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REVIJA ZA ELEMENTARNO IZOBRAŽEVANJE
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STRUCTURAL AND FUNCTIONAL MODEL FOR THE SOCIALIZATION AND DEVELOPMENT OF CHILDREN WITH INTELLECTUAL DISABILITIES IN GROUP WORK

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Abstract/Izvleček

The aim of the article is to introduce an effective structural and functional model for the socialization and development of these children through group work, implemented in out-of-school education institutions (SFM). The study presents a comprehensive model comprising target, substantive, organizational, procedural, result-oriented, and analytical components. It outlines content and methodological support for socialization and development in various areas, such as naturalistic, tourist, local history, artistic, and aesthetic domains. It also highlights the essential spatial-subject, psycho-didactic, and social conditions required for an inclusive educational environment.

Strukturno-funkcionalni model socializacije in razvoja otrok z motnjami v duševnem razvoju skozi skupinsko delo

Cilj prispevka je predstaviti učinkovit strukturni in funkcionalni model za socializacijo in razvoj otrok z motnjami v duševnem razvoju skozi skupinsko delo, ki je uveden v izobraževalnih ustanovah izven šole. Raziskava predstavlja celovit model, ki vključuje cilje, vsebinske, organizacijske, postopkovne, rezultatsko usmerjene in analitične komponente. Opiše vsebino in metodološko podporo za socializacijo in razvoj na različnih področjih, kot so naravoslovje, turizem, lokalna zgodovina, umetnost in estetika. Poudarja tudi ključne prostorsko-subjektivne, psihodidaktične in socialne pogoje, potrebne za inkluzivno izobraževalno okolje.

Keywords:
children with intellectual disabilities, socialization, development, structural and functional model, group work.

Ključne besede:
kompetence bodočih učiteljev, učni rezultati, zgodovina, osnonvošolsko izobraževanje, razumevanje časa.

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Introduction

In cases of intellectual disability, immaturity of personality and deficiencies in social functioning are the consequences of low cognitive activity, inertia of nervous processes, and weakness of the closing function of the cerebral cortex. In particular, the DSM-5 defines intellectual disability as a developmental disorder of the nervous system that occurs in childhood and is characterized by intellectual dysfunction and deficits in communication, social, and practical areas (Američka psihijatrijska udruga, 2014). The authors of the study (Schuengel et. al., 2019) pointed out that children with intellectual disabilities have reduced cognitive ability and low levels of adaptive functioning, which negatively affect their socialization and social adaptation. Therefore, the socialization and development of children with intellectual disabilities is seen as the main aim, main process, and key result of correctional education in an educational institution. At the same time, the following studies (Vukovič, 2021; Nesayan et. al., 2016) showed that the learning process in formal education is focused on the formation of program learning outcomes and subject competences. Instead, out-of-school education embraces the European values of non-formal education and addresses the general and specific tasks of educating children with intellectual disabilities, the leading place among which is given to the correction of deficiencies in psychophysical and social development, along with the formation of life and social competences. Out-of-school education provides opportunities for informal and non-formal learning, creating conditions for communication, for acquiring teamwork skills, learning social roles, developing critical thinking, and exhibiting independence, and self-awareness (Brajčić and Kuščević, 2022; Brajčić and Sunko, 2020). In addition, the involvement of children with intellectual disabilities in out-of-school activities and hobby groups allows them to acquire pre-professional knowledge, skills, and abilities (Kovalenko et. al., 2021).

Theoretical background

Considering the social significance and significant achievements in the field of correctional education of children, the system of out-of-school education and certain aspects of the activities of out-of-school education institutions in terms of education, upbringing, and social formation of the individual have been the subject of scientific

research (Abells et. al., 2008; Cummins and Lau, 2003; King et. al., 2003; Kovalenko et. al., 2021; Mundhenke et. al., 2010; Murphy and Carbone, 2008; Rimmer et. al., 2007; Shields et. al., 2012). One study (Murphy and Carbone, 2008) determines that participation of children with intellectual disabilities in out-of-school activities is important for their health, has a positive impact on their self-esteem and psycho-emotional state, while creating conditions for acquiring social competence, and promoting physical development. The leading model for involving children with intellectual disabilities in out-of-school education is "collective educational integration", and the leading form is group work (Kovalenko et. al., 2021). Out-of-school education is considered as an environment in which educational, developmental, orientation and vocational, correctional, creative, constructive and sports services should be provided for children with special educational needs. This is an environment where a child can find motivation to fulfil their individual personal needs, and satisfaction contributes to a good mood, harmonization of emotional states, overcoming aggressive behaviour, self-control and self-regulation of their actions, the formation of dialogue, and communication, including verbal and alternative communication (Shulzhenko, 2021). A study by Cummins and Lau (2003) emphasizes that involvement of children with intellectual disabilities in out-of-school education contributes to the development of their communication skills and social integration. This allows for the development of children's social competence and interpersonal relationships, improves their quality of life, ensures their integration into society (King et. al., 2003), and improves their academic achievement (Şeker, 2020). The distinctive feature of out-of-school education is the positive emotional atmosphere in a group of children, including tolerance, equality, and success for everyone. Every child with intellectual disabilities can feel significant and successful if appropriate conditions are created based on the principles of special didactics. Despite the significant correctional and socializing potential of out-of-school education, children with intellectual disabilities are less likely to be involved in it than their peers with normal development (Abells et. al., 2008). One study (Mundhenke et al., 2010) affirms that children with intellectual disabilities have a desire to participate in out-of-school activities, but they have significantly fewer opportunities to do so compared to their typically developing peers. Barriers to children's involvement include the instability of their interest in group work participation, a significant gap in skills compared to children with normal development, insufficient parental involvement in the upbringing of these children

and maintaining interest in group work activities, along with personal barriers such as behavioural problems or lack of social skills (Shields et. al., 2012). Therefore, there is a need for psychological and pedagogical mentoring in the processes of socialization and development of such children. The assimilation of social experience occurs during activities and communication, leading to the enhancement of mental processes and the broadening of cognitive understanding of the surrounding world. Given this, leveraging the potential of out-of-school education becomes especially crucial in facilitating the socialization and development of children with intellectual disabilities. Above all, involvement of children in out-of-school education, activities and communication based on their interests involves expanding the sphere of life, raising their social status, and active participation in public life, while developing abilities and subject competence in accordance with the chosen profile of out-of-school education, expanding the boundaries of freedom of choice (social tests) in determining their life and professional path. These benefits substantiate the importance of developing *a structural and functional model for the socialization of children with intellectual disabilities in out-of-school group work (SFM).*

Methodology

The methodological basis of the study is the dialectical method of cognition and a systematic approach. The following theoretical methods were used in the study: analysis of general and special psychological and pedagogical literature on the research problem; systematization and generalization of theoretical approaches to solving the problem of socialization and development of children; and theoretical modelling to create the SFM. The purpose of this article is to describe the SFM.
The presented SFM is implemented in the educational process of Kharkiv Regional Station of Young Tourists of Kharkiv Regional Council, the Center for Tourism, Local History and Excursions of Pupils' Youth of Valky City Council of Kharkiv Region; the municipal institution "Centre for Creativity and Youth of Kyiv Region"; the municipal institution "Palace of Pupils' Youth of Lutsk City Council", Krasnokutsk Centre for Children and Youth Creativity of Krasnokutsk Village Council of Bohodukhiv District of Kharkiv Region; the municipal institution "Volyn Regional Centre for National and Patriotic Education of Tourism and Local History of Pupils' Youth of Volyn Regional Council"; the municipal institution "Volyn Regional Centre for Tourism and Local History of Volyn Region"; the municipal

institution "Volyn Regional Centre for National and Patriotic Education of Tourism and Local History of Student Youth of the Volyn Regional Council"; the municipal institution "Kupiansk Special School, municipal institution" the "Centre for Children and Youth Creativity No. 3 of Kharkiv City Council" and proved its effectiveness (Kovalenko, 2022). The formative stage of the experiment, which lasted from 2016 to 2022, involved 468 participants: 288 children of primary, second, and high school age with mental disabilities, 132 parents of children; and forty-eight teachers, heads of group work.

Results and Discussion

The method of pedagogical modelling was used to create the SFM. The scientific substantiation of pedagogical modelling was according to these two studies: (Maksymenko, 2016; Kovalchuk, 2020). During development of the SFM, we relied on the following definition of a pedagogical model: "It is a model of pedagogical activity that presents the idea of the predicted result, defines its content, describes the means and conditions necessary for the realization of the expected result, and identifies the subjects of activity" (Kovalenko, 2022). The general requirements for a model are content (the ability of the model to reflect the properties and functions of reality and the system); deductive requirements (the ability to control the result); inductive requirements (demonstration of shifts, dynamism of the system); and the independence of the result in relation to a particular interpretation. Thus, on the one hand, the structural model imitates the internal organization and structure of the original and on the other hand, it demonstrates its functional characteristics. The SFM provides for specially organized correctional and pedagogical activities of the group work heads aimed at the socialization and development of children with intellectual disabilities. The development of the SFM allowed us to logically organize correctional and pedagogical activities.

In our study, the SFM is considered a complex holistic system, which is represented by a set of interconnected structural blocks: target, content, organizational and procedural, and result-oriented and analytical. The modelling method allowed us to reveal the essence of the model and demonstrate it graphically (Fig. 1). Let us analyse the presented model blocks in more detail.

The structural and functional model of socialization and development of children with intellectual disabilities in out-of-school group work

Target	**Aim**: to increase the level of development and socialization of children with intellectual disabilities at the stages of adaptation, individualization, and integration through their involvement in out-of-school activities **Tasks**: *in the field of socialization*: development of cognitive-awareness, motivational-value, emotional-regulatory, and activity-behavioral components of socialization; *in the field of development*: formation of knowledge, skills, competences (in accordance with the direction of out-of-school education), development of abilities, and development of intellectual, cognitive, and physical components of development. **Methodological approaches**: synergetic, personality-oriented, activity-based, organizational, corrective, therapeutic, competence-based. **Principles**: unity of diagnostics and correction; purposefulness; activity principle; principle of correctional and compensatory orientation; continuity and sequence; social and adaptive orientation; principle of individual and differentiated approach; principle of multi-subject partnership and principle of "spiral" of emotional well-being.
Content	**Subjects of the educational process: heads of group works, psychologist, medical worker, pupils, parents of children with intellectual disabilities** **Content of training, education and development** Modified curricula for out-of-school group works
	Initial level (corresponds to the adaptation stage) / Basic level (corresponds to the stages of individualization and integration)
	Components of socialization cognitive-awareness / motivational and value / emotional and regulatory / activity-behavioral **Development components**
	intellectual and knowledgeable / physical
Organizational and procedural	**Stages of model implementation**
	Diagnostical / **Environmental modeling** / **Correctional and upbringing**
	identification of interests, starting level of socialization and development / adaptation and modification of spatial-subjective, psychodidactic, social conditions of the educational environment / Education, upbringing, development, socialization of children with disabilities in out-of-school group works
	Professional development of heads of group works (organization of professional development courses)
	Organizational forms: group work, individual lessons, competitions, excursions, hikes, exhibitions, concerts
Result-oriented and analytical	**Assessment of the level of socialization and developmental dynamics of children with intellectual disabilities**
	In the field of socialization / In the field of development
	formation of cognitive-awareness, motivational-value, emotional-regulatory; activity-behavioral components of socialization / formation of knowledge, skills, abilities, professional competences (in accordance with the modified program of out-of-school education), formation of physical, intellectual and knowledge components of development
	Levels of socialization: high; medium; low / Levels of development: high; sufficient; medium; low

Figure 1. The structural and functional model for the socialization and development of children with intellectual disabilities in out-of-school group work

Target block of the SFM

It involves defining the aims and developing tasks, while interconnecting, and describing all components of the model. The goal of the SFM is to increase the level of development and socialization of children at the stages of adaptation, individualization, and integration through their involvement in out-of-school education. In the context of the study, the aim is understood as an ideal, planned result of educational activity. The aim is realized through the solution of the following tasks: in the field of socialization: development of cognitive-awareness, motivational-value, emotional-regulatory, and activity-behavioural components of socialization; in the field of development: formation of knowledge, skills, abilities, and profile competences (in accordance with the direction of out-of-school education); and development of intellectual, cognitive, and physical components.

When constructing the SFM, we relied on the ideas of the following approaches: synergistic, organizational, activity, correctional, personality-oriented, and therapeutic. The synergistic approach is the methodological basis for the socialization and development of children with intellectual disabilities in out-of-school group work, as the out-of-school education system is complex, open, and nonlinear. This approach outlines the use of a set of ideas, concepts, and methods in the correctional management of socialization and development processes. It involves a combination of a multifaceted impact on the development and socialization of children with intellectual disabilities through direct correctional impact (working directly with children using a variety of methods that activate mental activity and creatively organize the educational space), and indirect impact (professional development of teachers, heads of group work, and the development of skills to create pedagogical conditions for schoolchildren to learn new social experiences).

The personality-oriented approach involves considering the interests, abilities and inclinations of the child when determining the direction of out-of-school education and the profile of out-of-school group work, and is aimed at creating conditions for the formation of the child's personality, its development and socialization in the artistic and aesthetic, tourist and local history, and ecological and naturalistic areas that are interesting and accessible to the child, whose needs and desires are important (Kisovar-Ivanda, 2022).

The activity-based approach serves as the systemic basis for the development and

socialization of children with intellectual disabilities. Its objective is to establish conducive conditions within out-of-school education group settings for active and purposeful engagement. Successful, interesting, and accessible activities are the means through which learning outcomes, educational progress, and personal development are attained by the children.

The organizational approach is aimed at creating a safe educational environment focused on the implementation of the principles, aims, and content of out-of-school education, which ensures the development and socialization of children. The organizational approach involves determining the optimal forms for involving children in out-of-school education: group work, individual work, concerts, competitions, exhibitions, excursions, and hikes.

The correctional approach involves the correction of secondary and tertiary developmental disorders during the teaching and upbringing of children in out-of-school group work. Organizational issues in the correction of children's development in out-of-school education institutions, their education and social adaptation involve the creation of special learning conditions in the educational process that best meet the needs of the child.

The therapeutic approach is aimed at the self-disclosure, release, and sublimation of internal tension and negative experiences of children in socially acceptable forms of behaviour. The child's internal conflicts are expressed through visual, artistic, sports, environmental and naturalistic activities in out-of-school group work.

The competence-based approach involves focusing not only on the formation of knowledge, skills, and abilities but also on the ability to perform functions related to different subject areas and the development of social competence.

We have identified the following main principles of the model based on the synergistic, person-cantered, organizational, correctional, activity, therapeutic, and competence approaches: unity of diagnosis and correction, purposefulness, the activity principle, principle of correctional and compensatory orientation, continuity and consistency, socially adaptive orientation, the principle of the individual and differentiated approach, the principle of multi-subject partnership, and the principle of the "spiral" of emotional well-being.

Content block of the SFM

This block constitutes the educational content and is one of the main means for children's development and socialization. The subjects of the educational process

are the heads of group work, a psychologist, a medical worker, schoolchildren, and parents of children with intellectual disabilities.

The socialization and development of children in out-of-school education is based on the tasks set out in the model. The content of education and upbringing is determined by modified curricula of out-of-school group work that correspond to the current level of pupil development, considering their abilities and potential. The modified programs for primary and basic levels are based on typical programs in specialized subjects for children with intellectual disabilities, considering typical programs of group work for children with normal development.

Primary level programs for out-of-school education are aimed at developing pupils in a particular subject area, deepening their interests, adapting to out-of-school activities, and developing social interaction skills in group activities. The programs provide for the general cultural development of the child and the assimilation of socio-cultural experience using both educational content and various organizational forms of out-of-school activity in a favourable environment.

The modified primary level curricula provide for further deepening and broadening of children's interests and the formation of professional interests. The development of children's subject competences allows instilling practical skills and meeting their needs for professional mentoring. The programs include not only active learning of socio-cultural experience but also its selective reproduction through collective activities and communication. The period of implementation for modified basic level programs lasts for four to six years and corresponds to the stages of adaptation, individualization, and integration of pre-labour socialization. Considering the focus of children with intellectual disabilities on artistic and aesthetics, tourism and local history, and ecological and naturalistic activities (Kovalenko et al., 2021; Carbonaro, and Maloney, 2019), the curricula Folk Art, Young Tourists and Local History, Historical Local History, and Floriculture were modified.

Organizational and procedural block of the SFM

The organizational and procedural block of the model includes ensuring the organization of educational activities, which identifies the necessary stages and conditions of the educational environment for out-of-school education.

The involvement of children with intellectual disabilities in out-of-school education means consistent work, which consists of a diagnostic stage, environment modelling, and correctional and educational stages. Let us consider the content of each stage in more detail.

Diagnostic stage

This stage involves the following: 1. identifying the direction of children's interests and abilities; peculiarities of their physical development to establish possible contraindications to involvement in certain areas of out-of-school education for health reasons; 2. identifying the "initial" level of children's socialization to establish an optimal model for their involvement in out-of-school education; 3. determining the "initial" level of development of subject competences that correspond to the direction of children's interests to determine modifications and/or additions. Thus, when involving children in the artistic and aesthetic direction of out-of-school education, it is advisable to identify the features of artistic subject competence; when involving children in the tourism and local history direction, the level of development of physical qualities, subject natural science and geographical competences; and when involving children in the ecological and naturalistic direction of out-of-school education, it is necessary to identify the features of natural science and geographical competences. On the basis of the identified modal-specific and phenomenological features, the direction of out-of-school education and the model of involving a child in out-of-school education are determined. Group work should be organically combined with individual lessons, competitions, excursions, hikes, exhibitions, and concerts. For example, in addition to group work, schoolchildren with an artistic and aesthetic direction are involved in competitions and exhibitions of creative work; tourism and local history – actions and expeditions "My Motherland", "My native land", "The land where I live", youth conferences "Know yourself, your family, your people"; ecological and naturalistic – "Help the birds in winter", "Autumn clean-up", environmental campaigns "Let's save the world so that life can continue", exhibitions "Flower show", "Floral vernissage", etc. Special education institutions hold group work in the areas of tourism and local history, ecology and natural history, and art and aesthetics. The group work activities are managed by the teachers of out-of-school education institutions.

The out-of-school education institution provides organizational, pedagogical, methodological, and financial support for the group work activities during out-of-school time, which contributes to their socialization and development.

Environmental and modelling stage

At the environmental and modelling stage, the adaptation and modification of spatial-subject, psycho-didactic, and social conditions of the educational environment of out-of-school education was conducted. We consider the educational environment of an out-of-school education institution as a system of corrective influence on the processes of development and socialization for children with intellectual disabilities because it creates special conditions (spatial and subject, psycho-didactic, social) that promote the physical, social and mental development of pupils, their acquisition of primary professional knowledge, skills and abilities necessary for their socialization, and the expansion of social experience through the acquisition of additional knowledge, and social interaction skills.

The spatial and subject conditions of the educational environment must meet the following requirements: safety of the educational environment, guaranteed by safety rules, principles of accessibility and rationality; convenience of classrooms; sufficient lighting; ergonomic furniture; maintaining a balance in visual stimulation and avoiding excessive noise.

The following psycho-didactic pedagogical conditions of the educational environment are of particular importance: modification of curricula; application of a security and pedagogical regime; combination of theoretical and practical classes, group and individual forms of work; and mandatory use of excursions in the educational process. The content of out-of-school education should consider the set of knowledge, skills and abilities already acquired as well as the set of knowledge and skills necessary to master a profession that meets the aptitudes and intellectual capabilities of these children. To create conditions for extensive interaction between schoolchildren and the teacher to ensure their socialization, interactive teaching methods were widely used in group work, such as mind maps, lapbook activities, associative learning, case studies, and the project method. Choosing a group of interactive methods works because the situation of social interaction modelled by the teacher may be a prerequisite for the start of the real learning process, and social interaction provides stimulation to develop the child's potential for further learning and development (Zoglowek and Aleksandrovich, 2017).

The social conditions of the out-of-school education environment characterize the system of social interaction among all subjects in the educational process, which should aim to harmonize the processes of socialization and development of the pupils through group work, ensuring the emotional well-being of children, parents, and teachers. In the case of children with intellectual disabilities who enter the out-of-school environment, teachers at the institution should provide corrective social education aimed at developing socially significant qualities of the pupils necessary for the formation of their life competence and an active life position. Therefore, the general social conditions of the educational environment of out-of-school education are the following: formation of communicative competence in the process of interaction with the social environment (developing skills of constructive interpersonal interaction); a systematic approach to mastering, understanding and observing social norms; expansion of the scope of activity, focusing its content on the realization of socially significant needs of the individual (satisfaction of the need for communication); development of socially normative behaviour.

At the stage of adaptation, correctional social education should be aimed at forming children's ideas about social moral norms and emotional attitudes toward them as those that must be strictly observed. The subject of correctional social education should be the formation of pro-social values, development of self-control, deepening of interests, reduction of impulsivity and aggression, and formation of socially normative behaviour on this basis.

At the stage of individualization, correctional social education is aimed at developing self-awareness and adequate self-esteem, developing stable interests, forming moral beliefs, developing value orientations in activities of interest, in accordance with individual psychological characteristics and abilities, harmonizing the emotional background, developing communication skills and self-control, socially normative behaviour, and independence. At this stage, the content of out-of-school education should meet the needs of pupils for individualization and development of knowledge, skills, and abilities in a certain profile of correctional educational activities.

At the integration stage, several aspects have particular significance: the development of social activity and independence, the fostering of constructive social interaction skills, the further refinement of moral convictions, the cultivation of enduring interests in various activities, and the enhancement of pupils' effectiveness in professional and labour-related endeavours.

Additionally, it is vital to consider and nurture their capabilities and professionally significant qualities. Furthermore, preparing children for personal and professional self-determination and self-realization is crucial at this stage. The involvement of children with intellectual disabilities in group work was preceded by professional development courses for teachers at out-of-school education institutions, which made it possible to expand and deepen professional knowledge, skills and abilities to adapt/modify spatial and subject, social and psycho-didactic educational environments in accordance with the modality-specific features of children's socialization and development. The curriculum focuses on deepening the competences of out-of-school education teachers and heads of group work in the following areas: effective organization of the educational process in group work involving children based on their interests, abilities, levels of socialization and development; application of innovative methods, forms, and techniques of teaching, considering the specific patterns of development and socialization of children and individual characteristics of interests, preferences, abilities and inclinations; formation and development of key subject competences of pupils in accordance with the direction of out-of-school education; solving the problem of correctional education of children in group work, preparing them for conscious professional choice and independent life in a democratic society; improving the knowledge, skills and abilities of pupils in the field of out-of-school education, developing the ability to evaluate, adapt and develop new educational materials considering the individual capabilities and needs of pupils with intellectual disabilities and specific learning situations, to creatively use pedagogical technologies of competence-based, special and inclusive education.

