

COMPETENCIES FOR CREATING AN INTEGRATED APPROACH IN THE EDUCATIONAL PROCESS OF PRESCHOOL STUDENT TEACHERS¹

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Abstract: The preschool teacher is the main initiator of the dynamics and efficiency of the educational process. The children need to acquire more functional knowledge, which raises questions about the preschool teacher students' competencies.

The paper emphasizes the necessity of raising awareness of preschool student teachers about the importance of their role in enriching children's experiences, and bringing scientific, musical and linguistic phenomena closer. This further implies modernization of university education by encouraging and raising students' motivation to apply innovative approaches to work and the creation of specific competencies and skills. The competence of preschool student teachers in the realization of activities is not only reflected in building moral values and habits among children, but also in activating children's potentials and encouraging creativity.

The aim of the research was to examine the attitudes of preschool student teachers towards their competencies necessary for implementation of an integrated approach. The method of theoretical analysis and scaling techniques are used. The paper emphasizes the importance of extending specific professional competencies of preschool teacher students, as well as the importance of the continuous development of pedagogical knowledge for supporting holistic development of children, through monitoring, listening and supporting various children's expression (sound and voice, dance, movement, narration, etc).

Keywords: *student's competencies, cross-curricular integration, integrated approach, holistic development of children.*

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Introduction

The competence of preschool teachers in the realization of activities is reflected not only in the development of moral values and habits among children, but also in encouraging creativity and developing children's potentials. The preschool teacher has active participation in work and encourages social interaction, communication, and children's creativity to explore their environment. S/he also supports successful creation of critical thinking skills and the acquisition of permanent and more functional knowledge that will be applied at other levels of education.

Therefore, for preschool student teachers it is necessary to permanently develop pedagogical knowledge and competencies through monitoring, listening and supporting different ways of expressing children (sound and voice, dance, movement, narration, etc.). Given that the preschool teacher is the main driver of the dynamics and efficiency of the educational process, it is necessary to point out to students the importance of their role in enriching children's experiences in approaching scientific, musical and linguistic phenomena through their professional transformation. In general, competencies can be defined as a "context-specific cognitive dispositions (e.g. knowledge, readiness, and training), which enable to overcome certain types of situations and demands" (Pijanović, 2014: 322), although the authors of PISA studies in our country the term 'competence' is used synonymously with the term 'literacy' (Pijanović, 2014: 322).

In university education, differences in the acquisition of general, professional and pedagogical-psychological competencies have been identified. Pedagogical-psychological education is dominant, as shown by the analysis of some research (Munjiza, Lukaš, 2006), because it covers about 60% of teaching, followed by methodical education, which is represented by over 40%.

However, the questions are, which preschool teacher students' competencies need to be perceived as specific and necessary, how to distinguish their broader and narrower definitions, and then to further exploit and direct such knowledge to improve specific competences through lifelong learning. This further implies the need to modernize university teaching by encouraging and increasing students' motivation, their training, the creation of interest for further enrichment of acquired levels of knowledge (Kuka, 2007: 66), and the creation of specific, professional competencies for the application of innovative approaches.

Theoretical approach to the problem

Tendencies of the modern educational process are gaining knowledge through experience and systematic thinking (Vilotijević, 2016), because this

contributes to the understanding that all segments of the educational process are linked, so the change of only one segment directly affects its total course. Cross-linking of the contents of various fields of work in the kindergarten, achieving harmony between them, and freeing from differentiation, can just provide an integrated approach.

The term *integration* (the renewal or joining of elements into one whole), from a pedagogical point of view, signifies the functional connection of different educational areas, which are processed into a meaningful whole. The concept of integration is to deal with knowledge as a whole, to structure content from the known to the unknown, where different topics will be presented in a way that makes sense to the child, enabling, thus, the child to progress from one level to the other.

To apply an integrated approach, preschool teacher students should have competencies to apply different techniques, methods and strategies; to use the relevant ideas, facts and opinions of other entities to explain their views; to apply various teaching resources; to use the local environment and resources; to include children in practical activities and to develop necessary skills in children to form their behaviour, attitudes and values.

