

CALT 2023

BOOK OF ABSTRACTS



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BOOK OF ABSTRACTS

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KEYNOTES

Revisoning Creative Approaches to Learning and Teaching: Lessons from Posthuman Inquiry

Pamela Burnard, PhD

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'Making-with' is a term coined by Donna Haraway (2016:58) which recognises that nothing makes itself but is in a constant state of 'becoming' with materials, environments, bodies and constructs. 'Thing-power', according to Jane Bennett (2010: 6), is the curious ability of inanimate things to animate, to act, to produce effects dramatic and subtle. In this presentation I will explore how these (and other) posthuman concepts matter in terms of what things do in the coauthoring of new creativities which . I will share examples of what sciences and arts teach together when creative learning and teaching is revised. I will evidence and argue the importance of identifying which creativities we are educating for. I will provide examples from educational settings of transdisciplinary and design creativities, as well as everyday and entrepreneurial creativities, all of which produce material performances and practices that call for transforming teacher education and future-making education.

Pedagogies of the Possible: Reimagining Education

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The emerging field of Possibility Studies advances a paradigm shift in the way we think of ourselves, our societies, nature and the environmental crisis, and not least our educational systems. By foregrounding notions such as agency, creativity, and innovation, Possibility Studies researchers and practitioners are actively trying to reimagine education as a space for increased participation, possibility thinking, and learner empowerment. This talk will discuss, in this context, Pedagogies of the Possible as those educational encounters and experiences based on awareness and exploration of the possible in psychological, material, social, and ethical terms. A call will be launched to contribute to designing such pedagogical approaches in a radical effort to consider education not only 'as is' but 'as it could be' and 'as it should become'.

ORAL PRESENTATIONS

Creative incentives for reading in children of early school age

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Abstract

The teaching of the Croatian language according to the Curriculum of the subject Croatian Language (2019) is based on four language activities: listening, speaking, reading and writing, which should be developed equally. In early school age, from the first to the fourth grade, students acquire basic knowledge of the mother tongue, and special attention is paid to the development of communication competence, that is, functional language knowledge and language use in different situations. Given that children acquire a large amount of information not only in Croatian language classes, but especially in other subjects such as Nature and Society, Religious Studies or Mathematics, it is important to develop their reading competence as well as their motivation towards reading. Standardized reading tests (PISA, 2018 and PIRLS, 2011) show that Croatian students have developed reading strategies, but have very low motivation for reading. On the other hand, there is a lot of talk about the importance of encouraging creativity in students, but also the importance of using creative teaching methods that will result in greater student interest and greater motivation towards the subject and its content. This is precisely why the aim of this work is to examine the connection between the use of creative methods in encouraging reading and student motivation toward reading. During the course of three months, an experimental program to encourage reading, which was created for the purposes of this research, will be implemented with students in the second grade of primary school (N = 24). The program lasts 12 weeks and every week the teacher implements one creative method (game or activity, e.g.: reading badges; reading meter; literary recommendation; 5-minute reading; I read and ask; the reader goes around the world) to encourage reading (six methods in two cycles in total). Students will fill out a questionnaire on reading attitudes before and after the implementation of the program, and the results will be compared. In addition to the students, their parents will also participate in the research by filling out the questionnaire. It is expected that the creative reading promotion program will improve students' motivation and attitude toward reading, and that their interest in reading will be noticed by parents at home.

Keywords: reading, motivation, creative teaching, Croatian language, early school age.

Creative language and music workshops as incentives for the complete development of the child

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Abstract

In early kindergarten and preschool ages, it is important to encourage the development of all skills in a child, and he should be allowed to try different content in order to find what interests him more or in which he wants to develop more. Given that children of that age are particularly sensitive to music and rhyme, songs and rhymes are often used, especially at the younger kindergarten age, which enables the child to acquire rhythm, language intonation and enrich vocabulary. When a child has mastered the basics of his mother tongue, around the age of three, he needs to be encouraged to express himself through different activities. This is particularly important considering that research (Roje Đapić et al., 2020) shows that children of kindergarten and preschool age spend two to three hours a day in front of screens during the week. It is precisely because of this that communication difficulties, as well as specific language difficulties in the preschool and early school age, appear more and more often (Ivanković, 2021). This is precisely why we would like to investigate how much the implementation of the "language-music workshop for children from four to seven years" program affects the development of language skills. Namely, over three months, the program will be held once a week for one full hour, during which children will develop their listening and speaking skills, as well as hearing and rhythm, through singing songs and language games. Before the implementation of the program and after its completion, a language test will be conducted with the children so that the results can be compared. It is expected that the implementation of the program will have a positive impact on the language development of kindergarten and preschool children.

Keywords: integral development, language games, creativity, musical game, language development.