Correctional stage

From the moment a child with intellectual disabilities starts attending group work, a qualitatively new stage of correctional education begins, focused on promoting development and socialization and forming educational, cognitive, practical, and social competences. This stage involves the process of teaching, upbringing, development, and socialization of a child in group work at the primary and basic levels of out-of-school education in specially created spatial, subject, psycho-didactic, and social conditions of the educational environment. Group work sessions are organized twice a week, considering the sanitary and hygienic requirements for the load on children.

Result-oriented and analytical block of the SFM

This block includes intermediate and control analytical procedures and studies of the effectiveness of the measures taken, including an assessment of the children's level of socialization and developmental dynamics. The criteria include formation of the cognitive-awareness criterion (knowledge and awareness of social moral norms and rules of social behaviour); the motivational and value criterion (peculiarities of the child's attitude to social and moral norms); the emotional-regulatory criterion (degree of adaptability of the individual, degree of perception, understanding and assessment of one's own personality, and the capacity for emotional regulation); and the activity-behavioural criterion (a set of practical actions and deeds through which an individual implements the resulting cognitive abilities).

In practice the SFM guides teachers in structuring corrective education tailored to the needs of children with intellectual disabilities, fostering an inclusive learning environment. It can also be used for individualized support, when educators use the model to create personalized support plans based on each child's interests, potential, and needs, enhancing their learning experiences. By emphasizing essential conditions for inclusivity, the model encourages educators to create accessible and supportive learning environments for all pupils. The model aims to enable children with intellectual disabilities to thrive academically and socially, empowering educators to support their success.

Conclusion

The process of socialization for children with intellectual disabilities involves successful preparation for independent living, meaningful activity and participation in social life, and professional self-determination. Ensuring the processes of socialization and development for children with intellectual disabilities involves the use of two leading strategies: enhanced labour training and communication with various peers in the community (Johnson and Bauer, 1992). This emphasizes the importance of using out-of-school education resources in harmonizing the development and socialization of children with intellectual disabilities. The developed and substantiated SFM combines the following systemic blocks: target and content, as well as organizational, procedural, result-oriented, and analytical components. The content and methodological support for the socialization and development of these children in group work involving the ecological and naturalistic, tourist and local history, artistic and aesthetic directions of out-of-school

education has been developed and implemented. The spatial-subject, psycho-didactic and social conditions of the educational environment for out-of-school education, which should be created on the basis of an out-of-school education institution and a special school when involving schoolchildren with intellectual disabilities on the model of collective educational integration, are characterized. The curricula of the primary and basic levels of out-of-school education in the artistic and aesthetic area ("Folk Art"), the ecological and naturalistic area ("Floriculture") and the tourism and local history area ("Young Tourists and Local History") were modified; the structure of group work class was developed; the procedure was described for applying interactive teaching methods (mind maps, work with lapbooks, associative learning, the case method, the project method, etc.) to ensure the development and socialization of schoolchildren with intellectual disabilities in group work. An experimental study of the effectiveness of the proposed SFM proved its effectiveness.

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LEARNING AND TEACHING HISTORICAL CONTENT IN PRIMARY EDUCATION

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Abstract/Izvleček

This paper presents the results of a study whose primary goal was to determine the level of future teachers' knowledge of historical content taught in primary school, the ways they self-assess their abilities to organize the learning and teaching of historical content, and their beliefs about the possibilities of teaching history in primary education. The research was conducted using a survey of 157 fourth- and fifth-year students in teacher education programs. The results indicate that students demonstrate a satisfactory level of knowledge about historical content taught in primary education. They self-assess their skills for teaching of historical content as mostly developed and have positive beliefs about the possibilities of teaching and learning history at the primary education level.

Keywords:
competences of future teachers, learning outcomes, history, primary education, time comprehension.

Učenje in poučevanje zgodovinskih vsebin v osnovni šoli

V prispevku so predstavljeni rezultati raziskave, katere osnovni cilj je bil ugotoviti raven znanja bodočih učiteljev o zgodovinskih vsebinah, ki se poučujejo v osnovni šoli, preučiti načine, kako sami ocenjujejo lastne zmožnosti za organizacijo učenja in poučevanja zgodovinskih vsebin ter analizirati njihova prepričanja o možnostih poučevanja zgodovine v osnovni šoli. Raziskava, v kateri je sodelovalo 157 študentov četrtega in petega letnika programov za izobraževanje učiteljev, je bila izvedena s pomočjo ankete. Rezultati kažejo, da študenti izkazujejo zadovoljivo raven znanja o zgodovinskih vsebinah, ki se poučujejo v osnovni šoli. Svoje spretnosti za poučevanje zgodovinskih vsebin ocenjujejo kot večinoma razvite in imajo pozitivna prepričanja o možnostih poučevanja in učenja zgodovine na osnovnošolski stopnji izobraževanja.

Ključne besede:
kompetence bodočih učiteljev, učni rezultati, zgodovina, osnonvošolsko izobraževanje, razumevanje časa.

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Introduction

Historical consciousness is frequently cited as a crucial concept in historical education (Ahonen, 2005). It is defined as the ability to create a link between the interpretation of the past, comprehension of the present, and vision of the future (Jeismann, 1979). Schulz-Hageleit (2006) argues that the development of pupils' historical consciousness is only possible during adolescence. Several previous studies have shown that without a concrete understanding of chronology in a metric sense, pupils are unable to develop an understanding of historical time (Brumlik, 2005; Wilschut, 2012; Clark and Grever, 2018). Piaget (1969) emphasized that the development of a child's sense of time is only possible when they can connect it to places, people, and objects, since children aged 6 to 11 still do not have the capacity for abstract thinking. One of the earliest comprehensive reviews of the theory and research on the development of historical thinking, which supports this view and is followed by later research on this phenomenon, was conducted by Zaccaria (1978). His review showed that the capacity for formal historical thinking occurs in the middle and late teenage years, highlighting that understanding history depends on a mature sense of time and chronology. Based on such findings, some educators concluded that learning history requires a certain level of maturity and cognitive ability that is not yet developed in primary education pupils (Brumlik, 2005; Wilschut, 2012), while others advocate for teaching history in primary education with the aim of promoting faster development of historical thinking skills (Kübler, 2011; Skjaeveland, 2017). The final perspective accepted in the education system is held by those who advocate history instruction in primary education, however, less focused on complex chronologically-based insights and formal explanations of historical trends, and more on attainable goals. In this context, Levstik and Barton (2011) argue that history for younger pupils should be in the form of inspirational stories about real people, told without reference to precise measures of time. Research in this area was particularly intense in the 1980s when Levstik (1986) proposed a different approach to teaching history based on narrative, considering it more suitable for younger pupils. Furthermore, Kübler's (2011) research found that rudimentary time understanding appears at an early developmental stage and that even a child aged four to eight, in the pre-operational stage of development, can sequence the order of events in a series.

Most scientific studies, however, conclude that children of primary school age are not yet capable of formally thinking about history in a mature sense, that is, dealing with multiple cause-and-effect relationships and statements of probability related to social trends and events that cover long periods of time, occurring hundreds or even thousands of years ago (Wilschut, 2012; Tok, 2016; Nordgren; 2016). Despite this, primary education pupils can recognize simple cause-and-effect relationships, constructing visual and verbal descriptions of events, generalizing, and identifying similarities and differences in all types of phenomena. These abilities can be successfully applied in learning and teaching historical content (Levstik and Barton, 2011; Kübler, 2011; Skjaeveland, 2017). Levstik and Barton (2011) believe that children can understand historical time and have a sense of chronology even if they do not experience time as a measurable unit, and Kübler (2011) highlights narratives and a child's life story as essential for a child's understanding of chronology. He even argues that the emergence of historical consciousness can be observed as early as in five- or six-year-old children. Debates on this topic continue, but a conclusion on the existence or non-existence of historical consciousness in younger children has not yet been reached.

An overview of the developmental characteristics of children and their implications for history teaching shows the importance of their active and personalized participation in such instruction, which allows the development of a wide range of intellectual and social skills as part of such teaching (De Zan, 2005). For history learning at an early age, the development of chronological thinking is considered a necessary standard. This means that pupils should be enabled to distinguish between past, present, and future time, identify the temporal structure of historical narratives or stories (beginning, middle, and end), establish the temporal sequence in constructing their own historical narratives, interpret data presented on a timeline, create their own timeline, and explain changes and continuities over time (Reeken, 2011). Content that is emotionally close to pupils can serve as motivation and inspiration for more complex endeavours in teaching, such as projects about local history (Husanović-Pejnović, 2011). However, Koren and Najbar-Agičić (2007) caution that teaching the most notable events in the history of Croatia in the 4th grade can still be a significant challenge for pupils if they do not understand the content they are learning and merely memorize it mechanically without grasping the basic concepts. On the other hand, overly simplifying the curriculum can be harmful

to the development of pupils' skills and abilities. Therefore, teaching should be organized in such a way as to lead to the achievement of learning outcomes that stimulate pupils' desire for and interest in learning historical content.

Strandling (2005) states that pupils must understand that historians and others attempting to reconstruct the past are limited by the number of available sources and that they can interpret and use the same evidence in diverse ways. Therefore, one of the most important tasks in teaching historical topics is the analysis of sources and the study of multiple perspectives to arrive at more accurate conclusions. Inquiry-based teaching related to historical content should be planned with regard to data sources that could be interesting and useful for pupils. Lack of literacy can be considered a limiting factor in the comprehension of history at an early age (Balun Derganc and Braičić, 2022). Written sources are extremely important for history instruction, and this is a period in which pupils' reading abilities are still insufficient (Reeken, 2011). However, this limitation can be effectively compensated for by using historical images (De Zan, 2005). For effective teaching of history, Yilmaz (2008) emphasizes that teachers must have considerable knowledge about historical content, as well as generic and subject-specific methodological competences that enable the transformation of subject matter knowledge into effective learning experiences for pupils. Taylor and Young (2003) also emphasize three characteristics of effective history teaching: understanding theoretical and conceptual foundations, the process of historical reconstruction, and teaching in line with the psychophysical characteristics of pupils. However, Lee et al. (2009) caution that a high level of knowledge about history alone does not make someone an effective teacher; it requires a combination of subject matter knowledge with other variables, such as preparing effective methodological scenarios, setting clear learning outcomes, enthusiasm in teaching, and well-developed methodological competences.

Research Methodology

Research Objectives

The objectives of this study were to determine the knowledge of students, future teachers, about the historical content taught in primary education, investigate how they self-assess their ability to organize the learning and teaching of historical content, and examine their beliefs about the possibilities of teaching history in primary education.

Research Questions

The following research questions stem from the stated research objectives:

1. What is the level of knowledge among students in teacher education programs regarding the historical content taught in primary education?
2. How do students in teacher education programs assess their skills required for organizing the learning and teaching of historical content?
3. What are the beliefs of students about the possibilities of teaching history in primary education?
4. Is there a correlation between students' level of knowledge about historical content, self-assessment of their skills to organize the learning and teaching of historical content, and their beliefs about the possibilities of teaching history in primary education?
5. Is there a statistically significant difference in the a) knowledge, b) self-assessmentof skills, and c) beliefs of students with respect to their grade in the course Croatian History and their year of study?

Participant Sample

The research was conducted on a sample of 157 students in the fourth and fifth years of the Faculty of Teacher Education at the University of Zagreb. The sample included seventy-six fourth-year students and eighty-one fifth-year students. Regarding the grades in the course Croatian History which students attended in their first year of study, after taking the exam two students achieved a passing grade (2), 18 students achieved a good grade (3), 66 students received a very good grade (4), and 68 students received an excellent grade (5).

Research Instruments

For the purposes of this study, a special questionnaire tailored to the needs of the study was constructed. In the first part of the questionnaire, demographic information about the participants (gender, year of study) and their grade in the course Croatian History were collected. The second part of the questionnaire contained twenty questions aimed at assessing the students' knowledge of the historical content taught in primary education. The third part of the questionnaire consisted of a list of 20 skills required for organizing the learning and teaching of historical content in primary education, divided into four subscales (skills related to

the application of teaching strategies and methods for active learning, skills related to organizing outdoor activities related to historical content, skills related to the application of historical knowledge and generic skills related to history teaching). Students self-assessed their proficiency in these skills on a five-point Likert scale (1 - not developed at all, 2 - poorly developed, 3 - partially developed, 4 - mostly developed, 5 - fully developed). The fourth part of the questionnaire contained twenty statements about learning and teaching historical content in primary education, divided into three subscales (students' opportunities for learning historical content, the importance of using active learning strategies and methods, and the importance of teacher competences for teaching historical content). Students evaluated their level of agreement with these statements on a five-point Likert scale (1 - strongly disagree, 2 - disagree, 3 - neither agree nor disagree, 4 - agree, 5 - strongly agree).

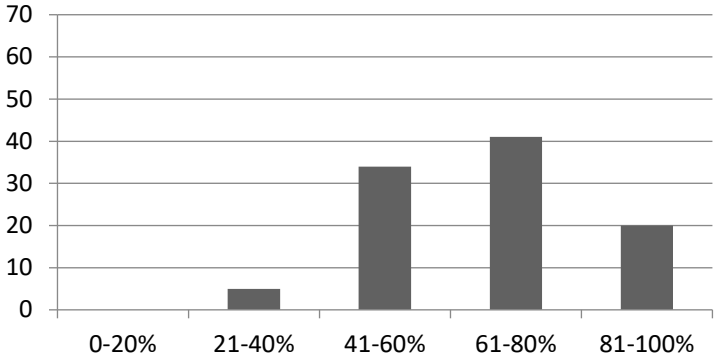
Data Processing Methods

Statistical analysis of the data was conducted using the SPSS 20.0 statistical software package. Descriptive parameters, such as mean and standard deviation, were used to determine the descriptive indicators of individual items and scales. Pearson correlation coefficients were calculated to determine the intercorrelation of different variables, while ANOVA was used to determine the statistical significance of differences among the subscales used to assess students' skills and beliefs. The t-test was employed to determine differences in respondents' answers based on their grade in the course Croatian History and year of study.

Results

The participants achieved an average score of 15.29 points out of a possible twenty-two on the knowledge test, which corresponds to 69.51% correctly answered questions, indicating a moderate level of knowledge. Graph 1 shows that none of the students scored between 0% and 20% on the test. Most students, 41%, answered between 61% and 89% of the test questions correctly. Only 20% of students scored between 81% and 100% on the test. Based on these data, it can be concluded that most students have a moderate level of knowledge of historical content, followed by those with a basic level of knowledge, and then those with a high level of knowledge. While the students' level of knowledge is satisfactory, the results suggest room for

improvement in developing this aspect of student competences to concentrate the knowledge level above 80% and aim for a higher level of knowledge.



Graph 1: Correct answers achieved on a historical content test

Further analysis confirmed that there is no statistically significant difference in the knowledge of students in the fourth and fifth years ($t = 0.548$, $p = 0.584$), nor in the level of knowledge about historical content among students based on their grade in the course Croatian History ($t = 1.944$, $p = 0.054$).

The results of student self-assessment of skills required for organizing the learning and teaching of historical content are presented in Table 1.

Table 1. Self-assessment of skills for organizing the learning and teaching of historical content

Skill groups	N	M	SD	F	p
Application of active learning strategies and methods	157	3.79	1.02	3.21	0.051
Skills related to organizing outdoor history learning	157	3.60	1.11		
Skills related to the application of historical knowledge	157	3.61	0.97		
Generic skills related to history teaching	157	4.02	0.94		
Self-assessment of skills (total)	157	3.76	1.01		

The average self-assessment score for skills is 3.76, with an average deviation from the mean of 1.01. This indicates a high level of positive self-assessment (3.76 / 5.00; 75.00%). Students gave the highest rating to their generic competences for organizing the teaching and learning of historical content, such as communication skills ($M = 4.41$, $SD = 0.91$) and openness to diverse opinions and attitudes ($M = 4.27$, $SD = 0.88$). On the other hand, they assessed their skills for organizing outdoor history learning as the least developed ($M = 3.60$; $SD = 1.11$).

They self-assessed their skills at applying historical knowledge almost equally (M = 3.61; SD = 0.97), with the weakest self-assessment in the ability to establish cause-and-effect relationships in historical content (M = 3.15; SD = 1.07). Although students assessed their generic teaching-related skills as more developed compared to other skills, ANOVA did not find a statistically significant difference in the self-assessment of individual groups of skills for organizing the teaching and learning of historical content (F = 3.21; df = 156; p = 0.051) (Table 1).

Further analysis shows that there is no statistically significant difference in the self-assessment of skills between students in the fourth and fifth years (t = 0.914, p = 0.362), nor in student self-assessment of skills based on the grade obtained in the course Croatian History (t-value = 0.199, p = 0.843).

The third scale in the questionnaire assessed student beliefs about teaching historical content in primary education. Fifteen statements from the third scale of the questionnaire reflected positive beliefs, while five statements reflected negative beliefs. When calculating the average value of respondents' answers, the results for negatively oriented statements were decoded to obtain a valid insight into the results obtained. The results are presented in Table 2.

Table 2. Student beliefs regarding teaching and learning history in primary education

Subscales	M	SD	F	p
Pupils' capacity to learn historical content	3.51	0.94		
Importance of using specific strategies for active learning	3.94	0.94	1.04	0.375
Importance of teacher competences for teaching historical content	3.93	0.80		
Beliefs (total)	3.79	0.89		

The findings reveal that participants have a positive attitude toward the potential for teaching and learning historical content in primary education (M = 3.79; SD = 0.89). This reflects a high level of positive beliefs (3.79 / 5.00; 76.00%).

Students show the highest level of agreement with statements related to the importance of using active learning strategies and methods when teaching historical content at the primary education level (M = 3.94; SD = 0.94). They express extremely positive opinions about implementing inquiry-based teaching (M = 4.40; SD = 0.70) and museum visits, which provide pupils with a better understanding of the past (M = 4.46; SD = 0.68). Moreover, they believe that teachers should possess well-developed methodological competences required for teaching historical content suitable for the pupils' age.

Students strongly agree that a teacher can significantly influence pupils' interest in learning historical content (M = 4.69; SD = 0.51) and that teaching and learning historical content can be organized in many engaging ways for pupils (M = 4.57; SD = 0.59).

The students also generally believe in the potential for pupils learning historical content in primary education considering their psycho-physical characteristics, but there is a slight tendency towards indecision in this respect (M = 3.51; SD = 0.94). They mostly disagree with rote memorization of historical content without understanding (M = 2.02; SD = 1.06) and with the use of frontal teaching methods (M = 2.41; SD = 1.17). However, students are uncertain about whether pupils in primary education find historical content difficult to understand (M = 2.98; SD = 1.07), and whether historical content in the school subject Science and Social Studies is underrepresented (M = 2.90; SD = 0.94). Interestingly, students are also uncertain about whether pupils in primary education are capable of finding information related to historical content on their own (M = 3.42; SD = 1.00), despite having an extremely positive view of inquiry-based learning and the need for its more frequent application when learning historical content (M = 4.40; SD = 0.70).

Further data analysis based on Table 2 did not reveal any statistically significant differences in student beliefs regarding the potential for primary education pupils to learn history on the above-mentioned subscales (F = 1.04; df = 156; p = 0.375). Additionally, there was no statistically significant difference found between the beliefs of students in the 4th and 5th study years (t = 1.298, p = 0.196), nor were there differences based on the grades students achieved in the History of Croatia course (t-value = 0.176, p = 0.86).

At the end of the study, it was necessary to investigate whether there was a correlation between the examined variables (knowledge, self-assessment of skills and beliefs) (Table 3).

Table 3. Correlation between the examined variables (knowledge, self-assessment of skills and beliefs).

	Knowledge	Self-assessment of skills	Beliefs
Knowledge	/	0.183	0.179
Self-assessment of skills	0.183	/	0.299
Beliefs	0.179	0.299	/

The strongest correlation exists between student beliefs in the potential for teaching and learning history in primary education and their self-assessment of skills for it (r = +0.299). The correlation coefficient indicates a weak connection, and the

respondents who expressed more positive beliefs rated their skills for teaching historical content at a higher level. There is also a slight correlation between student beliefs and their knowledge ($r = +0.179$), as well as between their self-assessed skills and knowledge ($r = +0.183$).

Discussion

Teaching historical content in primary education is of immense importance because it equips pupils with the ability to understand the concept of time, recognize cause-and-effect relationships between events, understand significant historical events, and place them within specific time periods. Therefore, in the formal education of future teachers, it is crucial to emphasize the development of adequate competences for organizing the learning and teaching of historical content and implementing related curriculum learning outcomes. While this is a relevant area of education, only a limited number of studies have focused on teaching history in lower primary school grades (Skjæveland, 2017; Dixon and Hales, 2014; Kübler, 2011).

The results obtained in this study show that knowledge among teacher education students about historical content is developed at a moderately high level. Since only a small percentage of students (20%) demonstrated a superior level of knowledge, it is evident that there are opportunities for further improvement in the development of this aspect of student competence. Indeed, a high level of knowledge about historical content, coupled with well-developed generic and subject-specific pedagogical and methodological competences that enable teachers to transform subject knowledge into effective learning experiences for students, is considered essential for the successful organization of teaching and learning about historical content in primary education (Yilmaz, 2008; Taylor and Young, 2003). Therefore, it is recommended that during the formal education of future teachers, more emphasis be placed on achieving a higher level of knowledge among students. However, since effective teaching of historical content involves multiple interrelated variables, this study also encompassed students' self-assessment of their skills for the organization of historical content teaching.