According to the document that regulates standards of preschool teacher competencies (*Pravilnik o standardima kompetencija vaspitača*), the competencies of preschool teachers are defined in three areas: 1) direct work with children (which includes knowledge of the holistic nature of child development, different strategies for teaching children, communication and participation of children, knowledge in the field of different sciences, arts and culture as a source of content in developing educational programs); 2) developing cooperation and learning communities (encompassing knowledge of joint learning and cooperation, as well as knowledge of cooperation with the local community); and 3) developing professional practice (encompassing knowledge about different procedures and techniques of planning, monitoring, documenting and evaluating in developing the program).

The application of the integrated approach contributes to the comprehensive development of the child, his intellectual, emotional, aesthetic and social development because “the human organism and its systems, especially the thought, act on the principle of integrating system parts into one whole. As a result, the child achieves inner consistency” (Vilotijevic, 2016: 105). The meaningful integration of activities involves the structural linking of two or more fields and the elimination of boundaries between them, through critical reflection and finding more different, logical ways to connect suitable content, where their various aspects will be unified into a meaningful whole, with a focus on a wider subject. The integrated knowledge acquired in this way will make effective decisions which will help the child to solve problems in everyday life. That the planned activities have the desired, affirmative integrated effect, it

is necessary to know the program of preschool education (*Osnove programa predškolskog vaspitanja i obrazovanja*) and then to set real and child-relevant tasks and objectives. An integrated approach implies that the preschool teacher, together with the child, comes to some knowledge, unlike the traditional approach where the teacher gives the child finished knowledge. It can be noticed that in the integrated approach the role of the teacher changes, since s/he now has the task of encouraging a child to express various ideas, to point to the observation and conclusion, to insist on finding more ways to solve a problem, whereby the child actively participates.

The nature of science is to ask questions, explore, nurture initiative and self-direction, and stimulate lifelong learning, while art provides a link between learning and topics that are relevant to understanding the contemporary world of every child, precisely because it is based on the free expression of imagination and creative instinct. By linking the content of science and language through music and art, we transform the concept of professional practice and include new skills and dispositions for 21st century learning. The way the teacher thinks and acts, his/her professional competence and creativity, enables the realization of performing activities and expressing creativity, skills and knowledge by the children s/he educates. The teacher should know how to apply his professional knowledge through planning and organization, to achieve good relationships with family, colleagues and the wider community and to monitor the development of children.

The global tendencies that have emerged in the last two decades are committed to the implementation of new learning models. Based on literature, emphasis has been placed on three topics: the motivation for a new learning model, the development of specific competencies and skills needed for effective functioning in the 21st century, and the pedagogy necessary for the creation of these abilities. However, due to the constant and rapid development of society, the potential economic and global crises, the question is whether students generally have a combination of critical thinking, creativity, and skills of cooperation and communication, necessary for solving unexpected events which the modern age can set in front of them.

The quality of early childhood education, teacher qualifications and quality practice in teaching and learning are in a correlative relationship. We believe that these results can contribute to proper practice shaping, despite the fact that some studies show that students are not aware of the (low) level of their knowledge and how insufficient knowledge can further influence their ability to provide appropriate scientific, linguistic, artistic knowledge and experiences to young children (Garbett, 2003).

Students, future preschool teachers, must recognize the importance of constant, personal improvement, in order to provide as high quality education as possible to children. "A creative pedagogue is usually defined as a person

who has ideas for innovation in teaching and upbringing, which even the most conventional didactic forms and methods apply in original variants as the creation of their own pedagogical innovation” (Plavša, 1989: 24). Therefore, for proper selection of related and for integrating suitable content, specific competences for planning through elements of integrated learning are necessary, which is the ultimate goal of the Serbian Strategy for the development of education (Strategija razvoja obrazovanja u RS do 2020. godine, *Službeni glasnik RS*, broj 107/12).