Reading – the door to the world of imagination and creativity

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Abstract

“If you want your children to be intelligent, read them fairy tales, if you want them to be more intelligent, read them more fairy tales.” Albert Einstein

Children of an early and preschool age are capable of using their imagination and have big dreams. By reading we expand children’s imagination and creativity because reading is not only a mechanical act of going through sentences found in picture books. It is the foundation for the acquisition of numerous important skills which children should master before starting school. Reading to children from the earliest age is equally important for their development as caring about their basic needs.

By flipping the pages of a book children have the opportunity to get immersed in the lives of fictional characters and learn about a world which is completely different from their own.

Children of an early and preschool age use their imagination and develop their linguistic and communication skills, improve pronunciation and the use of body language. Imagination helps them find solutions to various problems, but also to develop negotiation skills. Besides, it is common knowledge that they develop emotions through imagination, and that imagination enhances understanding and helps expressing emotions and sympathy.

This paper presents the results obtained in research about parents and children’s habit of reading, as well as their influence on the development of imagination and creativity. The aim of the research was to investigate the preschool children parents’ attitudes toward habits and methods of reading.

As many as 83 preschool children parents participated in the research, and the obtained results indicate that a large number of participants are aware of the importance of reading from the earliest age with regard to the fact that it empowers creativity and expands imagination. Through picture books, children learn about the world surrounding them and about the difference between good and evil. Reading stimulates empathy and logical thinking and makes children become stronger individuals. This research proved that by reading books, new imagination areas are discovered thus opening the door to all types of new, still unknown worlds.

The research also proved that reading aloud helps children use their imagination and explore people, places, times and events beyond their own experience.

Keywords: children, parents, reading, development of imagination, creativity.

Musical and stage expression creation research

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Abstract

This paper investigates creation and creativity as a means of research in the scientific and artistic fields from an educational (pedagogical) perspective. The research purpose entails a display of the creative activities and students' final results within an elective course and their personal experiences during the continuance of the act and with a gap of five years or more. The descriptive approach of the participants through their recollection of the experiential act of encouraging and developing creativity within the course, the sociological aspect of joint creation and the emotional satisfaction achieved, resulted in a changed perception of the role of the teacher in the context of arts education. The open approach and creative ideas of individuals who have adopted such an approach through personal experience are transferred to other educational areas, imperceptibly incorporated and form a modern teaching process.

Keywords: arts education; creation; creativity; educational context.

Imagination and creativity in a child's encounter with a musical composition - let's listen to children's voices

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Abstract

In the context of the contemporary paradigm of childhood, highlighted by the National Curriculum for Early and Preschool Education (hereafter NKRPOO, 2015), creativity stands out as an educational value that represents the basis of a child's development as an initiative and innovative person. In contrast to the traditional view of the child's development and the idea of a naturally creative child, all children are beginners in musical activities who are waiting for intervention and encouragement from adults (Campbell, 2010). Accordingly, creativity needs to be encouraged and developed from the child's early and preschool age (Bačlija Sušić, 2018).

Within an integrated, humanistic and co-constructivist-oriented development concept (NKRPOO, 2015), the paper is based on the idea of democratic participation of the child in all activities, including music. Such a starting point emphasises the respect of children's voices and the child's best interest as a priority (Dockett, Einarsdottir & Perry, 2019; Eriksen, 2018; GC14 Committee on the Rights of the Child, 2013; UNCRC, 1998).

On the basis of participant observation within the framework of the case study, recordings of activities with children and children's reactions (N= 14) were analysed from the aspect of the development of the child's creative potential, as well as education for democracy. Additionally, the activities were observed and evaluated from the aspect of children's well-being and involvement as fundamental indicators of the quality of the activities carried out (Laevers, 2005).

It was concluded that active participation in the creation of music listening activities and giving children the opportunity to express their own opinion and experience of music, greatly contribute to the development of the children's creative potential and active participation in their own education for democracy. Moreover, assessments of the levels of well-being and involvement of children in the activities carried out indicate that the child's freedom of creative expression and opinion is particularly present when these values are at their highest level and when the child is in a state of flow (Csikszentmihalyi, 1979).

Keywords: creativity of the child, education for democracy, music listening activity, well-being and involvement.

Traditional and contemporary aspects of teaching theoretical music subjects

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Abstract

By attending primary, secondary, and higher levels of music education, a formally trained musician learns music for at least fifteen years and, through instrumental, singing, and theoretical music courses, acquires many musical skills necessary for mastering the musical language. These skills range from playing and singing, listening, and understanding musical material to artistic expression and creative skills. This paper provides an insight into activities related to creative skills, i.e., the challenges teachers face in creating an atmosphere for students' creativity in teaching key theoretical music subjects: Solfeggio (Ear training / Aural training), Harmony, and Counterpoint. In this qualitative survey, we used an interview among the teachers of mentioned subjects in December 2018 and January and February 2019. A total of 42 teachers presented their thoughts on existing learning methods and modern approaches to teaching theoretical disciplines. Namely, traditional principles are the basis of theoretical music subjects and have been practiced for many years. These principles, however, face outdated concepts of learning and an "art for art's sake" approach to teaching. The results show that the teachers of Harmony and Counterpoint are dissatisfied with the dominance of traditional learning methods in the curriculum. The teachers of Solfeggio believe that there is an apparent neglect of activities related to students' creative work in methodical practice. The teachers of all three subjects expressed the need to modernize the approach to teaching and develop competencies that will enable the implementation of activities intended for students' creative expression. Thus, there should be more attention to harmonic analysis and analytical listening to music in Harmony classes, more focus on listening to musical examples, researching and analyzing music in Counterpoint classes, and more improvisation and expressiveness in Solfeggio classes.

