to express emotions; *the spiritual function* of singing is related to the sacred and to the religious dimension of life. Folk traditions and biblical texts have always used singing as a form of prayer and communion. Saint Augustine summarized this role through the famous statement: “Qui cantat, bis orat” (“He who sings, prays twice”) [3].

Naturally, human beings demonstrate interdisciplinary thinking, which is an essential characteristic of the process of learning and understanding the world [4; 45]. In an interdisciplinary context, numerous contemporary researchers have emphasized the role of motivation in the educational process. Among them, N. Silistraru stands out for defining motivation as the “dynamic and directional aspect” [46, p. 47] of the individual, alongside M. Șevciuc, who emphasizes the dimension of interest, understood as a “motive, means of didactic activity, and aspect of personality” [49, p. 53]. These premises are supported by theoretical studies and confirmed by practical experience. Thus, it can be concluded that the primary school teacher must *design* an educational process that responds to the fundamental requirements of contemporary education. In this respect, stimulating pupils and awakening their desire for knowledge from the very first lessons represent not only a primary objective but also *an essential condition* for developing lasting competences relevant to contemporary society. Achieving this goal is possible through the adoption of an *interdisciplinary approach to educational content*, which facilitates a deeper understanding of phenomena and relationships in the real world. This approach is particularly important at an early school age, contributing to pupils’ motivation to explore and appreciate the relevance of the knowledge being studied. The theoretical and practical relevance of this research *is fundamental, as it is situated within the current curricular paradigm of national primary education*. This involves an integrated approach to curricular factors: the structure and organization of the educational process, the design of the content and objectives of school subjects, the planned integration of teaching materials, and the active involvement of teachers in the design and implementation of educational activities [77]. These perspectives are supported by the contributions of authors such as E. Joița [33, pp. 109–111] and P. Popescu-Neveanu [42, p. 151].

Nevertheless, not all primary school teachers recognize the importance or value of implementing such methods in the classroom because of less successful experiences in music lessons at elementary school and the *limited effectiveness of efficiently integrating music*.

Helping primary school teachers recognize the value of *integrating musical activities into their curricula*—and that they are more than capable of doing so if they focus on their abilities and maintain *positive attitudes* toward the *integration of musical activities into teaching*—may contribute to their *successful integration of musical activities into the teaching process*.

The integration of curricular content/educational subjects/disciplinary content is a *multidimensional* action of establishing relationships among, interrelating, merging, and combining various elements of

content/disciplines and constructing a harmonious whole of a higher level that goes beyond the sum of its parts (L. Ciolan) [14].

Based on Johann Heinrich Pestalozzi's statement that the child should be allowed "to see, to hear, to discover, to fall, then to rise again and to make mistakes. Do not use words when the action, the fact itself, is possible" [39, p. 1], the pupil is placed in a stimulating and interdisciplinary educational environment. This environment facilitates constructive dialogue and collaboration among subjects such as Romanian language and literature, Hebrew, mathematics, music and movement, personal development, visual arts, and practical skills, with the primary aim of developing interest in learning. Development constitutes an essential long-term element, while an interdisciplinary approach to school content represents an effective way of stimulating pupils' motivation. Naturally, *interdisciplinarity* brings significant benefits to primary education by providing sustainable learning experiences, broadening the horizon of knowledge, increasing academic achievement through the stimulation of critical and creative thinking, and developing essential competences. These perspectives are supported by numerous researchers, including T. Callo [9], O. Dandara [17], A. S. Mohamed [76], I. Neacșu [37], A. Darawsha [18], I. Gagim [22], and I. Kant [34].

The most important ways of integrating curricular content are: integration of knowledge around a central focus; *curricular integration* at the level of one-day teaching activities; *curricular integration at the level of a system of teaching activities* distributed over time; *curricular integration within thematic projects*; and *curricular integration within integrated optional courses*.

L. Vygotsky argues that the zone of proximal development is relevant to primary education and has precisely the capacity to ensure children's subsequent bio-psycho-socio-cultural development [51].

These findings justify our choice, in the process of harnessing music in primary education, of *an integralist pedagogical paradigm*, centered on the holistic formation/development of personality. In personality formation, it is necessary to pay attention to all areas, since the child is a complex being whose development encompasses all dimensions. The *integral personality is represented by a multifunctional system* that includes: *the orientation and protection subsystem* (needs, aspirations, motivation, interest); *the bioenergetic subsystem* of personality (somatic type, type of nervous activity); *the instrumental subsystem* of personality (knowledge, skills, abilities, capacities, attitudes); *the rational-value subsystem* (personality character). Learners should be placed in situations in which they can engage with the full extent of their potential, so that *the value of music* can be harnessed in the educational process of primary education.

The adoption of a *transdisciplinary* approach tends toward the complete "*decompartmentalization*" of subjects of study, progressing gradually from the variant closest to the model (multidisciplinarity) toward the *complete dissolution* of disciplinary boundaries (transdisciplinarity), while curricular competences and content are *integrated* around problems, according to V. Guțu and M. Vicol [31].

Description of the situation in the research field and identification of the research problem:

Methods for integrating musical activities represent one of the principal methods of arts integration used in the teaching process in elementary school classrooms [6]. Their importance is highlighted by Bresler [62], Merrell [75], and Krashen [73], where integration appears as a principle of major importance for progress. A number of contemporary authors examine and develop the characteristics of active and interactive teaching and learning, including N. Petrovski [40], D. Patrașcu [38], T. Cartaleanu [10], V. Goraș-Postică [30], M. Călin [11], I. Cerghit [12], I. Radu [44], E. Joița [33], C. Mureșan [36], Ș. Popenici [41], D. Potolea [43], V. Vasile [50], and I. Gagim [25], addressing all its aspects: the projective aspect (designed curriculum) and the processual aspect (taught curriculum, teaching-learning/study-assessment methodologies), the subjective aspect (the actions of teaching-learning subjects), and the objective aspect (the characteristics of the subjects taught), as well as educational outcomes (competences, traits, behaviours, abilities), advancing related concepts [13].

A review of the scientific literature on the use of musical integration in teaching has revealed several contradictions concerning teachers' attitudes toward music integration; their beliefs about music in general; its effectiveness in relation to musical integration; and the pedagogical knowledge acquired by teachers

during their academic studies in relation to their needs in the field. The following **contradictions** were therefore formulated and included in the study:

- between teachers' attitudes toward the integration of musical activities and the need to capitalize on the integration of musical activities in the educational process of primary education;
- between the pedagogical knowledge acquired by teachers during their academic studies and the lack of mechanisms for improving this phenomenon from an interdisciplinary perspective;
- between the need for a *model for integrating musical activities across various subjects* and the lack of programmes for integrating musical activities into primary-level subjects.

Some countries address these contradictions by using special introductory programmes in which emphasis is placed on content, and certain achievements have also been obtained in the Republic of Moldova. Nevertheless, the contradictions listed above open a new opportunity by taking musical integration into consideration without focusing primarily on the content of teaching methods.

The above considerations lead to the **research problem**: What are the theoretical and methodological foundations that would ensure the effective integration of musical activities into the educational process of primary education.

The aim of the research is to provide the theoretical and methodological foundation for developing and applying a pedagogical model for integrating musical activities into other subjects in primary education, with a view to integrating musical activities into elementary schools in the Arab sector of Israel.

The research objectives are:

- to establish the theoretical premises for integrating musical activities into the teaching process;
- to identify the *pedagogical principles, factors, and conditions* aimed at integrating musical activities into the didactics of other primary education subjects;
- to identify curriculum content and the effectiveness of teachers with regard to musical integration in the teaching process of Arab Israeli schools;
- to develop and experimentally validate the pedagogical model for integrating musical activities;
- to describe the experimental results obtained through the application of the session methodology and to formulate general conclusions and practical recommendations.

General research hypothesis: The integration of musical activities into other subjects in primary education can be effective provided that:

- the theoretical and methodological foundations for integrating musical activities into primary education subjects are identified and applied;
- opportunities for engaging pupils in learning situations are capitalized upon;
- the curriculum is implemented through learning situations tested within the Pedagogical Model for Integrating Musical Activities into the Didactics of Other Primary Education Subjects through the application of the programme.

Research methodology included several methods: *theoretical methods*: synthesis, generalization, classification, systematization, comparison, modelling, surveys; *empirical methods*: observation, testing, questionnaires, conversations, ascertaining, formative, and control experiments; *statistical methods*: Cronbach's alpha, two-way analysis of variance, one-way analysis of variance, etc.

At the level of theoretical conceptualization: scientific and bibliographic documentation, synthesis and epistemological induction, deduction, conceptual analysis, theoretical modelling, hermeneutic analysis, argumentation, modelling of the pedagogical experiment, observation, data collection, statistical analysis, systematization, interpretive synthesis, etc.

At the experimental level: questionnaires, *interviews*, and pedagogical experimentation (diagnostic, formative, and control).

The scientific novelty and originality of the research are substantiated by updating the significance of the phenomenon of harnessing music in the teaching of primary education subjects, substantiating the content of sessions focused on pedagogical principles, conditions, and factors, and developing the

Pedagogical Model and the Programme for Integrating Musical Activities into the Didactics of Other Primary Education Subjects in Israel (the Arab sector).

The scientific problem solved in the research consists in the conceptual and praxiological substantiation of the *functionality of the pedagogical model for integrating musical activities* through the implementation of the methodological integration programme aimed at improving the quality of education in Arab schools in Israel.

The theoretical significance of the research lies in establishing the phenomenon of harnessing music in primary education from the perspective of its dominant psychological and pedagogical dimensions; substantiating the programme for harnessing music as an object of integration into primary-level subjects within the curricular context through *pedagogical principles, factors, and conditions* in learning situations.

The applicative value of the research lies in developing and validating a set of *pedagogical tools* and theoretical-methodological foundations incorporated into the Pedagogical Model for Integrating Musical Activities into the Didactics of Other Primary Education Subjects, based on the methodological programme integrating music education into primary education subjects.

At the same time, the research supports the identification of difficulties faced by teachers in integrating musical activities into teaching; the analysis of introductory programmes aimed at facilitating teachers' musical integration into teaching; the *development and validation of a set of pedagogical tools presented* in the Pedagogical Model for Integrating Musical Activities into the Didactics of Other Primary Education Subjects; and the *formulation of practical recommendations* addressing the content and importance of improving teachers' effectiveness and *attitudes* toward musical integration, providing them with a framework in which they feel capable of and willing to integrate music into teaching. Furthermore, this research recommends *including a course on the integration of musical activities for trainee teachers* during their university studies. By addressing a wide range of issues, the research findings may significantly improve the teaching-learning-assessment process.

Main scientific results submitted for defense:

The theoretical and practical research conducted made it possible to identify the theoretical and methodological framework, which represents a reflective process aimed at raising teachers' awareness of the integration of musical activities into other primary education subjects within the teaching-learning-assessment process.

Through the methodological and educational coordinates of the Pedagogical Model, the capacity to integrate musical activities and to foster pupils' development of *a complex of competences, character traits, behaviours, and musical attitudes* was established. These are represented through the methodological system for designing and effectively conducting lessons based on teaching strategies, methods, procedures, and techniques.

The functionality of the Pedagogical Model for Integrating Musical Activities into the Didactics of Other Primary Education Subjects led to the formation of beneficial attitudes toward integrating musical activities with other subjects.

Implementation of the scientific results was carried out in Arab elementary schools in Galilee and the Negev, Israel.

Approval and validation of the scientific results: The main research results are reflected in scientific articles published and presentations delivered at scientific conferences and in specialized journals.

Volume and structure of the thesis. The thesis comprises: an annotation (in Romanian and English), a list of tables, a list of figures, a list of abbreviations, an introduction, 3 chapters, general conclusions and recommendations, a bibliography consisting of ____ references, appendices, and a total of ____ pages constituting the main body of the research work.

Keywords: music, teaching, integration, teachers, attitudes, methods, elementary school, primary education, pedagogical model, methodological programme.

THESIS CONTENT

In the **Introduction**, the relevance and significance of the research problem are described, along with the aim of the research, objectives, novelty, and value of the research. The theoretical and practical significance of the research, the main results of the investigation, and a summary of the thesis chapters are also included.

Chapter I, Theoretical Foundations for the Integration of Musical Activities, presents theoretical approaches and epistemological aspects of integrating musical activities into teaching. Theoretical concepts concerning the integration of the arts into teaching and the origins of arts integration in general are defined.

As L. Ciolan observes, **holism** is a theory that emphasizes the structural and/or *functional relationships between parts and the whole, abandoning an exclusive focus on the separate elements of a system*. It should be noted that the working procedure of holism involves reconstruction “*from the bottom up*,” attempting to capitalize on information *that is lost when the whole is broken down into its component parts*—a procedure specific to reductionism. Holism means the “irreducibility of the whole to its component parts, the superiority (not necessarily quantitative) of the whole over the sum of its parts, and the **integral** and **integrated** view of the objects, phenomena, or processes under study” [14, p. 117].

According to P. Hash, **integrality** is a complex totality constituted by elementary units between which *a network of relationships exists*, which become mutually connected and is related to the first operation of the mind, representing a model of knowledge [68].

When we speak about the **stages of integralization**, it is natural for the boundaries between them to be mobile and permeable. Integration is a dynamic process that can easily “move” from one level to another, from one stage to another along the continuum. According to L. Ciolan [14, p. 135], the analytical rationality of the *holistic* approach is based on: **1. dividing the whole into component parts; 2. analysing and explaining these parts independently; 3. juxtaposing the partial explanations in order to construct an overall picture.**

The most radical phase of *integration*, according to researchers V. Chiş and M. Ionescu, is *transdisciplinarity*—the interpenetration and *fusion* of several disciplines in the form of curricular integration. **Transdisciplinary integration** “fully represents a holistic, global curricular approach,” as V. Chiş confirms [13, p. 22].