Previous research has shown that student perceptions of effective history teaching are associated with four fundamental areas: knowledge of historical content, general pedagogical knowledge, knowledge of the psycho-physical characteristics of pupils,

and skills in teaching historical content, including adequate methodological competences (Boadu, 2015). However, Lee (2011) emphasizes that a high level of historical knowledge alone does not make someone an effective teacher. It requires a combination of subject knowledge with other variables, such as lesson planning and preparation focused on the pupil, setting clear learning outcomes, and the abilities and skills of effective teaching, i.e. transforming concepts into learning formats acceptable to pupils. In this regard, future teachers assessed the skills required for organizing the learning and teaching of historical content as generally well developed, with the highest ratings given to their generic abilities related to history teaching, such as communication skills and openness to diverse opinions and perspectives. Additionally, they gave high ratings to their skills in applying various teaching strategies and methods to the teaching of history, especially those aligned with the psycho-physical characteristics and cognitive abilities of pupils.

When teaching historical content in primary education, the emphasis is on practical learning experiences in history, the utilization of local historical sources, and the direct involvement of pupils in interpreting, researching, and personalizing history (Reeken, 2011). Teaching history at the beginning of schooling should not burden pupils with historical facts; instead, it should prioritize their experience of the past and methods for its understanding (Reeken, 2011). Methods and approaches for teaching local history do differ significantly from those in higher grades because of the need to adapt instruction to the cognitive abilities of younger pupils (Reeken, 2011). Therefore, effective teaching strategies, methods, and approaches are considered to include visits to local museums (Govenkar Okoliš, 2022), interviews with authentic individuals about past ways of life, exploring local history through the study of cultural and historical monuments, photographs, and historical artefacts, simulations of historical events, and project-based learning related to historical content (Balun Derganc and Braičić, 2022).

The first studies of children's understanding of historical time emerged in the early 20th century, with psychologists showing that children can begin to maturely understand and learn about historical time at around 11 years of age (Groot-Reuvekamp et.al, 2017). However, some empirical studies provided evidence that children as young as six have some understanding of historical time and can differentiate concrete changes over time in images and stories (Harnett, 2007; Levstik and Barton, 2011).

Given the conflicting views of various scholars on teaching history in primary education, this study examined the beliefs of future teachers about the potential for teaching history in primary education. The results show that teacher education students express the highest degree of agreement with statements related to the possibility of using active learning strategies and their importance, especially the application of inquiry-based and outdoor teaching. Their beliefs align with contemporary insights into pupil-centred instruction and their active role in the educational process (Balun Derganc and Braičić, 2022).

Ali et al. (2017) emphasize that pupils are less interested in learning history if the focus is solely on facts and knowledge acquisition with the exclusive use of memorization methods; thus, the application of active learning methods becomes one of the key success factors in teaching. Additionally, the research results show students' awareness of the teacher's role and the methodological competences required for teaching historical content suitable for pupils of this age. However, when assessing the potential of primary education pupils to learn historical content, there is a mild tendency toward indecision among respondents. Students, probably because of their lack of practical experience in working with pupils, are uncertain when evaluating whether historical content is interesting and fully comprehensible to primary education pupils. They are also unsure whether primary education pupils can independently find sources related to historical content. Given the existing contradictory views, with some experts believing that studying history requires a certain level of maturity and cognitive ability that primary education pupils may not possess (Brumlik, 2005; Wilschut, 2012), while others advocate for early history education in the hope of accelerating the development of historical thinking abilities, the inclination of students toward indecision can be understood to some extent. This finding underscores the need for further development of positive beliefs among teacher education students regarding teaching history in primary education, in a manner that aligns with the cognitive abilities of pupils in middle childhood. Unadapted learning and teaching of history in primary education, with abstract tasks disconnected from concrete activities, can be perceived by pupils as a burden, separate from the context, and primarily focused on mechanical and routine knowledge acquisition. It becomes devoid of the potential for deeper understanding and the application of acquired knowledge (Wilschut, 2012).

Indeed, history education at the primary level aims to develop pupils' interest in and motivation for learning history and to provide them with a realistic view of its inherent limitations. It enables pupils to assess how people, events, and decisions from the past impact the present and future (Clark and Grever, 2018). Ultimately, historical content helps pupils recognize their own relationship to history, understanding that their actions and lives are potentially part of history yet to be written. Therefore, it is crucial that teacher education students, as future participants in the education system, are aware of the importance of teaching history in primary education. History helps develop pupils' understanding of diversity and cultural environments, fosters logical and creative thinking, allowing pupils to develop skills that are useful in other subject areas (Fru, 2015). It enables pupils to develop specific skills that help them understand society (Cruse, 2011; Nordgen, 2016; Straaten et al., 2016). Some studies consider history as essential in developing and fostering children's sense of identity (Cruse, 2011; Bowen et al., 2012; Fru, 2015; Straaten et. al. 2016). According to Tok (2016), history contributes to children's moral understanding and helps children become active citizens, encouraging their curiosity and enthusiasm (Straaten et al., 2016). This implies that inquiry-based learning in history education will show pupils that history is crucial for understanding the past, present, and future. Considering all the above, it is essential to equip future teachers to introduce pupils to navigating through time and to teach historical content effectively while developing beliefs positively aligned with this goal.

Conclusion

This study on the knowledge of future teachers about historical content, their self-assessment of teaching skills, and their beliefs about teaching historical content in primary education provides valuable insights for the development of the concept of preparing future teachers for teaching historical content in primary education. The acquired knowledge, combined with pedagogical, didactic, and methodological competences, an understanding of pupils' cognitive, emotional, and social needs, and the adaptation of teaching approaches accordingly, planning teaching that is tailored to the developmental stages of pupils, as well as a good knowledge of appropriate teaching strategies and methods, are key components of teacher readiness for teaching historical content and should be part of initial teacher education. Furthermore, this research suggests that the further development of curricula for initial teacher education, as well as the provision of educational resources and programs for their professional development in the field of history teaching, are of paramount importance.

Only through the efforts and dedication of teachers, along with the support of educational institutions, can we ensure that history is taught in a way that promotes understanding, interest, and a deeper connection of pupils with the past.

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CASE METHOD LEARNING FOR IMPROVING CRITICAL THINKING SKILLS AMONG ELEMENTARY SCHOOL STUDENTS

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Abstract/Izvleček

This study aimed to analyse students' critical thinking profiles and assess teachers' needs for case method learning to improve critical thinking skills. The research method used was qualitative. The study's results reveal that most students' mastered critical thinking skills profiles are indicators of reveals existing facts and drawing conclusions. However, indicators that students have not fully mastered critical thinking are formulating the key issues, selecting logical arguments, conducting analysis, and conducting evaluations. As a result, teachers require a learning method, precisely the case method, to encourage critical thinking skills.

Keywords:
Case Method; Critical thinking; Elementary School

Učenje z metodo primera pri izboljšanju sposobnosti kritičnega mišljenja osnovnošolcev

Namen te študije je bil identificirati profile kritičnega razmišljanja učencev in oceniti potrebe učiteljev po učenju metode primera pri izboljšanju veščin kritičnega mišljenja. Uporabljena raziskovalna metoda je bila kvalitativna. Rezultati študije razkrivajo, da so obvladani profili veščin kritičnega mišljenja večine učencev pokazatelji razkrivanja obstoječih dejstev in sklepanja. Kazalniki, da učenci kritičnega mišljenja niso povsem obvladali, pa so oblikovanje glavnih vprašanj, izbira logičnih argumentov, analiza in ocenjevanje. Posledično učitelji potrebujejo učno metodo, natančno metodo primera, da bi spodbudili sposobnosti kritičnega mišljenja.

Ključne besede:
Študija primera, kritično mišljenje, osnovna šola

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Introduction

One of the skills required for 21st-century learning is critical thinking (Kim et al., 2019; Özelçi, 2023). These critical thinking skills need to be acquired because they can provide solutions to problems, carry out tasks in new ways, help in work, and influence future income (Li, 2022). Analysing and assessing information, solving issues, making decisions, and drawing conclusions are all examples of critical thinking (Çelik et al., 2018). Students also need critical thinking to develop a combination of theoretical knowledge with practical learning (Varenina et al., 2021). In addition, the purpose of critical thinking is to increase the skills of students to use reason in answering more complicated questions or finding and solving more complicated problem cases (Handayani, 2020). Critical pupils are more engaged in problem-solving, have self-corrective thinking, and can better detect and manage their emotions (Suhirman et al., 2021).

However, critical thinking skills among Indonesian students still need to be improved to match the expectations of the twenty-first century (Sarwanto et al., 2021). According to a World Economic Forum (WEF) study on the 2016-2017 Global Competitiveness Index (GCI), Indonesia placed 41st out of 138 nations, below Malaysia and Thailand's GCI (Nababan, 2019). Previous research also revealed that Indonesian students' critical thinking skills still needed to be improved (Susetyarini and Fauzi, 2020). Preliminary studies conducted by Mustika (2020) revealed that pupils' critical thinking skills in Indonesia are inadequate because subject matter questions do not allow pupils to think critically and instead focus on learning ideas (Mustika et al., 2020). Furthermore, students' critical thinking skills in scientific learning are still lacking, particularly in tasks that require fundamental clarification, basic decision-making, conclusions, advanced categorization, assumptions, and integration (Sari, R. M. et al., 2019). Research reveals that student critical thinking skills with indicators of primary clarification, fundamental support, conclusions, advanced clarification, and strategy and tactics still need to be higher (Hidayati and Sinaga, 2019).

According to the findings of interviews with fifth-grade instructors in July 2023 from multiple elementary schools in Surakarta, Indonesia, pupils' critical thinking skills still needed to be improved and should be improved. It can be seen from the results of student assignments, which are still low. Students still rely on memorization in

answering questions and have yet to be able to work on questions in the analytical and evaluative categories. In addition, when students are faced with problems, they cannot overcome them. Based on the results of interviews, students were less active in the learning process. Teachers have not used variations in learning methods. This is because teachers who can vary learning impact create a learning environment that draws attention, allowing students to be active and engage in every step of the learning process, resulting in a more successful learning experience (Casetama and Utami, 2023).

One of the elements contributing to the inadequate capacity to think critically is an inefficient learning process, method, strategy, and models (Bustami et al., 2018). Learning methods that are still conventional are ineffective in improving critical thinking skills (Anwar & Setyaningrum, 2021; Jatmiko et al., 2018). This is because conventional learning methods are based on teacher-centred learning and do not allow pupils to use analytical abilities, practice problem-solving, or assess challenges (Roza and Luthan, 2022). Moreover, conventional methods may not provide pupils with the skills necessary to acquire and remember information (Aldarmahi, 2016).

Based on the findings of the interviews, the teacher's learning method consists of questions and answers, and debates. This strategy has yet to improve elementary school pupils' critical thinking skills. As a result, teachers must encourage improvement in critical thinking skills through learning methods. Examples and non-examples are two types of learning approaches that can help develop critical thinking (Jackson et al., 2022; Nurunissa and Abdullah, 2023), along with the experimental method (Hamdani et al., 2019), and the concept map method (Barta et al., 2022; Tseng, 2020). Apart from that, methods that can improve students' critical thinking skills include the case method (Alsaleh, 2020; Cotugno, 2018; Mahdi et al., 2020).

The case method is a learning method that involves investigating instances to grasp circumstances, concepts, and procedures for making case-solving judgments (Nurkhin et al., 2022). This method presents narrated content accompanied by questions and activities to encourage students to participate in group discussions and solve complex problems (Sagala et al., 2022). The case method is also intended to help students enhance their critical thinking skills and capacity to solve issues and discover answers (Nurkhin et al., 2022). This method gives students a holistic perspective on challenges via critical thinking, teamwork, and communication (Puri,

2022). Aside from that, the potential influence of teaching and learning activities should be investigated through an empirical and holistic examination (Roza and Luthan, 2022). The case method is unique in that it is based on real-life circumstances, includes supporting data and papers for examination, and gives solutions to the open issues or challenges addressed (Mahdi et al., 2020).

The benefits of the case method are that it relieves students from the burden of rote learning or passive learning and focuses on self-discovery to form students' perspectives and collaboration from other perspectives, which play an essential role in clarifying and consolidating ideas (Nkhoma et al., 2017). The steps of the case method include the teacher forming groups of students, each group observing and investigating the agreed case or topic, each group conducting data or case analysis through discussion, each group presenting or communicating the results of group analysis, the groups respond to the cases discussed, and the teacher and students provide conclusions on solutions to the problems discussed (Harahap and Yusra, 2022).

Therefore, based on the preceding, this study is crucial in determining the necessity for the case method to promote students' critical thinking. The capacity to think critically will assist pupils in tackling numerous challenges they may face today or in the future (Bernadetha and Lamhot, 2020). According to improved knowledge of theory, the case method is a learning method that may help students develop and employ critical thinking skills, problem-solving, assessing problems, and offering practical solutions (Haryati et al., 2022). Critical thinking skills are needed to solve problems (Yeung et al., 2023). The case method can focus on training students to solve problems and can become a medium for students to evaluate critically (Bridgman et al., 2018).

Previous research on this topic includes the influence of problem-based learning (PBL) on creative and critical thinking (Leasa et al., 2023; Reyk et al., 2022; Ulger, 2018). According to the findings of this study, PBL can help students with nonroutine problem-solving processes by retaining uncertainty and fostering inventive thinking. An equivalent conclusion, however, could not be obtained for the critical thinking disposition. Second, there has been research on the effective use of the case study method to increase students' critical thinking (Cotugno, 2018). Third, the guided inquiry learning method has been explored for its role in improving critical thinking skills (Murnaka et al., 2019). The results of this study said that experiments using guided inquiry learning methods increased critical thinking

skills in mathematics. Fourth, there has been research on improving critical thinking skills through case-based textbooks (Telaumbanua et al., 2022).

This study, however, varies from past research in that it will examine the need for learning methods to increase one of the key 21st-century talents: critical thinking. Unlike the previous study, the researcher used case-based method learning in this study. Furthermore, this study was conducted in the activator program's primary schools. The Activator School Program is utilized to help each school produce a generation of lifelong learners with Pancasila student profiles (Marmoah et al., 2023). This research will help teachers and stakeholders in improving critical thinking skills using case method learning. In addition, the results of this study provide solutions for the use of learning methods in class so that students are active in the learning process. So, the research questions in this study are as follows:

a. What is the profile of students' current critical thinking skills from the teacher's perspective?
b. What is the need for the case method in teacher learning to improve critical thinking skills?

Methods

The research design used in this study was qualitative. A case study was chosen as the research approach in this study. A case study is a piece of research that seeks to explore cases in depth within certain predetermined boundaries (Creswell and Poth, 2016). The case in this study is the problem of students' critical thinking and the need for teachers to improve these skills through the case learning method.

The subjects of this study were fifth-grade teachers from the activator program of elementary school, totalling six people in Surakarta City, Central Java, Indonesia. The activator program elementary schools that were used as research sites included the innovative Ta'Mirul Islam Elementary School, Al-Firdaus Elementary School, Bibis Luhur II Elementary School, and Muhammdiyah 4 Elementary School Kandang Sapi, Bayan Elementary School, and Rejosari Elementary School. This research was conducted in July-August 2023.

The technique used to collect research subjects was purposive sampling. This sampling technique is also known as the judgment sampling method since it involves selecting study samples depending on sample quality and criteria in research (Etikan

et al., 2016). The elementary school activator program was selected because the activator school focuses on holistically developing student learning outcomes, so it is of intrinsic interest. In addition, this research focuses on the city of Surakarta, Indonesia, which was chosen as the location for the study because it is a cultural city that is rich in local wisdom.

Interviews were used as data-gathering methods. Interviews were used to determine the profile of students' critical thinking skills from the teacher's point of view and the teacher's needs for the case method. Critical thinking indicators used in this study were adapted from (Ennis, 1996; Facione and Facione, 2013) and consist of the following: indicators formulating the main issues, disclosing existing facts, selecting logical arguments, conducting analysis, conducting evaluation, and drawing conclusions.

The following is a table of interview instruments showing teachers' need for the case method (Table 1):

Table 1. Teachers' need for the case method

Interview purpose	Indicator
Obtain information about the characteristics of the learning method used	Types of learning methods
	Learning method criteria
Obtain information about the need for case-based learning methods (case-method) to improve critical thinking skills.	The need for learning methods to improve critical thinking

Adapted from (Wulandari, 2022)

The data validity technique in this study was content validity. The instrument is valid if it meets the content validity determined by expert judgment. Expert judgments from those with expertise in the field, acknowledged by others as certified experts, and offering information, facts, judgments, and assessments are often utilized to carry out this sort of validity (Caligiore-Ge and Ison-Zintilini, 2021). The experts who conducted this validity assessment are lecturers in learning evaluation. The credibility test or reliability used critical reviewers. Such reviewing is a way to determine the credibility of data by compiling research data that will be used in an orderly manner to facilitate review and increase the reliability of research information (Sutopo, 2002).

This study's analytical method was a flow model of analysis, which covers the processes of data gathering, data reduction, data display, and conclusion (Miles et

al., 2019). Research data was collected using interviews. After that, the data reduction step was completed by summarizing, choosing, concentrating, grouping, and categorizing research material based on the generated topic or pattern. Following that, the stage of study data presentation was completed, which was deemed critical since it would make it simpler for researchers to grasp the information obtained, allowing them to draw more suitable conclusions or take action in the future. Brief descriptions, charts, tables, correlations between categories, graphs, and so on can all be used to display qualitative data. Finally, conclusions were made to determine the significance of the data obtained by identifying similarities and differences to determine the solution to the problem that arose. During the research, the conclusion was also validated.

The procedure in this study was conducted by seeking problems or research topics that occurred to students in the field and conducting literature studies on current topics in international journals. Next, we formulated the problem and research objectives. After that, research instruments and data collection were developed. After that, the researcher conducted data analysis and data validity testing. Then, if the data was said to be valid, the research conclusions were made.

Result and Discussion

Based on the data collection, the following research results were obtained:

Profile of Critical Thinking Skills

Based on the results of the interviews, the profile of students' critical thinking skills in class V is as follows:

The indicators formulate the main problems for students, consisting of sub-indicators that identify problems in learning and formulate the main problems. Respondents said the skills of most class V students did not allow them to formulate the key issues in detail. Students still need guidance in formulating and understanding problems and solving problems. One of the respondents said,

> *Students are only able to know the initial problems and are still assisted by the teacher in finding solutions*

The learning methods used by the teacher included the question-and-answer method, discussion, and the inquiry cycle. The teacher's technique involved formulating the subject matter by asking simple questions. Teachers utilize those

methods to help pupils develop their critical thinking skills in the classroom. However, those methods have not been shown to improve pupils' overall critical thinking.

According to the interview results, most students can express the existing facts using their critical thinking skills.

> *Some students are able to express existing facts by conveying existing information using simple language that can be understood.*

This can be seen in the learning process for conveying information in the reading text. The learning carried out to improve critical thinking skills in this research is science and social science (IPAS) learning in the Merdeka Curriculum (Independent Curriculum). However, respondents also said that some students could not distinguish between facts and opinions. The facts and opinions in question are information contained in the text reading and information obtained during the investigative learning process. The method used by the teacher to reveal the facts is the question-and-answer method, contextual and collaborative.

Teacher responses in interviews on the indicator of choosing logical arguments revealed that students were unable to find logical arguments or reasons to solve problems in the learning process.

> *Students cannot choose logical arguments by thinking systematically.*

This can be seen when students are not able to provide reasons that are appropriate and relevant to the main problem discussed in the discussion process. Besides, some students are only able to convey information explicitly according to the reading text. Most students have not been able to think systematically and structurally. Therefore, students still need teacher guidance in selecting structured and systematic logical arguments.

Indicators of analysing fifth-grade students can already find information or lesson content. This can be seen in some students who have a good understanding. On the other hand, some students are still unable and need the teacher's guidance in analysing information, such as connecting questions with statements of the concept of the subject matter and stating informed decisions or reasons for solving problems. The point is students can understand the meaning of the information contained in the lesson material. However, students are not yet able to connect some information and interpret it. Respondents said that the teacher usually used the question-and-answer method and discussion so that students could analyse information.

There are some students who can't yet connect questions with lesson concept statements. They still need guidance in carrying out the analysis.

Indicators of evaluating student critical thinking have sub-indicators on the capacity of students to assess the credibility of information obtained from various sources. The results of the interviews revealed that almost all students had been unable to assess the credibility or trustworthiness of information obtained from the internet and social media to support problem-solving in the classroom learning process. Students immediately search for information on websites or Blogspot without checking the correctness of the information. Therefore, students still need teacher guidance in finding reliable information and evaluating it. This is proven by the results from the class teacher interviews, which reveal that

Grade 5 students are not yet able to assess the credibility of the information they obtain…. Students still need teacher assistance and guidance in searching for credible information on the internet and evaluating that information.

The final indicator of critical thinking in this study is the ability to draw conclusions. Interviews with respondents revealed that some students could convey the conclusions of the subject matter using their language. Some students are also capable of compiling hypotheses. Teachers still assist students who experience difficulty drawing conclusions from available evidence or information.

The majority of students are capable of inferring information simply based on the language itself.

Based on the findings of the preceding study, indicators of critical thinking skills that most students already have are expressing existing facts and concluding. Indicators that students have not fully mastered critical thinking show up in the following areas: formulating the key issues, selecting logical arguments, conducting analysis, and evaluating. Therefore, the critical thinking skills of elementary school students have not met expectations.

The findings of this investigation are consistent with earlier studies, which revealed that the profile of the critical thinking skills of the majority of students is still low, with a percentage of 30.56%, compared to only 22.22% who have a high level of critical thinking skills (M. K. Sari et al., 2021). The factor that differentiates is the research subject when the study is dealing with fourth-grade students. In contrast, this research is aimed at fifth-grade students. The intermediate stage, where the indicators of identification and explanation, recognition of context and assumptions,

evaluation and synthesis of information, and conclusion with related outcomes are still in the basic stage, require improvement (Suciati et al., 2022).

The cause behind the low skills of students is that the learning methods employed have not facilitated students' critical thinking skills. Based on the constructivism theory, the assumption reveals that students actively develop and build their knowledge and that the teacher should not use traditional or conventional ways of delivering lessons (Schunk, 2012). Constructivism theory also reveals that activity in constructivist learning consists of observing phenomena or issues occurring, collecting data, formulating and testing hypotheses, and cooperating with others. These activities are in line with the indicators of critical thinking in this study. Therefore, learning methods that facilitate constructivist activities are needed to overcome students' critical thinking problems.