Keywords: creativity, skills, theoretical music subjects, traditional approach.

Creative practices and interculturalism in the educational system and models of application

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Abstract

The paper *Creative practices and interculturalism in the educational system and models of application* will represent creative practices in the process of teaching and process of learning. On the example of Erasmus project *Grandma's story*, in which several institutions of the European Union cooperated, the emphasis of the paper will be on the cooperation between students of Culturology in Osijek and the Museum of Slavonia, and the paper will represent models for creating new educational content. The research of the local community, the observation of the intercultural environment, the analysis of migration within the local community and the impact of migration on the life of the individual are the starting points of the research. The creation of video material as well as the collection of personal items that create story motifs will be the documents for the creation of simple pop-up exhibitions and will be an incentive in the cooperation of museum spaces, the local community and the university. The results of the project are e-publications with models of application in educational institutions, civil society organizations, youth work associations, museums, social cooperatives, public institutions and e-publications for creating simple pop-up exhibitions in schools, youth centers, libraries, museums etc.

Keywords: interculturalism, education, migration, creative practices, pop-up exhibitions.

The relationship between beliefs about creativity and perception of their own creativity in students of teacher studies

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Abstract

Developing creativity is one of the crucial goals of educational activity. Creativity is essential when training future personnel who will generate new technological solutions and a different point of view when performing complex tasks. Formal education has a significant role in developing creativity, giving an increasing focus on creativity in the classroom and school curriculum. Teachers become responsible for fostering creativity as well as for students' attitudes towards teaching both creative thinking skills and creative problem-solving skills. It is commonly believed that teachers' positive attitudes and beliefs about creativity make teachers competent enough to encourage and develop creativity in students, while the representation of teachers' false beliefs about creativity slows down students' creativity. The paper aimed to examine the relationship between students' self-perceived creativity and false personal beliefs about creativity and investigate the characteristics of the abovementioned variables. The research was conducted with students from the first to the fifth year of the Integrated Undergraduate and Graduate University Class Teacher Studies and the Undergraduate and Graduate University Study of Early and Preschool Education at the Faculty of Education in Osijek. Data were collected by a Sociodemographic variables questionnaire (Q-SV), a survey - borrowed from the author for the purpose of this research, which consists of 16 statements about the most common false beliefs about creativity (degree of agreement on a Likert scale) (Sawyer, 2003; Sawyer, 2006; Drobac-Pavićević and Andrijašević, 2021) and the Short Scale of Creative Self (Karwowski, 2011). Quantitative parametric analysis and correlation analysis of the collected data revealed that there are differences in the experience of one's own creativity and false personal beliefs concerning certain sociodemographic variables, as well as that there is a relationship between the experience of one's own creativity and false personal beliefs. The results indicate the importance of revealing and reducing false beliefs and educating teachers on creativity to improve their performance in encouraging creativity in students. It is also important to emphasise that this research implies the significance of future teachers' accurate self-assessment of creativity with the aim of better understanding and developing competencies for encouraging creativity.

Keywords: creativity, false beliefs, creative self-efficacy, students of teacher studies.

The potential of creative practices in the context of extracurricular activities in primary and secondary education through the adoption of the heritage art of drystone construction

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Abstract

The availability of modern technology often leads to the loss of students' interest in traditional teaching. However, even in these circumstances, it is possible to enrich the educational process with opportunities for creative expression through creatively stimulating activities.

The application of extra-curricular activities based on a complex issue, such as the heritage art of drystone construction, contributes to the importance of releasing creative potential and indirect adoption of teaching content. As an intangible cultural asset, drystone construction was included in the Register of Cultural Assets of the Republic of Croatia in 2016 and in 2018 in UNESCO's Representative List of the Intangible Heritage of Humanity. The above represents the recognition of the cultural value of drystone construction as a traditional skill, which contributes to the strengthening of cultural identity and awareness of the need for generational transmission of heritage skills. Through the acquisition of practical knowledge about this complex skill and interaction with nature and history, students acquire knowledge about ecological and economic value and the importance of achieving sustainable development.

The aim of the research is to highlight the complexity of the art of drystone construction, as well as the creative potential it offers through extra-curricular activities. Also, it aims to investigate the level of so far applied extra-curricular activities of primary and secondary school students related to the acquisition of the art of drywall construction and, thus, striving in the direction of defining the need for a preservation strategy through formal training. The research was conducted by analysing archival materials, i.e., historical and administrative documents, as well as recent literature on the art of dry masonry and current issues in the context of heritage, landscape and ecology. Data available online about extra-curricular activities for the acquisition of dry construction skills by primary and secondary school students were also analysed.