The development of didactics of the arts, one component of which is the field of teaching methods, has also been influenced by various theories of knowledge developed in philosophy, psychology, and musicology, as well as theories of learning and knowledge developed in psychology, pedagogy, and arts pedagogy, including:

- in *general philosophy and the philosophy of art and music*: I. Kant’s triadic delimitation of philosophical cognitive categories [34]; the triadic concept in philosophy (syncretism–analysis–synthesis) described by Hegel [32]; and the distinction between scientific knowledge and artistic knowledge mentioned by researchers M. Breazul [5] and I. Gagim [23];
- in *general psychology and the psychology of music*: the theory of musical abilities; T. Bularga’s psychoenergetic theory of music [7]; V. Vasile’s theory of the dynamic nature of harmony [48]; I. Gagim’s biphasic theory of music cognition, “perception and apperception” of the sonic message [26]; I. Gagim’s proto-psychological concept of music and musical-type knowledge [20]; and I. Gagim’s extensive knowledge of music [22];
- in *musicology*: V. Vasile’s algorithmic sound-consciousness theory [50]; G. Breazul’s functional theory of music [6]; I. Gagim’s intonational theory of music [25]; and I. Gagim’s concept of the musical message, understood as dynamic and structured on the basis of a hierarchy [29];
- in *general pedagogy and arts pedagogy*: M. Zlate’s concept of operant cognitivism [53] and I. Gagim’s concept of music education [21].

The second part of Chapter I addresses the psychopedagogical dimensions of musical integration in the didactics of other subjects, the benefits for teachers who implement music in their programmes, and the effects of music on the brain, concentration, achievement, development, discipline and classroom management, behavioural problems, motivation, productivity, and performance, with particular emphasis

on the effects of musical integration on emotions, anxiety, stress, and tension. The effects of music on learning abilities are also discussed.

The third part of Chapter I examines the relationship between music and elementary school subjects (language, foreign languages, mathematics, science, and religion). Particular emphasis was placed on Islam because the religion taught in the schools involved in the research was Islam.

Theoretical Basis and Conceptual Specificity of Integration

The results obtained by human beings in the learning process represent the collective experience accumulated in the field of education and constitute an integral part of global social culture.

From the perspective of sociology of education, global social culture includes a set of basic knowledge and skills necessary for preparing an adaptable personality capable of responding to various situations, responsible toward an evolving society and toward oneself, and competent in social life [45, p. 71].

Originally borrowed from mathematics, the term *integration* has become widely used in various fields of the social and human sciences, including the economic sciences, covering a very broad range of processes and phenomena.

In general terms, integration represents the mutual adjustment of the constituent elements of a system, enabling it to establish a new equilibrium, or the combination of parts of a whole in the process of reaching a state of unity. Unity is a whole resulting from the combination of parts or entities. In the economic sense, the term integration refers to the relationships established within economic activity between different divisions of a company or between different companies that participate, within a technological flow, in the production of a product. The notion of *integration* derives from the Latin *integro*, *integrare*, and *integratio*, meaning *to put together*, *to reunite several parts into a unified whole* or *for the purpose of constituting a whole*; *to restore to complete*. In this context, the constituent parts become integral parts.

According to the *Concise Oxford Dictionary* and *Chambers Essential Dictionary*, integration is the combination of parts into a whole, while unity is a whole resulting from the combination of parts or members. Thus, integration is the process of reaching a state of unity. *Larousse Dictionnaire* defines integration as entry into a subsystem, while the *Dictionnaire des Sciences économiques* emphasizes that integration generally evokes either the incorporation of a foreign element into an ensemble or the transition from a diffuse state to a conscious one; the notion of integration always includes that of unity—*what is dispersed becomes united*. Similarly, the *Dictionnaire économique et financier* regards integration as an aspect of concentration, a narrow view that no longer corresponds to current orientations [59].

T. Callo [9, p. 10] *approaches the issue of integrality in pedagogy as an effect of the revitalization of the formative ideal in education*. From philosophical, logical, and pedagogical perspectives, the researcher identifies the criteria of integrality (conditions of possibility, relational basis, etc.), the factors of integrality (the integrating environment, the integrator and integrative systems, etc.), and the characteristics of integrality (processuality, instrumentality, etc.).

The idea of integrality enters pedagogy because educational practice offers a great diversity of problems and situations that exceed the capacity of a single field, as well as through the revitalization of the formative ideal in education. In addition, starting from *relational theory* within postmodernism, it should be noted that this theory proposes a shift away from substance in favour of *relationships*. The understanding of cause-and-effect mechanisms is reconsidered in favour of *determining the conditions of possibility* of a process or phenomenon, within the context of the relationships it establishes at a particular time and in a particular space. According to L. Ciolan, this perspective seeks to identify the “relations of forces” that are continuously articulated and re-articulated, giving rise to cognitive, organizational, and social structures [14, p. 18].

The *methodology of knowledge integration* is the instrument that ensures the effectiveness of the integration process. *Knowledge integration* involves several processes: *systematizing knowledge already acquired*; *acquiring new knowledge and integrating it with existing knowledge*; and *planning the*

subsequent process of acquiring knowledge. Thus, this methodology has a *triadic character*, meaning that it is a process of knowing and everything related to it, consisting of three components: *what we know*, *the knower*, and *knowledge itself*. Therefore, the methodological instrument of knowledge must neutralize this situation in order to ensure the integrity of knowledge. The elementary instrument of knowledge, called a *system* (or *model*), contains the trichotomy in the form of three basic principles corresponding to the elements of the trichotomy. Thus, the determining principles are:

- *Totality* – as the essential idea of the world of objective knowledge, which is formative for every result of cognition. This principle generates the existence of a characteristic systemic feature that is specific only to the system as a whole and not to its individual component elements. This quality is called *emergence*, emphasizing that the characteristics of the system as a whole cannot be reduced to the characteristics of its component elements.

- *Causality* – as the central idea of the world of objects and phenomena, expressing the generality of relationships in this world. The total absence of causal relationships at any point in the Universe would lead to the distortion of the principle of totality. The principle of causality determines the existence in every system of what is called the “system-forming factor,” that is, a complex of causes ensuring the integrity of the system and preventing it from “disintegrating” into parts.

- *Relative knowability of the world* – as the central idea of the knowing subject, the denial of which would render knowledge meaningless. Knowability has a specific form expressed through the characteristic of “modelling.” Modelling means that a particular characteristic of one system may correspond to another characteristic of another system; in other words, a model represents a correspondence between two systems according to a particular criterion.

There are necessary conceptual connections between the concepts of *integrality* and *totality*, since both indicate an absolute whole. Between the concepts of *integrality* and *unity*, there are criterial connections, with the criterion understood as any relevant factor of conceptual meaning, without being a necessary condition [63]. Such connections may not exist, as in the relationship between *union* and *cohesion*. Unlike *holism*, which assumes that parts can be understood only through the *whole to which they belong* and that *wholes* (or at least some of them) are more than their parts [7, p. 285], integrality does not carry such a categorical emphasis on the value of the whole, since the component elements retain their independence and may disintegrate from the whole.

Thus, by synthesizing the *specifications of integrality within a specific hermeneutic framework*, the following defining characteristics can be identified:

- *integrality* is a *phenomenon*, but *unintentionally* it is also a *processuality*;
- it is *more than the sum of its parts*, that is, it stimulates a better effect;
- it does not have its own “personality”; it is not an object in itself, but *an instrument* for achieving a purpose;
- it requires a *rigorous, perfect order*, encompassing a multitude of rationalities;
- it presupposes a strong *connection with life*, reality, and everyday experience;
- it is oriented primarily toward *the formation of values and attitudes*, relating various disciplines within pupils’ mental structures.

Nevertheless, *curricular integration* at this level creates certain advantages: it facilitates pupils’ establishment of connections between the content of different subjects; contributes to a better understanding of problems that cannot be fully explained within the strict framework of a single discipline; and stimulates the development of coordinated planning.

At the highest curricular level, the highest degree of integralization is represented by transdisciplinarity, reaching the stage of fusion. Fusion is the most complex and radical phase of integration. Transdisciplinarity is the form of interpenetration of several school subjects which, over time, leads to the emergence of a genuine phenomenon of knowledge. *Transdisciplinarity* is what exists simultaneously between disciplines, within different disciplines, and beyond any school discipline. The space between and beyond disciplines in transdisciplinarity is filled with scientific information [14, p. 53].

The mechanism of integration involves the following actions:

1. For “past” knowledge – it is necessary to systematize it in order to reveal contradictions and deficiencies and to make it possible to eliminate them through existing internal knowledge or future external knowledge. This requires the repeated application, in stages, of the analysis and synthesis procedure. This process is essentially continuous, but in practice it is limited by internal resources, the environment, and the level of self-awareness.

2. For the current moment – *integration as such involves constructing a model of the external elements of knowledge and synthesizing them with the model of knowledge integration*. Problems may arise here, such as controlling the model of external elements in order to identify internal contradictions or non-contradictions and determining their compatibility with one of the elements of the model.

The pupil is viewed not through the prism of his or her shortcomings and failures, but through the perspective of potential, the ability to construct new knowledge, to learn, to be active, and to become autonomous. The pupil is considered not merely an intellect, but a human being with a complex personality, including an affective dimension, with the status of an active subject in learning and as a social being. The active pupil engages simultaneously in physical and practical activities at the material level and in intellectual and mental activities involving searching, investigating, rediscovering, and constructing new knowledge. Maximum activation occurs at the level of personal, internal, and abstract reflection, at the level of thinking, the highest level of abstraction, and verbal manipulation [51].

Curricular content is not viewed as a sum of memorized and reproduced acquisitions, but as a support, vehicle, and pretext for developing pupils cognitively, psychomotorically, affectively and attitudinally, and socially. It serves the construction and development of new acquisitions by pupils themselves; the establishment of intra- and interdisciplinary connections; transdisciplinary approaches; cognitive transfers; practical applications; preparation for pupils’ actions in different situational contexts; and the promotion of educational and interpersonal relationships.

The teacher acquires a new identity: he or she no longer has the role of transmitting knowledge, but of organizing learning situations conceived as contexts for establishing interactions and dynamic relationships between the pupil and the object/content of learning. Pedagogical approaches are implemented in a precise manner that allows the teacher to study how pupils’ activities unfold.

Peers represent another practical pole of particular relevance in interactive instruction. The emergence of this pole correlates with the reduction of the teacher’s role, which gradually diminishes, making room for pupils’ actual activities and for intellectual, verbal, socio-emotional, and affective interactions among them. Such interactions make possible the effective progress of discussions and, implicitly, of knowledge, through consideration of the ideas, conceptions, opinions, viewpoints, and arguments put forward by the pupils themselves.

The orientations of interactive pedagogy, the educational model it proposes, the way it conceptualizes the curricular process, and its educational implications differ fundamentally from the field of classical/traditional pedagogy. The main facets of the educational process can be identified through a multi-criteria pedagogical and comparative perspective, contrasting interactive pedagogy with classical pedagogy, as follows:

- The systemic paradigm of education, in which the whole is studied rather than individual parts of the whole.
- Psychosocial interactions and intellectual exchanges among pupils, collaboration and cooperation, and the establishment of affective-social relationships, rather than individualism and competition among pupils.
- The classroom as an educational community, which also includes the teacher, where pupils learn in relation to and together with one another, rather than as a group of pupils learning merely alongside one another.

- Decision-making is shared by the teacher and pupils. Pupils themselves may make decisions, including through feedforward, in collaboration with the teacher, rather than the teacher being solely responsible for the learning process.

- The pupil as an active participant in the educational process, as an authentic (object and) subject of education and an authentic subject in the educational act—a conscious and active co-participant who engages fully in educational activity from intellectual/cognitive, psychomotor, and affective-volitional perspectives. The pupil reflects, dialogues, communicates intra- and interpersonally, cooperates, searches, experiments, tests, solves problems, analyses, synthesizes, and so forth. The pupil is at the centre of the curricular process and of the process of (re)constructing his or her own knowledge and knowing, and uses nondirective, dialogic, active, and interactive learning strategies. The pupil practically identifies with the learning situation in which he or she is engaged, becoming the manager of his or her own knowledge and development. Interactive approaches, strategies, methods, and techniques motivate pupils, rather than treating them as passive participants in the educational process, passive recipients of ready-made knowledge, and objects of education who listen and learn through directive, expository, and demonstrative learning strategies.

- *The teacher as facilitator*, coordinator, guide, organizer, collaborator, and tutor for the pupil and for the pupil's learning activity, through the implementation of a constructivist curriculum. The teacher acts as a mediator and facilitator of the learning process undertaken by the pupil rather than as a transmitter of knowledge or the person who controls the learning process.

- It must be recognized that teaching means organizing pupils' learning situations and learning experiences, rather than equating teaching with telling, dictating, and requiring pupils to verbally reproduce what was said in the following lesson.

- The teacher guides indirectly, nondirectively, and flexibly; he or she facilitates learning, both cognitively and metacognitively, and facilitates knowledge. Mediation and guidance dynamically integrate pedagogical approaches at both individual and systemic levels, taking into account the characteristics of the classroom curricular environment and concrete educational situations, rather than acting directly, rigidly, and prescriptively. The teacher is a leader in learning and knowledge-building activities. Guidance involves the teacher's relationship with the class as a whole.

- Active reception of knowledge, through pupils' expression of their own opinions and communication of these opinions to other pupils and to the teacher, involving active and interactive interpersonal communication as well as intrapersonal communication, rather than the transmission by the teacher of ready-made knowledge and absolute truths to the class as a whole through passive interpersonal communication.

- Ensuring a balance between the formative and informative dimensions of education and aligning education with the latest paradigms in the field, including the need to shift the specific weight of instruction and education from the educator to the educated person, rather than privileging the informative dimension of learning and the transmission of ready-made/pre-processed knowledge.

- Active, interactive, and creative involvement in constructing new knowledge and acquisitions by pupils themselves, who make use of higher-order processes of thinking and creativity, rather than passively receiving knowledge processed by the teacher or accepting absolute truths.

- The process of knowledge construction undertaken by pupils and the predominant way of thinking required by the subject studied, rather than the product obtained, namely learning outcomes and the assimilation of a volume of knowledge.

- Scientific, procedural, strategic, and declarative knowledge, with no single category being privileged, rather than privileging scientific and declarative knowledge.

Not so much *savoir* as *savoir-faire* cognitive, practical *savoir-faire*, *savoir-être*, and *savoir-devenir*, rather than predominantly *savoir*.

Active, interactive, and creative learning, through pupils' own intellectual and practical activity and through cognitive/intellectual, affective-motivational, and psychomotor involvement, rather than passive learning through reception.