The results of this study are in line with previous research which revealed that students who were taught using conventional methods, including lecture, discussion, and assignment methods, had lower critical thinking skills compared to other methods such as RICOSRE (Reading, Identifying a problem, Constructing the solution, Solving the problem, Reviewing the solution, and Extending the solution) (Mahanal et al., 2019). Other methods used to develop critical thinking skills include the argument mapping method (Dwyer et al., 2012), the digital game-based learning method (Hussein et al., 2019), and the snowball throwing method (Khotimah and Nurhasanah, 2024).

The Need for the Case Method in Improving Critical Thinking Skills

The results of interviews on the implementation of learning in class revealed that learning used the Merdeka Curriculum. The Merdeka curriculum will begin to be implemented in 2020, where teachers have the freedom to contribute to implementing the curriculum, including designing the learning process according to environmental conditions (Mustofa et al., 2023). The lesson plan is called a teaching module based on the flow of learning objectives.

The learning method used by most teachers involved question-and-answer, discussion, and contextual methods. One of the teachers stated the following:

> *We use discussion and question and answer methods during the learning process with a problem-based learning model.*

The technique used by the teacher when asking questions uses trigger questions. Presentation of material involved the use of learning media such as books, learning

videos, power points, and worksheets. The time allocation used in the learning process follows the subjects, usually taking two lesson hours (70 minutes). Based on the outcomes of the experience, this time was not employed effectively to apply learning methods to increase critical thinking skills. This is because the question and response, discussion, and contextual procedures must be repeated to sustain critical thinking skills. Elementary school pupils aged 5-11 years generally remember things quickly and quickly forget them (Limbong et al., 2024).

According to the research, the critical thinking skills of most pupils remain inadequate and do not meet the expected standards. The standards used in this study to measure critical thinking skills were taken from Ennis (1996) and Facione and Facione (2013)**,** which consist of indicators formulating the main issues, disclosing existing facts, selecting logical arguments, conducting analysis, conducting evaluation, and drawing conclusions. Other research uses similar indicators: skills in interpreting, analysing, concluding, and explaining (Sarwanto et al., 2021).

Even though responding teachers stated that the learning approaches utilized were appropriate and capable of improving critical thinking, problem-solving, and active learning, fifth-grade students' critical thinking skills still did not meet expectations according to the critical thinking indicator criteria used in this study. Interviews with respondents revealed that teachers still needed learning methods that could improve critical thinking skills, in particular, case-based methods, or case methods. The teacher revealed the following in the interview:

> *The learning methods currently used still do not improve critical thinking as a whole. Students still need guidance. We need new methods to improve student's critical thinking skills.*

The findings of this study support prior studies showing that adopting the case technique may successfully increase critical thinking skills (Fauzi et al., 2023). Other studies have also revealed that case studies improve critical thinking skills (Bezanilla et al., 2019). This follows the view of constructivist learning theory, which shows that learning activities in the classroom lead to real problem-solving, which forms knowledge, reflection, and changes in understanding (Kumar Shah, 2019). Therefore, the case method follows the view of constructivist learning theory.

The findings of this study have the potential to improve 21st-century skills, particularly critical thinking and problem-solving skills, with the use of this method.

The case method can improve skills of analysis, formulation, reflection on problems, and evaluation so that decisions can be made to overcome existing problems. Previous research revealed that the case method helps students to discuss among friends to reflect on problems, to practice critical thinking, analysis, and evaluation, and to discuss potential solutions for overcoming existing problems (Song et al., 2022).

Conclusion

The findings of this investigation show that most students' mastered critical thinking skills profiles are indicators of reveals existing facts and drawing conclusions. However, indicators that students have not fully mastered critical thinking include the following components: formulation of key issues, selection of logical arguments, analysis, and conducting evaluations. Therefore, teachers need a learning method to facilitate critical thinking skills, for which the case method qualifies. The results of this study can contribute to improving 21st-century skills, especially critical thinking skills and problem-solving, as well as offering solutions for teachers in the Merdeka Curriculum learning process in schools. Future studies should evaluate the effectiveness of the case method for enhancing critical thinking skills in a broader context. Additionally, a case method to improve critical thinking skills should be developed.

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APPROACHES TO EDUCATIONAL ACTIVITIES AND CONSTRUCTION OF AN INFORMATICS CURRICULUM

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Abstract/Izvleček

The research section of the paper explores elementary school students' satisfaction with informatics. This research was carried out using the *American Customer Satisfaction Index* (ACSI). Four subscales were used: Expectation, Satisfaction, Quality, and Values. The number of Croatian elementary school pupils investigated (from Brod-Posavina County) is 135 (N). Research results show that pupils have high expectations of informatics, including that it will progressively meet their expectations and help them to receive a quality education. It can also be concluded that the problems once faced by students, such as classroom and equipment quality, are becoming much smaller compared to previous years.

Keywords:
American Customer Satisfaction Index (ACSI), computer science curriculum, ICT, informatics, student satisfaction.

Pristopi k izobraževalnim dejavnostim in konstrukciji kurikuluma Informatike

Raziskovalni del prispevka analizira zadovoljstvo osnovnošolcev s predmetom informatika. Raziskava je bila izmerjena in predstavljena z uporabo ameriškega indeksa zadovoljstva strank (angl. *American Customer Satisfaction Index* – ACSI). Uporabljene so bile štiri podlestvice, in sicer *pričakovanje, zadovoljstvo, kakovost* in *vrednote*. Anketiranih je bilo 135 (N) hrvaških osnovnošolcev (iz Brodsko-posavske županije). Rezultati raziskav kažejo, da učenci od predmeta informatika veliko pričakujejo in da se njihova pričakovanja postopoma izpolnjujejo ter da so deležni kakovostne izobrazbe. Ugotoviti je mogoče tudi, da so težave, s katerimi so se učenci srečevali prej, kot sta kakovost učilnic in opreme, v primerjavi s prejšnjimi leti precej manjše.

Ključne besede:
American Customer Satisfaction Index (ACSI), učni načrt predmeta informatika, IKT, informatika, zadovoljstvo učencev.

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Introduction

Because information and communication technology (ICT) has changed the world and become a large part of everyday life, digital literacy is a necessity for every individual who wants to use all the benefits of these technologies (Bischof and Sabitzer, 2011; Bahromova, 2021). Even after knowing the basic terms, concepts, and practices, an individual not only has to be a user of technology but also a creator (Spirin, 2005). Furthermore, most 21st-century jobs require at least some knowledge of computers or computer systems. Therefore, Informatics as a school subject has become essential in elementary and secondary education (Dagienė, Hromkovič and Lacher, 2021).

In the Decision on Adoption of Informatics Curriculum for Elementary and High Schools in the Republic of Croatia (NN 22/2018), the section titled Informatics in the Educational System encompasses the following:

1. Acquisition and use of ICT (information and communication technologies) skills.
2. Problem-solving using a programming language to develop a computational way of thinking that involves understanding, analysing, and solving problems using strategy, algorithms, and programming solutions.
3. The use of abstractions, logical connections, analysis, algorithmic thinking and other problem-solving techniques and tools that are applicable not only in informatics, but also in many areas of everyday life.
4. Competences such as creativity and innovation, critical thinking, problem-solving, and decision-making are acquired through ICT, information and digital literacy, responsible and effective communication, and respect and appreciation in a digital environment.

In the same document, it is recommended to adopt the content from informatics teaching using the spiral model, where the knowledge acquired at lower levels of education is extended to higher ones, and the role of the subject is highlighted as very important in supporting other subjects and cross-curricular topics.

Furthermore, in the said Decision, four domains are indicated through which the goals of informatics teaching are realized:

1. e-Society
2. Digital Literacy and Communication
3. Computer Thinking and Programming
4. Information and Digital Technology.

In the Information and Digital Technology domain, content related to computer science and data management are studied, forming the basis of the information society, i.e., basic knowledge and concepts of computer science and understanding of digital display, storage, and transmission of data using computers or networks. In the Computer Thinking and Programming domain, students learn to develop logical and algorithmic thinking suitable for troubleshooting and other areas, including everyday life. The Digital Literacy and Communication domain, closely related to other domains, provides essential digital competencies necessary for high-quality technology application in everyday tasks and for acquiring competences from other domains. The last domain, e-Society, includes topics such as online security, data protection, electronic violence, caring for one's digital reputation, and responsibility and ethics in the digital environment. Understandably, these domains intertwine and complement each other and jointly form informatics classes intended to train students to become responsible, conscientious, creative individuals able to use information and communication technologies and, as such, be constructive members of the digital society. Considering that it is possible to adapt such activities and content to the needs and interests of diverse students, classes, and schools, e-learning is present in our everyday lives, and students must be able to use the tools that facilitate learning (Diković, Etinger and Golja, 2020). Some authors (Babić, Bjelanović, and Čičin-Šain, 2021) provide examples of how to use various methods to achieve learning outcomes according to the first-grade curriculum for elementary school. In addition to games, group and partner work is often used where creative, organizational, and communication skills are acquired in addition to digital skills. Greater student motivation can also be achieved by including children in the choice of content, the digital tools they will use, and topics covered, as well as by putting everything in a realistic context and allowing them to present their work. Nowadays, children use digital technologies and devices earlier and earlier, so they come to informatics classes with various levels of prior knowledge and experience. Teachers then have the task of assessing students' prior knowledge and upgrading it from a theoretical perspective, as well as devising sufficiently exciting and creative tasks that will enable students to reach their full potential and develop their skills. Some of the challenges are indeed creating an atmosphere of freedom and creativity by experimenting with different technologies and devices, creating equal foundations for students' initial knowledge so that they can all develop equally, and finally, of

course, teachers themselves must keep pace with new technologies to be able to transfer their knowledge.

The teacher is a collaborator, leader, and mentor of students in the process of achieving educational goals; s/he is responsible for motivating students, creating a positive and creative atmosphere; s/he is accountable for student safety, and for designing activities that will encourage attention, interest, respect, and empathy in students. Furthermore, partnership with students and mutual appreciation of ideas, concepts, and content are also essential. In addition, teachers must be self-critical and continuously re-evaluate their methods, the quality of work and communication, and, finally, their entire work (Fleer, 2017). The importance of teachers' role in teaching informatics is recognized by several authors (Kabátová, Kalaš and Tomcsányiová, 2016; Caspersen et al., 2019; Orehovački, Diković and Dautović, 2022), some of whom describe post-2020 new informatics education (Kanemune, Shirai and Tani, 2017).

Some studies indicate that the primary attention in Polish schools is paid to pedagogical approaches to teaching and learning informatics and its needs, focusing on preparing for living and lifelong learning in the information (knowledge-based) society (Syslo and Kwiatkowska, 2005). Informatics education is recognized (Kabátová, Kalaš and Tomcsányiová, 2016, pg. 125) in Slovakia, where it is "believed that it offers an important opportunity for developing informatics knowledge, computational thinking and problem-solving skills".

Research shows that one problem in elementary schools is organizing quality learning spaces for informatics. However, this problem has been intensively addressed in Croatia recently. Providing students with a networked computer classroom with sufficient high-quality computers and Internet access is essential.

In teaching informatics at schools, it is necessary to use modern/contemporary teaching resources, first, computers and various other digital devices and media. It is also essential for teachers to use modern teaching methods to present the content to the students as efficiently as possible. Teachers should apply a range of methods through which students acquire knowledge, skills, and values and shape their attitudes. However, for the process of upbringing and education to be more effective in advancing the educational achievements of students, educational systems should encourage and develop ways and methods of teaching and learning that would not only improve knowledge and skills but also innovate the monitoring and evaluation of their application in practice (Orehovački, Diković and Dautović, 2022).

Traditional teaching methods mainly focus on the teacher, while the student has a more passive role, the listener. Modern methods recognize this practice as flawed and shift the focus to the student. Cooperation between students and teachers and stimulating creativity and research are among the main characteristics of modern teaching methods. Some of these methods that can be used in informatics are project creation and presentation, debates, experimentation, games, problem-solving using digital and other tools, competitions, and the like. It is crucial to provide the student with an active position in which s/he solves a problem, i.e., seeks possible solutions, uses available tools, and, consequently, grows in responsibility, independence, creativity, intelligence, resourcefulness, and communication skills.

While not diminishing the value of traditional and working methods mainly well-known to teachers, we will introduce some new ones that can modernize the teaching process. These are exploratory learning, flipped classroom, collaborative learning, project teaching, and gamification (Mišurac, 2017).

Student research includes the students' search for interesting problems in informatics, for example, setting up a hypothesis, using multiple creative research methods, analysing results, and reaching a conclusion. The focus is on the student (Syslo and Kwiatkowska, 2005), who then develops their creativity, independent reasoning, and curiosity. The knowledge gained in this way is more long-lasting. The processed content is more understandable to the student, and the acquired knowledge is more straightforward to transfer to the everyday context and use in appropriate contexts. Including a "child-friendly approach to modern ICT", the teacher can achieve learning outcomes in the acquisition of informatics content (Sabitzer, Antonitsch and Pasterk, 2014).

As the name reveals, collaborative learning is learning in pairs, i.e., in a group, to study a topic or solve a problem. It is a process in which communication skills, creativity, empathy, and reasoning are developed. In learning a certain teaching content, students discover its meaning through joint work while the teacher guides them (Mišurac, 2017). Collaborative learning in informatics, and not only in informatics, is based on the theory of constructivism, whose basic thesis is that learning occurs only with the active engagement of students, which is realized through interaction with their environment (Blaho and Salanci, 2011). Problem-based collaborative learning groupware can improve pupils' computer programming skills (Chorfi et al., 2022).

In project classes, students independently investigate a problem in all its phases, from research and implementation to presenting conclusions. Multiple students usually participate in the projects, which is also a form of collaborative learning (Kong, Chiu, and Lai, 2018).

The use of games or elements of games in teaching, called gamification, is a great motivator that adds a fun and relaxed character to teaching. Digital games provide numerous opportunities for learning and practicing learning content in modern teaching. They are very close to the students, who get emotionally involved and experience higher levels of interest and concentration. In these games, students immediately receive feedback on their work, influencing them to voluntarily change, supplement their knowledge, and develop competences (Mišurac, 2017).

In the last few years, and especially in the era of the coronavirus pandemic, schools have started using a hybrid learning method in which, in addition to classroom teaching, technology is also used for communication and learning.

Whatever method and technique teachers decide to use, it is of utmost importance that they develop their distinctive teaching style. This will allow them to use their greatest strengths, resulting in better teaching quality and greater student satisfaction and success.

American Customer Satisfaction Index

The American Customer Satisfaction Index (ACSI), which started in 1994, was developed by the National Center for Quality Research at the University of Michigan in collaboration with the American Society for Quality and the CFI Group, Inc. The model was originally designed in 1989 for the Swedish economy (Swedish Customer Satisfaction Barometer – SCSB). The Swedish version and the ACSI were developed by Claes Fornell, Distinguished Professor Emeritus of Business Administration at the University of Michigan and President of the CFI Group (Fornell, 1996).

The ACSI measures customer satisfaction with the quality of products and services offered by different companies with a significant share in a given market. Such an indicator is helpful for business entities, researchers, and consumers. It is precisely for this reason that this index has been used in this research, as it enables the measurement of quality of satisfaction, although on a much smaller scale. The American Customer Satisfaction Index is a causal model with left-hand satisfaction indices such as customer expectations, perceived quality, and value. Satisfaction is in

the middle of the model, while customer complaints and loyalty are on the right, which includes customer retention and price tolerance.

This research uses four subscales: Expectation, Satisfaction, Quality, and Values. Each subscale is examined using five statements/questions answered on a 5-point Likert scale, where 1 represents disagreement, 2 partial disagreement, 3 neither agreement nor disagreement, 4 partial agreement, and 5 agreement.

In addition to the subscales, three identification questions were asked: school attended, class, and gender.

The Expectations subscale was examined with the following statements:

- Considering what you expected from Informatics, to what extent did you acquire the knowledge you hoped for?
- Considering your expectations before attending Informatics, to what extent are modern computer skills taught?
- What is the probability that you will enrol in the Informatics elective next year as well?
- Would you recommend Informatics to friends who have not yet chosen this elective subject?
- Considering what you learned in Informatics in the 5th and 6th grades, are you satisfied with the knowledge upgrade in your current grade? (Do you feel you are learning the same things? Are you improving your existing knowledge or learning something new?)

The Satisfaction subscale was examined with the following statements:

- How satisfied are you overall with the teaching of Informatics?
- How satisfied are you with the range of areas of Informatics covered in the Informatics class?
- How satisfied are you with the method of teaching Informatics? (group work, research work, creativity etc.)
- How satisfied are you with the Informatics textbook? (clarity, comprehensibility, etc.)
- How satisfied are you with the amount of time spent on particular areas of Informatics teaching? (Excel, Word, programming, Windows, etc.)

The Quality subscale was examined with the following statements:

- Are you satisfied with the quality of computers and IT equipment in your IT classroom?
- Are you satisfied with your IT classroom's program support (software)?

- Are you satisfied with the quality and speed of Internet access in your IT classroom?
- Are you satisfied with the space where Informatics takes place?
- Are you satisfied with the number of computers and seats in the IT classroom?

The Values subscale was tested with the following statements:

- Are you satisfied with the informatics knowledge you have acquired so far?
- Did the teaching of Informatics satisfy all your needs and desires for information technology knowledge?
- Are you satisfied with the quality of informatics knowledge you have learned so far?
- Are you satisfied with using your time by choosing Informatics as an elective?
- Do you think you could learn the material taught in Informatics classes so far on your own?

The Customer Satisfaction Index is calculated as average values of the survey questions that measure different aspects of satisfaction with a product or service, in this case, Informatics.

The next index is Customer Expectations. It measures clients' expectations of the quality of a specific product or service, in this case, student expectations about the quality of Informatics based on previous experience.

The next index is Perceived Quality, where client assessments are derived from recent experience using the services or products of a company, i.e., in this case, the quality of teaching aids and the space where Informatics takes place.

After that, the Perceived Value Index is measured, where the current quality is measured in relation to the price paid. In this study, the expected value is based on the effort and time invested in relation to the quality of what was learned.

Method

Aim

This study aims to identify and understand the factors influencing elementary school students' satisfaction with Informatics.

Research problems

The research problems are as follows:

1. to examine the relation between satisfaction with Informatics teaching and measured variables of expectations, quality, and value from the American National Satisfaction Index model;
2. to check whether there is a gender difference in their satisfaction with Informatics teaching;
3. to investigate the connection between some variables and satisfaction with the teaching of Informatics.

Sample

The research involved 135 elementary school students (N=135), 65 of whom were female (48%). Of the total number of participants, 55 were 7th-grade students, and 80 were 8th-grade students. The pupils came from three elementary schools in Brod-Posavina County.

Instrument

The American National Customer Satisfaction Index was used to measure satisfaction with Informatics teaching. The questionnaire consists of twenty-two items comprising four subscales: Expectations, Satisfaction, Quality, and Values.
In this study, four subscales were used; Expectation, Satisfaction, Quality, and Values. Each subscale was examined with the help of five statements/questions that were answered on a 5-point Likert scale, where 1 represented disagreement, 2 partially disagree, 3 neither agree nor disagree, 4 partially agree and 5 agree.
In addition to the subscales, three identification questions were asked: school attended, class, and gender.

Procedure

School principals approved the conduct of the research, and written parental consent forms were collected. The research was conducted in March 2022 using the paper-pencil method. The students were given concise instructions on how to fill out the questionnaire. It was explained that the research was completely anonymous and voluntary and that the results would be analysed on the group rather than the individual level. Filling out the questionnaire took an average of 10 minutes. At the end of the research, the participants were told to contact the research manager if they were interested in the research results.

Results and Discussion

The Relationship Between Satisfaction with Informatics Teaching and Measured Variables of Expectations, Quality, and Value

Since ACSI (all four construct dimensions) is based on a Likert-type scale, which produces ordinal data, it was necessary to verify the normality of the distributions of the constructs to ascertain which kind of procedures, parametric or nonparametric, would be used. A Kolmogorov-Smirnov (K-S) test was conducted to assess if the distribution of the pupils' answers on the four constructs was normally distributed. The null hypothesis was that the distribution of the answers was normal. For all four constructs, the null hypothesis of normality was rejected (the complete ACSI is normally distributed): Expectation, $D(135) = .159$, $p = .002$; Satisfaction, $D(135) = .126$, $p = .028$; Quality, $D(135) = .136$, $p = .013$; Value, $D(135) = .151$, $p = .004$; Complete ACSI (normally distributed), $D(135) = .111$, $p = .074$. For this reason, nonparametric tests were used to compare the scores on the construct scales by gender and by school grade. Descriptive statistics are shown in Table 1.

Table 1: Descriptive statistics and reliability coefficients for the variables on the American National Satisfaction Index its subscales Expectations, Satisfaction, Quality and Value (N=135)

	Mean	Median	SD	Variance	Cronbach's α
Expectation	4.02	4.20	0.870	0.757	0.82
Satisfaction	3.97	4.20	0.757	0.573	0.71
Quality	3.89	4.00	0.809	0.655	0.81
Values	3.69	4.00	0.854	0.729	0.77
ACSI	3.89	4.00	0.687	0.471	0.91

Concerning the first research question, examining the connection between satisfaction with informatics teaching and the measured construct variables of expectations, quality, and value, we can conclude that the correlations (Pearsons' are high between the measured construct variables with the satisfaction index (see Table 2). This may mean that students expect, but also receive, quality Informatics education and are satisfied with the high quality of Informatics teaching. It can also be concluded that the quality of classrooms and equipment is increasing.

Table 2: Correlation matrix (N=135) (the variables Grade and Gender were used in the linear regression analysis)

	Grade	Gender	Expectation	Satisfaction	Quality	Values	ACSI
Grade	—						
Gender	-0.135	—					
Expectation	0.064	0.141	—				
Satisfaction	0.015	0.098	0.720***	—			
Quality	-0.008	0.053	0.432***	0.430***	—		
Values	0.053	0.247**	0.773***	0.779***	0.426***	—	
ACSI	0.038	0.164	0.883***	0.872***	0.683***	0.896***	—

Note. * p < .05, ** p < .01, *** p < .001

This result corresponds to research showing that ICT, robotics, and programming activities are the most attractive for elementary school pupils (Purković, Delač, and Kovačević, 2022).

Satisfaction with Informatics Teaching

Differences in the results of the Satisfaction Index and the ACSI subscales Expectations, Satisfaction, Quality and Value were tested with regard to gender and class grade with the Brunner-Munzel nonparametric test (Karch, 2023).