One of the trends in the current reform of higher education is the formation of multidisciplinary competence centres that will replace separate academic sections. The integration of thematic contents in the initial [undergraduate] education of preschool teachers is preferable, and the examination of attitudes of future preschool teachers about the integrative approach in planning and realization of content in preschool institutions, is an initial phase of curriculum reform. Although the introduction of an integrated approach has been recognized as a need in modernizing the educational process, it is not sufficiently represented at present, although advancements such as the application of the STEAM model in education are increasingly demonstrating and confirming the benefits of its application.

Research methodology

The goal of the research was to examine the extent to which student preschool teachers consider that they have developed competencies for applying an integrated approach in educational work. This goal was achieved through research tasks: 1) to determine the extent to which students believe they have competencies for planning and implementation of integrated contents in the field of different sciences, languages, arts and culture within the educational activities, taking into account the different learning strategies and the holistic nature of child development; 2) to examine the attitudes of students towards the competencies for monitoring the continuous development of children; and 3) to examine students’ attitudes towards competencies for collaborative learning and cooperation with colleagues and with the local community.

The method of theoretical analysis and scaling techniques was used. As an instrument, the assessment scale with 16 statements on the competences of preschool teachers was used. The statements were compiled according to the document *Regulations on the Competence Standards for the Teacher* (Pravilnik o standardima kompetencija za profesiju vaspitača i njegovog profesionalnog razvoja, *Službeni glasnik RS, Prosvetni glasnik*, broj 16/2018).

The research involved 58 students of the third year of undergraduate academic studies, study program Preschool Teacher Education, at Faculty of Education in Jagodina, University of Kragujevac.

The research results with discussion

Within the first research task *students' attitudes about the necessity of developing and possessing competences for planning and realization of integrated contents and different learning strategies within educational activities* were examined (Table 1).

The majority of students (96.55%) agreed that *during planning and realization, integrative activities should be harmonized with children's needs, abilities, pre-knowledge and interests*, which was the expected response. Theme and content, close to the child's understanding and perception, stimulate his/her interest. Adaptation of themes and contents to the psycho-physical age of a child is one of the basic didactic principles. Through activities, engagement and additional support, these themes should be realized to activate all the potentials and holistic development of the child.

With the statement *the preschool teacher should create and organize an incentive environment for the implementation of integrative activities, adapted to the content*, 12.07% of students agreed and 86.21% completely agreed. Affirmative environment, with the support of teacher, has positive effects on the development of talents, intelligence, and the overall childhood personality. Exploring the environment, the child through interaction learns how to understand the world around him/her; therefore, a stimulating environment is an important factor for the success of integrated activities.

On the statement about *the preschool teacher develops a work program relying on various content sources*, 94.83% of students gave positive answers. The results can be interpreted as the ability of students to critically examine and develop their practice with the *program* through their own content research and self-reflection. Then, based on constant monitoring of children, as well as exchanging ideas with family and colleagues, the teacher flexibly plans educational work.

The students' answer to the statement *on the need to use professional literature from various fields in the organization of integrative activities* is surprising: 24.14% of students could not estimate whether professional literature is necessary. In the organization of integrated activities it is necessary to rely on professional literature of various fields, books, vocabularies, encyclopaedias, collections of poems, special handbooks and practices for integrative activities. Ideas and information can be taken from media as well (Pijanović, 2014: 381). For example, scientifically popular texts adapted to the younger age, interesting facts about flora and fauna, or about well-known composers and writers' lives, as well as excerpts of contemporary literary works, quizzes, logical tasks and ideas for simple experiments, can be found in children's magazines. Therefore, students, future preschool teachers need to be educated to work with data

and information, to find and analyse information in different media and to use them when applying integrative activities.

Such students answers can be interpreted in two ways, as insufficient commitment, lack of readiness for lifelong learning and skilful professional literature search, or as insufficient equipment in semi-structured and unstructured materials for work and lack of support teams and centres that offer assistance with innovative work models (as STEAM).