- Encouraging pupils to interact with other sources of knowledge, such as peers, with the aim of developing cognitive and educational autonomy, rather than encouraging pupils' dependence on the teacher as the sole source of knowledge. All categories of pupils are involved and assigned responsibilities through collective and cooperative activities, rather than only high-achieving pupils.

From the perspective of pedagogical research and the philosophy of education, the integration of music with other subjects is grounded in the idea that music contributes to the integral development of personality and facilitates connections between artistic, cognitive, and socio-affective forms of knowledge. The authors mentioned above have addressed this issue from different yet complementary perspectives, as presented in the table below.

Table 1. Theoretical Perspectives on the Integration of Music with Other Disciplines in the Conceptions of Representative Authors

Author	Perspective on the Integration of Music with Other Disciplines
Liora Bresler [62]	One of the leading proponents of integrated curriculum in arts education. She argues that music should be integrated with literature, history, science, mathematics, and everyday experiences to construct authentic learning. Integration develops critical thinking, creativity, and students' ability to make meaning of knowledge. Bresler distinguishes different models of curricular integration (subordinated, co-equal, and authentic), advocating for integration based on shared educational objectives rather than merely thematic association.
Immanuel Kant [34]	In <i>Critique of the Power of Judgment</i> , music is regarded as one of the fine arts, serving to cultivate aesthetic sensibility and harmony between imagination and intellect. Although he does not explicitly discuss interdisciplinarity, his conception provides a basis for integrating music with philosophy, moral education, and character formation through aesthetic education.
Georg Wilhelm Friedrich Hegel [32]	In <i>Lectures on Aesthetics</i> , music expresses the inner life of the spirit and occupies a place within a unified system of the arts. Music should be understood in relation to literature, religion, history, and philosophy, as all of these express the development of the human spirit. Interdisciplinary integration facilitates a comprehensive understanding of cultural phenomena.
Lev S. Vigotski [51]	In his sociocultural theory and <i>Psychology of Art</i> , music is viewed as an instrument of cognitive, emotional, and social development. Learning takes place through interaction and cultural mediation, which supports the integration of music with language and literature, drama, moral education, and collaborative activities. Music stimulates imagination, language, and symbolic thinking.
Ion Gagim [27]	He regards music as a means of the spiritual and cultural development of the individual. He advocates integrating music education with literature, visual arts, history, traditions, and moral education. The emphasis is placed on developing musical culture, aesthetic sensitivity, and cultural identity through interdisciplinary connections.
Tatiana Bularga [7]	She promotes integrated arts education and the exploration of connections between music, visual arts, dance, drama, and other school subjects. Music is viewed as a universal language that contributes simultaneously to the development of students' cognitive, affective, and social skills, as well as key competences.
Ioan Ciolan [14]	He approaches interdisciplinarity as a fundamental principle of the modern curriculum. Integrating disciplines makes it possible to overcome the fragmentation of knowledge and develop transferable competences. From this perspective, music becomes a learning context that can incorporate content from language and communication, mathematics, history, civic education, and other fields, contributing to contextualized and meaningful learning.

Phillip M. Hash [68]	His research on general music education highlights the effectiveness of integrating music with other disciplines in primary and secondary education. He argues that interdisciplinary projects increase student motivation, facilitate conceptual understanding, and develop competences such as collaboration, communication, and creative problem-solving. Integration should respect the specific objectives of each discipline and avoid subordinating music to other fields.
Stephen D. Krashen [63]	Although he is primarily known for his theory of language acquisition, his ideas have implications for integrating music into foreign language learning. Music lowers the “affective filter,” increases motivation, and facilitates the retention of vocabulary, pronunciation, and linguistic structures. Songs provide comprehensible input and contribute to natural language learning through authentic and emotionally positive experiences.

The views of these authors can be grouped into four main directions:

1. *Philosophical foundation of integration* (Kant [34], Hegel [32]) – music contributes to the aesthetic, moral, and spiritual development of the individual and must be understood in relation to other areas of culture;
2. *Psychopedagogical foundation* (Vygotsky [51], Krashen [73]) – music promotes cognitive, emotional, and linguistic development through social interaction, motivation, and positive affective experiences;
3. *Curricular and methodological foundation* (Bresler [63], Ciolan [14], Hash [68]) – the integration of disciplines represents a modern teaching strategy oriented towards competence development, contextualized learning, and the development of interdisciplinary thinking;
4. *Foundation of music education* (Gagim [22], Bularga [7]) – music is an essential component of general culture and should be integrated with other arts and humanities disciplines for the harmonious development of the personality.

The comparative analysis highlights the fact that, although the authors come from different philosophical, psychological, and pedagogical traditions, they all converge on the idea that music goes beyond the status of an autonomous artistic discipline and becomes an integrating factor in the educational process. In their view, the integration of music with other disciplines facilitates the development of cognitive, linguistic, aesthetic, social, and moral competences, promotes authentic and contextualized learning, and contributes to the formation of a creative, reflective, and culturally responsible personality. This theoretical convergence provides a solid foundation for designing a student-centred interdisciplinary curriculum focused on the development of key competences.

In our view, following the analysis of these prominent personalities, we attempt to define the integration of music with other disciplines in the conditions of schools in the Arab sector of Israel. The integration of music is analysed from the perspective of the integrated curriculum, competence-based learning, and arts education. The concepts of methodological integration, interdisciplinary strategies, the use of music as a motivational tool, and the valorisation of music represent complementary dimensions of the use of music in the teaching–learning process.

Chapter 2. Development of the Pedagogical Model for the Use of Musical Activities in the Educational Process in Primary Education is dedicated to the development of the Pedagogical Model for the Use of Musical Activities in the Educational Process in Primary Education. Based on the theoretical foundations and practical needs, a pedagogical model oriented towards the effective integration of music into teaching activities was designed.

At the same time, the principles, objectives, factors, and conditions for applying the model are presented. The developed pedagogical model served as the basis for designing a programme for the integration of musical activities, based on the national standards for music education, intended for the use of music within school subjects and educational activities, with a view to the harmonious development of pupils.

Theoretical Foundations for the Development of the Pedagogical Model for the Integration of Musical Activities into the Educational Process in Primary Education includes the following axiological, epistemological, and praxiological foundations of the research and on developing pupils' appreciation of beauty in relation to the spirit of music, leading to the awareness of national values in Israel (Arab sector), as well as universal human values related to the psychology of musical art, based on the following:

- *student-centred paradigm* – the personality of the educated individual is at the centre of the pedagogical process;
- *value (axiological) paradigm* – the integration of musical values as part of personality formation;
- *interdisciplinary / transdisciplinary paradigm* – music integrated into the didactics of other disciplines, rather than treated in isolation.

The pedagogical model for integrating music education into primary education is grounded in a set of modern educational paradigms that reflect the current orientation of the educational sciences towards the formation of an autonomous, creative personality capable of critical reflection. These include the student-centred paradigm, *the axiological paradigm*, and *the interdisciplinary and transdisciplinary paradigm*, as well as *pedagogical principles, factors, and conditions*.

The document explicitly identifies the following conditions: *activation of the process of developing musical competence* within integrated teaching; *axiological and pedagogical positioning* regarding the integration of musical activities into the didactics of other disciplines in primary education; *valorisation of the formative potential of musical art* – recognition of the formative potential of music; *institutional and professional support* – the support and guidance of a professional team by a specialised instructor; *development and adjustment of a systemic plan* for integrating musical activities in school; *continuous monitoring and evaluation* of the integration process.

Within the analytical context addressed, the following *criteria of integrality* are formulated [9, p.10]:

- the need to *discover the causes and conditions of possibility* of integrality;
- clear determination of the *relationships between the component elements* of integrality;
- *examination of the effects* both at the level of the whole and at the level of the component elements;
- consideration of *the whole as a principle preceding the parts*, proceeding from the whole to the parts and ensuring comprehension;
- the whole constitutes the basis of the *possibility of its form* and the *basis for establishing relationships* between the parts that depend on this form.

When speaking of *integrality*, it must be taken into consideration that, for it to occur, the following **factors** need to be manifested:

- an *integrating environment*, as a totalising construct that makes it possible to unite two or more elements into a whole;
- the *integrating system*, within which integration takes place;
- the *integrative system*, i.e. those elements that are integrated;
- an *integralisation stimulus / integrating element*, a stimulating factor that makes it possible to unite the elements and that belongs to the same environment; the agent that integrates;
- *common elements* that make such unification possible;
- *integralising potential* – the relationships between the component elements [26, p. 110].

The integration of music is based on a clear set of **pedagogical principles**:

- *principle of internalisation of values* – adoption of the system of values as one's own values, integrated into the structure of the personality;
- *principle of affective, motivational, and character engagement* – permanent adaptation to the conditions of an open pedagogical context;

- *principle of complementarity* – a balance between cognitive and non-cognitive objectives in the design of pedagogical action;
- *principle of integrality* – a key principle in the assessment of transdisciplinary competences in primary education;
- *principle of focusing on the personality of the educated individual* – the pupil/the person being assessed is the central point of reference.

Conditions for the Integration of Music Education into the Teaching Process

The integration of music education within teaching activities in primary education presupposes the creation of a coherent pedagogical framework that capitalises on the formative potential of musical art and contributes to the comprehensive development of pupils' personalities. The specialised literature emphasises that the achievement of effective integration between different curricular domains depends on the existence of well-defined pedagogical, institutional, and methodological conditions (Cerghit, 2006). In this respect, the pedagogical model of music education integration is based on a set of conditions that ensure the functionality and effectiveness of the educational process [12].

A first essential condition is *the activation of the process of developing musical competence within integrated teaching*.

A second important condition is represented by *the axiological and pedagogical positions regarding the integration of musical activities into the teaching of other subjects in primary education*.

Another fundamental condition is *the valorization of the formative potential of musical art*.

An essential condition for the implementation of the integration model is *institutional and professional support*.

Another important condition is *the development and implementation of a systemic plan for integrating musical activities into the school's educational activities*.

At the same time, the integration of music education requires *continuous monitoring and evaluation of the implementation process*. Evaluation should address both pupils' learning outcomes and the effectiveness of the teaching strategies used. Through the periodic analysis of educational activities, difficulties encountered can be identified and solutions can be developed to optimise the integration process.

It can be concluded that the effective integration of music education into the pedagogical process depends on compliance with a set of pedagogical, institutional, and methodological conditions. The activation of the process of developing musical competence, the axiological foundation of integration, the valorisation of the formative potential of musical art, institutional and professional support, systemic planning, and continuous monitoring constitute essential elements for the development of an effective and integrative educational model. By observing these conditions, music education can become an important factor in the holistic development of pupils and in strengthening the cultural and value-oriented dimension of the educational process.

The figure below presents the *Pedagogical Model for the Integration of Musical Activities* and contains all its important components.

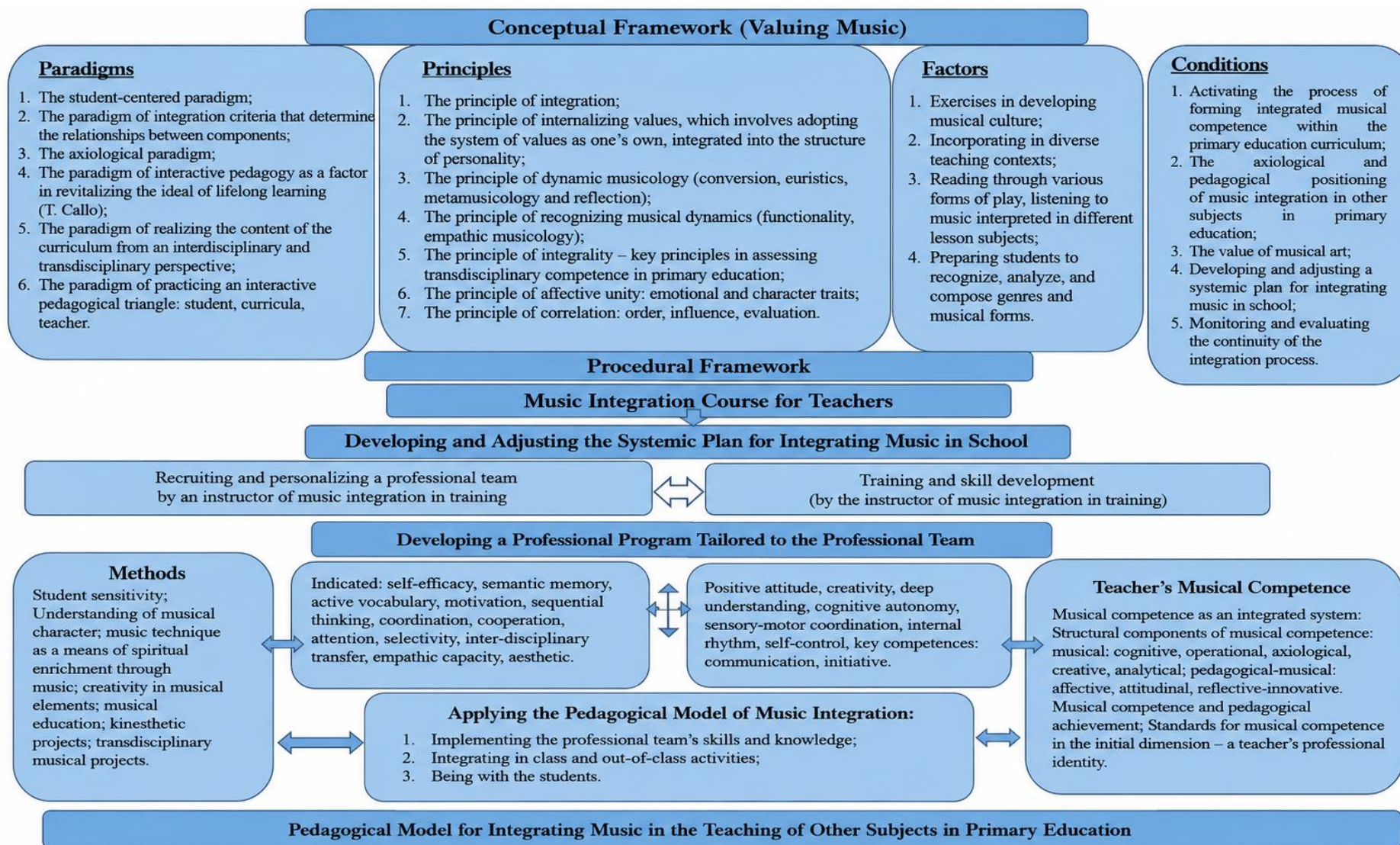


Figure 1. The pedagogical model of integrating musical activities into the primary education process

From a conceptual perspective, the pedagogical model represents a scientific construct that describes and explains the relationships among the components of the educational process and provides guidelines for the effective organisation and implementation of learning activities. In the case of musical activities, it harnesses the educational potential of music for the cognitive, affective, social, aesthetic, and moral development of primary school pupils.