Table 3: Brunner-Munzel test of the results of the Satisfaction Index and its subscales by gender

Brunner-Munzel Test

		Statistic	df	p
Expectation	Asymptotic	2.370	132	0.019
Satisfaction	Asymptotic	1.406	132	0.162
Quality	Asymptotic	0.738	133	0.462
Values	Asymptotic	2.701	125	0.008
ACSI	Asymptotic	2.119	133	0.036

Note. H_a P(Female < Male) + ½P(Female = Male) ≠ ½

There are significant differences in the Expectations, Values, and the complete ACSI between males and females (see also Table 4).

Table 4. Descriptives

						Skewness		Kurtosis	
	Gender	Mean	Median	Mode	SD	Skewness	SE	Kurtosis	SE
Expectation	Female	3.89	4.00	3.80	0.819	-0.890	0.297	0.548	0.586
	Male	4.14	4.40	5.00	0.904	-1.562	0.287	2.214	0.566
Satisfaction	Female	3.89	4.00	4.20	0.730	-0.799	0.297	0.790	0.586
	Male	4.04	4.20	4.60	0.780	-1.002	0.287	0.985	0.566
Quality	Female	3.85	4.00	4.60	0.799	-0.702	0.297	-0.119	0.586
	Male	3.93	4.00	4.40	0.822	-0.859	0.287	0.417	0.566
Values	Female	3.48	3.60	4.40	0.964	-0.796	0.297	0.182	0.586
	Male	3.90	4.10	4.20[a]	0.685	-0.938	0.287	0.247	0.566
ACSI	Female	3.78	4.00	4.00	0.694	-0.632	0.297	-0.193	0.586
	Male	4.00	4.15	4.55	0.666	-1.121	0.287	1.196	0.566

[a] More than one mode exists only the first is reported

The Brunner-Munzel test of differences by school grade revealed no differences between the 7th and 8th grade pupils (see Table 5).

Table 5: Brunner-Munzel Test of differences in Constructs by School Grade.

Brunner-Munzel Test				
		Statistic	df	p
Expectation	Asymptotic	0.559	97.3	0.577
Satisfaction	Asymptotic	0.630	114.8	0.530
Quality	Asymptotic	-0.113	127.3	0.910
Values	Asymptotic	0.676	111.8	0.501
ACSI	Asymptotic	0.300	103.1	0.765

Note. H_a $P(7 < 8) + \frac{1}{2}P(7 = 8) \neq \frac{1}{2}$

BECTA's study (2008) confirms the results of this study, stating that boys attending elementary school see somewhat more value and motivation in Informatics than girls do. One reason is that girls feel less confident using technology and see IT as a tool to explore their interests further and gain knowledge more efficiently, while boys are interested in IT for its own sake. Also, there is evidence that girls in higher grades are becoming less interested in Informatics. There is also the problem of stereotypes because the media and society in general have created an image that information technologies are the domain of boys, i.e., men.

A more recent study (Qazi et al., 2022) that analysed 42 studies on gender differences in the use of information technology in education found that many factors influence satisfaction with and use of technology in teaching girls, including geographical influences, social differences, prejudices, and teaching quality.

The Relationship Between Some Variables and Satisfaction with Informatics

We wanted to examine the third research problem: Investigate the assumption that the questionnaire variables of gender, class, expectations, quality, and values increase satisfaction with informatics teaching. To verify whether gender and class and the construct variables mentioned above predict overall satisfaction with teaching (Satisfaction subscale), a hierarchical regression analysis was conducted, with the Satisfaction subscale included as a criterion. Before carrying out the hierarchical regression analysis, correlations between criteria and predictors were checked. Hierarchical regression analysis was performed in four steps. In the first step, the gender and class variables were introduced. The expectation variable was included in the second step of the regression analysis. The third step of the hierarchical regression analysis included the construct Quality, and the fourth step was the construct Values.

The gender and class variables included in the first step of the regression analysis explain a nonsignificant 1.04% of the variance in satisfaction with informatics teaching (R^2=0.0104, p=.0502). In the second step, the item "Considering what you expected from the Informatics class, to what extent did you acquire the knowledge you hoped for?" was included, and an additional 32.1% of the variance in satisfaction with the Informatics class was explained ($\Delta R2$=.312, p< 0.01). At the same time, it was shown that this item was a significant positive predictor of satisfaction with the teaching of Informatics; that is, the higher the self-assessment of the acquired knowledge, the greater the satisfaction with the learning.

Table 6: Results of hierarchical regression analysis with subscale Satisfaction as a criterion

Predictor	β	t	R	R^2	ΔR^2	F change
I Block						
Gender	.088	1.018				
Class	.035	.404	.90	.008	.008	.557
II Block						
Gender	.047	.649				
Class	.065	.900				
Extent of acquired knowledge	.562	7.850**	.566	.321	.312	61.625**
III Block						
Gender	.041	.585				
Class	.064	.916				
Extent of acquired knowledge	.527	7.414**				
Satisfaction with speed and Internet in the IT classroom	.193	2.727**	.597	.357	.036	7.437**

** p < 0.01

In the third step, satisfaction with the quality and speed of Internet access was included, and an additional 3.6% of the variance in satisfaction with teaching was explained ($\Delta R2=.036$, $p<0.01$). The change in the explained variance was statistically significant, even though the relative contribution of satisfaction with the quality and speed of Internet access was low. The overall model explained 35.7% of the total variance in satisfaction with computer science teaching. At the same time, the items "Considering what you expected from the Informatics class, to what extent did you acquire the knowledge you hoped for?" and "Are you satisfied with the quality and speed of Internet access in your Informatics classroom?" proved to be significant positive predictors of satisfaction with Informatics teaching.

To check the model's multicollinearity, the coefficients of the variance increase factor (VIF), whose values range from 1.009 to 1.043, and tolerance, whose values range from .959 to .991, were calculated. According to the results, no multicollinearity was found among the measured variables. It is recommended that VIF values be less than 10. The value of the Durbin-Watson test in this model is 1.427, indicating that the residuals are independent.

Conclusion

The quality of informatics teaching results from the competence of teachers, particular technical prerequisites, student motivation, and the implementation of curriculum co-construction in educational institutions. Quality cooperation between teachers, students, and institutions requires a free and creative atmosphere where all suggestions and problems are heard, and solutions are found through joint work. The goal is the quality of education and teaching, which can be achieved through a better understanding of children and their needs, monitoring technological achievements, and teaching the necessary knowledge in this subject.

Thus, informatics is a necessary area of education that continues to develop in the right direction in Croatia. With effective teamwork among students, teachers, professional associates, and institutions, it has the potential to develop into the modern, advanced subject it could be.

The above research concludes that students expect a great deal from informatics, that their expectations are increasingly being met, and that they receive quality education. It can also be concluded that past difficulties, such as the quality of classrooms and equipment, are now less of a problem.

Emphasizing that students become the creators of educational work is necessary because they are at the center of the educational system. This approach builds understanding, develops competences, and helps students see themselves as creative and active participants.

Limitations of this research concern the geographical area from which the originate; moreover, only elementary school pupils were included, and their number was low, so future studies could be more extensive, making the conclusions more authoritative in the context of the ACSI.

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CULTURAL HERITAGE IN MUSIC TEACHING: THE EXPERIENCE IN CROATIA

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Abstract/Izvleček

This study explores music teachers' attitudes toward cultural heritage education and to what extent this subject matter is implemented in music lessons. The study included music teachers (N = 61) employed in Croatian elementary schools. The results show that music teachers have a very positive attitude towards the inclusion of cultural heritage education in music teaching and that music teachers believe such resources should be part of the music curriculum. The findings also show that some dissatisfaction is present among music teachers regarding the way such topics are presented in the music curriculum and their overall representation in music lessons.

Keywords:
cultural heritage education, music curriculum, music teaching, music teacher.

Kulturna dediščina pri poučevanju glasbe: izkušnje na Hrvaškem

V prispevku preučujemo odnos učiteljev glasbe do izobraževanja o kulturni dediščini in ugotavljamo, v kolikšni meri se vsebine, povezane s kulturno dediščino, obravnavajo pri pouku glasbe. V raziskavo so bili vključeni učitelji glasbe (N = 61), zaposleni v hrvaških osnovnih šolah. Rezultati kažejo, da imajo učitelji glasbe zelo pozitiven odnos do vključevanja poučevanja kulturne dediščine v pouk glasbe in menijo, da bi morala biti vsebine kulturne dediščine del učnega načrta za glasbo. Ugotovitve kažejo tudi, da je med učitelji glasbe prisotno določeno nezadovoljstvo glede načina predstavitve dediščinskih tem v učnem načrtu za glasbo in njihove splošne zastopanosti pri pouku glasbe.

Ključne besede:
vzgoja za kulturno dediščino, učni načrt za glasbo, glasbeni pouk, učitelj glasbe.

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Introduction

The concept of cultural heritage is very broad and is composed of the concepts of *culture* and *heritage* (Šošić, 2014). Ogbu (1989) speaks of culture as the totality of the way of life of a certain human group that resolves the question of its own survival through a system of accumulated knowledge, values, customs and patterns of behaviour. Culture is also discussed by Haralambos (1989), who believes that culture influences the members of society by directing their actions and determining their worldview.

The term heritage (Lat. *patrimonium*) has several meanings. In its most general sense, it refers to property inherited from ancestors and primarily means material heritage or property. In the second half of the 20th century, the role of heritage in the development of society began to be explored, as well as the possibility of strengthening the local community through the preservation and presentation of heritage (Goddard, 2012). The concept of "heritage" also provides one of the central characteristics of the phrases that determine its legal significance. These include elements such as "material culture, ritual culture, symbolic culture" and even "language-as-culture, values, beliefs", while, in some circumstances, "ideas ideologies, [and] meanings" might also be included (Blake, 2000, p. 68).

Cultural heritage implies the overall wealth of the world - peoples, nations or a states. The preservation of cultural heritage is important for the purpose of identifying and nurturing cultural identity, defining it and presenting it to other entities. The diversity of cultural heritage enriches all of humanity, and respecting, nurturing and living it teaches us tolerance and respect, and contributes to sustainable cultural development.

The term *World Cultural and Natural Heritage* implies internationally recognized values with the aim of their preservation and protection. This term was first mentioned in 1972 in the *Convention Concerning the Protection of the World Cultural and Natural Heritage* (UNESCO, 1972). The Convention was adopted by the United Nations Educational, Scientific and Cultural Organisation's (UNESCO) General Conference at its 17th session in Paris on 16 November 1972. Among its more important conclusions is a statement about the accelerated deterioration of the world's cultural and natural heritage, owing to time and natural destruction, but also to human activity. The importance and necessity of preserving heritage as a unique benefit to every nation and state has been recognized. According to the aforementioned Convention, heritage can be cultural and natural. The domain of cultural heritage

includes monuments: architectural works, paintings, archaeological elements, elements of historical, artistic or scientific character, buildings and landmarks of great cultural significance. The domain of natural heritage includes natural monuments, geological formations, places, beauties and sights. Each state that has been a signatory of this convention has committed itself to finding, protecting, conserving and transmitting heritage to future generations for the purpose of its preservation (Forrest, 2009).

Another conference was held in Mexico in 1982, the World Conference on Cultural Policies (MONDIACULT). The main objective of this gathering was to question the knowledge gained so far and compile new guidelines for the further development and promotion of culture. In addition, the meaning of the term culture has been redefined and now implies a whole way of life. The conference highlighted the need to preserve intangible heritage and then, for the first time, the same term was used in an official document (Blake, 2017).

The Convention for the Safeguarding of the Intangible Cultural Heritage was held in Paris in 2003 at the 32nd session of the United Nations. The purpose of this conference was to protect the intangible cultural heritage, respect the heritage of individuals, groups and communities, systematically raise awareness on all levels - local, regional, national and international, and provide international assistance in achieving those elements (UNESCO, 2003).

The Republic of Croatia ratified and accepted this Convention in 2005 through the *Act on the Ratification of the Convention for the Safeguarding of the Intangible Cultural Heritage* (*Official Gazette*, 2005). This document states the following: "Intangible cultural heritage means the skills, performances, expressions, knowledge, skills, as well as related instruments, objects, handicrafts and cultural spaces that communities, groups and, in some cases, individuals accept as a part of their cultural heritage." It was also pointed out that intangible cultural heritage is manifested in areas such as oral tradition and language as a means of transmitting oral tradition, performing arts, customs and ceremonies, knowledge and skills, and traditional crafts. Protecting intangible cultural heritage means ensuring measures for the sustainability of heritage, as well as its identification, documentation, research, preservation and transmission to present and future generations (*Official Gazette*, 2005).

In the context of cultural heritage, today we are talking about immovable cultural heritage, and movable cultural heritage, as well as intangible and archaeological cultural heritage.

Since the ratification of the Paris Convention in the Croatian Parliament, the Republic of Croatia has systematically assessed, listed and promoted Croatian intangible heritage. In the period from 2005 to 2018, the Ministry of Culture listed about 160 intangible assets in the Register of Cultural Assets of Croatia, of which 17 were included in the UNESCO list of protected intangible heritage (Ministry of Culture, Republic of Croatia, 2018).

Musical heritage belongs to the domain of intangible cultural heritage and includes musical performances, expressions and musical instruments characteristic of a certain geographical area. Intangible assets are entered in the Register of Intangible Assets, but certain obstacles are often encountered in the form of terminology, categorization or the manner of performance of a particular asset (Eichler, 2020; Inawat, 2015; Pinto, 2018; Smith and Akagawa, 2009). UNESCO, as the umbrella organization of the United Nations in the field of science, education and culture, compiles a list of intangible heritage in three categories: the Representative List of the Intangible Cultural Heritage of Humanity, the List of Intangible Cultural Heritage in Need of Urgent Safeguarding, and the Register of Best Safeguarding Practices (Eichler, 2020). The UNESCO list includes 17 intangible cultural assets from Croatia, six of which relate to the field of music (Ministry of Culture, Republic of Croatia, 2019). There is two-part singing and playing in the Istrian scale, Ojkanje singing, Bećarac singing and playing from eastern Croatia, Nijemo kolo (silent circle dance of the Dalmatian Hinterland), Klapa multipart singing of Dalmatia (southern Croatia), and Međimurska popevka (a folksong from Međimurje) (Bajuk, 2014; Bonifačić, 2001; Cukrov, 2015; Hameršak and Pleše, 2018; Marošević, 2006; Primorac, 2010).

Research Methodology

Research Aim and Research Questions

For the purpose of this article, an empirical study was conducted aimed at examining music teachers' attitudes toward cultural heritage education and whether this subject matter is sufficiently included in music teaching. The research also sought to answer the following questions:

1) According to music teachers, how important are cultural heritage topics for education in general?

2) Are cultural heritage topics adequately represented in the music teaching curriculum?
3) Do music teachers have sufficient knowledge of cultural heritage?
4) How do music teachers evaluate their competences for implementing heritage themes and content in music teaching?
5) Is there a statistically significant difference in the responses of music teachers regarding their membership in associations that promote and nurture cultural heritage?

Participants

In the study, a convenience sample was used (Cohen, Manion, and Morrison, 2000), comprised of 61 music teachers (48 female teachers – 78.7% and 13 male teachers – 21.3%). These are teachers who teach music from the fourth to the eighth grades of elementary school. The study included music teachers employed in Croatian elementary schools from four Croatian counties: Brod-Posavina, Osijek-Baranja, Pozega-Slavonia, and Vukovar-Srijem counties. Most teachers were from the Osijek-Baranja County (26, 42.6%). Just over a third of the music teachers belong in the 42-51 age group (22, 36.07%). One quarter of the music teachers are in the under-34 age group (14, 22.95%) and the 32-41 age group (15, 24.59%). Only a few teachers belong to the age group of 52 and above (10, 16.39%). A small portion of the teachers have the title of teacher mentor (11, 18.03%) or teacher advisor (2, 3.28%). Music teachers were invited to participate in the research through the principals of the elementary schools in which they are employed. An official letter was sent to the principals of all elementary schools in the four counties asking them to invite all class teachers to participate in the study.

Methodological approach

The procedure was conducted through surveying, and a questionnaire was used as the instrument (Mejovšek, 2008). The survey was conducted in June and July 2021. The first part of the questionnaire included questions concerning the socio-demographic characteristics of the research participants: gender, age, length of service and their school county. The second part included a series of statements related to the attitudes of music teachers on the inclusion of cultural heritage topics in education in general, as well as in music teaching, and to the self-assessment of the competences necessary for teaching music lessons that include cultural heritage

topics. In doing so, a 5-point Likert-type scale (1 = strongly disagree, 2 = disagree, = neither agree nor disagree, 4 = agree, 5 = completely agree) was used. The survey was anonymous.

A quantitative analysis for data processing was used. Based on the results, the basic descriptive parameters were calculated: arithmetic mean *(M)*, standard deviation *(SD)* and the percentage of answers obtained. Also, certain procedures from inferential statistics were used. The statistics program SPSS V26 was used for the processing of statistical data. The nonparametric Mann-Whitney U test was used to compare differences in the answers according to whether they were members of associations that promote and nurture cultural heritage as a part of their activities (Petz, 2007; Suzić, 2007). Statistical significance was set at .05.

Research Results

The survey was completed and handed in by sixty-one teachers. Music teachers were asked to express their views on the importance of cultural heritage topics for education. As can be seen in Table 1, most teachers believe that cultural heritage topics are important because they develop students' respect for (M = 4.48) and understanding (M = 4.43) of other cultures, and they are also important because they enable the connection of different subject areas (M = 4.48). About three-quarters of the teachers believe that heritage topics are important for sustainable development (M = 3.93), and for slightly more than a half the teachers, topics related to cultural heritage are insufficiently represented in education (M = 3.48) (Table 1).

Table 1. Average values and dispersion of results for teachers' statements on the importance and representation of cultural heritage topics in education

Teachers' statements on the importance and representation of cultural heritage topics in education	*N*	1+2 %	3 %	4+5 %	*M*	*SD*
With a better knowledge of our own cultural heritage, we will be able to better understand the traditions of other nations.	61	1.64	11.48	86.88	4.43	.82
Cultural heritage topics are necessary for sustainable development.	61	8.20	16.39	75.41	3.93	1.03
By getting to know the topics from cultural heritage, we teach students to respect the cultures of other nations.	61	1.64	6.56	91.80	4.48	.77
Cultural heritage topics are an interdisciplinary field that allows the connection of several different subject areas.	61	1.64	8.20	90.16	4.48	.79
Topics related to cultural heritage are underrepresented in upbringing and education.	61	14.75	32.79	52.46	3.48	1.07

Note: *M* = average value; *SD* = standard deviation

Teachers were divided into two groups according to whether or not they were members of associations that promote and nurture cultural heritage as part of their activities. In comparing their responses, no statistically significant difference was found in their views on the importance and representation of cultural heritage topics in education was (Table 2).

Table 2. Differences in teachers' statements about the importance and representation of cultural heritage topics in education with regard to their membership in associations or societies that promote cultural heritage - average values, dispersion of results, Mann-Whitney U test

Teachers' self-assessment on the process of teaching and understanding cultural heritage topics	Membership in an association or society that promotes cultural heritage	*N*	*M*	*SD*	z	*p*
With a better knowledge of our own cultural heritage, we will be able to better understand the traditions of other nations.	Is a member of an association or society	23	4.35	.98	-.296	.767
	Is not a member of an association or society	38	4.47	.73		
Cultural heritage topics are necessary for sustainable development.	Is a member of an association or society	23	4.04	.88	-.444	.657
	Is not a member of an association or society	38	3.87	1.12		
By getting to know the topics from cultural heritage, we teach students to respect the cultures of other nations.	Is a member of an association or society	23	4.39	.94	-.325	.746
	Is not a member of an association or society	38	4.53	.65		
Cultural heritage topics are an interdisciplinary field that allows the connection of several different subject areas.	Is a member of an association or society	23	4.48	.90	-.240	.810
	Is not a member of an association or society	38	4.47	.73		
Topics related to cultural heritage are underrepresented in upbringing and education.	Is a member of an association or society	23	3.70	1.18	-1.768	.077
	Is not a member of an association or society	38	3.34	.99		

Note: *M* = average value; *SD* = standard deviation; z = Mann-Whitney U test

The teachers were again divided into two groups according to whether they were members of associations that promote and nurture cultural heritage within their activities, and their answers were compared (Table 4). This time, the results indicated the existence of a statistically significant difference in the response to the representation of cultural heritage topics in music teaching (z = -2.109, p = .035). Thus, according to these results, most teachers from both groups are not satisfied with the representation of such topics in music teaching, but there is still a somewhat greater level of dissatisfaction among those teachers who are active in associations that promote and nurture cultural heritage.

Table 3. Average values and dispersion of results for teachers' statements on the importance and representation of cultural heritage topics in music teaching

Teachers' statements on the importance and representation of cultural heritage topics in music teaching	N	1+2 %	3 %	4+5 %	M	SD
I consider topics related to cultural heritage to be very important for music teaching.	61	1.64	22.95	75.41	4.15	.89
Getting to know the topics related to cultural heritage in music teaching is necessary for understanding both the tradition and the culture.	61	1.64	11.48	86.89	4.41	.82
In the music curriculum, topics related to cultural heritage are presented in an appropriate way.	61	14.75	40.98	44.26	3.41	.94
Topics related to cultural heritage are underrepresented in music teaching.	61	21.31	34.43	44.26	3.28	1.16

Note: M = average value; SD = standard deviation

Table 4. Differences in teachers' statements about the importance and representation of cultural heritage topics in music teaching with regard to their membership in associations that promote cultural heritage - average values, dispersion of results, Mann-Whitney U test

Teachers' statements about the importance and representation of cultural heritage topics in music teaching	Membership in an association or society that promotes cultural heritage	*N*	*M*	*SD*	z	*p*
I consider topics related to cultural heritage to be very important for music teaching.	Is a member of an association or society	23	4.21	.99	-.811	.417
	Is not a member of an association or society	38	4.11	.83		
Getting to know the topics related to cultural heritage in music teaching is necessary for understanding both the tradition and the culture.	Is a member of an association or society	23	4.43	.95	-.529	.597
	Is not a member of an association or society	38	4.39	.75		
In the music curriculum, topics related to cultural heritage are presented in an appropriate way.	Is a member of an association or society	23	3.17	.98	-1.210	.226
	Is not a member of an association or society	38	3.55	.89		
Topics related to cultural heritage are underrepresented in music teaching.	Is a member of an association or society	23	3.65	1.11	-2.109	.035
	Is not a member of an association or society	38	3.05	1.14		

Note: *M* = average value; *SD* = standard deviation; z = Mann-Whitney U test

This was followed by a group of statements in which teachers had to assess how much they know about this topic and how successful they were in teaching music lessons that cover topics about cultural heritage. The results from Table 5 show that the majority of the teachers (68.85%) are well acquainted with the tradition and musical heritage of the Republic of Croatia. The problem is that almost a quarter of the teachers are unsure of their knowledge in the field, and 8.2% of the teachers feel that they do not know enough about the tradition and musical heritage of their

country. In line with this are their answers on the competences necessary for teaching heritage topics and content in music lessons, according to which one-third of these teachers are still not satisfied with their competences for teaching topics that deal with cultural heritage (M = 3.74). Teachers state that they feel confident in identifying traditional instruments and Croatian tunes (M = 4.15), and only a small number of teachers (8.20%) state that they do not manage to cover heritage topics in class because of the burden of other content. It is a positive thing that teachers listen to music when teaching such topics (M = 4.72%), but it is not favourable that only half of the teachers include dance in such lessons (M = 3.23%). Just over half the teachers can present heritage topics without much previous preparation (M = 3.51). The majority of the teachers (83.61%) point out that music teachers need to be further educated in the field of heritage topics.