With the statement that *an integrative approach to learning activates more different senses and potentials of the child*, 39.66% of students agreed and 55.17% completely agreed. We can conclude they have perceived the values of competence they should have as future preschool teachers. They approach learning as an open process with a focus on an integrated approach, and children are seen as active, equal players and protagonists of their own learning.

However, 5.17% of students were undecided, which can be interpreted as their not being sufficiently familiar with an integrated approach or do not know the benefits of an integrated approach in the comprehensive development of the child. By gaining knowledge in the field of various sciences, language, arts and culture through research, discovery and problem solving, knowledge becomes more permanent. Moreover, the preschool teacher, by linking multiple fields and offering various contents during one activity, prevents the occurrence of boredom in children, retains their attention and interest longer and additionally excites children's curiosity. Because of the wide spectrum of benefits it brings, it is necessary through university teaching to clearly demonstrate the importance of applying integration to students, future preschool teacher.

The majority of students (87.93%) agree that *the preschool teacher should bring the local, national and cultural heritage of mankind closer to children*. Cultural heritage can enrich the human spirit (Pijanović, 2014: 339). Students agree that cultural heritage should be brought closer to children from the earliest age, and this is possible primarily through introducing the literary heritage (oral and written literature), because it carries "a distinct presence of national consciousness and belonging to Serbian culture" (Pijanović, 2014: 470). Short forms of folk literature, such as tongue twisters, puzzles, and counting rhymes are part of national cultural heritage. Counting rhymes provide a possibility for the integration of speech development and the development of mathematical concepts (Maričić, Purić 2010). Verbal literacy games today can have a modern form, as "mysterious stories, mathematical brainstorms, rebuses, anagrams, or crosswords" (Obradović, 2014: 392).

Also, through national folklore, abundant with rhythms and the extraordinary built-in sense of our people to express their emotions through movement

in a variety of performing forms and choreographic settings, student preschool teachers can bring musical cultural heritage closer to children. The national folk heritage is carefully preserved to this day and has a significant place in the education of young people, and therefore is an essential part of the activities within Music Education, Language, Physical Education, and Science. It also contributes to the development of the national entity, the preservation of national tradition, cultural traditions and the holistic development of the child in general. "The dance is the mother of all arts" (Sachs, 1980), it is a product of common thoughts and reflects the spirit of one nation, the degree of cultural development, national characteristics, lifestyles, even the occupations of certain ethnic groups.

Students' attitudes about *competencies for monitoring the continuous development of children* were examined within the second research task (Table 1). With the statement *preschool teachers should approach to learning as an open process that allows the active participation of all participants and encourages further learning* agrees 46.55% of students agreed, and 53.45% completely agreed. These results show that students recognize the need for additional support to children in education and upbringing, as well as the demands of the modern reform that every child in the group is actively involved in their work. They also recognized the importance of continuous and constant encouragement of cultural creativity and creativity in general, both of which are related to entrepreneurial thinking, and further imply the ability to recognize opportunities, and readiness to accept risk and responsibility. Children should be taught to think, encouraged to be inventive, and even be given autonomy to organize entrepreneurial activities such as the sale of their creative products. Also, the teacher, together with children, can organize exhibitions of children's work, an exhibition of photographs taken by children during a visit to a park (a farm, a local factory, a concert etc.) or actions for decorating public spaces where children will participate.

To the statement, *the preschool teacher should develop pedagogical knowledge through monitoring, listening and supporting different ways of children's expression*, almost all of the students (93.1%) answered affirmatively, thus examining the importance of expanding their specific professional competences as future preschool teacher, while 6.9% of students were undecided.

Only a student who, during his initial [undergraduate] education, is well-trained to detect the expressive characteristics of children's speech, for example, possesses the necessary competences for monitoring and supporting children's spontaneous linguistic creativity. Nurturing children's language expression is aimed at their acquiring communicative skills, understanding the speech of others, and strengthening creative language capacities (Ivanović, 2014: 11). Language units are elements of literary expression and cause stylistic effect. In other arts, different means are used: colour is an element of artistic

expression; tone is an expressive means in music; a movement in dance; and a moving image in film (Pijanović, 2014: 237).