The obtained results point to the multiple values of adopting the art of drywall as an instrument for encouraging creative expression - originality, spontaneity, and a multidisciplinary source of knowledge that students acquire in an extra-curricular environment. Through efforts to revitalise and sustain this valuable heritage segment, Activities so far at the primary and secondary school level give direction to further affirmation and potential development of educational secondary school vocational programmes that would shape new generations of practitioners and transferrers of this valuable skill.

Keywords: creative potential, heritage, primary and secondary schools, the art of dry construction, extra-curricular activities.

Personalising the curriculum: Creative learner pathways

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Abstract

This paper introduces the preliminary results of quantitative and qualitative research on the development and teaching of so-called final projects at a newly established academic program, K2: Program of Technology and Science (2016), at Reykjavík Technical College. The program encourages collaboration and explores authentic and creative solutions to a variety of new contexts. Project-based instruction or learning is primarily used as a teaching method.

Each semester students participate in a two-week final project where they learn through problem-based learning methodology which incorporates project-orientation and team-working settings to solve replicated real-world case study problems with aims to develop learners' soft skills and technical skills through "learning by doing". This work is done in collaboration with industries, NGOs and various universities.

This paper will address how the teachers emphasize guided and self-directed learning to develop inquiry skills, shaping students into resilient people who are actively working in accordance with the six fundamental pillars defined in the National Curriculum Guide and the nine areas of key competence, therein described. The students incorporate knowledge, competence and skills acquired in other and seemingly unrelated subjects into these final projects, and become an essential part of the project's formal assessment.

The research includes the assessment and evaluation of teaching methods, syllabuses, projects and students' project solutions as well as interviews and survey findings. The main findings suggest that no matter the final project theme, integration of various subjects is always present. Key competences of different subjects are then implemented in these final projects, as well as the general fundamental pillars. This way teachers work towards fulfilling the aims of the National Curriculum Guide but also think outside the box and are creative. The role of the teacher in encouraging and developing creativity plays a large part in motivating the students to not only do what is expected of them but go beyond the assignment description and make the project their own.

Keywords: creativity, curriculum, entrepreneurial education, leadership, creative teaching.

Creating new learner pathways in secondary school

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Abstract

This paper introduces the preliminary results of quantitative and qualitative research on the development of the so-called final projects at a newly established academic program, K2: Program of technology and science (2016), at Reykjavík Technical College. The program encourages collaboration and explores authentic and creative solutions to a variety of new contexts.

Each semester students participate in a final project where they learn through problem-based learning methodology which incorporates project-orientation and team-working settings to solve replicated real-world case study problems with aims to develop learners' soft skills and technical skills through "learning by doing". This work is done in collaboration with industries, NGOs and various universities.

The research addresses how the teachers emphasize creativity as well as guided and self-directed learning to develop inquiry skills, shaping students into resilient people who are actively working in accordance with the six fundamental pillars defined in the National Curriculum Guide as well as the nine areas of key competence, therein described. The students incorporate knowledge, competence and skills acquired in other and seemingly unrelated subjects into these final projects, and become an essential part of the project's formal assessment.

The research includes the collection and analysis of various data, such as assignment sheets, teachers' diaries and students' project solutions as well as the evaluation of teaching methods and interviews with teachers and students. The main findings suggest that by shaping opportunities for students to use their creativity teachers could work towards fulfilling the aims of the National Curriculum Guide but also think outside the box and create new learning pathways for the students. The role of the teacher in developing creativity plays a large part in motivating the students to not only do what is expected of them but go beyond the assignment description and make the project their own.

Keywords: Curriculum, creativity, innovation, entrepreneurial education, leadership, creative teaching.

Mechanisms for assessing and evaluating the creativity of teaching work in the school environment

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Abstract

Assessing and evaluating teaching work is a mandatory and complex activity, which includes various subjects of the process, mechanisms, and instruments. The assessment and evaluation of teaching work is generally recognized by legal and by-laws, but it does not follow the trends in the development of the teaching career, nor is it harmonized with the modern competence frameworks of the teaching profession. The necessity of monitoring arises. One of such ubiquitous modern competencies of teachers is creativity.

Creative competence is primarily manifested through pedagogic-didactic-methodical guidance, encouragement, and the creation of opportunities for learning in teaching and extracurricular activities. For this purpose, the teacher increasingly needs knowledge about the student, about learning and teaching, and about creatology and creativity. Although creativity, as a competence, is expected of every teacher, it is often the exception rather than the rule. And when it is manifested through teaching work, it seems that it is not adequately recognized or valued in the school environment.