In this case as well, a distinction was made between the teachers' answers with regard to whether they were members of associations promoting and nurturing cultural heritage within their activities (Table 6). The results indicated a statistically significant difference in the teachers' answers on the knowledge of tradition and musical heritage of the Republic of Croatia (z = -3.095, p = .002) and in the answers on the success of presenting heritage topics in music teaching (z = -2.525, p = .012). Therefore, those teachers who are active in associations that promote and nurture cultural heritage possess greater knowledge about the tradition and musical heritage of the Republic of Croatia and are more successful in presenting heritage topics in music teaching than those teachers who are not active in such associations.

Note: *M* = average value; *SD* = standard deviation

Table 5. Average values and dispersion of results for music teachers' statements on the success of teaching music lessons on cultural heritage topics

Teachers' self-assessment on how to implement and understand heritage topics	*N*	1+2 %	3 %	4+5 %	*M*	*SD*
I know the tradition and musical heritage of the Republic of Croatia.	61	8.20	22.95	68.85	3.85	.95
I can present heritage topics and content to students without much prior preparation.	61	14.75	32.78	52.46	3.51	.96
I can identify traditional instruments, tunes and their characteristic features in the Republic of Croatia.	61	1.64	13.11	85.25	4.15	.77
I always listen to music when teaching heritage topics to students.	61	0	1.64	98.36	4.72	.49
When teaching heritage topics to students, I always dance the traditional dances of a particular homeland.	61	29.51	21.31	49.18	3.23	1.24
I am competent enough to implement heritage themes and content in music teaching.	61	9.84	24.59	65.57	3.74	.98

I don't have time to cover heritage topics because of the burden of other teaching contents.	61	65.57	26.23	8.20	2.02	1.01
I consider it necessary to further educate music teachers in the field of heritage topics.	61	1.64	14.75	83.61	4.34	.79

Table 6. Differences in music teachers' self-assessment on the success of teaching music lessons on cultural heritage topics with regard to their membership in associations or societies that promote cultural heritage - average values, dispersion of results, Mann-Whitney

Teachers' self- assessment on how to implement and understand heritage topics	Membership in an association or society that promotes cultural heritage	*N*	*M*	*SD*	z	*p*
I know the tradition and musical heritage of the Republic of Croatia.	Is a member of an association or society	23	4.30	.82	-3.095	.002
	Is not a member of an association or society	38	3.58	.92		
I can present heritage topics and content to students without much prior preparation.	Is a member of an association or society	23	3.91	.85	-2.525	.012
	Is not a member of an association or society	38	3.26	.95		
I can identify traditional instruments, tunes and their characteristic features in the Republic of Croatia.	Is a member of an association or society	23	4.35	.65	-1.538	.124
	Is not a member of an association or society	38	4.03	.82		
I always listen to music when teaching heritage topics to students.	Is a member of an association or society	23	4.70	.47	-.506	.613
	Is not a member of an association or society	38	4.74	.50		
When teaching heritage topics to students, I always dance the traditional dances of a particular homeland.	Is a member of an association or society	23	3.61	1.08	-1.843	.065
	Is not a member of an association or society	38	3.00	1.29		
I am competent enough to implement heritage themes and content in music teaching.	Is a member of an association or society	23	4.00	.85	-1.523	.128
	Is not a member of an association or society	38	3.58	1.03		
I don't have time to cover heritage topics because of the burden of other teaching contents.	Is a member of an association or society	23	1.91	1.12	-.848	.396
	Is not a member of an association or society	38	2.08	.94		
I consider it necessary to further educate music teachers in the field of heritage topics.	Is a member of an association or society	23	4.57	.66	-1.666	.096
	Is not a member of an association or society	38	4.21	.84		

Note: *M* = average value; *SD* = standard deviation; z = Mann-Whitney U test

Discussion

The purpose of this study was to explore music teachers' opinions about the importance of implementing traditional content in the teaching process.

Additionally, teachers were asked to assess their knowledge of heritage topics and competence in implementing the same content in the teaching process.

The research results show that music teachers have a positive opinion about cultural heritage and believe that these topics are important because they contribute to the development of respect and a better understanding of other cultures. Previous research conducted in Croatia showed that classroom teachers and music teachers agree that, by learning about traditional music, students develop their aesthetic abilities and learn about tolerance and respect for diversity (Drandić, 2010; Dobrota and Blašković, 2014). By understanding their own culture and heritage, individuals create a more positive attitude towards the culture of other nations (Volk, 1998). Also, teachers agree that this content enables an interdisciplinary approach and cross-subject correlation in music teaching. Through heritage themes, teachers include various subject areas such as history, geography, mother tongue, music, etc. in their teaching.

A little more than half the teachers in this survey consider heritage topics essential for music lessons, and they also point out that heritage content is insufficiently represented in education. In addition, students also show interest in heritage content and consider it important (Gergorić and Sučić, 2018), and traditional music is the second most frequently listened to in musical lessons (Vidulin, Plavšić, and Žauhar, 2020). In order to nurture and preserve the cultural heritage, traditional content is necessary in the students' musical education (Drandić, 2010). Traditional music nurtures and transmits cultural heritage, strengthens national identity, contributes to connecting the community and at the same time teaches about musical elements. In a global society, people become "citizens of the world", and that is why it is important to nurture one's own cultural heritage (Ministry of Science, Education and Sport, Republic of Croatia, 2011). Additionally, teachers participating in this research point out their dissatisfaction with the presentation of heritage topics in the subject curriculum and their representation in music lessons. Similarly, slightly more than half the surveyed teachers from the other two Croatian counties believe that traditional culture is underrepresented in the music curriculum for the 5th and 6th grades (Gergorić and Sučić, 2018).

However, this study showed a statistically significant difference between two groups of teachers, where teachers who participate in associations that promote cultural heritage are more dissatisfied with the representation of heritage topics in music lessons than teachers who do not actively participate in similar associations.

Teachers who participate in cultural associations are active promoters of cultural heritage and, as such, probably attach more importance to heritage topics in music lessons.

Most teachers report that they are familiar with the tradition and musical heritage of the Republic of Croatia. However, one-quarter of these teachers indicate that they are unsure of their knowledge of this content, and a smaller number do not know enough about Croatian musical heritage. In accordance with these results, teachers self-assess their competences in teaching heritage topics. As much as one-third of these teachers are not satisfied with their competences for teaching heritage topics. One study showed that the attitudes of pedagogical students of music education depend on their previous music education and musical experiences, as well as self-assessment of and self-confidence in their own competences for teaching music (Nikolić, 2017). It is likely that music teachers are not satisfied with their own competences for teaching heritage topics as a result of insufficient education and a lack of experience in the same field.

The teachers claim that they can identify traditional musical instruments and traditional melodies, and they most often listen to traditional music during the processing of heritage topics in class. The lack of knowledge and experience in the field of heritage topics is also reflected in the fact that only half of these teachers perform traditional dances in class. Also, less than half of the teachers can teach heritage topics without major preparation. The inadequacy of education in the field of cultural heritage and the lack of competences for teaching this content were also expressed by music teachers in other Croatian counties (Drandić, 2010; Gergorić and Sučić, 2018). In accordance with earlier results, teachers who are involved in heritage associations estimate that they have greater knowledge and that they can more successfully present heritage topics in their own teaching process. The reason for this can be found precisely in the fact that these teachers know and understand heritage topics better since they have gained experience by participating in heritage associations, so they do not need much preparation for teaching heritage content. The teachers in this study emphasize the need for additional education regarding heritage topics.

In order for teachers to teach heritage topics successfully and develop the necessary competences, professional development in the same field is necessary, along with practical experience that includes musical expression, that is, traditional singing, playing or dancing.

Conclusion

The results of this study showed the attitudes of music teachers employed in Croatian elementary schools on the inclusion of cultural heritage topics in music teaching. The data revealed that music teachers have positive attitudes regarding heritage topics but are not entirely satisfied with the position these topics have in the music curriculum nor with their knowledge of and the competences necessary for teaching music lessons with regard to cultural heritage topics. Those teachers who are actively involved in the work of associations and societies that promote and nurture cultural heritage are more positive about their knowledge and competences in this area. Therefore, as a part of professional development, music teachers, as well as future music teachers during their studies, should become better acquainted with the work of such associations and instructed to be actively involved in their work.

Today we live in a globalized intercultural environment in which meeting cultural needs means understanding and accepting the values of different cultures (Campbell, 2001; Edwards, 1998; Ilari, Chen-Hafteck and Crawford, 2013), but also respecting and nurturing one's own cultural and historical heritage (Walker, 2007). How can someone understand another culture if they don't even know their own?

We all inherit cultural ties through our families, our surroundings, our early experiences, the symbols and artefacts which we grow up with, and our deep emotional being which requires cultural identity. All these things are acknowledged by all of us in ways which affirm who we are. (Walker, 2007, p. 282)

It should be pointed out that schools are the institutions where it is possible to become aware of one's own identity. The importance of cultural heritage is also emphasized in the Croatian music curriculum, and teachers are instructed to include topics on cultural heritage in music teaching. By implementing heritage themes in music teaching, we nurture a sense of continuity and connection with our historical and cultural experience, i.e., we teach students how to recognize, nurture and preserve cultural heritage for their own benefit, as well as the benefit of future generations. Without a solid sense of their past, a sense of identity rooted in time and space, students are poorly equipped to face the future (Hunter, 1988; Patrick, 1989). The findings of this study have certain limitations. The main limitation of this study was the small sample size because music teachers from only four Croatian counties were included in the research. Given the small sample size, the statistical results were limited because of their generalization to similar settings.

Therefore, in future research, it would be good to investigate the attitudes of music teachers regarding the inclusion of cultural heritage topics in music teaching from other parts of Croatia, but also music teachers from other countries. It would also be beneficial for researchers to examine the attitudes of elementary school students towards such topics in the field of cultural heritage and how to best bring such topics closer to elementary school students. It would be advisable to conduct such research on a random sample of elementary school students.

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REVIJA ZA ELEMENTARNO IZOBRAŽEVANJE
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FAMILY ADJUSTMENT IN RELATION TO THE ACADEMIC ENGAGEMENT OF PUPILS AT PRIMARY LEVEL

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Abstract/Izvleček

Family adjustment is crucial for the child's school obligations. This quantitative study was conducted to determine the significant relationship between the family adjustment of primary school pupils and their academic engagement. The pupils' level of family adjustment was found to be positively and significantly related to their academic engagement (r = 619, p <.001). In addition, a small but significant difference was found between female students (M = 3.59) and male students (M = 3.43) regarding family adjustment. Also, a small but significant difference was found between female teachers (M = 3.61) and male teachers (M = 3.80) regarding pupils' academic engagement.

Keywords:
family adjustment, academic engagement, primary education, teacher, pupil.

Prilagoditev družine in njen odnos do akademskega udejstvovanja učencev na primarni ravni

Družinska prilagoditev je ključnega pomena za otrokove šolske obveznosti. Ta kvantitativna študija je bila izvedena, da bi ugotovili pomembno povezavo med družinsko prilagojenostjo osnovnošolcev in njihovo akademsko angažiranostjo. Ugotovljeno je bilo, da je stopnja družinske prilagoditve študentov pozitivno in pomembno povezana z njihovo akademsko angažiranostjo (r = 619, p <,001). Poleg tega je bila ugotovljena majhna pomembna razlika med študentkami (M = 3,59) in študenti (M = 3,43) glede družinske prilagoditve. Prav tako je bila ugotovljena majhna pomembna razlika med učiteljicami (M = 3,61) in učitelji (M = 3,80) glede akademske angažiranosti študentov.

Ključne besede:
družinska prilagoditev, akademski angažma, osnovna izobrazba, učiteljica, študent.

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Introduction

The ability of a child to adapt to and flourish within their familial setting is referred to as family adjustment (Cheung et al., 2021). Family adjustment is regarded as crucial to a child's overall development and well-being (Hetherington et al., 1998). As they navigate the intricacies of the outside world, children's emotional, mental, and social development is significantly influenced by their familial environment. Since a child learns about relationships, values, and social norms for the first time in the family, it is believed that the family serves as an important foundation for a child's growth (Roostin, 2018). To foster resilience and a positive sense of self in the developing person, families must be able to adapt to and support a child's changing needs and demands.

The adjustment of a child into a family is a complicated and continuing process that incorporates numerous factors, interactions, and family dynamics (Giannotti et al., 2022; Trute, 1990). When stability, communication, and support are lacking in a home setting, children frequently face a variety of obstacles that prevent them from succeeding academically. A family's emotional turmoil may provide a distracting environment that makes it difficult for a child to focus on his academics (Xu and Zheng, 2023). In academic activities, a loss of motivation and a weakened sense of purpose may result from unclear expectations and the absence of positive reinforcement. Pupils with low levels of family adjustment may also have trouble managing their time and being organized since their lack of regular home routines might affect how they approach their academic work (Calatrava et al., 2023). Pupils who have poor communication within their families may feel alone and unsupported, which might worsen their academic performance (Orm et al., 2022). Additionally, pupils who live in unstable or crisis-ridden homes may experience elevated stress levels, which can have a negative impact on their general mental health and cognitive abilities (Giannotti et al., 2022).

Academic engagement is necessary for a pupil's academic performance (Kim et al., 2019). A child is said to be academically engaged if he actively takes part in his academic duties, tasks, and obligations (Roksa and Kinsley, 2019). Through effective interaction, encouragement, and a dedication to education, parents can work to produce an atmosphere that can foster their child's well-being and academic achievement (Fard, 2020). Given the pressing need to improve children's academic

engagement, it is critical that parents and educators understand the factors affecting this dynamic.

The existing literature has gaps that highlight the need for more thorough research, like the one conducted in this study, to clarify the complex link between primary school children's academic engagement and family adjustment. Through identifying the subtle differences in how children adapt to their family situations, this research was intended to close the knowledge gap and offer insightful information to parents, teachers, and legislators. Equipped with a more profound comprehension of these relationships, stakeholders may cooperate to establish conditions that promote the best possible academic involvement and lay the groundwork for primary school pupils to succeed in lifetime learning.

Objectives

This study is intended to determine the level of family adjustment among children at the primary level of schooling. It investigated the relation between pupils' family adjustment and their academic engagement. The study also determined whether there was any statistical difference in perception among male and female respondents.

Hypotheses

H_1 There is a statistically significant positive relationship between family adjustment and the academic engagement of primary-level pupils.

H_2 There is a statistically significant difference in perception between male and female pupils regarding family adjustment.

H_3 There is a statistically significant difference in perception between male and female teachers concerning pupils' academic engagement.

Literature Review

How successfully a child adjusts to and performs within their family unit is referred to as family adjustment (Trute, 1990). The general health and development of a child can be significantly influenced by family changes. It is critical to understand that family adjustment is a continuous process, and difficulties can appear at various junctures in a child's growth (Trute and Hiebert-Murphy, 2002). A child's general wellbeing and success in life are influenced by their familial environment, which should be caring, reassuring, and stable (Gniewosz et al., 2023). The quality of the

interaction between children and their parents is a key factor in family adjustment (Trute et al., 2012). Relationships that are wholesome, encouraging, and loving are essential for a child's emotional and psychological growth (Chanda and Alkon, 2018). The family unit must communicate openly and effectively in order to resolve issues, address worries, and foster understanding. Children adjust to their families better when they feel heard and appreciated. The emotional health of a child inside the family is crucial to their entire growth and adjustment (Gniewosz et al., 2023). A child's emotional well-being is significantly shaped by a loving and supportive home environment (Flujas-Contreras et al., 2022). A sense of security and belonging is created for children when love and affection are shown to them. Hugs, pleasant words, and constructive encounters help them feel better emotionally. A setting that is consistent in its norms and standards can lessen anxiety and promote emotional stability (Ohannessian et al., 1994). When emotional encouragement, safe attachments, and an environment of affection are present, a child's emotional wellbeing within the family increases (Trute et al., 2012). Children are more likely to experience healthy emotional adjustment if they feel accepted, valued, and safe in their family (Schoors et al., 2019). A child's sense of security and predictability can be influenced by consistency and regularity within the family. Maintaining a stable setting that satisfies the child's fundamental needs is necessary for family adjustment (Sterle et al., 2018). The ability to acquire social skills, empathy, and the capacity to build lasting relationships with family members and others beyond the family are all influenced by healthy family adjustment (Quinn, 1983). Children learn and develop their social skills, values, and behaviours most frequently within the family, which serves as their primary social context. The first and most crucial socialisation factor for children is their families (Nichols and Keltner, 2005). Through interaction with their parents, siblings, and extended family, children acquire societal conventions, values, and behaviours. Their knowledge of how to connect with people in society is shaped by this early learning. A child's capacity to develop stable attachments and trust in others in future social connections is strongly influenced by the type of attachment they have with their primary carers, who are typically their parents (Singh et al., 2017). A sense of emotional stability that is fostered by a secure attachment to carers has beneficial effect on social development (Sterle et al., 2018). A child's freedom may improve his family adjustment naturally; as children become older, they want greater freedom and autonomy (Nicholas and Geers, 2003).

Giving a child the opportunity to make decisions that are age-appropriate might help them develop a sense of responsibility and self-worth (Robinson and Anderson, 1983). A
more peaceful home environment might result from parents encouraging their child's developmental autonomy because it lessens disputes brought on by power struggles. Children who are given some autonomy can improve family relationships and trust (Abdullah et al., 2023; Zemljak and Virtič, 2022). It can foster an environment of openness and cooperation when parents pay attention to their children's viewpoints and appropriately involve them in decision-making (Kotaman, 2013). The act of feeding, playing with, and nurturing children can strengthen the emotional ties that bind a family together (Music, 2016). These connections can provide comfort and support during trying times. Effective family communication is frequently necessary for excellent parenting (Singh et al., 2017). To improve communication skills and foster more honest discussions within the family, parents coordinate their efforts and make decisions jointly. Parents and other family members feel a profound sense of duty and purpose in raising a child. Having a sense of direction can improve family satisfaction and adjustment in general (Wissow et al., 2011).

Academic engagement is the term used to describe a person's active and constructive participation in educational experiences and learning activities (Perkmann et al., 2021). It includes a variety of emotions, attitudes, and feelings that reveal a child's dedication to and enthusiasm for their academic endeavours (Linnenbrink-Garcia and Pekrun, 2011). Academic engagement is crucial to a child's entire growth and performance in school. Children are eager to learn and exhibit sincere interest in the subject. They frequently show curiosity and a desire to learn more about subjects. Children who are actively involved will work hard to finish tasks and homework. They exhibit a willingness to persist despite obstacles and failures. There is a complicated and nuanced relationship between children's family adjustment and their educational engagement. A child's academic progress and engagement can be impacted by familial factors (Morrissey et al., 2014). Parents who are actively interested in their child's education are frequently found in families that are functioning well. It can have a favourable effect on a child's academic engagement when parents take an interest in their child's schooling, attend parent-teacher conferences, and assist with homework. The academic engagement of children from families with excellent emotional and academic support systems is higher (Carmona-

Halty et al., 2022; Khan et al., 2023). A child is more likely to take their academics seriously if they believe that their family is encouraging and supporting them (Mićanović, 2019). Higher academic involvement among children is more common in families with high educational expectations for their children (Sakirudeen and Uwe, 2020; Barger et al., 2019). It can inspire children to become more involved in their studies when parents set clear goals and support their efforts towards academic achievement. The stability of the family and a regular schedule at home can also help children be more engaged in their academics (Boonk et al., 2018).

Methodology

Method and Sample

This quantitative study was carried out in Sargodha division, Punjab, Pakistan, under a cross-sectional research design. Sargodha, as a division, comprises four districts: Sargodha, Mianwali, Khushab, and Bhakkar. All primary-level public school pupils and teachers in the division made up the total population of the study. In Pakistan, primary education typically encompasses classes 1 to 5, with pupils starting primary school around the age of 5 or 6. Primary school students typically vary in age from 6 to 11 years old.

Sampling

Owing to limited time and resources, the study was limited to a single district of the division using multistage sampling techniques. At the first stage, the researcher selected the district of Bhakkar through simple random sampling, and this process was executed with the help of online random number generation tools after constructing a sampling frame of the four districts. Bhakkar district had four tehsils: Bhakkar, Mankera, Darya Khan, and Kallur Kot. At the second stage, Tehsil Bhakkar was selected, repeating the same process that was used in the first stage. Tehsil Bhakkar comprised 67 Union Councils (UCs). The researcher visited the district council in Bhakar and requested that they generate a list of all UCs in Tehsil Bhakkar. At the third stage, 20 UCs were selected randomly using the systematic sampling technique, in which the researcher made a random start between one and three, yielding the last two digits on the table of random numbers. Then, the researcher visited the district education office for primary education and requested that they generate a list of all primary schools falling under the selected UCs. They were also

asked about the total strength of students and teachers in the selected UCs. According to the researcher's own calculation after visiting all tehsil-level primary education offices, a total of 107 primary schools were found to be functional, of which 23 were for girls, 41 for boys, and 43 were providing education to male and female students at the same institutions. Moreover, almost 8000 male and female students were found to be enrolled in primary schools and were taught by almost 3000 primary-teachers, both male and female. In accordance with these estimates, the study sample was to be chosen from a population size of 11,000. The study sample was selected through the L. R. Gay calculation of population and sample distribution. The suitable sample size is 400 if the size of the total population exceeds 5000 (Gay, Mills, and Airasian 2012). Hence, the sample of 400 students and teachers was taken conveniently at the fourth stage. The sample was drawn without any proportion as the exact strength of teachers and students was unknown to the researcher because of new admissions, and the records were yet to be updated by the officials. Finally, equal samples (100 from each) were taken from each category of male and female pupils and teachers.