An integrated approach enables the linking of different expressions of children. It can include linguistic development and the acquisition of skills necessary for the development of literacy through the use of different language varieties, such as discussion about activities, information exchange, asking questions and responding to them, consulting literature for information, and a detailed description of a careful observation (French, 2004). As linguistic development is parallel to cognitive development, it is necessary to strive for the interweaving of elements of musical, artistic expression, and expression with movement with verbal expression in work with preschool children. Therefore, during the education of future preschool teachers, it is necessary to link contents of different methodologies. Silent games, rhythm games, rhyming games or game styles, breathing exercises, locomotor development exercises and vocal exercises, alongside the development of auditory perception for speech and the development of kinaesthetic movements of muscular speech apparatus are important for the development of future speech and language (Kostić, Vladisavljević, 1995: 155), and at the same time have a place in music education. Also, authentic life situations are “the most natural framework for learning and developing children speech skills” (Ivanović, 2014: 13), so children should be encouraged to use speech to satisfy curiosity about the world around them while visiting the zoo, botanical garden, market, farm, florist etc.

The results showed that 56.9% and 32.76% of students consider that *the preschool teacher should encourage children to participate in cultural creativity as a means of self-expression (performing plays, storytelling, artistic expression, drama expression, etc.)* while 10.34% were undecided. Specially trained preschool teacher can enrich children’s knowledge, but can also awaken in children a desire to learn more (Pronin Fromberg, 2006). The competencies necessary for the application of the integrated approach in educational work are reflected in the abilities of preschool teacher to activate the child’s potentials to the personal maximum of each person through the development of intellectual abilities and encouraging creativity, which is connected not only with innovation, but also with entrepreneurial thinking.

Since artistic creativity is an important element of the curriculum at all levels of education, it is important to examine the attitudes of preschool teachers towards the competence to include artistic creativity in work with children. Studies show that, during self-evaluation, competencies for teaching mathematics and mother tongue were evaluated more positively than competencies for teaching any field of art, whereby some teachers do not deal at all with certain artistic fields in everyday practice, especially drama, media, and music (Garvis, Pendergast, 2011). Artistic creativity dominates over other forms

of creativity in working with children (Irwin, 2018). Other kinds of creativity, such as musical creativity, dramatic creativity and spontaneous child linguistic creativity must not be neglected in the work on fostering children's creativity. For the integration of arts with other thematic areas, continuous work on cross-curricular competences is required during the education of future pre-school teachers.

Creativity is a prerequisite, whether we are talking to children about cultural contents or talking about children's creativity. Contrary to traditional education, with its emphasis on memorization and facts reproduction, in today's world of global competition, innovative capacity and creative spirit have become imperatives for professional and personal success, and therefore a central place should be provided systems for creativity and innovation in education .

Within the third research task (Table 1), students' attitudes on *competencies for collaborative learning and cooperation with colleagues and with the local community* were examined. These competencies can be of great importance for the improvement of educational work. Based on answers, students appear to recognize the necessity for *organizing various forms of cooperation*, which can be realized through visits to museums, music schools, theatres and other institutions. Most students believe that the preschool teacher has competencies to *organize activities that will involve the child's family, through various workshops, kindergarten activities, or joint actions*.

However, 6.9% of students were not sure that *preschool teachers should involve children in local projects, events and activities* through visits to festivals, concerts, exhibitions, sports events or ecological campaigns. Also, 3.45% of them did not think that *cooperation with the local community* is needed and did not realize the *possibility to use this cooperation for the application of innovative approaches to work*. They should be informed that cooperation and a critical and reflexive approach to the practice of preschool education are the basis for development. The values that will be expressed by such an approach are respect for the rights of the child as a citizen through his full participation in social and cultural community life, as well as the development of social and cultural identity and the sense of belonging to the peer community, kindergarten, and local community.