The pedagogical model for integrating musical activities involves establishing correlations among: *the aims of music education and the key competences stipulated in the curriculum; musical content and pupils' age-specific characteristics; interactive methods and authentic musical experiences; and the assessment of pupils' artistic and personal progress.*

Within this model, musical activities are not viewed exclusively as means of developing artistic competences, but *as educational tools with complex formative potential.* Through vocal and instrumental performance, music listening, musical games, movement to music, and artistic creation, pupils develop aesthetic sensitivity, communication skills, creativity, emotional self-control, a spirit of cooperation, and respect for cultural values.

The model includes the following components:

1. *Teleological component* – the purpose and objectives of education through musical activities;
2. *Conceptual component* – the pedagogical, psychological, and musical principles underlying the educational process of integration;
3. *Curricular component* – the content and specific competences of music education;
4. *Methodological component* – methods, procedures, forms, and means used to implement the activities;
5. *Operational component* – the organisation and implementation of musical activities;
6. *Evaluative component* – criteria, indicators, and assessment tools for evaluating outcomes.

Consequently, the pedagogical model for harnessing musical activities in primary education represents *an integrated system for organising and implementing the educational process through music, aimed at developing pupils' musical competences as well as the intellectual, affective, social, moral, and creative dimensions of their personality,* in accordance with the aims of modern education.

Explanation of the Pedagogical Model for Integrating Musical Activities into the Teaching of Other Subjects in Primary Education

First, the teachers attended a “*course on integrating musical activities*” in which they became familiar with all the integration methods that they were expected to use in the teaching process, as described above.

The second step was the creation of a leadership team, including the coordinators of each subject, which developed *a working plan for integrating musical activities at school*, presented in Table I. The music teacher was involved, and the entire process was supervised by the author of this research.

The third step was for each subject coordinator to develop a *professional programme* together with the respective subject team: Arabic, English, Hebrew, science, mathematics, and religion. The programmes included suggestions provided by the researcher to the teams. All programmes incorporated the various ways of integrating musical activities examined in the research.

These first three steps—“the integration course in music”, “the development of a school working plan”, and “the development of a professional programme with the subject team”—were intended to provide teachers with a *greater sense of efficacy and more positive attitudes* towards the integration of musical activities into teaching.

The fourth step was *the implementation of the programme for integrating musical activities* by each teacher in their lessons. Teachers applied the following methods in their lessons: using background music, content-related songs, creativity, music outside the classroom, external talent, performance, music and arts, and music at the beginning and end of the lesson.

The implementation of musical integration included integration *during and outside the classroom*. The *talents of teachers and parents* were also involved. The programme also included an *accompanying website*.

Throughout this process, the instructor responsible for integrating musical activities, who was also the author of this research, accompanied the team in order to provide *support* and *personal guidance*, as well as *encouragement* and empowerment, helping teachers develop confidence in their ability to succeed.

Two development mechanisms were used to enable teachers to learn from the experience gained through this process. Teachers were asked to invite colleagues from the same subject team to observe lessons in which they were integrating musical activities. *Peer observation* is an excellent opportunity for teachers to learn from one another and inspire each other. In addition, the instructor responsible for integrating musical activities, namely the author of this research, conducted *weekly monitoring and evaluation* of the process.

The pedagogical model for integrating musical activities into the teaching of other subjects in primary education is formulated according to a common standard approved by the Ministry of Education of Israel and is specifically addressed to schoolteachers, using the professional language with which they are familiar. This makes the model functional for teachers and schools. From the perspective of integrating musical activities into the teaching of other subjects in primary education, the model is presented in considerable detail, enabling teachers and school principals to use it easily. It is holistic and incorporates many dimensions that could benefit pupils during the learning process.

The integration of music into the teaching process can be highly beneficial to pupils in several dimensions:

1. It contributes to the pupil's *emotional well-being* while learning by reducing anxiety and stress and increasing self-confidence.
2. It also contributes to the *social dimension* of pupils' learning. It improves relationships among pupils and between pupils and their teacher.
3. It increases pupils' *motivation* to learn.
4. It also contributes to the *cognitive dimension*, including understanding, internalising, and memorising learning material.
5. It contributes to *improved achievement*.
6. It also helps pupils with the *behavioural dimension* and disciplinary issues.
7. It also assists teachers with *classroom management*.
8. It helps pupils improve their *motor skills*.

The dimensions that benefit from the integration of musical activities into teaching are: the emotional dimension, the social dimension, cognitive learning effects, motivation, motor effects, behavioural effects, achievement, classroom management, and general personal attitudes.

The pedagogical model emphasises the importance of conducting a course for teachers who intend to focus on the following:

1. The benefits and value of integrating musical activities into teaching.
2. Ways and methods of integrating musical activities into teaching.
3. Empowering and encouraging teachers by reinforcing their belief that they can implement the approach.

Music relates to many areas of life and extends into various disciplines. Therefore, the core music programme provides diverse combinations of social and educational activities. Cross-curricular integration is valuable because of its ability to connect school subjects with pupils' lives [81].

Two aspects, in the same vein, are related to music:

- Music as a "field of life" in pupils' lives and at school.
- Music as a domain connected with different subjects and areas of knowledge taught at school.
- Music as a domain of life is an important component of school ceremonies and is used as a "memory aid" and as a tool for preserving cultural heritage. Musical-social activities at school can be used

as a tool for social integration, particularly when they take into consideration the musical traditions that pupils bring from home and respect for every form of musical-cultural expression.

Musical activity at school can provide a basis for education for cultural consumption and participation in culture.

Therefore, programmes for integrating musical activities should include a variety of school initiatives that reflect this position. For example: musical activities and songs during holidays; creating mixed-age groups to play music and sing together; participation in musical events at school; establishing “clubs” for music lovers interested in different styles, such as rock, classical music, and rap [80].

Some of these initiatives are intended for all students, whereas others will be based on free choice and voluntary “*interest groups*”, encouraged and supported by the school [69].

The experimental basis of the research consisted of a sample of 80 teachers from four Arab primary schools in Israel who taught one of the following subjects in Grade 4: *Arabic, Hebrew, English, Mathematics, Science, and Religion*. The sample was heterogeneous in terms of gender, age, marital status, years of professional experience, academic education, musical experience, and teaching field. The sample consisted of 30% men and 70% women. The mean age of the sample was 41. Ninety percent of the teachers were Muslim and 10% were Christian. All were tenured teachers. The mean length of professional experience was 15 years. All were married. Eighty percent held a bachelor’s degree, while 20% held a master’s degree.

The majority of primary school teachers are currently part of the “Ofek Hadash” program, a reform initiated by the Ministry of Education in Israel. Teachers participating in “Ofek Hadash” receive higher salaries than they did before joining the program. Under this reform, they are required to complete 60 hours of study per year. They also receive financial compensation for working in the afternoon. The sample for this study was randomly selected from teachers in four primary schools (20 teachers from each school). The sample was divided into six groups: 16 language teachers: Arabic; 12 Hebrew teachers; 12 English teachers; 16 Science teachers; 16 Mathematics teachers; and 8 Religion teachers.

For the purposes of the analysis, these groups were divided into four subject groups: Arabic and Hebrew, English, Mathematics and Science, and Religion.

The main research instruments were the questionnaire and the interview, as outlined below:

1. At the first stage, the levels of the following variables were determined: teacher effectiveness; attitudes towards the integration of musical activities into teaching; and the ways and methods teachers use to integrate music into their teaching. Eighty teachers completed two questionnaires on their effectiveness and attitudes towards the integration of musical activities in primary school, as well as a biographical questionnaire.

The surveyed sample was divided into two groups: the experimental group (EG) and the control group (CG).

The experimental and control groups included teachers from four schools. In these schools, seven sessions were held during which various ways of integrating musical activities into teaching were presented; the teachers were introduced to an integrative musical model. In each school, the principals chose to integrate music into teaching. Thus, 20 teachers from each school were involved and experienced the integration of musical activities into teaching. The pedagogical model for integrating musical activities into the teaching of other subjects in primary education was a model presented during the sessions on the integration of musical activities. Teachers of the following subjects participated: Arabic, Hebrew, English, Mathematics, Science, and Religion (Islam), in Grades 3 and 4. The total number of teachers exposed to the model for integrating musical activities into teaching was 80.

The same 80 teachers from the research population completed the same two questionnaires again, concerning their effectiveness and attitudes towards the integration of musical activities into teaching.

After the questionnaires had been analyzed, interviews were conducted with 10 teachers in order to obtain a clearer picture of certain explanations arising from the questionnaire analysis.

Research Results:

This research examined several objectives and sought to provide answers to five main hypotheses. The main objectives of this study are:

1. To examine the attitudes and effectiveness of primary school teachers towards the integration of musical activities into the teaching process in primary school.
2. The research also examined the effect of using the Pedagogical Model for Integrating Musical Activities into the Teaching of Other Subjects in Primary Education on teachers' attitudes and effectiveness. The study examined the difference made by the Pedagogical Model for Integrating Musical Activities into the Teaching of Other Subjects in Primary Education, as compared with the traditional ways of integrating musical activities that teachers generally use.
3. The research examined *eight dimensions of teachers' attitudes and eight dimensions of teacher effectiveness* in integrating music.

Table 4. Dimensions of Attitudes and Effectiveness

Attitudes toward the effectiveness of integrating musical activities in teaching, 9 dimensions	Effectiveness – of the 9 ways of integrating musical activities in teaching
1. Emotional effect	1. Use of background music
2. Social effect	2. Use of content songs
3. Cognitive learning effect	3. Use of creativity
4. Motivational effect	4. Use of music outside school
5. Motor effect	5. Use of external talent
6. Behavioral and disciplinary effect	6. Use of performance
7. Achievement effect	7. Use of music and art
8. Classroom management effect	8. Use of music at the beginning/end of the lesson
9. General personal attitudes	9. General sense of ability

The study also examined whether there was a relationship between teachers' education, teaching field, musical education and experience, and their attitudes and effectiveness regarding the integration of musical activities into their teaching subjects, using the techniques mentioned above. The purpose of the study was also to identify the characteristics and methods of integrating musical activities commonly used in the teaching process by teachers in Arab elementary schools in Israel.

Criteria for the Effectiveness of Implementing the Pedagogical Model for Integrating Musical Activities into the Teaching of Other Subjects in Primary Education

This research examined the efficiency and effectiveness of the pedagogical model in improving teachers' attitudes and effectiveness regarding the integration of music in elementary schools.

The research examined teachers' attitudes towards musical integration and their sense of ability (self-efficacy) to use methods of integrating musical activities into their lessons at two points in time. The first period was before the intervention, and the second was after the implementation of the Pedagogical Model for Integrating Musical Activities into the Teaching of Other Subjects in Primary Education.

The criteria according to which effectiveness (self-efficacy) was measured included eight aspects: cognitive, emotional, behavioral, social, motivational, achievement, positive change in teachers' attitudes towards musical integration, and positive change in teachers' self-efficacy in applying methods for integrating musical activities.

Priorities of the Program for Integrating Musical Activities into Primary Education

The National Association for Music Education developed standards for music education.

National Standards for Music Education (NSME)

1. Singing, alone and with others, a varied repertoire of music.
2. Playing instruments, alone and with others, a varied repertoire of music.
3. Improvising melodies, variations, and accompaniments.
4. Composing and arranging music according to specified guidelines.
5. Reading and notating music.
6. Listening to, analyzing, and describing music.
7. Evaluating music and musical performances.
8. Understanding relationships between music, the other arts, and disciplines outside the arts.
9. Understanding music in relation to history and culture.

Planning of Applications by Teachers

Music as an Integrated and Independent Domain: Since music is innate, it allows people to function intuitively without formally acquired knowledge. People can express themselves through sounds, respond to sounds, and enjoy them even if they have not learned music. Music is regarded as a subject in the curriculum based on three aspects: *cognitive-psychological, social, and creative aspects.*

Cognitive-Psychological Aspect: Since music is concentrated in the emotional domain, it could serve as a reflective tool for examining internal feelings and emotions and for expressing emotions externally. *Music is a form of thinking and, as a means of expressing thought,* the ability to use it continually develops.

Research findings demonstrate:

In the experimental group, significant changes occurred in teachers' attitudes towards the effectiveness of the Pedagogical Model for Integrating Musical Activities into the Teaching of Other Subjects in Primary Education. The changes were reflected in each of the aspects. However, in the control group, no significant changes were found in the aspects of classroom management, emotional, social, and motor development. In the control group, attitudes improved in the cognitive, motivational, behavioral, achievement, and general aspects.

In the experimental group, there were changes in teachers' self-efficacy (sense of ability) regarding the use and application of methods for integrating musical activities into teaching. The changes were reflected in each of the methods and in the overall sense of ability to integrate music. However, in the control group, no significant changes were found in these aspects. In the control group, self-efficacy improved slightly in the areas of background, creativity, and the use of external talents.

Teachers with musical experience had more positive attitudes towards the integration of musical activities into teaching than teachers without musical experience. These teachers were part of the experimental group before being exposed to the Pedagogical Model for Integrating Musical Activities into the Educational Process in Primary Education.

In the experimental group, the attitudes of teachers with musical experience increased, as did those of teachers without musical experience. However, after exposure to the Pedagogical Model for Integrating Musical Activities into the Teaching of Other Subjects in Primary Education, teachers with musical experience had significantly more positive attitudes towards the integration of musical activities than teachers without musical experience in the experimental group. The differences were reflected in each of the aspects.

Teachers with musical experience had higher self-efficacy regarding the integration of musical activities into teaching than teachers without musical experience. These teachers were part of the experimental group before exposure to the Pedagogical Model for Integrating Musical Activities into the Teaching of Other Subjects in Primary Education.