Instrumentation

The study was carried out with the help of a self-developed tool for data collection. Two scales were prepared separately for teachers and pupils with fixed-choice items built on a 5-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = uncertain, 4 = agree, 5 = strongly agree). The pupils' scale, "Family Adjustment," was designed as a structured interview, aiming to eliminate the realistic possibility that a primary-level pupil might not understand the terms in a real sense. This scale consisted of twenty-three items with suitable content required for measuring children's level of family adjustment. On the other hand, the teachers' scale "Academic Engagement" was organized as a self-administered questionnaire containing nineteen relevant items to measure the extent to which pupils were engaged with their academics after scoring low or high on the level of adjustment from their families. The data collection tools were validated through face and content validity by presenting them to a panel of six experienced and highly qualified experts who had an adequate level of experience in similar areas of research. Having completed the validation process, the research scales went through a pilot testing procedure in which forty questionnaires (10%) were tested on teachers and pupils (5% each). This helped the researcher ensure the feasibility of research tools and design.

The reliability of thescales was established by employing Cronbach's alpha on the pilot-tested data to ensure consistency among the items in their respective constructs. Only items with
a reliability coefficient of ≥.70 were kept on the scales. Factorial validity (convergent) and internal reliability of research scales are also visible in the factor analysis statistics given in Table 1.

Data collection procedure

Prior to the data collection procedure, the researcher approached the competent authorities at the tehsil and district levels to seek permission. They were told about the purpose of the study and assured of any ethical considerations during the data collection process. The researcher, in person, visited the schools and collected the required information during the half-time break. A rapport of loyalty and trust was developed with children as well as teachers, and they were completely assured of their personal confidentiality and anonymity. An informed consent was attached to the questionnaire, showing the purpose of the study and asking respondents for their voluntary participation. The overall response rate remained at 98% (392) as a large amount of missing data was found in 2% (8) of questionnaires, which were excluded from the data analysis procedure.

Data analysis procedure

The data were analysed through descriptive and inferential statistics, using the Statistical Package for Social Sciences (SPSS) V-23. In descriptive statistics, the grouped mean and standard deviation were calculated after computing the means and standard deviations of all the items of a specific construct into a single variable. In inferential statistics, a Spearman ranked-order correlation was determined between family adjustment and the academic engagement of students, while a test of significance (t-test) was executed to identify any difference in perception among male and female teachers and pupils. Prior to using the parametric test (t-test) in data analysis, its core assumptions, i.e., independence of two groups, data normality, and equality of variance, were met. Levene's test was used to determine equality of variance ($F = .083$, $p > .05$). The data normality matrix was added in the following section.

Results

Exploratory factor analysis (EFA) was performed to ensure the internal reliability and factorial validity of the research scales. Table 1 indicates that all the items were loaded under their respective factors, indicating satisfactory factorial validity. In factor one, all the items are consistent, revealing an alpha value >.50, except items e4 and e11. In factor 2, similarly, all the items except item e35 were loaded in their own factor, indicating reasonable internal consistency and factorial validity. However, items e4, e11, and e35 were not consistent with their counterparts and violated their respective factors. To ensure the quality of work, these items were excluded from their respective scales.

Table 1. Factor analysis (rotated component matrix).

	Items	Factor loading	
		1	2
Factor 1: Family Adjustment			
e5.	My parents provide what I want.	.953	
e7.	My parents keep an eye on my indoor and outdoor activities.	.942	
e13.	My parents enjoy giving me hugs, cuddles, and kisses.	.923	
e15.	I feel comfortable talking to my parents about my feelings.	.912	
e12.	My family focuses on developing my self-esteem.	.898	
e10.	My family members are very careful about my health.	.896	
e14.	My family members enjoy spending time with me.	.876	
e2.	I have a good relationship with my parents.	.870	
e9.	My family is careful about my personality development.	.862	
e20.	My parents remain involved in my extracurricular activities.	.847	
e22.	My family feels proud of me.	.839	
e17.	I feel supported by my family.	.832	
e6.	My family members have an emotional attachment to me.	.818	
e8.	My family members listen to me and give importance to my ideas.	.802	
e19.	My parents are involved in my academic activities.	.797	
e21.	My family employs a permissive parenting style with me.	.793	
e23.	My family is very careful about my future.	.784	
e16.	I feel loved by my family members.	.771	
e18.	I get along with my siblings.	.756	
e1.	I feel satisfied with my life.	.750	
e3.	My parents reward me for behaving well.	.743	
e11.	My parents take me shopping in the market.	.431	
e4.	My parents get angry when I misbehave.	.325	

Factor 2: Academic Engagement		
e32.	The pupil properly takes notes in class lectures.	.941
e34.	The pupil does homework regularly.	.923
e37.	The pupil spends leisure time in studying their lesson.	.921
e25.	The pupil does proper study for exams.	.907
e26.	The pupil struggles to achieve good grades on exams.	.890
e24.	The pupil is punctual in attendance.	.875
e36.	The pupil exerts more effort doing difficult tasks.	.871
e39.	The pupil studies harder to improve performance.	.857
e33.	The pupil reviews notes properly.	.842
e30.	The pupil attends lectures/classes properly.	.837
e41.	The pupil actively participates in all classroom activities.	.833
e31.	The pupil is prepared for class.	.802
e28.	The pupil becomes disappointed when the class teacher is absent.	.781
e38.	After an absence, the pupil prepares the missing lesson.	.773
e40.	The pupil spends less time with friends to concentrate on studies.	.770
e42.	The pupil remains active and attentive in the classroom.	.764
e29.	The pupil maintains good study habits.	.750
e27.	The pupil gets frustrated when the class is interrupted.	.743
e35.	The pupil focuses on material that is tested.	.436

Table 2. Cronbach's alpha statistics.

Scales	Number of Items	α
Family Adjustment	21	.770
Academic Engagement	18	.738

Table 2 exhibits the reliability statistics of the research scales. The family adjustment scale included twenty-one items, yielding a reliability coefficient of .770, while the academic engagement scale consisted of eighteen items with a reliability coefficient of .738. The statistics indicate that both scales possessed a reliability coefficient ≥ .70, which is highly recommended.

Table 3. Grouped psychometric properties.

Scales	M	SD	Range	Skewness	Kurtosis
Family Adjustment	3.510	0.411	1-5	-0.85	0.74
Academic Engagement	3.705	0.351	1-5	-0.78	0.95

Table 3 shows the grouped psychometric properties of the research scales.

According to the statistics, the family adjustment results were (M = 3.510, SD = 0.411) and the academic engagement results (M = 3.705, SD = 0.351). The data on both scales were found to be normally distributed for family adjustment (*skewness* = -0.85, *kurtosis* = 0.74) and academic engagement (*skewness* = -0.78, *kurtosis* = 0.95). According to Ho (2013), if a calculated z value exceeds ±1.96, the assumption of data normality will be rejected at the alpha level of .05.

Table 4. Spearman (ranked order) correlation matrix.

Variables	N	1	2
Family Adjustment	392	-	
Academic Engagement	392	.619***	-

***p < .001.

Table 4 shows the Spearman correlation matrix between family adjustment and the academic engagement of pupils. The study found a significant positive correlation between two variables (r = 619, p <.001). Therefore, it is hypothesized that as the family adjustment of pupils increases, academic engagement also increases at the same pace.

Table 5. Mean comparison of female and male pupils on family adjustment.

Variables	Female Pupils		Male Pupils				
	M	SD	M	SD	t(197)	p	Cohen's d
Family Adjustment	3.59	0.63	3.43	0.59	0.513	.03	0.26

Note. female pupils (n = 98), male pupils (n = 97).

Table 5 shows the t-test statistics of the mean comparison between female and male pupils on family adjustment. The study found that female pupils exhibited a mean score (M = 3.59, SD = 0.63) similar to that of male pupils (M = 3.43, SD = 0.59). It is hypothesized that there was a small significant mean difference between male and female pupils regarding their family adjustment (p = .03, < .05). The study found a small difference or effect size between the two groups (Cohen's d = 0.26).

Table 6. Mean comparison of female and male teachers on academic engagement.

Variables	Female Teachers		Male Teachers				
	M	SD	M	SD	t(197)	p	Cohen's d
Academic Engagement	3.61	1.02	3.80	0.71	-0.601	.02	-0.21

Note. female teachers (n = 99), male teachers (n = 98).

Table 6 shows the statistics of the mean comparison between female and male teachers on academic engagement. The statistics revealed that female teachers exhibited scores (M = 3.61, SD = 1.02) similar to those of male teachers (M = 3.80, SD = 0.71). The study hypothesized that there was a small significant difference in perception between male and female teachers concerning pupils' academic engagement (p = .02, < .05). A small difference or effect between the two groups was observed (Cohen's d = -0.21).

Discussion

The study found a significant relationship between pupils' academic engagement and their family adjustment. In other words, it emphasizes how crucial a loving home environment is for encouraging children to succeed academically and to be engaged. It emphasizes the variety of ways that family dynamics affect children's wellbeing and capacity to succeed in their academic endeavours. Hetherington et al. (1998) emphasized that familial adjustment is a necessary factor in the emotional and psychological wellbeing of children. Gniewosz et al. (2023) concluded that a child's emotional health is crucial for his overall growth and adjustment. Most students reported successful family changes, demonstrating that they received support and value from their families. The provision of necessities and health care were included in these healthy family dynamics. These findings are consistent with those of Gniewosz et al. (2023), who concluded that a child's overall wellbeing is dependent on his family environment. Most students reported feeling completely at home in their families, which they described as having strong bonds, a positive outlook on family life, and open lines of communication. Trute et al. (2012) emphasized that quality relationships and interaction between parents and children are among the key factors in children's family adjustment. A pupil's capacity for navigating the norms and values of their community is intimately related to their capacity for social flexibility in a variety of contexts. The study also emphasizes the importance of family participation and children's self-perceived familial network integration in affecting family adjustment. The style of attachment a child has with their primary carers, who are often their parents, has a significant impact on their ability to form secure attachments and trust in others in future social connections. These findings are supported by Sterle et al. (2018), who found that children's social development

benefits from a sense of emotional stability that is fostered by a stable attachment to parents.

Importantly, the results highlight the considerable influence of interpersonal support and family ties on pupils' academic involvement. Academic performance is generally greater for pupils who obtain emotional support from their families. Supporting these findings, Morrissey et al. (2014) emphasized that family factors can have a significant impact on a child's intellectual development and participation. Supportive family relationships, including physical health and emotional support, are important determinants of academic involvement. The findings of this study make it abundantly evident that increased academic engagement in primary school children can be linked to a variety of psychological, social, and intellectual changes made within the context of the family. Academic success is more likely to occur when students feel supported, appreciated, and emotionally attached to their families. Carmona-Halty et al. (2022) concluded that children from families with effective emotional and intellectual support networks are typically more engaged in their academics. This emphasizes how crucial it is to support strong family ties as a basis for the academic achievement and the general wellbeing of primary school children. According to the figures reported in this study, children who were well-adjusted to their families consistently outperformed other pupils in academics and showed a keen sense of responsibility. These pupils were prompt, reliable, and diligent in their study habits, putting their all into their assignments and other academic duties. They participated fully in class discussions and kept a laser-like focus on their homework at home. Boonk et al. (2018) emphasized that a regular schedule at home and the stability of the family might also encourage children to take an interest in their academics.

The findings of this study offer significant new information about how children's familial adjustment and academic involvement are related. Spearman correlation analysis revealed that the relation between children's familial adjustment and their degree of academic engagement is substantial and favourable ($r = 0.619$, $p < 0.001$). These findings are consistent with the existing literature, such as Roksa and Kinsley (2019), which emphasises that the social and familial development of a child can have substantial impact on how involved he is in education. Moreover, Fard (2020) concluded that parents can attempt to create an environment to support their child's wellbeing and academic accomplishment through effective contact, encouragement, and a commitment to education. The study also looked at potential gender disparities

among pupils' opinions of family adjustment and found small, statistically significant differences ($p = 0.03, < 0.05$). This shows that in this situation, male and femalempupils have comparable viewpoints about adjustment within their families. Additionally, the study compared the views of male and female teachers on the academic engagement of their students and discovered small, appreciable differences ($p = 0.02, < 0.05$) in their responses. This implies that, based on the information gathered, teachers differ slightly in their perspective on pupils' academic participation. The main conclusion from these findings is that gender does appear to be a significant determinant in how pupils perceive their family adjustment and how teachers assess student academic engagement.

Conclusion

In conclusion, this study emphasizes how important family support and dynamics are in determining children's academic engagement and general wellbeing. According to the research, there is a substantial correlation between family adjustment and academic engagement, which suggests children who grow up in families that are loving and supportive are more likely to achieve high academic involvement. The study also emphasizes the significance of a number of elements within the setting of the family, including strong ties, open communication, and a positive attitude towards family life. These components help children feel emotionally secure and connected, which directly translates into improved academic performance and a greater sense of personal accountability.

The results also highlight the importance of maintaining family links and interactions, as children from families with strong emotional and mental support are more likely to be academically engaged. This emphasizes how important it is to encourage a supportive family environment as a basis for academic success and the general wellbeing of primary school pupils. The study also showed small gender differences that were statistically significant in how these pupils felt about their family's adjustment or how teachers evaluated their academic commitment. This shows that in this situation, teachers of both sexes have a small difference in viewpoint about the academic participation of pupils and that male and female pupils have slightly different ideas regarding their familial situations. These observations can help politicians, educators, and families create a supportive atmosphere that encourages children to succeed academically.

Limitations of the research

There are several noteworthy limitations, even though the study highlights the strong and positive correlation between academic engagement and family adjustment among primary school pupils in Bhakkar, Punjab, Pakistan. First, the study's limited generalizability stems from its exclusive emphasis on a specific area, which may limit the findings' significance in other contexts. Furthermore, the cross-sectional nature of quantitative research hinders the investigation of changes over time and the discovery of causal relationships. Response bias may arise from the use of self-reported data from teachers and pupils, since people do not always appropriately perceive or represent their experiences.

Guidelines for future research

A number of recommendations may be made for future research that builds on the current study in the areas of family adjustment and academic engagement among primary school pupils in Bhakkar, Punjab, Pakistan. First, to improve the generalizability of results to a more varied population, researchers could think about broadening the geographic reach beyond a particular area. By using a longitudinal research design, it would be possible to identify potential causal linkages and gain greater knowledge of the temporal dynamics between academic involvement and family adjustment. A wide range of research techniques, such as observational measures or qualitative approaches, could also be usefully included in future studies to triangulate results and provide a more thorough knowledge of the intricate relationship between family dynamics and academic involvement. To fully reflect the complex impact on pupils' academic experiences, a wider variety of demographic characteristics, such as socioeconomic status and cultural aspects, could be investigated.

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EVIDENCE-BASED EDUCATION IN DISCOURSE AROUND THE CONCEPT OF *BILDUNG*

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Abstract/Izvleček

The aim of this study lies in the use of theoretically comparative and historically methodological approaches to elaborate, compare, and recapitulate the features, history and the relationship of evidence-based education and the concept of *Bildung*. The relationship of the continental European didactic and Anglo-American curricular tradition, as well as to the meaning of teacher autonomy and (inter)national external evaluations of student achievements will be given special attention. Evidence-based education degrades teacher autonomy. Constituting the synergy of these two concepts can be considered the contemporary Holy Grail of education, which will probably not be found in the theoretical-methodological differences.

Keywords:
didactics, curriculum, education policy, history of education, teacher autonomy.

Na dokazih temelječe izobraževanje in koncept *Bildung*

Namen prispevka je z uporabo teoretično primerjalnih in zgodovinsko metodoloških pristopov obdelati, primerjati in povzeti značilnosti, zgodovino in odnos na dokazih temelječega izobraževanja in koncepta *Bildung*. Posebna pozornost bo namenjena razmerju med kontinentalno evropsko didaktično in anglo-ameriško kurikularno tradicijo ter pomenu učiteljeve avtonomije in (med)nacionalnega zunanjega vrednotenja dosežkov učencev. Na dokazih temelječe izobraževanje zmanjšuje avtonomijo učiteljev. Iskanje sinergije med omenjenima konceptoma lahko štejemo za sodobni sveti gral izobraževanja, ki ga najverjetneje ne bomo našli v teoretično-metodoloških razhajanjih.

Ključne besede:
didaktika, kurikulum, izobraževalna politika, zgodovina izobraževanja, avtonomija učitelja.

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Introduction

In the last few decades, the educational process has been dominated by (inter)national standardized evaluations of student achievements, as well as the subsequent discussions (Pettersson, Popkewitz, and Lindblad, 2017; Sahlberg, 2021). Therefore, we can talk about establishing a theory of evaluation (Rømer, 2018) that nurtures standardization and the quantitative measurability of student achievements in a behaviouristic manner (Pettersson et al., 2017; Sahlberg, 2021). Recent (inter)national external evaluations are based on the commercialization, psychologization, globalization and standardization of education established during the Cold War (Sahlberg, 2021; Topolovčan and Dubovicki, 2019). The repercussions of such standardized evaluation and quantitative research over the past thirty years have been seen as evidence-based practice, which is evidence-based education, evidence-based profession, evidence-based education policy (Biesta, 2007, 2010; Bridges, Smeyers and Smith, 2010; Hammersley, 2005; Smeyers and Depaepe, 2006). On the other hand, as with the Phoenix bird itself, continental and northern Europe is renewing interest in the concept of Bildung, which in no way diminishes the significance of the curriculum (Autio, 2017; Herdt, 2019; Horlacher, 2016; Krogh, Qvortrup, and Graf, 2021; Krogh et al., 2023). In fact, curriculum studies and the didactic tradition are equally represented. There are similarities between didactic approaches, i.e., the Bildung tradition, and the Anglo-American curricular approach to education; however, there are undeniable theoretical and practical differences, as well (Gundem and Hopmann, 2002; Krogh et al., 2021). The first attempt a systematic comparison of the two traditions was initiated by an international group of educational science experts in the early 1990s within the international project "Didaktik meets Curriculum" (Gundem and Hopmann, 2002). Interest in a comparison of the two traditions is still alive today (Krogh et al., 2021; Krogh et al., 2023).

Having acknowledged the rise in evidence-based education, and the renewed interest in the concept of Bildung, the aim of this study, in the perspective of a theoretical-comparative and historical methodological approach, is to elaborate, compare and recapitulate these phenomena. The genesis and characteristics of evidence-based education and the concept of Bildung will be analysed, as well as their manifestations in school practice, with special reference to the development of the didactic tradition in central and northern Europe and the curriculum approach in the USA.

In analysing the Bildung concept, special attention was paid to its focus on teacher autonomy. The focus of the study encompasses the collateral side-effects of evidence-based education, especially in light of the relationship between practitioners, education policy makers and educational research, as well as standardized external evaluations. The resulting data can offer (re)definitions, descriptions, and classifications of these concepts and their scientific understanding. This forms an explanation of the relationship, and (re)definition of educational, didactic and curriculum theory.

The German tradition of Bildung

The Bildung concept, which was historically dominant in central and northern Europe is not a coherent concept (Autio, 2017). The word Bildung is of German origin, and translated literally, it means "education", which is, however, a rudimentary translation, because it does not include its complex theoretical and linguistic meaning. Its translation is, therefore, avoided, and the original form is used in foreign languages, as well as for the terms Didaktik and curriculum (Gundem and Hopmann, 2002). Bildung can be defined as the forming of an autonomous, complete, free, emancipated, (self-)critical and (self-)reflective individual capable of moral and cultural action (Terhart, 2022). The history of the Bildung concept is intriguing. It appeared during the Enlightenment (Herdt, 2019; Horlacher, 2016). The term was first used in an educational context in 1745 by the Swiss philosopher Johann Georg Sulzer, and as a theory of education proposed by Johann Gottfried Herder based on religion, i.e., the Protestant movement of Pietism (Herdt, 2019; Horlacher, 2016). The central notions of Bildung comprise freedom and autonomy and have their genesis in the libertarian pedagogical ideas of Jean-Jacques Rousseau (1712-1778) and his book Emile or on Education from 1762 (Autio, 2017). Emile marks a historical dividing the old in pedagogy, before its publication, and the new, after its publication (Tröhler, 2011). Rousseau defines freedom as a desirable personal, social, and civic virtue. The intellectual history of the Bildung concept was formed in the moral philosophy of Immanuel Kant (1724-1804), which served as the point of distinction between the German didactic Bildung tradition and the anglophone psychologized concept of curriculum (Autio, 2017).