The aim of the work is to emphasize the importance of adequately recognizing examples of creative practice in teaching and extracurricular work and the necessity of establishing evaluation mechanisms. The research was based on a qualitative research paradigm, which included methods of content analysis, theoretical analysis, and descriptive-analytical methods. Data collection was carried out using focus groups and interviews with a sample of teachers whose creative practices were recognized through various evaluation mechanisms. The results of the research showed that there is no systematic approach to assessing and evaluating the creativity of teaching work in the school environment, but rather individual and sporadic efforts at the micro-institutional level. Such findings lead to reflection on the need for reconceptualization of the existing assessment and evaluation practice with regard to the importance of the creativity of every teacher, not just an individual one.

Keywords: competences, creativity, evaluation, teacher, teaching practice.

Contribution to the creativity of mathematics teaching through solving optimization problems using differential calculus

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Abstract

Mathematics teachers often encounter questions from students: "Why are we learning this?", "Where will we need it?", "What does this have to do with real life?". The answers to these and similar questions are mostly reduced to short motivational stories.

Setting up and solving real problems in which we use the mathematical content that we teach often require a lot of time. The amount of compulsory teaching content in primary and secondary schools in regular mathematics classes does not leave much room for tasks in which the application of mathematics comes to the fore.

Numerous educational reforms did not contribute to a greater extent to the reduction of students' workload, nor did they free up a lot of space for the development of creativity. Therefore, one of the tasks of mathematics teachers is to create that space themselves.

Many authors believe that tasks in which the optimization problem appears are important for the development of creativity. A very interesting topic in mathematics lessons for the fourth grade of high school is differential calculus, where such tasks appear. It is often a very abstract topic for students if it is not connected to real-life applications. The discovery of differential calculus solved many previously unsolved problems. Differential calculus is one of the most important areas of mathematical analysis today.

The purpose of this paper is to determine whether such tasks are sufficiently represented in high school textbooks for the fourth grade. An analysis and classification of such tasks was carried out according to the content represented in the task.

Keywords: function derivation, extremes of function, infinitesimal calculus, optimization.

From language games to the Dubrovnik dialect

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Abstract

The Dubrovnik dialect is a local dialect which used to refer to the old core of the city. Today that dialect is spoken in a wider area. The Dubrovnik dialect has gone through centuries of changes, which is a reflection of the language's flexibility, modern way of life, cultural mixing and other sociolinguistic circumstances. Changes in native dialects, including the Dubrovnik dialect, captured the attention of the wider public in an effort to preserve cultural and historical heritage, which resulted in the publishing of dialect dictionaries. The city of Dubrovnik also joined the process of raising awareness of the spoken heritage. TV and radio shows started broadcasting series on the topic of the Dubrovnik dialect; however, the goal of raising awareness will not prevent these changes from happening and developing. The question arises as to what extent the developments in everyday life and the influence and dominance of the language standard changed the Dubrovnik dialect lexicon. The aim of this thesis was to show problems of lexicon diversity of the Dubrovnik dialect and the relationship with the language standard among school-age children. The results of the testing showed a decline in knowledge of lexical richness of the native dialect. All the data presented in this thesis is based on the findings of the knowledge examinations carried out among fourth- and sixth-grade students in Dubrovnik 2022. The findings were analyzed with respect to the sex, the grade (age) and the family structure/cohabitation with the elderly population. It has been established that there is a difference in knowledge of the Dubrovnik dialect lexicon with respect to sex and grade, whereas the differences among the respondents with respect to the family structure did not turn out to be significant. Among the research there are solutions attached which suggest how to approach the Dubrovnik lexicon dialect. Those solutions are language games, music and books written in the Dubrovnik native dialect. Teachers, educators and parents can use those suggestions in their work with and nurturing of children.

Keywords: Dubrovnik dialect, Dubrovnik dialect lexicon, language games, school-age speakers.

Digital children's organ concerts - limits and chances of interactive concert formats

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Abstract

During the COVID-19 pandemic almost every theatre, concert house and church in Germany was unable to present live concerts for their audiences. As a reaction and compensation to this problematic situation, the number of digital concert streams and productions increased massively in a minimum of time. This happened to educational concerts for children and youth as well.

But especially in classical-oriented concerts for children was an important and almost necessary aspect in the conceptions and performances missing significantly: live interaction in general between the children, the music and the musicians (Schneider 2011).

To find a possible solution, we've developed the digital-interactive organ concert for children "Organ builder Fröhlich and the musical time travel" for children at the age of 6 to 10 and presented this in multiple different concert and church settings to this day. In our presentation we'd like to give a short introduction into the conception and the didactical framework of this children concert first. In addition to this conception, we present the different advantages and disadvantages of the conception, technical circumstances and the multiple live-performances.

This concept and the performances were developed in a kind of design-based-research process to best interactively engage children in concerts in the digital space and to enable musical learning and aesthetic experiences in their digital and analogue world (Pohlmann 2021). The concept could also be extended to other musical performances in educational, non-educational and cultural settings - also for other target and age groups.

Keywords: children's concert, design-based-research, digital-interactive concerts, Musikvermittlung.