In the experimental group, teachers with musical experience had higher self-efficacy than teachers without musical experience. The differences were reflected in each of the aspects.

There were differences in teachers' attitudes among the subject groups in each aspect. Tukey post-hoc tests showed that the differences resulted from the fact that the attitudes of Mathematics-Science and Religion teachers were significantly lower than those of Arabic-Hebrew and English teachers. These differences were found in each aspect.

There were also differences in teachers' self-efficacy among the subject groups in each aspect. Tukey post-hoc tests showed that the self-efficacy of Mathematics-Science and Religion teachers was significantly lower than that of Arabic-Hebrew and English teachers in the following aspects: content, beginning/end, creativity, and performance.

A significant positive correlation was found between teachers' attitudes towards musical integration and teachers' self-efficacy.

The correlation was found to be significant at a very high level of significance (0.01).

The concept operates on three complementary levels:

1. *The perceptive-receptive level* – active and conscious listening, *phrase–motive–timbre–dynamics–expression*;
2. *The interpretive-performative level* – performing with understanding and expressiveness, *nuances–phrasing–character–style–co-creation*;
3. *The creative-productive level* – creating music from assimilated structures, *improvisation–engagement–composition*.

The essence of the entire concept can be formulated as follows: valuing music through music means treating music not as an object to be technically manipulated, but as a living language capable of speaking about the human condition – and developing the learner so that they can hear, feel, and respond to this language with their whole being.

Students' musical competencies represent a set of knowledge, skills, and attitudes developed through arts education. These include *perceptive abilities* (active listening), *interpretive skills* (vocal/instrumental), *musical creativity* (improvisation), and *reflective competencies* that help them understand and appreciate diverse styles and cultures. From the model diagram, we derive the components of this model. In the model, the concept is structured into levels.

Table 5. Attitude Differences Before and After Exposure to the Pedagogical Model of Integrating Musical Activities in the Didactics of Other Subjects in Primary Education (EG)

Attitudes (experimental group)	Before		After		T
Category	Mean	SD	Mean	SD	
1. Emotional	2.01	0.84	3.85	0.66	14.89***
2. Social	2.08	0.70	3.65	0.74	15.55***
3. Cognitive	1.89	0.69	3.62	0.60	16.88***
4. Motivation	2.09	0.83	3.90	0.72	12.88***
5. Motor	1.75	0.46	3.30	0.84	12.39***
6. Behavioral	1.94	0.61	3.16	0.57	11.49***
7. Classroom management	2.09	0.55	3.86	0.74	13.52***

Attitudes (experimental group)	Before		After		T
8. Achievements	2.02	0.85	3.91	0.64	19.14***
9. General personal attitudes	2.41	0.87	3.56	0.93	8.36***

*** $p < 0.001$

Table 5 summarizes the mean attitudes of the teachers in the experimental group across the 9 parameters examined in the study. Table 7 compares these means before and after exposure to the Pedagogical Model of Integrating Musical Activities in the Didactics of Other Subjects in Primary Education.

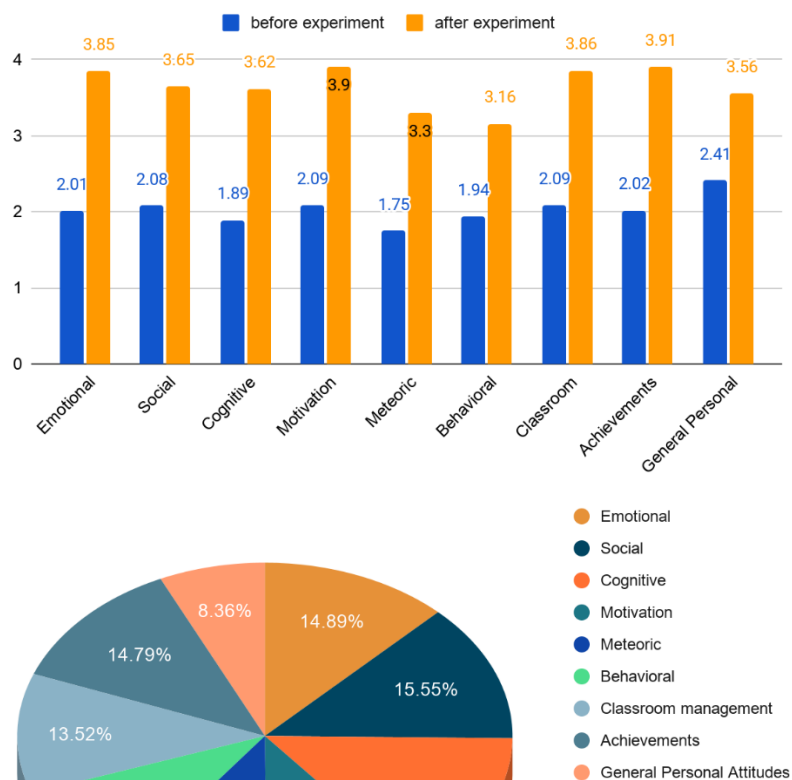


Figure 3.1. Differences in attitude before and after exposure to the Pedagogical Model for the Integration of Musical Activities into the Teaching of Other Subjects in Primary Education (EG)

Table 6. Differences in attitude before and after exposure to the Pedagogical Model for the Integration of Musical Activities into the Teaching of Other Subjects in Primary Education (CG)

Attitudes (control group)

Category	Before	After	T	Sig.
	Average	SD	Average	SD
1. Emotional	1.74	0.50	1.80	0.39
2. Social	1.85	0.44	1.91	0.44
3. Cognitive	1.73	0.42	2.05	0.32
4. Motivation	1.72	0.47	1.89	0.45
5. Methodological	1.64	0.48	1.77	0.50
6. Behavioral	1.70	0.40	2.35	0.32
7. Classroom management	1.88	0.53	1.99	0.53
8. Achievements	1.73	0.52	1.81	0.40
9. General personal attitudes	2.06	0.79	2.12	0.56

*** $p < 0.001$

Table 6 summarizes the mean attitude scores of the teachers in the control group across the nine parameters examined in the study. Table 8 compares these means before and after exposure to the Pedagogical Model for the Integration of Musical Activities into the Teaching of Other Subjects in Primary Education.

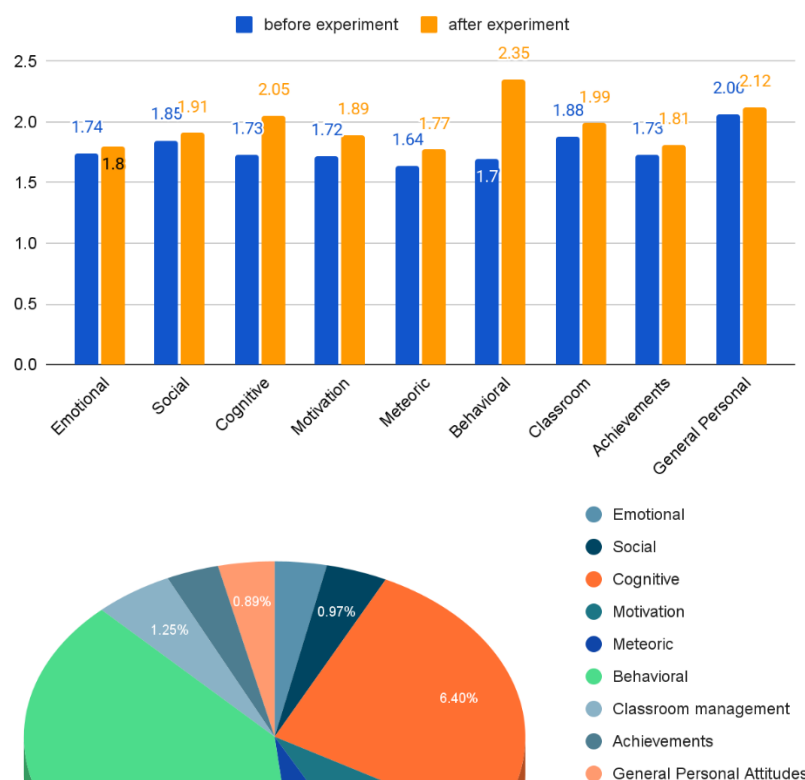


Figure 3.2. Differences in attitude before and after exposure to the Pedagogical Model for the Integration of Musical Activities into the Teaching of Other Subjects in Primary Education (CG)

Table 7. Differences in efficacy (sense of ability) before and after exposure to the Pedagogical Model for the Integration of Musical Activities into the Teaching of Other Subjects in Primary Education (EG)

Efficiency (experimental group)

Category	Before		After		T
	Average	SD	Average	SD	
1. Experience	1.10	0.23	3.34	1.17	12.31***
2. Content	1.48	0.55	3.17	1.01	11.40***
3. Creativity	1.37	0.59	2.81	1.51	7.09***
4. Progress	1.08	0.14	2.91	1.08	10.96***
5. External	1.05	0.15	2.66	0.98	10.49***
6. Performance	1.19	0.22	2.29	0.83	9.43***
7. Arts	1.16	0.28	2.90	0.96	10.85***
8. Beginning/Ending	1.31	0.48	3.05	1.03	10.28***
9. General feeling of ability	1.11	0.20	3.35	1.27	12.31***

*** $p < 0.001$

Table 7 summarizes the mean efficacy scores of the teachers in the experimental group across the nine parameters examined in the study. Table 7 compares these means before and after exposure to the Pedagogical Model for the Integration of Musical Activities.

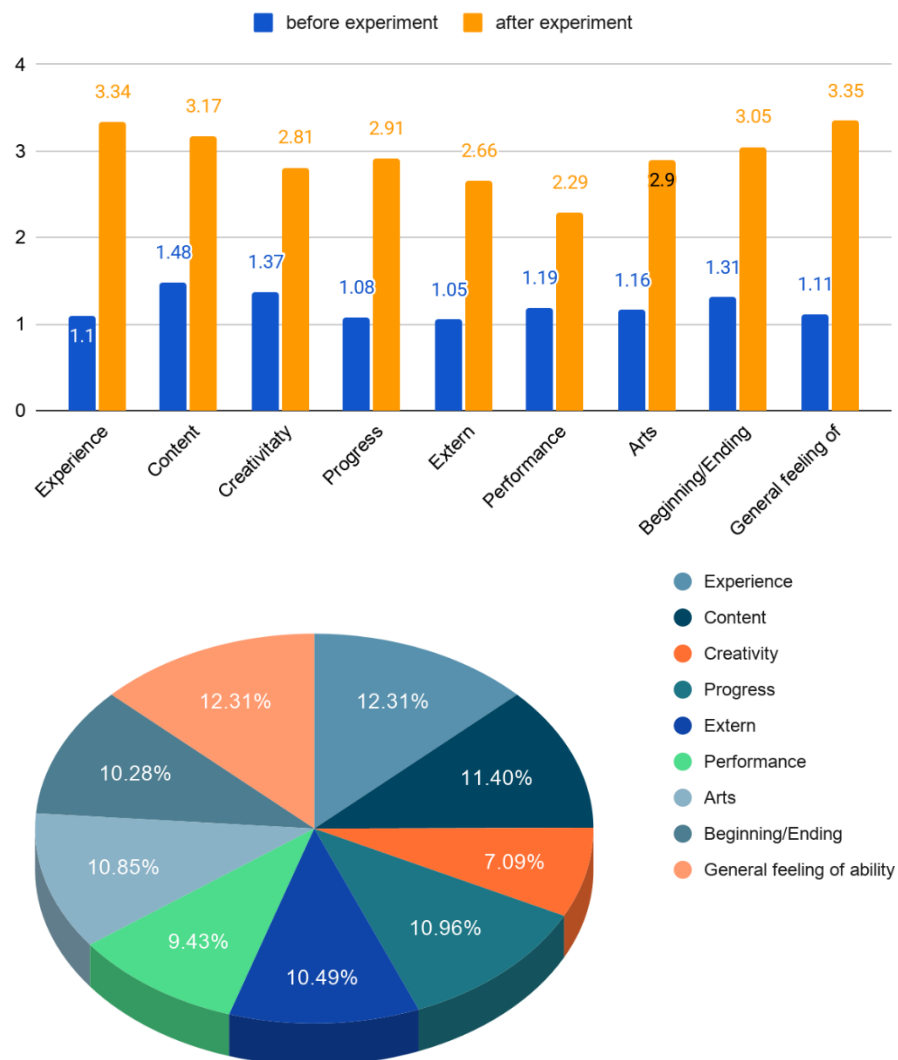


Figure 3.3. Differences in efficacy (sense of ability) before and after exposure to the Pedagogical Model for the Integration of Musical Activities

Table 8. Differences in efficacy before and after exposure to the Pedagogical Model for the Integration of Musical Activities into the Teaching of Other Subjects in Primary Education (CG)

Efficiency (Control group)						
Category	Before		After		T	Sign.
	Average	SD	Average	SD		
1. Experience	1.08	0.19	1.30	0.33	3.59***	0.001
2. Content	1.30	0.45	1.41	0.46	1.83	0.074
3. Creativity	1.12	0.29	1.27	0.45	2.22	0.032
4. Progress	1.06	0.13	1.16	0.25	2.15	0.038
5. External	1.05	0.18	1.19	0.21	3.56	0.001
6. Performance	1.10	0.13	1.20	0.25	2.64	0.012
7. Arts	1.06	0.20	1.26	0.32	3.56	0.001
8. Beginning/Ending	1.17	0.33	1.32	0.38	2.30	0.027
9. General feeling of ability	1.09	0.18	1.31	0.43	3.59***	0.001

*** $p < 0.001$

Table 8 summarizes the mean efficacy scores of the teachers in the control group across the eight methods examined in the study. Table 8 compares these means before and after exposure to the Pedagogical Model for the Integration of Musical Activities into the Teaching of Other Subjects in Primary Education.