Students' responses to the additional statement that the *competencies acquired during the study program allow the preschool teacher to organize integrative activities* (where 84.49% of students affirmatively replied), indicate that certain changes have been incorporated into university education. Interdisciplinary competencies, which are especially emphasized in the most recent documents on competencies, as well as in the new *Law on the education system* (Zakon o osnovama sistema obrazovanja i vaspitanja, *Službeni*

glasnik RS, 88/2017), have been globally identified as a prerequisite for the quality of educational work in the 21st century. However, for 15.52% of students (3.45% did not agree, while 12.07% were undecided), it is necessary to find ways to motivate them further through work responsibility and personal example (Kopas Vukašinović, Lepičnik Vodopivec, 2018), and further encourage them to apply innovative methods in order to meet the requirements of quality education for the 21st century in the field of professional competences development.

Although, in general, the view that scientific facts are considered unfavourable in pre-school institutions, mainly because of the desire to protect children from school culture (Sundberg, Ottander, 2013), the results of this research imply that through university education it is possible to form student teachers' specific competencies for knowledgeable transformation of certain scientific contents with integration with music and language culture. "The best connection, the greatest transfer from theory to practice, will exist when a relationship is created and emphasized during learning" (Nešić, 2003: 158). If the person clearly understands what he is learning, continually applying previous experiences, if he flexibly uses the adopted general rules, and openly examines new assumptions and changes in the flow of thought, then we can say that the transfer is successful (Nešić, 2003).

Table 1: Students' attitudes towards competencies for application of integrative activities

Statement		1 Strongly disagree	2 I do not agree	3 Neither agree nor disagree	4 I agree	5 I agree completely	Σ
1.	The preschool teacher plans and realizes integrative activities in accordance with the children's needs, possibilities, interests and their active participation in the group.	0	0	2	22	34	58
		0 %	0 %	3.45 %	37.93 %	58.62 %	100 %
2.	The preschool teacher should create and organize an incentive environment for the implementation of educational integrative activities adapted to the children and the contents.	0	0	1	7	50	58
		0 %	0 %	1.72 %	12.07 %	86.21 %	100 %
3.	The preschool teacher develops a work program relying on various content sources: authentic experiences of children, different life situations, culture, science, art, technology, ecology, sport, etc.	0	0	3	24	31	58
		0 %	0 %	5.17 %	41.38 %	53.45 %	100 %
4.	When organizing integrative activities, it is necessary to rely on professional literature of various fields.	0	0	14	20	24	58
		0 %	0 %	24.14 %	34.48 %	41.38 %	100 %
5.	An integrative approach to learning activates different senses and potential of the child.	0	0	3	23	32	58
		0 %	0 %	5.17 %	39.66 %	55.17 %	100 %
6.	The preschool teacher should bring the local, national and cultural heritage of mankind (music, dance, tradition, visual arts, drama, etc.) closer to children.	0	2	5	10	41	58
		0 %	3.45 %	8.62 %	17.24 %	70.69 %	100 %
7.	The preschool teacher should approach learning, within the activity, as an open process which allows the active participation of all participants and encourages further learning.	0	0	0	27	31	58
		0 %	0 %	0 %	46.55 %	53.45 %	100 %
8.	The preschool teacher should develop pedagogical knowledge through monitoring, listening and supporting different ways of children's expression (sound and voice, dance, movement, narrative, construction in space, etc.).	0	0	4	10	44	58
		0 %	0 %	6.9 %	17.24 %	75.86 %	100 %