Integration of a (therapy) dog into the EFL classroom – project rationale and design

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Abstract

The aim of this presentation is to lay out the research aims, methodology, and design of the project Integration of a therapy dog into the EFL classroom (DogsInEFL). We refer to the approach we thereby envisage as DEFL (dogs in the English language classroom) and ground it in the evidence of the benefits known to be procured from human-animal interaction, Montessori's philosophy on introducing animals into classrooms, and the findings that child-dog interaction in the EFL context positively impacts children's performance in English as well as their emotional wellbeing (Authors, in preparation).

The DogsInEFL project is a case study with 12 9-year-old Croatian children attending a 5-week-long EFL course taught by two teachers with the aid of a therapy dog. The aim of the project is to pilot the set-up of DEFL and design a methodology that would enable systematic research on the subject. Moreover, we aim to research the impact of DEFL on children's pronunciation and their affective response to the animal. Three ways of integrating a dog into the classroom have been envisaged: full integration, optional integration and sheer presence. The classes are to be video and audio recorded and subjected to analysis. Observation will be performed by 40 pre-service EFL teachers. Children's EFL pronunciation will be analysed by means of the previously created instrument focusing on segmental analysis and prosody (Author, 2022). Semi-structured interviews will be carried out with children and they will be invited to keep semi-structured diaries. Adaptations of the Pet-Attachment test (Melson et al, 1991) and a motivation questionnaire on using novel instructional materials (Keller, 2001) will be used.

We expect that the results will portray strong child-animal attachment and motivation to interact with the dog as well as a development in the children's EFL pronunciation. We contemplate whether DEFL could present a possible new second language acquisition approach.

Keywords: therapy dogs, English as a foreign language, early language learning, pronunciation, affect.

An individual approach in clarifying resonant spaces in the teaching of solo singing

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Abstract

For centuries, vocal pedagogues have been passing on knowledge to future vocal professionals, striving to adapt pedagogical methods to each student again and again. Discovering resonance spaces for the student is a challenge, and the vocal pedagogue helps him overcome this challenge. We cannot see the processes that take place inside the body when creating a quality tone. A better knowledge of the physical body and the way in which tone is created improves the understanding of individual vocal practice, which requires creativity in the approach to each individual student. The correct use of resonant spaces when singing is an integral part of vocal technique and the problem that vocal pedagogues deal with in their pedagogical work in order to form a singing instrument from the singer's body. It is important to master the singing technique because it allows singing with less effort while at the same time the sound level can be increased without increasing the pressure of the breath on the vocal cords. The beauty of the voice depends on the proper use of resonance spaces. The paper examines individualized pedagogical approaches in clarifying resonant spaces in the teaching of solo singing with a review of relevant professional literature.

Keywords: creativity, singing instrument, singing technique, vocal pedagogy, vocal professionals.

Combined interpretation of two pluralistic concepts of intelligence(s) as possible frameworks for creative approaches to learning and teaching

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Abstract

When learners' educational attainments are investigated, the traditional approach suggests that they go hand in hand with intelligence. In this view, creativity is not considered a component of intelligence at all. However, in case we accept the understanding of the pluralist notion of intelligences – this time, two possible models for such an interpretation, namely that of Gardner (1983, 1999, 2006), the theory of multiple intelligences, and Sternberg's triarchic model of intelligence, i.e. successful intelligence (1985, 1997) than we may experience more equitable, i.e., personalized, educational frameworks.

The main topic and purpose of the proposed theoretical paper is to illustrate how learners' personal passion, which may be expressed through one's intelligence profile, relates to creativity. The methodology used may be considered a meta-analysis of relevant literature from the past forty years concerning the combined interpretation and educational implementation of the two internationally recognised theories (e.g. Gardner et al 1994, Williams et al 1996, 2002; Williams et al 2001, Cianciolo – Sternberg 2007, Sternberg et al 2008, Gardner 2014, Sternberg 2014, Gardner 2020, Sternberg 2021, Sternberg et al 2022). Limitations occur as instead of a systematic literature review, a continuous Google Scholar and JSTOR search engine has been used and cross-references of the theorists have been investigated. Also, exclusively sources in English have been taken into consideration. It is a novel interpretation due to critical reading and analysis of the sources used and has significance as it offers a new theoretical framework for future educational practice and developmental research on ISCED 0, 1, and 2 levels aiming at equity in the classroom and beyond. The findings are considerable for (both pre- and in-service) teacher education and suggest a designer role for (future) teachers in order to encourage and develop pupils' / students' creativity.

Keywords: multiple intelligence, successful intelligence, creativity, equity.

Creative approach to listening to music in early and preschool age: The place and role of classical music

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Abstract

Musical activities of children of early and preschool age significantly contribute to their overall development. The paper examines whether the preferences of classical music in children of early and preschool age differ with regard to gender, age and additional music instruction. As part of the research, a general data questionnaire and an assessment scale were used to examine the preferences of musical passages. The research was conducted in Split with a sample of 40 children from DV Marjan (Tamarin), aged three to seven years.