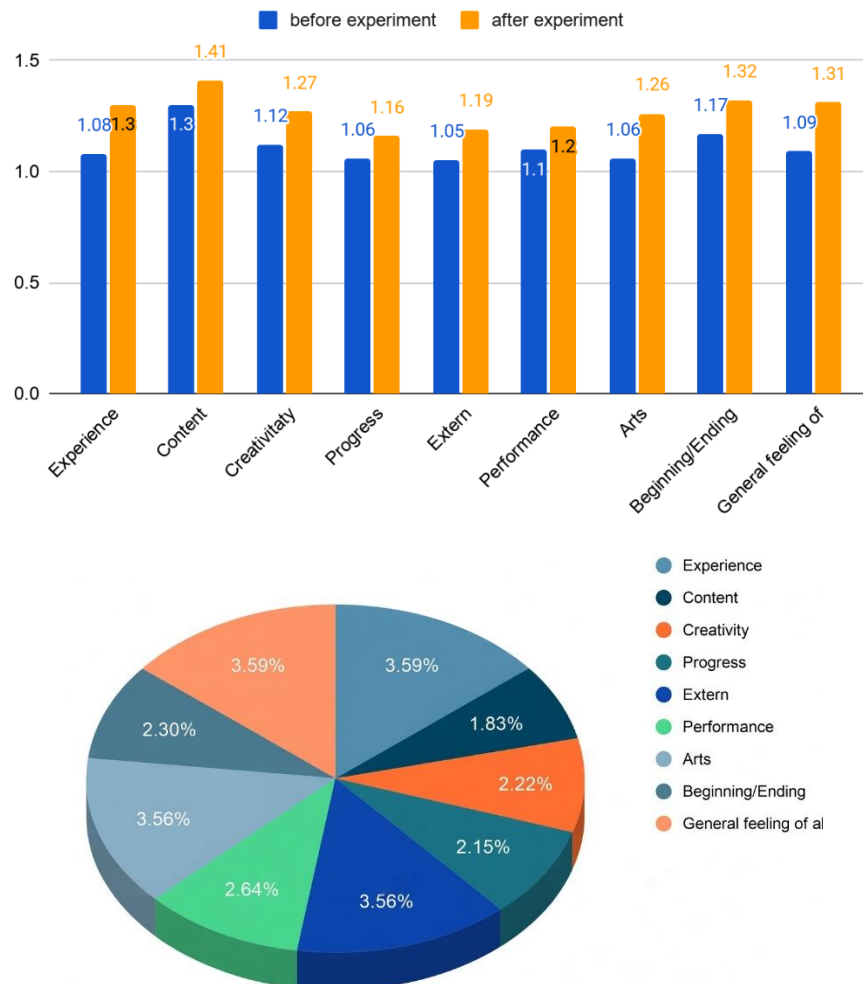


Figure 3.4. Differences in efficacy before and after exposure to the Pedagogical Model for the Integration of Musical Activities into the Teaching of Other Subjects in Primary Education

1. Interpretation of Table 5 – Attitudes of the Experimental Group

In the experimental group (EG), a positive and statistically significant trend is observed across all nine attitude categories. The mean scores increased from initial values ranging between 1.75 and 2.41 to final values ranging between 3.16 and 3.91. The most substantial increases in mean scores were recorded for the following dimensions: **cognitive attitude**, which increased from 1.89 to 3.62; **emotional attitude**, with an increase of 1.84 points; **motivation**, which increased from 2.09 to 3.90; **achievement**, with an increase of 1.89 points; and **classroom management**, which increased from 2.09 to 3.86.

The *t*-test values are very high, and statistical significance of $p < 0.001$ is reported for all dimensions, indicating that the differences between the initial and final assessments are statistically significant.

The implementation of the pedagogical model was therefore associated with a consistent and statistically significant change in participants' attitudes in the EG, encompassing cognitive and motivational dimensions as well as emotional, behavioural, and managerial dimensions.

2. Interpretation of Table 6 – Attitudes of the Control Group

In the control group (CG), the observed development is considerably more modest. For most dimensions, the differences between the initial and final assessments do not reach the threshold of statistical significance. No statistically significant differences were identified for the following dimensions: **emotional** ($p = 0.412$), **social** ($p = 0.337$), **methodological** ($p = 0.160$), **classroom management** ($p = 0.218$), **achievement** ($p = 0.413$), and **general personal attitudes** ($p = 0.378$).

Statistically significant differences were identified for the **cognitive** dimension ($p = 0.001$), **motivation** ($p = 0.032$), and **behavioural** dimension ($p = 0.001$); however, the magnitude of these changes was smaller than that observed in the EG.

The CG thus exhibited some changes over the period under investigation, but these changes were not generalised across all dimensions. The fact that most dimensions did not demonstrate statistically significant differences contrasts markedly with the results obtained for the EG.

3. Interpretation of Table 7 – Perceived Efficacy in the Experimental Group

The findings concerning perceived efficacy are particularly relevant. In the EG, all nine dimensions demonstrated statistically significant increases, with $p < 0.001$. The increases were substantial across the following dimensions: **experience**, with an increase of 2.24 points; **content**, 1.69 points; **creativity**, 1.44 points; **progress**, 1.83 points; **external factors**, 1.61 points; **performance**, 1.10 points; **arts**, 1.74 points; **beginning/end**, 1.74 points; and **overall sense of ability**, 2.24 points.

The largest increases were recorded for **experience** and **overall sense of ability** (+2.24), followed by **progress**, **arts**, and **beginning/end** (+1.74). These findings demonstrate a substantial improvement in the perceived efficacy of participants in the EG, suggesting that exposure to the pedagogical model was accompanied by an enhanced perceived ability to integrate musical activities into the instructional process.

4. Interpretation of Table 8 – Perceived Efficacy in the Control Group

In the CG, increases between the initial and final measurements were also observed; however, their magnitude was considerably smaller than that recorded in the EG. For example, **experience** increased from 1.08 to 1.30, while **content** increased from 1.30 to 1.41.

Statistical significance varied across the dimensions. For **content**, the difference was not statistically significant ($p = 0.074$), whereas the remaining dimensions were reported as having *p*-values below 0.05. Thus, the changes observed in the CG were more isolated and of smaller magnitude compared with those identified in the EG.

Taken together, Tables 5–8 reveal a clear difference between the dynamics of the EG and those of the CG. In the EG, following exposure to the **Pedagogical Model for the Integration of Musical Activities into the Teaching of Other Subjects**, substantial and statistically significant

increases were observed in both attitudes and perceived efficacy, with all investigated dimensions showing higher final than initial scores.

In the CG, although some increases were observed, they were smaller in magnitude and less consistent, while differences across several attitude dimensions did not reach statistical significance.

Overall, the findings provide empirical support for an association between the implementation of the **Pedagogical Model** and improvements in both participants' attitudes and their perceived efficacy in the experimental group. The differences in the patterns of change between the EG and CG constitute an important empirical argument supporting the effectiveness of the model under investigation.

Nevertheless, in order to draw a firm causal conclusion, it would also be useful to report the direct differences between the EG and CG at post-test, as well as measures of effect size (e.g., **Cohen's *d***). This is because the *t*-values for the **pre-test–post-test comparisons** demonstrate change within each group but do not directly compare the two groups.

The effective implementation of the pedagogical model for the integration of music education requires the fulfillment of essential conditions that ensure the coherence and sustainability of the educational process. One of these conditions is *the activation of the process of developing musical competence within integrated teaching*. This involves the use of interactive and participatory didactic methods that stimulate students' active involvement in various musical activities, such as music listening, vocal or instrumental performance, improvisation, and artistic creation. Through these activities, students develop their musical competencies as well as their capacity for expression, imagination, and artistic sensitivity.

Another important condition is represented by *the axiological and pedagogical positioning regarding the integration of musical activities into the teaching of other subjects*. The integration of music education must be carried out consciously and in a planned manner so that musical activities contribute to the achievement of the educational objectives of the various curricular domains. This approach presupposes collaboration among teaching staff and the development of didactic strategies that capitalize on the formative potential of music in the learning process.

At the same time, it is necessary *to capitalize on the formative values of musical art*, which can positively influence students' emotional and social development. Music has the capacity to create a favorable educational climate, reduce emotional tensions, and stimulate cooperation and communication among students. Through musical activities, students learn to express their emotions, develop empathy, and actively participate in the cultural life of the school community.

Institutional and professional support plays a significant role in the implementation of the model. The integration of music education into teaching activities requires the support of the educational institution, as well as collaboration between teachers and specialists in the field of music education. Methodological guidance provided by specialized instructors or mentors can contribute to the development of teachers' pedagogical competencies and to the improvement of the quality of educational activities.

The following table (**Synoptic Table of the Proposed Methods**) synthesizes the correlation between the proposed methods, the principles of the initial model, the host subjects, and the targeted transversal competencies, offering an overview of the internal coherence of the proposed completion.

Table 9. Systematic correlations of the proposed methods with the components of the initial model

Method / Strategy	Correlated Principle	Priority Subjects	Targeted Transversal Competencies
Thematic and background song	Internalization of values; Teaching-learning-evaluation correlation	Mathematics, Arabic language, Foreign languages, Sciences	Semantic memory, active vocabulary, intrinsic motivation
Structured musical game	Optimal affective engagement; Centrality of the educated individual	Mathematics, Physical Education, Arabic language	Sequential thinking, coordination, cooperation

Directed pedagogical listening	Cognitive-noncognitive complementarity; Integrality	Religion, Sciences, Visual Arts	Selective attention, interdisciplinary transfer, aesthetic empathy
Elementary musical creation	Integrality; Centrality of the educated individual	All curricular areas in primary education	Creativity, deep understanding, cognitive autonomy
Integrated rhythmic movement	Optimal affective engagement; Cognitive-noncognitive complementarity	Mathematics, Hebrew language	Sensorimotor coordination, internal rhythm, self-regulation
Musical-transdisciplinary project	All principles of the model	All curricular areas (integrated)	Key competencies: communication, initiative, cultural sensitivity

Completing the pedagogical model for the integration of musical activities with the section **Methods and Didactic Strategies** in the practical framework does not represent a mere quantitative addition, but a structural intervention that confers upon the model **the character of a complete system**: principles → paradigms → factors and conditions → strategies → monitoring and evaluation. Each component becomes intelligible and functional in relation to the others, and the internal coherence of the model is thereby consolidated.

The six proposed methods – *the thematic song, the structured musical game, directed pedagogical listening, elementary musical creation, integrated rhythmic movement, and the musical-transdisciplinary project* – constitute an open and gradual repertoire that can be adapted according to the class of pupils, the host subject, the available resources, and the musical competencies of the teacher. They are not prescriptive, but orientative and reflective, in the spirit of the constructivist pedagogy that underpins the entire model.

The empirical validation of these strategies through field research constitutes one of the priority directions of the doctoral investigation, to be operationalized through action research and quasi-experimental studies with parallel groups in the primary cycle.

GENERAL CONCLUSIONS

It has been established that the concept of *curricular integration*, understood as a process of establishing realities of convergence at the level of elements (content, concepts, values), is focused on:

- **horizontal integration**, which brings together in a coherent whole two or more subjects belonging to different domains or curricular areas;
- **vertical integration**, which brings together in a coherent whole two or more subjects belonging to the same domain or curricular area;
- **transversal integration**, which presupposes centering on a theme/problem that does not originate from the existing disciplines, has a certain autonomy in relation to them, but can engage them on certain segments in the study of aspects of the theme under discussion.

1. The structural content of the integration of music into the subjects of primary education integrates three important components:

- *the cognitive component* – knowledge of “learning to know” of self-planning, self-organization, self-evaluation, and self-counseling of the learning activity aimed at identifying the learning goal, designing the activity, executing the actions, and obtaining the result;
- *the behavioral component* – capacities/aptitudes of “knowing how to do” of self-planning, self-organization, self-evaluation, and self-counseling of the learning activity focused on identifying/accepting a learning goal, designing the activity, and executing the actions in obtaining the personal result, expressed in a qualitative behavioral change;
- *the attitudinal component* – attitudes of “knowing how to become” updated and capitalized in a novel way in a continuous process of self-planning, self-organization, self-evaluation, and self-counseling, oriented toward identifying/accepting a learning goal, designing and executing the relevant actions for recording a personal result expressed in a qualitative behavioral change.

2. It has been demonstrated that the cognitive, affective, and behavioral aspects of primary-education pupils in the curricular context are focused on *interdisciplinarity, multidisciplinary, interdisciplinary, transdisciplinarity, and the integration of musical activities* as an artistic phenomenon [62], [63].

3. The integration of the methodologies of education and music education is not reduced to the elaboration of new methods, technologies, and techniques for stimulating the formation in pupils of artistic-aesthetic culture, but presupposes the valorization and reconceptualization of existing methodologies, excluding inhibitory factors. The engine of the formation in pupils of the elements of musical culture is the methodology conceived on the interaction of education and music education, validated by paradigms, the principles of the interaction and syncretism of the arts.

4. It has been demonstrated that the integration of musical activities into the subjects of primary education cannot be learned theoretically *but must be lived and experienced directly*. Beyond the teaching of the necessary knowledge, *education must concentrate on the formation of attitudes, taste, character, and a lifestyle focused on the entire human condition* [Chapter 2, p. 58].

5. The pedagogical experiment was carried out within school and extracurricular activities, within the Program for the Integration of Musical Activities into the Teaching of Other Subjects in Primary Education, with emphasis on didactic competence, valorizing the main criteria for evaluating the educational process, which included: *the pupils' reactions to the established norms of conduct, the manifestation of responsibility* and duty; for parents, the evaluation focused on the level of understanding of the particularities of school age, awareness of the characteristics of education, and their motivation in the integration of musical activities into the subjects of primary education.

6. The ascertaining experiment showed that, in general, teachers establish links between artistic education and music education, yet these are sporadic, not scientifically grounded, and have an insignificant educational effect. Teachers do not know the epistemic and theoretical foundations of the interaction and syncretism of the arts and do not possess methodologies for realizing, within an organized educational framework, the interactions of certain directions of music.

7. The formative experiment aimed for the pupils' activity to have an interactive character both in relation to the studied musical works and to the elements of musical culture that would be formed in them. In experimental value, a system of formative exercises and didactic tests of a formative-evaluative character was applied sequentially from the perspective of ensuring an interdisciplinary interference among the methodologies.

8. Significant values of the experimental instruction are the real and possible levels of interaction of the elements of the pupils' musical culture, under the conditions of applying an interactive instructional-educational methodology: starting from these levels, it is possible to conceive more efficient teaching-learning instruments and to carry out a unitary and polyvalent integrated process, the pupils benefiting from an instruction, development, and formation of the elements of elementary music; the increase of teachers' professionalism, as well as the aspects that need to be approached globally, interactionally, and syncretically in their professional formation.