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9.	The preschool teacher should encourage children to participate in cultural creativity as a means of self-expression (performing plays, storytelling, artistic and drama expression, etc.).	0	0	6	19	33	58
		0 %	0 %	10.34 %	32.76 %	56.9 %	100 %
10.	The preschool teacher should involve children in local projects, events and activities (ecological actions, music events, festivals, exhibitions, daily life of the community, sports events).	0	0	4	15	39	58
		0 %	0 %	6.9 %	25.86 %	67.24 %	100 %
11.	Cooperation with colleagues from the same and other institutions is crucial in the planning of educational activities.	0	0	17	25	16	58
		0 %	0 %	29.31 %	43.1 %	27.59 %	100 %
12.	Partner relations between preschool teachers and local community institutions can be of great importance for the improvement of educational work.	0	0	8	26	24	58
		0 %	0 %	13.79 %	44.83 %	41.38 %	100 %
13.	If a possibility for cooperation with the community appears, this should be used to apply innovative approaches to work.	0	2	3	12	41	58
		0 %	3.45 %	5.17 %	20.69 %	70.69 %	100 %
14.	It is necessary to frequently organize various forms of cooperation with the local community (museums, music schools, theatres, etc.).	0	2	4	7	45	58
		0 %	3.45 %	6.9 %	12.07 %	77.59 %	100 %
15.	The preschool teacher can organize a variety of activities to include family and other community members through workshops, kindergarten activities, joint actions, etc.	0	0	0	23	35	58
		0 %	0 %	0 %	39.66 %	60.34 %	100 %
16.	The competencies obtained during the studies allow the preschool teacher to organize integrative activities.	0	2	7	23	26	58
		0 %	3.45 %	12.07 %	39.66 %	44.83 %	100 %

Conclusion

In this paper, we highlight the key elements of the competencies necessary for the preschool teacher of the 21st century, which include personalization, cooperation, communication, productivity and content linking. We also emphasized the importance of personal knowledge, taking the initiative, responsibility, and the necessity of creativity in work, teamwork, management and organizational skills. Based on the research results, students, future preschool teacher, largely evaluate themselves as persons with competencies that enable them to apply an integrative approach in their educational work. They have a positive attitude towards an integrated approach, but despite increasing competence, they have a lack of self-confidence in applying it.

Pedagogical implications of this research can be seen in five directions:

1) The integration of thematic content into initial [undergraduate] university education of students, future preschool teacher is desirable. The main goal should be the training of students for planning that includes an integrated approach, depending on the interests and possibilities of a particular group of children. We find support for above-mentioned implication in the report of the European Political Strategy Center, *10 trends: Transforming education as we know it* (Trend 6:5, 2017), which supports local and global challenges, including sustainable development issues, as well as cultural diversity within a society and demands for the application of an integrated approach, to understand the causes of contemporary challenges and find innovative solutions.

2) Integration of thematic contents enables cross-curricular cooperation and team work by university teachers.

3) It is necessary to present or at least sketch possible ways of developing methods that includes innovative approaches, which in the planning and realization of content represents the initial phase of the curriculum reform. Also, the formation of activity centres, in which students, future preschool teachers would be active participants, would directly influence the creation of their specific competencies.

4) Encourage creativity and find ways, through study programs for preschool teacher, to make student teachers interested and encouraged to challenge and apply innovative procedures. Further consideration may include monitoring the development of students' integrative skills, giving instructive ideas and referring to the use of a variety of children's literature to help students to find links between different fields.

5) One of the directions in which content integration can be considered, would be experimental research, in which the effects of the integrated approach that students would apply in their activities would be examined. The organization and practical realization of these activities would show whether

students have, and to what extent, specific competencies for linking the contents of different fields of work.

Since preschool age is the most sensitive period in the life of a child, a person who works with children should be highly qualified and competent to perform his/her profession. S/he needs to be full of “experience, knowledge, and power of guidance, who fills with enthusiasm” (Nešić, 2003: 150), to identify the child’s abilities, and “by approval and praise think of the best they can give and thus acts beneficial and stimulating on them” (Nešić, 2003: 150). Therefore, students, future preschool teachers are expected to critically and reflectively approach their own practice, and monitor and understand social and economic trends that directly or indirectly set new demands on the teacher profession and have an impact on the preschool institutions work. They need to realize their role in the full sense, to be successful in all domains of their work and thus confirm the quality of university education.