Kant's definition of free will is a component of morality, which is characteristic of the northern European educational tradition of having the teacher as an autonomous professional in teaching. The concept of Bildung has cognitive, aesthetic, and practical elements of the teaching as educational, because these are morally decided as relevant in the teaching content, and worthy of teaching and learning. Wilhelm von Humboldt (1767-1835) was significant for establishing the concept of Bildung as Kant's successor with his philosophy (Lundgren, 2015). Von Humboldt's understanding of the concept of Bildung is in accordance with Herbart's concept of Bildsamkeit. Johann Friedrich Herbart (1776-1841) was also significant for establishing the concept of Bildung. Herbart defined Bildung as an autonomous, emancipated and morally, culturally, and socially responsible (self-)critical individual formed through the teaching process (education by teaching). An individual formed in this way is not only critical of new knowledge, but also capable of shaping (Bildsamkeit) (Lundgren 2015). John Dewey (1859-1952) was also on the trail of the Bildung concept with ideas about critical judgment (Biesta, 2007; Rømer, 2018). In the USA, by the end of the 19th century, education, just as with Dewey himself, was inspired by Herbart's ideas and pedagogical tack. In discussing Dewey, and thus pragmatism in education, it should be pointed out that pragmatism has two theoretical origins. The first is behavioural psychology, and the second is the process of research (Mead, 1936, as cited in Oelkers, 2004, p. 362). In relation to Wilhelm Wundt, i.e., his student George Herbert Mead (1863-1931), Dewey realized the importance of human science in education (Germ. Geistewissenschaft) and the ideas of Wilhelm Dilthey (1833-1911) (Tomlison, 1997). Following the basis of human science, human scientific pedagogy (Germ. Geisteswissenschaftliche Pädagogik) was created with representatives Hermann Nohl (1879-1960) and Erich Weniger (1894-1961) (Riquarts and Hopmann, 1995; Oelkers, 2006) from which, together with reform pedagogy (Germ. Reformpadägogik), the theory of education and teaching was formed (Germ. bildungstheoretische Didaktik) (Riquarts and Hopmann, 1995). The genesis of didactics is connected to Johann Amos Comenius (1592-1670), who wrote Didactica Magna in 1632, and Wolfgang Ratke (1571-1635), who wrote Methodus Didactica in 1613. Owing to the (counter-)reformation and the Thirty Years' War, this was a turbulent time in Europe. Comenius was especially important to education in Europe at the time, but also in a wider social, cultural, religious, and political context. He was a member of a brotherhood called Czech Brethren, who were supporters of the Hussite movement and reformation (Blankertz, 1982).

Comenius and Ratke used the Latinized word "didactics" of Greek origin (Greek didaskein, didaskalos, didaskaleion, didaktike tehne) (Riquarts and Hopmann, 1995) since Latin was the official language of the social establishment of the time. In Comenius's statement that everybody needs to be taught everything, one can see a silhouette of the didactic triangle: teach (teacher), everybody (student) and everything (content), which is the basis of the didactic Bildung tradition.

Teacher autonomy is the manifestation of the Bildung concept in school practice (Heinrich, 2015; Terhart, 2002), and it first appeared in the 18th century with the ideas of Rousseau and Johann Heinrich Pestalozzi (1746-1827) about the autonomy of a child (Heinrich, 2015). The word autonomy comes from the Latin word "autonomos," which means possessing one's own rules and regulations, and in professions it is defined as an individual or group possibility of self-governance, management, and limitation (Wermke and Salokangas, 2015, p. 1). The concepts of Bildung and Didaktik differ from the Anglo-American curricular tradition in regards to accepting the teaching content in education (Autio, 2017; Gundem and Hopmann, 2002; Lundrgren, 2015; Terhart, 2002). The Anglo-American curricular tradition focuses on operationalized learning outcomes and student learning activities, while the teaching content and its legitimization in the curriculum are important to the didactic tradition (Lundrgren, 2015; Terhart, 2002). The teaching content is the didactic essence of the Bildung concept. Therefore, teachers in the European didactic tradition, because of their own education, are entrusted to design their own teaching (and student learning) of the teaching content with their expertise (Černe, 2022; Lundgren, 2015; Plavšić i Diković, 2022; Terhart, 2002). This constituted teacher autonomy (Heinrich, 2015; Lundrgren, 2015; Terhart, 2002). Therefore, the autonomous teaching of the teaching content is a crucial difference between the didactic (Bildung concept) and the curricular approach. Teacher autonomy experienced significant development and establishment in the form of human pedagogy and in the movements and directions of reform pedagogy (Heinrich, 2015). In recent times, teacher autonomy has become a term used globally in research, educational policy, and practice (Wermke and Salokangas, 2015).

Evidence-based education

It is not enough to merely explain the problem of education (German erklären), it is also necessary to understand it (German verstehen) (Biesta 2020; Smeyers and Smith,

2014). The distinction between the terms explain and understand represents the intersection of quantitative and qualitative approaches to educational research. Scientific explanation in education comes from the natural sciences and is characterized by exactness, measurability, and quantification (Langemann, 2000). Scientific understanding derives from human science and the ideas of Wilhelm Dilthey, and it includes a number of qualitative tools such as hermeneutics, interviewing, systematic observation, and ethnographic, naturalistic, and participatory research. In the last few decades, there has arisen a need for both methodological approaches and their combination (Krmac, 2022; Topolovčan and Dubovicki, 2019). Educational research has increasingly been using methods from the field of future studies (Dubovicki, 2017; Dubovicki and Topolovčan, 2020).

In the last thirty years, a movement called evidence-based practice (evidence-based policy, evidence-based profession) appeared as a mechanism for connecting practice, policy and research in certain professional areas (Biesta, 2007, 2010; Bridges et al., 2010; Hammersley, 2005; Smeyers and Depaepe, 2006). The movement first appeared in the field of medicine in the 1990s (Guyatt et al., 1992). It was later accepted in social work, probation, human resource management and so on (Biesta, 2007). It is defined as a decision-making process and intervention in the practical part of an area based on the results of scientific research (Biesta, 2007, Hammersley, 2005), i.e., as an integration of a) the most reliable available evidence, b) professional judgment and 3) client values (Sackett et al., 2000, as cited in Detrich and Lewis, 2012, p. 214). Its central idea lies in effective intervention and in finding "what works" (Biesta, 2007). The movement of evidence-based practice has become crucial for deciding on a policy of acting at all levels of the professional field (Detrich and Lewis, 2012). In the early 2000s, it also appeared in education (Biesta, 2007; Bridges et al., 2010; Detrich and Lewis, 2012; Smeyers and Depaepe, 2006) in the form of evidence-based education. Evidence-based education draws data from empirical research and meta-analyses for decisions linking researchers, policy makers and practitioners in schools (Simpson, 2018; Wrigley, 2018). Additionally, it is present within education policy and standardized (inter)national evaluations, i.e., international large-scale assessment (ILSA) (Petterrson et al., 2017). This refers to evaluations such as PISA, TIMSS, PIRSL, etc. (Pettersson et al., 2017). Such international external evaluations are not new, seeing that the idea was conceived with the founding of the International Association for the Evaluation of Educational

Achievement (IEA) in 1958 (Hopmann, 2008). Data from such external evaluations provide insight into the level of measured achievement by students, as well as insight into inter-school differences in student achievement. The results of (inter)national evaluations of students are often used in creating national educational policies.

The development of evidence-based education is linked to the Anglo-American concept of curriculum. The word curriculum is of Latin origin and comes from the word "currere," which means to move, and the word "cursus," which means sequence, trace (Lundgren, 2015, p. 5). It appeared in the Renaissance and was first used by Petrus Ramus (1515-1572) in relation to goals and teaching content (Lundgren, 2015, p. 5). It was later used by Daniel Georgius Morhof (1639-1691), a professor at the University of Rostock (Ballauff and Schaller, 1970, p. 396, as cited in Gundem, 1992, p. 61). The discovery of new continents spread the educational ideas and the term "curriculum." At the beginning of the 20th century the concept of curriculum was developed in the USA, with Stanley Hall's student John Franklin Bobbitt (1876-1956) and his book The Curriculum (1918) being significant for its development (Lagemann, 2000). At the end of the 1890s and in the first decades of the 20th century, development of the concept of curriculum was also influenced by the ideas of John Dewey. Behaviourist operationalization of learning goals was a powerful mechanism for the formation of the curriculum concept (Ornstein and Hunkins, 2018). The curriculum as we know it today was established in the middle of the 20th century after the Second World War by the work of Ralph W. Tyler (1902-1994) and his rationale, which was the basis for the organization of teaching in the USA, founded on the idea of pragmatism (Topolovčan and Dubovicki, 2019). The reference moment in the development of the dominant curriculum concept is the USSR's launch of Sputnik in 1957, which caused Sputnik shock in the rest of the democratic and capitalist world, primarily in the USA (Topolovčan and Dubovicki, 2019). This is rightly considered a reference point for accentuating the STEM field in education. Coleman's report from 1966 and the Nation at Risk report from 1983 in the USA with global consequences were both crucial for later (re)forming of the curricular approach (Topolovčan and Dubovicki, 2019). The term curriculum returned to Europe at the end of the 1960s, thanks to the work of the returning emigrant S. B. Rosbisohn.

Discussion: the relationship between the concept of Bildung and evidence-based education

Evidence-based education has its genesis in the Anglo-American concept of curriculum, primarily in the USA and behavioural psychology (Sahlberg, 2021; Topolovčan and Dubovicki, 2019); however, the two are not synonymous. At the end of the 1960s, the concept of curriculum returned to Europe, and approximately simultaneously the intentions of external global evaluations appeared at the end of the 1950s, which provided the impetus for future evidence-based education.

The evidence-based education movement gravitates toward measurability, quantification, exactness, and standardization in education (Bridges et al., 2010). It deals with the transfer of research practice patterns from medicine to education, as well as the application of management patterns from the domain of corporate management (Biesta, 2007, 2010; Tröhler, 2016). The intention of this movement is to find the gold standard for randomized controlled trial that demonstrates the effectiveness of educational procedures beyond a reasonable doubt (Biesta, 2007, p. 5). Evidence-based education is a manifestation of the standardization, psychologization, globalization and economization of education with the intention of reforming national education systems, which represents a technocratic approach to the curriculum (Biesta, 2007; Topolovčan and Dubovicki, 2019) with the repercussion of the degradation of teacher autonomy. Teacher autonomy is an immanent element of the Bildung concept based on the idea of freedom, and it represents the building of a free, autonomous, (self)critical and reflective person (Heinrich, 2015; Terhart, 2002). The concept of Bildung has its limitations, primarily in that it has become predictable, boring and barren in practice (Maaser and Walther, 2011) and is used as an educational slogan to support conflicting positions, arguments, and goals (Horlacher, 2016).

Evidence-based education draws data from two forms. One is scientific empirical research conducted according to a relatively scientific canon of research practice, and (supra)national external standardized evaluations. More recently, this movement uses data, not only from primary research, but from first- and second-order meta-analyses. That has resulted in the emergence of a trend towards analysing and unifying the results of large quantitative meta-analytical studies using inappropriate methodology and interpreting these with an insufficiently scientifically based educational theory.

In relation to Bildung, external evaluation degrades the teaching profession, i.e., teacher autonomy, because the ability to evaluate students represents an immanent element of the teacher's expertise. Advocating external evaluation is an expression of distrust in the teacher's expertise at valid and reliable evaluation of student achievement. Evidence-based education has a tendency to prescribe precisely defined pedagogical procedures, teaching situations and methods of evaluation (teaching practice), which lead to minutely determined learning outcomes defined in a behaviouristic manner. Teachers lack autonomy in such a process, which is precisely the central notion of the concept of Bildung in school practice. The teacher's role and profession are reduced to those of a bureaucratic official who implements questionable "scientifically proven" effectiveness of teaching intervention.

The repercussions of the rigorous application and implementation of the results of external national evaluations that occur in the phenomenon called "shadow education" clearly demonstrate the relationship between the concept of Bildung and evidence-based education in school practice. We are talking about an escalation of private tutoring and courses from the subjects of formal education (Baker et al., 2001; Bray, 1999; Jokić and Ristić Dedić, 2007; Stevenson and Baker, 1992). In seeking to improve the formal educational system through external evaluation, we are doing exactly the opposite with the emergence of a parallel (shadow) educational system of tutoring. One of the reasons for that is that a standardized education policy, based on external evaluation, and evidence-based education, maximizes the competitiveness in the school system and in education.

The comparison of the Bildung concept and evidence-based education clearly shows that they represent two opposite approaches to education. The tension between the technocratic and democratic approaches is evident (Autio, 2017; Biesta, 2007). Education is not a process of physical interaction, but a process of a symbolically mediated interaction, which is visible in the Bildung concept (Biesta, 2007). Therefore, the question of what is desirable in education and teaching is justified (Autio, 2017; Biesta, 2007). In other words, education is a moral practice, not a technocratic intervention, which is the essential intention of evidence-based education (Autio, 2017; Biesta, 2007, 2010). That is why it is justified to claim that education and teaching practice are characterized by value-determined desirable decisions on action.

That elaboration does not diminish the importance of educational research, but the extent to which education policy is founded on research remains questionable, because such an approach distorts either practice or research. Besides using knowledge, practitioners also rely on their personal experience and value-based decisions (Hammersley, 2005; Biesta, 2007), while research criticism of education policy and practice often tends to be utopian or naïve, just as researchers often produce detailed data that are superfluous to practitioners (Hammersley, 2005).
Interpretation and comparison of these facts make it clear that evidence-based education denies the tradition of the Bildung concept (Autio, 2017; Biesta, 2007; Rømer, 2018). Evidence-based education degrades the concept of teaching and the teacher's instruction. Referencing the ideas of John Dewey (Biesta, 2007) and Immanuel Kant (Rømer, 2018) clarifies that evidence-based education accentuates the power of evaluation rather than the power of judgement. The emphasis is being placed on the standardization, measurability, commercialization, and privatization of education, which is additionally wrapped in the cost-benefit corporation management of the educational system, schools and the activities of students and teachers (Sahlberg, 2021). Therefore, we can say that education deals with the theory of evaluation, rather than with the pedagogical, i.e., educational theory that dominates in the Bildung tradition (Rømer, 2018).

Conclusion

The genesis of the Bildung concept lies in the Renaissance and the Enlightenment, as well as in the didactic tradition of continental and northern Europe. Education marks the forming of an autonomous, free, self-reflective, and self-critical person capable of moral, social, and cultural action. The integral parts of the Bildung concept are freedom and autonomy. It was the dominant starting point for the process of contemplating education until the first half of the 20th century. Evidence-based education has its origin in the curriculum tradition; however, those two are not synonyms conceptually. Evidence-based education implies using the results of scientific research and standardized external evaluations to make decisions regarding the education policy of linking practice and research. By the end of the 1980s, these phenomena had escalated into a global educational reform movement. Meanwhile, by the end of the 1960s, the term "curriculum" had returned to Europe, mainly in western Germany.

By the beginning of the 1990s, in the field of medicine, the phenomenon of evidence-based practice had triumphed, and later, in education, there is the phenomenon of evidence-based education. It thus became interesting to education policy. In the last twenty years, there has been renewed interest in the concept of Bildung, often as a tool to fight against standardized, international, large-scale assessment, and evidence-based education (education policy) in general.

Evidence-based education was formed on a positivist and technocratic approach to education. It arose along with the aspiration to quantitatively measure the "effectiveness of treatment" in achieving behaviouristic formulated student learning outcomes. Through that, it seeks to recommend "what works" interventions (treatments) in teaching to the practitioners. In the Bildung concept, education and teacher instruction are not technocratic undertakings of effective treatments, but moral and value-determined desirable actions by teachers (and students) during the teaching process. The didactic tradition places emphasis on the legitimization of the teaching content, and teachers were awarded trust in their expertise (autonomy) while designing the teaching of that content (moral and value-determined action). In the curricular approach, the emphasis was placed on the learning activities, and on achieving the prescribed learning outcomes and their evaluation, which serves as the basis for evidence-based education. In the manner of standardized external evaluation, evidence-based education discredits teacher autonomy, which is the central part of the Bildung concept. Teacher autonomy in teaching expertise is discredited, especially in the form of expressing distrust in the teacher's ability to evaluate student achievement.

The evidence-based education movement uses the results obtained through scientific study of education. It uses the results of extensive scientific research and data from (inter)national standardized external evaluations. Recently, it has become fashionable to conduct and use the results of meta-analyses; however, their results depend on the rigor of the methodological design of such research. On the other hand, arguments against the Bildung concept are that it is being used as an educational slogan to support opposing positions, arguments, and goals, and it is becoming predictable, "boring", and barren in practice.

One practical negative side-effect of evidence-based education, more precisely, the rigorous application of standardized external evaluation, is the emergence, alongside the formal system of education, of a parallel education system in the form of private instruction. Therefore, we can conclude that evidence-based education leaves no space for the concept of Bildung.

Nevertheless, it is not justified to hold a strictly negative view on standardized external evaluations. On he contrary, it is appropriate to critically use their data as an auxiliary tool for anthropological and philosophical formation of the goals of education policy as well as in system reform. Still, the fact is that the established measurability and standardization of education has been established, which raises the question of the future of education. It is nonetheless appropriate to critically use their data as an auxiliary tool in the anthropological and philosophical formation of the goals of educational policy and system reform. Undoubtedly, the measurability and standardization of education have been established, so the issue of the future of education remains relevant.

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NAVODILA AVTORJEM

Osnovni namen revije je povezati širok spekter teoretičnih izhodišč in praktičnih rešitev v izobraževanju ter tako spodbujati različne metodološke in vsebinske razprave. Uredniški odbor združuje strokovnjake in raziskovalce iz več evropskih držav in s tem želi ustvariti možnosti za živahen dialog med raznovrstnimi disciplinami in različnimi evropskimi praksami, povezanimi z izobraževanjem.

Revija za elementarno izobraževanje torej objavlja prispevke, ki obravnavajo pomembna, sodobna vprašanja na področju vzgoje in izobraževanja, uporabljajo primerno znanstveno metodologijo ter so slogovno in jezikovno ustrezni. Odražati morajo pomemben prispevek k znanosti oziroma spodbudo za raziskovanje na področju vzgoje in izobraževanja z vidika drugih povezanih ved, kot so kognitivna psihologija, razvoj otroka, uporabno jezikoslovje in druge discipline. Revija sprejema še neobjavljene članke, ki niso bili istočasno poslani v objavo drugim revijam. Prispevki so lahko v slovenskem, angleškem ali nemškem jeziku.

Sprejemanje člankov v objavo

Prejete prispevke najprej pregleda urednik/založniški odbor in ugotovi, ali vsebinsko ustrezajo konceptu in kriterijem revije.

1. Če prispevek ustreza konceptu in kriterijem revije, ga uredniški odbor pošlje dvema anonimnima recenzentoma. Članek, ki je vsebinsko skladen s konceptom revije, vendar ne ustreza drugim kriterijem, lahko uredništvo vrne avtorju, da ga popravi.
2. Avtor dobi recenzirani prispevek vključno z morebitnimi priporočili za izboljšave/popravke, v primeru zavrnitve pa z navedenimi razlogi zanjo.
3. Končno odločitev o objavi članka sprejme urednik na temelju priporočil recenzentov. Pri tem utemeljitve za svojo odločitev ni dolžan navesti.
4. Besedilo prispevka mora biti pripravljeno v skladu z Navodili avtorjem.
5. Avtor jamči, da so v prispevku predstavljeni podatki natančni, verodostojni in izvirni. Ko je članek sprejet v objavo, avtor podpiše Izjavo o etičnosti raziskovanja in Izjavo avtorja o izvirnosti prispevka. Vsi prispevki gredo skozi postopek za ugotavljanje plagiatorstva.

Navodila za oblikovanje besedila

Pri pripravi besedila prispevka upoštevajte naslednja navodila:

1. Tipkopis oddajte kot dokument v programu Microsoft Windows. Nabor pisave je Times New Roman, velikost črk 12 za osnovno besedilo in 10 za povzetka v slovenskem in angleškem jeziku, literaturo in citate, če so daljši od treh vrstic, razmik med vrsticami pa je 1,5. Velikost pisave v tabelah in naslovih tabel ter grafov je 10; razmik med vrsticami pa enojni. Širina tabele naj ne presega 12,5 cm. Besedilo naj bo obojestransko poravnano. Vodilni naslovi naj bodo zapisani krepko, prvi podnaslovi ležeče, drugi podnaslovi pa navadno. Naslovov in strani ne številčite in ne uporabljajte velikih tiskanih črk.
2. Besedilo prispevka naj ne presega 38.000 znakov s presledki, vključno s povzetki, literaturo in ključnimi besedami.
3. Naslov prispevka naj ne presega 15 besed in naj bo v slovenskem in angleškem jeziku.

4. Prispevek naj ima na začetku povzetek v slovenskem jeziku ter njegov prevod v angleškem jeziku (oziroma obratno) in naj ne presega 100 besed. Za povzetkom naj bo 5 ključnih besed. Poleg povzetkov naj prispevek na koncu prispevka, pred literaturo, vsebuje daljši povzetek (500-700 besed) v angleščini, če je članek napisan v slovenščini.
5. V prispevku ne uporabljajte ne sprotnih ne končnih opomb.
6. Vire navajajte v skladu s standardom APA (American Psychological Association). V seznam literature vključite samo v tekočem besedilu navedene vire, ki jih uredite po abecednem vrstnem redu.
7. V posebnem dokumentu pošljite naslednje podatke: ime in priimek avtorja, akademski naziv, organizacijo, kjer je avtor zaposlen, elektronski naslov, naslov bivališča in naslov prispevka.

Primeri:
Knjige: priimek, začetnica imena avtorja, leto izida, naslov, kraj, založba.
Duh, M. (2004). *Vrednotenje kot didaktični problem pri likovni vzgoji*. Maribor*:* Pedagoška fakulteta.

Članki v revijah: priimek, začetnica imena avtorja, leto izida, naslov prispevka, ime revije, letnik, številka, strani.
Planinšec, J. (2002). Športna vzgoja in medpredmetne povezave v osnovni šoli. *Šport*, *50*(1), 11–15.

Prispevki v zbornikih: priimek, začetnica imena avtorja, leto izida, naslov prispevka, podatki o knjigi ali zborniku, strani, kraj, založba.
Fošnarič, S. (2002). Obremenitve šolskega delovnega okolja in otrokova uspešnost. V M. Juričič (ur.), *Šolska higiena: zbornik prispevkov* (str. 27–34). Ljubljana: Sekcija za šolsko in visokošolsko medicino SZD.

Vključevanje reference v tekst: če gre za dobesedno navedbo, napišemo v oklepaju priimek avtorja, leto izdaje in stran (Lipovec, 2005, str. 9), če pa gre za splošno navedbo, stran izpustimo (Lipovec, 2005).

Prispevke avtorji oddajo na spletni aplikaciji:
https://journals.um.si/index.php/education/about/submissions.

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Planinšec, J. (2002). Športna vzgoja in medpredmetne povezave v osnovni šoli. *Šport*, *50* (1), 11–15.

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Fošnarič, S. (2002). Obremenitve šolskega delovnega okolja in otrokova uspešnost. V M. Juričič (ur.), *Šolska higiena: zbornik prispevkov* (str. 27–34). Ljubljana: Sekcija za šolsko in visokošolsko medicino SZD.

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