9. The experimental validation of the Pedagogical Model for the Integration of Musical Activities into the Teaching of Other Subjects in Primary Education was focused primarily, on the one hand, on the principles relevant for the efficiency of the pupils' learning process on the basis of the principles of integrating musical activities into the subjects of primary education, and, on the other hand, oriented to have an interdisciplinary character through a complex of formative exercises with openings toward exploring the way in which the subjects can interact and can, in the context of musical analysis [p. 115].

10. The value of the research is demonstrated, *whose important scientific problem solved consists in the conceptual and praxiological foundation* of the functionality of the pedagogical model for the integration of musical activities through the valorization of the methodological program of integration oriented toward the quality of education in the Arab schools of Israel.

Recommendations:

1. The functionality of the Pedagogical Model and of the Program for the Integration of Musical Activities, as well as the results of the experiment, offer authors of educational policies and curriculum designers, school directors, and music leaders suggestions for improving teachers' teaching methods of an integrative character of musical activities also at the lower-secondary level of education.

2. The system and process of teachers' professional formation should be restructured in accordance with the reconsideration of educational policies regarding musical integration, with emphasis on improving teachers' efficacy and attitudes toward the integration of music into the teaching of other school subjects.

3. The strategy for forming the teacher's didactic competence, as well as the Pedagogical Model elaborated in this key and its implementation program, can be applied in higher-education institutions for the initial formation of teachers in the initial professional formation of the pedagogue in any specialty.

4. The epistemological landmarks of the integration of musical activities into teaching with regard to teachers' attitudes and efficacy on how to use music in the didactic process, with examples from different subjects, offer opportunities to practice in a safe zone, encourage teachers by giving them the opportunity to learn among peers, providing them with tools for music integration, and having a music teacher accompany the process.

BIBLIOGRAPHY:

In Romanian:

1. ANDRIȚCHI, V.; STRATAN, V. *Evaluarea competențelor școlare din perspectiva principiului integralității: Cadrul didactic – promotor al politicilor educaționale*. Chișinău: 11-12 octombrie 2019. 434-439 p.
2. ATRASH-JUCAN, A. *Muzicoterapia, mijloc de tratament cu muzică*: www.bokra.net/aricles/1169989. Israel, 10 mai 2012.
3. AUGUSTIN, A. *De musica*. In *Patrologia Latina*, vol. 32, tomus primus. Paris: J.-P. Migne, 1841. Augustin. *De cura pro mortuis gerenda liber unus*. In *Patrologia latina*, vol. 40, tomus sextus. Paris: J.-P. Migne, 1841.
4. AVRAM, A. I. *Dezvoltarea interesului pentru învățare prin interdisciplinaritate la elevii claselor primare*, Teză de doctor în științe ale educației, 2025, <https://www.anacec.md/files/Avram-teza.pdf> (accesat 22.04.2026)
5. BREAZU, M. *Cunoașterea artistică*. București: Academia Română, 1960. 314 p.
6. BREAZUL, G. *Educația muzicală în școală primară*. In: *Revista pedagogică, Caietul 2*, 1938. p. 32-37.
7. BULARGA, T. *Psihopedagogia interesului pentru muzică*. Chișinău: Elena V.I., 2008. 88 p.
8. BURZA L.; RUS M. *Proiectarea lecțiilor interdisciplinare*. Modalități, realizare pas cu pas. In: *Educația Secolului XXI. Materialele simp. Interjudețean*. Turda, 2007, ed. 1-a, p. 93-96.
9. CALLO, T. *O pedagogie a integralității. Teorie și practică*. Chișinău: CEP USM, 2007. ISBN 978-9975-70-161-7.
10. CARTALEANU, T.; COSOVANU, O., *Atelierul de lectură în demersul educațional*. Centrul Editorial PRO Didactica, 2004, 67 p. ISBN 978-9975-9850-1-7
11. CĂLIN, M. *Teoria educației*, Editura AII, București, 1996, 110 p
12. CERGHIT, I. *Didactica, Manual Pentru Clasa A X-A*. Chișinău: Editura Didactică și Pedagogică, R.A., 1996. ISBN 973-30-4045-2.
13. CHIȘ V., IONESCU M., *Fundamentări teoretice și abordări praxiologice în științele educației*. Cluj-Napoca: Editura Eikon, 2009. 434 p. ISBN 978-9975-78-524-2
14. CIOLAN, L. *Învățarea integrată. Fundamente pentru un curriculum transdisciplinar*. Iași: Polirom, 2008. 280 p. ISBN : 978-973-461-034-1.
15. CIUREA, R., SALADE D., *Educația prin artă și literatură*, Editura Didactică și Pedagogică, București, 1973, p.19- 21.
16. CRIȘCIUC, V. *Specificul strategiilor de predare a cunoștințelor muzicale (în cadrul disciplinei educația muzicală)*: Autoref. tezei de dr. șt. Ped.. Bălți: USARB, 2013. 30 p
17. DANDARA, O. *Interdisciplinaritatea în context curricular: constatări și sugestii*. In: *Didactica Pro*, 2002, nr 3-4(13-14), p. 47-49.
18. DARAWSHA, AHL., *Dinamica motivației de învățare la elevii claselor primare din Israel (Sectorul Arab)*, Autoref. tezei de dr. șt. pedagogice (2019) C.Z.U.: 373.3.091(569.4) (043.3), 32 p.
19. DELION, P. *Metodica educației muzicale*. Chișinău: Hyperion, 1993. 187 p.
20. GAGIM, I. *Ce este muzica și cum s-o înțelegem?* Bălți: USARB, 2019. 290 p. ISBN 978-9975-3316-0-9.

21. GAGIM I.; CROITORU, S. *Educație muzicală*. Manual pentru cl. a IV-a. Chișinău : Știința, 2013. 144 p. ISBN 978-9975-85-062-9.
22. GAGIM, I. *Dimensiunea psihologică a muzicii*. Iași, Editura Timpul, 2003. – 280 p. ISBN 973-612-049-X.
23. GAGIM, I. *Știința și arta educației muzicale*. Chișinău, Editura ARC, 1997 – I ediție, 2004 – a II ediție, 2007 – a III ediție. – 222 p. ISBN 978-9975-61-423-8.
24. GAGIM, I.; BORȘ, A.; MORARI, M.; COROI, E. *Educație muzicală*. Manual pentru cl. 7-8. Chișinău : Știința, 2012. 152 p. ISBN 978-9975-67-829-2.
25. GAGIM, I.; CRÎȘCIUC, V. *Teoria și metodologia predării cunoștințelor muzicale*. Editura Pontos, Chișinău, 2016, 256 p. ISBN 978-9975-51-780-5.
26. GAGIM, I. *Fundamente pedagogice și psihologice și muzicologice ale educației muzicale*. Spec. 13.00.01. Pedagogie generală: ref. șt. de dr. habilitat în baza lucrărilor publicate în pedagogie / Ion Gagim; Univ. de Stat din Moldova. Chișinău, 2004. 56 p.
27. GAGIM, I.; MORARI, M., *Educație muzicală*. Manual pentru clasa a I-a. Chișinău: Știința, 2013. 47 p. ISBN 978-9975-67-915-2.
28. GAGIM, I. *Studii de Filosofia Educației*. Bălți: Editura USARB, 2017. – 160 p. ISBN 978-9975-50-191-0.
29. GAGIM, I. *Muzica – o mare pedagogie*. În: Grigore VIERU. Ștefan ANDRONIC. SĂ TRĂIASCĂ VISELE. Chișinău. Editura Pontos, 2016. 241-246 p. ISBN 978-9975-51-753-9.
30. GORAȘ-POSTICĂ, V. *Formarea competențelor prin intermediul metodelor interactive de predare-învățare-evaluare*. În: Formarea de competențe prin strategii didactice interactive. Chișinău: Centrul Educațional PRO DIDACTICA, 2008. 204 p. ISBN 978-9975-9763-4-3
31. GUȚU, VL.; VICOL M. *Învățământul centrat pe competențe: abordare teleologică*. În: Didactica Pro. Revistă de teorie și practică educațională, nr. 1 (65), 2011, p. 2.
32. HEGEL, G.W.F. *Știința logicii*. În 3 părți. T.1_ (Moscova: Mysl, 1970. – (Academia de Științe URSS. Institutul de Filosofie. Patrimoniul filosofic).
33. JOIȚA, E. *Metodologia educației*. Iași: Editura Institutul European, 2010. ISBN 978-973-611-661-2.
34. KANT, I. *Critica facultății de judecare*. București: Editura Științifică și Enciclopedică, 1981. 571 p.
35. MÎNDRUȚ, O. *Teorii ale dreptății*. Editura Alternative, București, 1996
36. MUREȘANU, C. *Pedagogie pitoresque*, Neuchâtel, Paris, 1932
37. NEACȘU, I. *Metode și tehnici de învățare eficientă. Fundamente și practici de succes*. București: Polirom, 2014, 320p
38. PATRAȘCU, D. *Tehnologii educaționale*. Chișinău: Tipografia Centrală, 2005.
39. PESTALOZZI, J.H. (1977). *Cum își învață Gertruda copii*. București: E.D.P. 152 p.
40. PETROVSCI, N., Integrarea – o nouă abordare a perspectivelor cunoașterii în procesul educațional. In: Revista Univers Pedagogic, nr. 1 (65) 2020, pp. 3-6. ISSN 1 811-5470.
41. POPENICI, Ș., *Motivația pentru învățare*, Editura: Didactica Publishing House 2009
42. POPESCU-NEVEANU, P. *Dicționar de psihologie*. Albatros. 1978. București. 784 p.
43. POTOLEA, D.; NEACȘU, I.; IUCU, R.B.; PÂNISOARA, I. *Pregătirea psihopedagogică*. Manual pentru definitivat și gradul didactic II. Iași: Polirom, 2008. 542 p. ISBN 978-973-46-1159-1.
44. RADU. I. T.; CERGHIT I.; POPESCU, E.; VLĂSCEANU, L., *Didactica (manual pentru clasa a X-a, școli normale)*. București: EDP, 1995. ISBN 973-30-2654-9.
45. SALADE, D. *Dimensiuni ale educației*. București: E.D.P. 1998. 232 p.
46. SILISTRARU, N. *Etnopedagogie și educație: Monografie*, Universitatea de Stat din Tiraspol, Chișinău 2021, p.19-48, ISBN 978-9975-76-295-3.
47. STANCIU, V. *Interdisciplinaritatea în educație: Teorie și practică*, București: Editura Universitară, 2012
48. STOICA, M. *Pedagogie și psihologie*, Craiova: Editura Gheorghe Alexandru, 2001

49. ȘEVCIUC, M. *Tendențe educaționale privind prevenirea și depășirea insuccesului școlar*. în: Studia Universitatis. Nr. 5 (25), 2009. P. 50-55. ISSN: 1857-2103. Disponibil: https://ibn.idsi.md/ro/vizualizare_articol/8361 (20.03.2026)
50. VASILE, V.; BABII V., *Aptitudini muzicale: realitate și deziderate*, În: Studia Universitatis Moldaviae (Seria Științe ale Educației) Nr. 9(39) / 2010 / ISSN 1857-2103, 2013
51. VÎGOTSKI, L.S. *Pedagogia artei*. București: Editura Universul, 1972. 316 p.
52. VIERU, N., *Dezvoltarea sensibilității emoționale la elevi în raport cu spiritul muzicii populare*, Rezumatul tezei de doctor, 2025, https://anacec.md/files/Vieru-rezumat_0.pdf (15.02.2026)
53. ZLATE, M. *Psihologia mecanismelor cognitive*. Iași: Polirom, 1999. 528 p

In English:

54. ABRIL, C. R., & GAULT, B. M. Elementary educators' perceptions of elementary general music instructional goals. Bulletin of the Council for Research in Music Education. 2005, nr.164, pp. 61–69. Retrieved from www.jstor.org/stable/40319260
55. AUSTIN, J.R. Future classroom teachers' ability, self-perceptions, and attributional responses to failure in music: do music fundamentals classes make a difference? *Research Perspectives in Music Education*, 1995, nr. 5(1), pp. 6-15.
56. BADARNE B. The Impact of music upon attention, attitude and motivation În: Artă și educație artistică, Nr.1 (21), 2013 p.58-60. ISSN:1857-0445 https://ibn.idsi.md/sites/default/files/imag_file/The%20impact%20of%20music%20upon%20attention%20attitude.pdf
57. BADARNE, B.; COCIERU, N. The correlation between music and elementary school disciplines (English, Mathematics and Religion). In: Acta et Commentationes. Education Sciences. Science magazine. Chisinau: UST 2017, no. 2 (11), pp. 126-131. ISSN:1857-0623 https://ibn.idsi.md/sites/default/files/imag_file/The%20correlation%20between%20music%20and%20elementary%20school%20disciplines%20%28English%2C%20mathematics%20and%20religion%29.pdf
58. BADARNE, B. Teachers' self-efficacy and attitudes towards integrating music in the didactic of other disciplines in elementary school. În: The 1st International Music Education Conference of the Israel Philharmonic Orchestra. Music Education in the Community- Traditions, Challenges, and Innovations. May 14-17 2017, The Charles Bronfman Auditorium Tel Aviv, Israel. <https://program.eventact.com/Lecture/143861/2763809>
59. BARRY, N. H. Arts integration in the elementary classroom: Conference development and evaluation. Update: Applications of Research in Music Education, 1998, nr. 17(1), pp. 3-8.
60. BARRY, N. H., & SCHONS, S. Integrated curriculum and the music teacher: A case study. Contributions to Music Education, 2005, nr. 31(2), pp. 57-72.
61. BATTERSBY, SH. & CAVE, A. Preservice Classroom Teachers' Preconceived Attitudes, Confidence, Beliefs, and Self-Efficacy Toward Integrating Music in the Elementary Curriculum. Update: Applications of Research in Music Education, 2014, nr. 32, pp. 52-59.
62. BRESLER, L. Music in a double-bind: Instruction by non-specialists in elementary schools. Bulletin of the Council for Research in Music Education, 1993, nr. 115, pp. 1–14. Retrieved from www.jstor.org/stable/40318744
63. BRESLER, L. The subservient, co-equal, affective and social integration styles and their implications for the arts. Arts Education Policy Review, 1995, nr. 96(5), pp. 31–38.
64. COLWELL, C. M. Integration of music and core academic objectives in the K-12 curriculum: Perceptions of music and classroom teachers. Update: Applications of Research in Music Education, 2008, nr. 26(2), pp. 33–41. doi:10.1177/ 8755123308317954
65. DEWEY, J., *Art as an Experience*. NY: Minton, 1934.