The results show that children's preferences in classical music, neither in the initial nor in the final phase of the study, do not differ according to gender and age. Regarding the differences between the experimental and control group with regard to attending additional music lessons, the existence of differences in classical music preferences was not confirmed, but the existence of differences with regard to the examination phase was confirmed. A significant interaction effect between the test phase and the group was found, with a significant difference between the initial and final test phases in the experimental group and no significant difference between the control group. This confirmed that additional music instruction had an effect on classical music preferences.

The obtained results have significant musical-pedagogical implications in terms of conceptualizing musical activities in early and preschool age.

Keywords: musical preferences, musical activities, early and preschool education.

Some aspects of the application of the Tablet-Human Hybrid Model of Avatar in university face-to-face classes

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Abstract

Pair work is a social form of teaching in which mutual communication between students becomes active and effective work and a valuable exchange of information that contributes to a better understanding and adoption of teaching content.

The Tablet-Human Hybrid Model of Avatar (T-HHMA) enables participation and communication during face-to-face classes for students who are prevented from physically being at university due to illness, the necessity of self-isolation, or some other reason. The model employs the present classmate as an agent, pairing him with the absent student via audio-video paired tablets. The application of this model has never been tested in university classes.

We study some characteristics of this new unique telepresence application which helps to connect students who are absent to their regular classroom at the faculty using a system T-HHMA. The specifics of using the model at this level of education are discussed. Data are collected through participant observation and interviews.

Keywords: avatar, model, pair work, university face-to-face classes.

Parental point-of-view: Gamification, digital learning and its influence on pupils' creativity

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Abstract

It is well known that parents' involvement in their children's education has an impact on their success, both in and out of school. Parents are considered partners with teachers in the educational process, and their individual attitudes and beliefs play an important role. The advancement of information and communication technologies has facilitated this partnership relationship, but it has also enabled the use of new, non-traditional teaching methods that may have been previously unknown to parents because they were not exposed to them in their education. Gamification appears to be one of the innovative learning and teaching methods that have increasingly come into the focus of practitioners and researchers in recent years. This paper analyzes the attitudes of parents of primary school pupils toward the use of information and communication technologies, digital learning, and gamification in their children's education, their previous experiences with gamification in education, and their attitudes toward how the use of gamification affects the development of primary school students' creativity. Descriptive statistics, a traditional statistical approach to discovering the relationship between variables, and one data mining method will be used.

Keywords: creativity, data mining, gamification, information and communication technology, parents.

Makerspaces in school: Creativity for meaningful learning

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Abstract

The purpose of this research was to study the implementation of the *development project East-West-Makerspaces*, a collaborative project of three elementary schools in Reykjavík, Iceland. The aim of the study was to examine what characterised the implementation and my role as project manager in one of the schools. Makerspaces are spaces where people can work with specialized tools, such as electronics, laser cutters, 3D printers, and various materials, digital and traditional. However, makerspaces are not limited to one specific space but can be used in all school activities in different ways to make learning meaningful for children as they get to find solutions, design and create with their hands or with technology. All teachers in the schools were expected to take part and find ways to implement the makerspace ways of working. They were supported by educamps where versatile approaches and projects were presented and with the leadership of project managers in each school.

I conducted an action research study in my school to support the teachers in the implementation process. The participants were me as a project manager, school administrators, teachers and students. Data included research journal entries, reflections on my role, fieldnotes, conversations with teachers and students and pictures from field observations. Data were analyzed regularly and at the end of data collection.

The results show that makerspace projects ignited students' interest and made their learning more meaningful as they often could choose what they worked on and how they developed the outcome. The teachers most active in implementing makerspace projects enacted emancipatory pedagogy where students have ample control over their learning and creativity is enhanced. I saw evidence of how the project influenced teaching methods in my school, where teachers sought various ways to inculcate students' creativity and the makerspace ideas emerged in many forms of schoolwork.

Key words: CREATIVITY, makerspace, emancipatory pedagogy, leadership, action research, meaningful learning.

Promoting students' critical and creative thinking through faculty development: Evidence and considerations of its impact and retention from an institution-wide program

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Abstract

Higher Education Institutions are committed to the promotion of critical thinking and creativity/creative thinking, as a way to prepare students for the unknowns of the future, whether as individuals, citizens, or professionals. To make such a commitment feasible, faculty development initiatives are fundamental, since teachers must first learn how to teach for the development of their students' critical and creative thinking. At North Carolina State University, there is an institutionally-held program on critical and creative thinking, designed for faculty who intend to develop their pedagogy and deliberately promote competences related to both ways of thinking in class, in order to promote students' critical and creative thinking. In the present work, we present evidence on the impact of this program in two moments: directly after its implementation (2018) and later in time (2022). Using data from a survey (N = 72, 2018) and interviews (N = 31, 2022) with faculty who participated, considerations are made about the long-lasting impact of the program, especially in terms of the teaching practices that are used up to today to deliberately promote students' critical and creative thinking, with faculty still making good use of what was learned years before. Institutionally-held initiatives such as the one described show how valuable a professional development program can become for faculty who intend to expand their students' (and their own) critical and creative thinking competences; such initiatives also have the potential to finally bring critical and creative thinking into Higher Education.