References

- Vilotijević, M. (2016). *Modeli razvijajuće nastave*. Beograd: Učiteljski fakultet.
- Irwin, M. R. (2018). Arts Shoved Aside: Changing Art Practices in Primary Schools since the Introduction of National Standards. *International Journal of Art & Design Education*, vol. 37, N. 1, 18–28. <https://doi.org/10.1111/jade.12096>
- French, L. (2004). Science as the center of a coherent, integrated early childhood curriculum. *Early Childhood Research Quarterly*, Volume 19, Issue 1, 1st Quarter, 138–149. <https://doi.org/10.1016/j.ecresq.2004.01.004>
- Garbett, D. (2003). Science Education in Early Childhood Teacher Education: Putting Forward a Case to Enhance Student Teachers’ Confidence and Competence. *Research in Science Education*, Vol 33 (4), 467–481. <https://doi.org/10.1023/B:RISE.0000005251.20085.62>
- Garvis, S. & Pendergast, D. (2011). An investigation of early childhood teacher self-efficacy beliefs in the teaching of arts education. *International Journal of Education & the Arts*, 12(9). Retrieved from <http://www.ijea.org/v12n9/>.
- Kopas Vukašinović, E. & Lepičnik Vodopivec, J. (2018). Teacher as a conception of enhancing the quality of university education. *Innovative teaching models in the system of university education: opportunities, challenges and dilemmas*. Jagodina: Faculty of Education; Koper: Faculty of Education.
- Kostić, Đ. & Vladisavljević, S. (1995). *Govor i jezik deteta u razvoju*. Beograd: Zavod za udžbenike i nastavna sredstva.
- Kuka, M. (2007). *Didaktika*. Beograd: Janus.
- Munjiza, E. & Lukaš, M. (2006). Pedagoško-psihološko osposobljavanje učitelja u visokoškolskim ustanovama. *Odgojne znanosti*, Vol. 8, br. 2, 361–383.
- Nešić, V. (2003). *Muzika, čovek i društvo*. Prosveta: Niš.

Pijanović, P. (2014). *Leksikon obrazovnih termina*. Beograd: Učiteljski fakultet.

Plavša, D. (1989). *Muzičko-pedagoške dileme i teme*. Novi Sad: Akademija umetnosti. <https://doi.org/10.1080/10901020500527145>

Pronin-Fromberg, D. (2006). Kindergarten Education and Early Childhood Teacher Education in the United States: Status at the Start of the 21st Century. *Innovations in Early Childhood Teacher Education: Reflections on Practice*, 65–85.

Richmond, B. (1994). System Dynamics / Systems Thinking: Let's Just Get On With It. *International Systems Dynamics Conference*. Sterling, Scotland.

Sachs, C. & Saks, K. (1980). *Muzika starog sveta na istoku i zapadu* (preveo Predrag Milošević). Beograd: Univerzitet umetnosti.

Standardi kompetencija za profesiju vaspitača i njegovog profesionalnog razvoja, *Službeni glasnik RS, Prosvetni glasnik*, broj 16/2018 od 17. septembra 2018. godine. Retrieved 4/18/19 from: <http://www.csu-kg.edu.rs/docs/kopetencijevaspitaca-pravilnik.pdf>.

Strategija razvoja obrazovanja u RS do 2020. godine, *Službeni glasnik RS*, broj 107/12. <http://www.mpn.gov.rs/strategije-2020/>

Sundberg, B. & Ottander, C. (2013). The Conflict Within the Role: A Longitudinal Study of Preschool Student Teachers' Developing Competence In and Attitudes Towards Science Teaching in Relation to Developing a Professional Role. *Journal of Early Childhood Teacher Education*, Vol. 34 (1). United Kingdom: Taylor & Francis. <https://doi.org/10.1080/10901027.2013.758540> <https://www.tandfonline.com/doi/abs/10.1080/10901027.2013.758540>

10 trends : Transforming education as we know it, 2017, European Political Strategy Center, https://ec.europa.eu/epsc/sites/epsc/files/epsc_-_10_trends_transforming_education_as_we_know_it.pdf

Zakon o osnovama sistema obrazovanja i vaspitanja, *Službeni glasnik RS*, broj 88/2017-3 <http://www.pravno-informacionisistem.rs/SlGlasnikPortal/eli/rep/sgrs/skupstina/zakon/2017/88/1/reg>