66. GAMBLE, S. The elementary classroom teacher: Anally for music education. *Music Educators Journal*, 1988, nr. 76(1), 25–28. doi:10.2307/3398041
67. HALLAM, S., & PRICE, J. Can the use of Background Music Improve the Behavior and Academic Performance of Children with Emotional and Behavioral Difficulties? *British Journal of Special Education*, 1998, nr. 25(2), pp.88-91.
68. HASH, P. M. Pre-service classroom teachers' attitudes toward music in the elementary curriculum. *Journal of Music Teacher Education*, 2010, nr. 19(2), pp. 6–24. doi:10.1177/ 1057083709345632
69. HENNESSY, S. Overcoming the red-feeling: The development of confidence to teach music in primary school amongst student teachers. *British Journal of Music Education*, 2000, nr. 17, pp. 183–196.
70. ISAACSON Ritt, Sh. Using Music to Teach Reading Skills in Social Studies. *The Reading Teacher*, 1974, nr. 27,(6), pp. 594-600.
71. JACKSON, M. F., & JOYCE, D. M. *The Role of Music in Classroom Management*. New York: New York University, 2003, pp. 1-11.
72. KANE, J. New ways of “training” in primary school music education: Results and implications of a longitudinal research study. Paper presented at the proceeding of the 2005 National Conference of the Australian Association for Research in Education, Parramatta, New South Wales, Australia, 2005. Retrieved from www.aare.edu.au/05pap/kan05133.pdf
73. KRASHEN, S. D. *Principles and practices in second language acquisition*. Oxford, England: Pergamon Press, 1982.
74. LEONHARD, C. The Challenge, *Bulletin of the Council for Research in Music Education*, 1993, nr. 117, pp. 1-8.
75. MERRELL, A. The benefit of incorporating music in the classroom. Retrieved August, 2004, nr. 19, pp. 2010.
<http://Audreymerrell.net/INTASC/INTASC6/the%20benefits%20of%20incorporating%20music.pdf>
76. MOHAMED, S. B. & N. B., Implementation of teaching and learning (PdP) of moral education in preschool. *International Journal of Academic Research in Progressive Education and Development*, 2022, 14(4), 792–804.
77. PROPST, T. G. The relationship between the undergraduate music methods class curriculum and the use of music in the classroom sof in-service elementary teachers. *Journal of Research in Music Education*, 2003, nr. 51, pp. 316–329. doi:10.2307/3345658
78. RICHARDS, C. Early childhood preservice teachers' confidence in singing. *Journal of Music Teacher Education*, 1999, nr. 9(1), pp. 6–17. doi:10.1177/105708379900900103
79. STEIN, M. R. Music courses for preservice elementary classroom teachers: Factors that affect attitude change toward the value of elementary general music (Doctoral dissertation, University of Northern Colorado). *Dissertation Abstracts International*, 63, 2002, 2488-A.
80. VANNATTA-HALL, J. E Music education in early childhood teacher education: The impact of a music methods course on preservice teachers' perceived confidence and competence to teach music. Doctoral dissertation, University of Illinois at Urbana-Champaign, 2010.
81. WELLER, M. W. Marketing the curriculum: Core versus non-core subjects in one junior high school (Doctoral dissertation, University of Wisconsin-Madison). *Dissertation Abstracts International*, 1991, nr. 52(4), pp. 1203-A.

Publications and Conference Presentations:

1. Articles in journals from the National Register of profile journals, category C

1. BADARNE B. The Impact of music upon attention, attitude and motivation În: Artă și educație artistică, Nr.1 (21), 2013 p. 58-60. ISSN:1857-0445

https://ibn.idsi.md/sites/default/files/imag_file/The%20impact%20of%20music%20upon%20attention%20attitude.pdf

2. BADARNE, B.; COCIERU, N. The correlation between music and elementary school disciplines (English, Mathematics and Religion). In: Acta et Commentationes. Education Sciences. Science magazine. Chisinau: UST 2017, no. 2 (11), pp. 126-131. ISSN: 1857-0623

https://ibn.idsi.md/sites/default/files/imag_file/The%20correlation%20between%20music%20and%20elementary%20school%20disciplines%20%28English%2C%20mathematics%20and%20religion%29.pdf

2. Articles in recognized foreign journals

3. BADARNE, B.; ERRLICH, A. Dancing on the limits: An interreligious dialogue exploring the lived experience of two religiously observant music educators in Israel, In: Perspectives on Music, Education and Religion. A Critical Inquiry (Eds Kallio, Alperson and Westerlund), Indiana USA, 2019, p. 262-272.

https://link.springer.com/chapter/10.1007/978-3-030-21029-8_3

4. BADARNE, B.; ERRLICH, A. Intercultural music teacher education in Israel: Reimagining religious segregation through culturally responsive teaching. In: Visions for Intercultural Music Teacher Education (Eds Karlsen, Pratii and Westerlund), Springer International Publishing, 2020, p. 31-46

<https://library.oapen.org/bitstream/handle/20.500.12657/23105/1007053.pdf?sequence=1#page=40>

3. Materials at international conferences abroad

5. BADARNE, B. Teachers' self-efficacy and attitudes towards integrating music in the didactic of other disciplines in elementary school. În: The 1st International Music Education Conference of the Israel Philharmonic Orchestra. Music Education in the Community- Traditions, Challenges, and Innovations. May 14-17 2017, The Charles Bronfman Auditorium Tel Aviv, Israel.

<https://program.eventact.com/Lecture/143861/2763809>

6. BADARNE, B.; MUALEM, R.; BISWAS, S.; HNOUT, M., & GANEM, S. Improvements in Cognition and Educational Attainment as a Result of Integrating Music into Science Teaching in Elementary School. *J. Neuroscience and Neurological Surgery*, 2021, 8(3), pp.1-8.

https://www.researchgate.net/publication/352059011_Improvements_in_Cognition_and_Educational_Attainment_as_a_Result_of_Integrating_Music_into_Science_Teaching_in_Elementary_School

4. Materials at international conferences (Republic of Moldova)

7. BADARNE, B. The impact of music upon attention, attitude and motivation. În: Ion Gagim și universul muzicii. Materialele conferinței științifice internaționale consacrate aniversării a 60 de ani ai savantului: Iași, 2014, pp. 64-67. ISBN: 978-606-547-192-4.

5. Conference materials with international participation

8. BADARNE, B. Aspects of music integration in the didactic of other disciplines. În: Probleme actuale ale didacticii științelor reale. Conferința științifico-didactică națională cu participare internațională, ed. II, consacrată aniversării a 80-a a profesorului universitar Ilie Lupu, 11-12 mai 2018, Volumul II, UST, Chișinău, 2018, p. 103-110. ISBN:978-9975-76-239-7

https://ibn.idsi.md/sites/default/files/imag_file/Probleme%20actuale%20ale%20didacticii%20stiintelor%20reale%20-%20ed.2-a%20-%202018%20-%20USTir%20-%20V.%202-103-109.pdf

ADNOTARE

Badarne Belal,

Modelul pedagogic de integrare a activităților muzicale în procesul educațional din învățământul primar,

teză de doctor în științe ale educației, Chișinău, 2026

Structura tezei: introducere, 3 capitole, concluzii generale și recomandări, bibliografie 181 de surse, 145 de pagini de text de bază, 4 anexe, 14 tabele, 23 diagrame, o figură.

Publicații la tema tezei: 10 lucrări științifice, trei dintre care au fost publicate în străinătate, 2 articole în reviste naționale de categoria C, 3 articole la conferințe internaționale, 1 articol la o conferință națională și 3 publicații electronice.

Cuvinte cheie: muzică, predare, integrare, învățători, atitudini, metode, școală elementară, educație primară, model pedagogic, program metodologic.

Domeniul cercetării: Teoria generală a educației

Scopul cercetării rezidă în fundamentarea teoretico-metodologică de elaborare și valorificare a modelului pedagogic de integrare a activităților muzicale în alte discipline ale învățământului primar pentru integrarea activităților muzicale în școlile elementare ale educației primare din sectorul arab, Israel.

Obiectivele cercetării sunt: 1) stabilirea premiselor teoretice pentru integrarea activităților muzicale în procesul didactic; 2) identificarea *principiilor, factorilor și condițiilor pedagogice* orientate spre integrarea activităților muzicale în didactica altor discipline ale învățământului primar; 3) identificarea conținuturilor curriculumului și eficacitatea învățătorilor cu privire la integrarea muzicală în procesul didactic al școlilor arabe israeliene; 4) elaborarea și validarea experimentală a modelului pedagogic de integrare a activităților muzicale; 5) descrierea valorilor obținute experimental din aplicarea metodologiei ședințelor, elaborarea concluziilor generale și a recomandărilor practice.

Noutatea și originalitatea științifică a cercetării: sunt argumentate de actualizarea semnificației fenomenului valorificării muzicii în cadrul predării disciplinelor din învățământul primar, argumentarea conținuturilor ședințelor axate pe principii, condiții și factori pedagogici, elaborarea Modelului pedagogic și Programul de integrare a activităților muzicale în didactica altor discipline din învățământul primar din Israel (sectorul arab).

Rezultatele obținute care contribuie la soluționarea unei probleme științifice importante în cercetare: fundamentarea teoretică și praxiologică a Modelul pedagogic de integrare a activităților muzicale în didactica altor discipline din învățământul primar; descrierea unor metode și procedee care contribuie la eficientizarea integrării activităților muzicale în contextul predării disciplinelor din învățământul primar; contribuția semnificativă a Programul integrării activităților muzicale în contextul predării disciplinelor din învățământul primar, la accentuarea motivației pentru studierea muzicii a școlarului mic și la creșterea calității procesului de învățare.

Problema științifică soluționată în cercetare: fundamentarea conceptuală și praxiologică a funcționalității modelului pedagogic de integrare a activităților muzicale prin valorificarea programului metodologic de integrare orientat spre calitatea educației în școlile arabe din Israel.

Semnificația teoretică a cercetării: rezidă în stabilirea fenomenului de valorificare a muzicii în învățământul primar sub aspectul dominantelor psihologice și pedagogice, argumentarea programului de valorificare a muzicii ca obiect de integrare în disciplinele ciclului primar în context curricular prin principii, factori și condiții pedagogice.

Valoarea aplicativă a cercetării rezidă în elaborarea și validarea ansamblului de instrumente pedagogice și fundamente teoretico-metodologice, înglobate în Modelul pedagogic de integrare a activităților muzicale în didactica altor discipline din învățământul primar, bazat pe Programul metodologic cu integrarea educației muzicale în disciplinele din învățământul primar.

Implementarea rezultatelor științifice s-a realizat în cadrul școlilor elementare arabe israeliene din Galeeli și din Negev.

ANNOTATION

Badarne Belal

The Pedagogical Model for Integrating Musical Activities into the Educational Process in Primary Education

Doctoral dissertation in Education Sciences, Chişinău, 2026

The dissertation consists of an introduction, three chapters, general conclusions and recommendations, a bibliography comprising 181 references, 145 pages of the main text, 4 appendices, 14 tables, 23 charts, and 1 figure.

Publications related to the dissertation topic: 10 scientific publications, including three published abroad, two articles in Category C national journals, three papers presented at international conferences, one paper presented at a national conference, and three electronic publications.

Keywords: music, teaching, integration, primary school teachers, attitudes, methods, elementary school, primary education, pedagogical model, methodological program.

Research field: General Theory of Education.

The aim of the research is to provide the theoretical and methodological foundation for the development and implementation of a pedagogical model for integrating musical activities into other primary school subjects, with a view to enhancing the integration of musical activities in Arab-sector primary schools in Israel.

The research objectives are: (1) to establish the theoretical premises for integrating musical activities into the teaching and learning process; (2) to identify the pedagogical principles, factors, and conditions that facilitate the integration of musical activities into the teaching of other primary school subjects; (3) to identify the curricular content and examine teachers' effectiveness in implementing musical integration within the educational process in Arab schools in Israel; (4) to develop and experimentally validate a pedagogical model for integrating musical activities; and (5) to analyse the experimental results obtained through the implementation of the methodological program and formulate general conclusions and practical recommendations.

The scientific novelty and originality of the research consist in substantiating the educational significance of integrating music into the teaching of primary school subjects, justifying the content of the methodological sessions based on pedagogical principles, conditions, and factors, and developing a Pedagogical Model and a Methodological Program for integrating musical activities into the teaching of other primary school subjects in the Arab sector of Israel.

The research results contributing to the solution of an important scientific problem include the theoretical and praxeological substantiation of the Pedagogical Model for integrating musical activities into the teaching of other primary school subjects; the identification and description of teaching methods and instructional strategies that enhance the effective integration of musical activities into primary education; and the demonstration of the significant contribution of the Methodological Program for integrating musical activities to increasing young learners' motivation to study music and improving the quality of the teaching and learning process.

The scientific problem solved in the research consists in the conceptual and praxeological substantiation of the functionality of the pedagogical model for integrating musical activities through the implementation of a methodological integration program aimed at improving the quality of education in Arab schools in Israel.

The theoretical significance of the research lies in conceptualizing the educational value of music in primary education from psychological and pedagogical perspectives and in substantiating a methodological framework for integrating music into the primary school curriculum through pedagogical principles, factors, and conditions.

The practical value of the research consists in the development and experimental validation of a comprehensive set of pedagogical tools and theoretical-methodological foundations incorporated into the Pedagogical Model for integrating musical activities into the teaching of other primary school subjects, supported by a methodological program that promotes the integration of music education across the primary school curriculum.

The implementation of the scientific results was carried out in Arab primary schools located in the Galilee and the Negev regions of Israel.

BELAL BADARNE

**THE PEDAGOGICAL MODEL FOR THE INTEGRATION OF MUSICAL ACTIVITIES
INTO THE EDUCATIONAL PROCESS IN PRIMARY EDUCATION**

Specialty 531.01. – General Theory of Education

Abstract of the doctoral thesis in educational sciences

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