Keywords: assessment, creative thinking, critical thinking, faculty development, higher education.

Representation of creative thinking in questions and tasks in high school history textbooks

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Abstract

The research aims to determine to what extent and in what way the questions and tasks in high school history textbooks stimulate the development of creative thinking. The research methodology is based on an analysis of questions and tasks in history textbooks for the first and third grades of high school, which are within a particular topic and which check factual, conceptual and procedural knowledge. Quantitative analysis was used first to determine the number of questions and tasks in which creative thinking is required. Further categorization was done according to the pattern of questions and tasks that encourage creative thinking in students (George, 2005, 62/63) with regard to fluency, flexibility, originality, elaboration, curiosity, complexity, risk-taking and imagination. By comparing the results, similarities and differences were determined with regard to grade level and publishers.

More than 2,900 questions were analysed for the first grade, and more than 3,000 questions for the third grade of high school. Although the results of the research on questions and tasks for both high school grades show a predominance of reproductive questions, it can be said that creative questions are represented at a satisfactory level. The categories of fluency, flexibility, originality and risk-taking are dominant (over 90%), while the categories of elaboration, imagination, curiosity and complexity appear in insignificant numbers. Although the quantity and order of creative categories vary from one publisher to another, they still enable certain conclusions about the developmental characteristics of the new generation of history textbooks with regard to creativity. Based on the results of the research, the authors will present recommendations for formulating questions and tasks that could further develop creative thinking in history classes.

Keywords: creative thinking, high school history books, questions in history teaching.

The importance of using musical games to encourage cognitive, motor and social development in preschool institutions

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Abstract

Music is an integral part of a child's life, and is especially important at the early and preschool age. There are numerous musical contents that stimulate the child's imaginative, cognitive, motor and social development. Musical play is one of the creative musical activities that function in the child's development and well-being. It gives children the opportunity for independent expression, research and encourages the development of social and moral norms of behaviour.

The starting point of the work is an overview of musical games in textbooks (V. Manasteriotti, H. Gospodnetić and others), as well as an overview of musical games in foreign works (J. M. Feierabend, E. Králová and others). In the overview, the authors present a selection of musical games for children of early and preschool age. The text elaborates on musical games according to their context and structure, and describes their features and a possible creative approach applicable to the activities of preschool institutions. The focus is on explaining and interpreting the importance of musical-movement activities and encouraging musical creativity in children of early and preschool age.

Keywords: children of early and preschool age, social games, methodology of musical culture, motor development of children, creative expression.

Classical music as incentive for interpretative reading in Croatian language primary school classes

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Abstract

Contemporary education implies a creative approach to learning and teaching that can be reflected in the integration of various areas. Therefore, this work focuses on the invisible relationship between music and elements of spoken language that powerfully act in unison. The work aimed to examine the efficiency of using classical music as a musical treatment and its influence on interpretative reading in Croatian language classes. It was based on students' interpretation of excerpts from the novel *Alarm on Green Hill* by author *Ivan Kušan* (1956). Interpretative reading was implemented along with the reproduction of musical examples from various classical periods (W. A. Mozart: Piano Concerto no. 23, 2, movement Adagio), the romance period (N. Rimsky-Korsakov: Scheherazade, 1st movement), and the 20th century (S. Ciani: Neverland). These examples of music were chosen according to music templates for different teaching situations (Jenesen, 2003). With the purpose of reading detection, the students individually, loudly and clearly read the assigned paragraph in a soundproof classroom. The obtained audio recordings of the students' speech were analysed with the use of the PRAAT computer programme, which is primarily used in the scientific phonetic analysis of speech. The treatment of listening to classical music resulted in more expressive student reading, and the acquisition and implementation of prosodic features of spoken language were observed (intonation, intensity and pauses) in almost all students of the fourth grade (N=16). Constant and various rhythmic forms of the chosen pieces of music influenced the growth of student concentration and attention. Apart from the crucial role of music, the speech exercises also contributed to the acquisition of spoken language elements in interpretative reading by motivating students to reflect on the importance of correct interpretation.

Keywords: music incentive, interpretative reading, Croatian language classes, primary education, elements of spoken language.

A book report as part of a syllabus in elementary school

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Abstract

Students, especially in the higher grades of elementary school, and also in secondary school, do not like book reports. They find the books that they cover for their reports boring, dull... That is exactly why they look for shortcuts. They seek short summaries on the Internet, then combine them and create »their« summary of what was read: some of them even ask their mothers to read the book instead of them and write the summary for them, and some mothers really do that. In such a way, the essence of reading, which means to create a dialogue between a student/reader and a text, is impaired. A teacher has a remarkably important role in creating that dialogue. The teacher should cultivate a love for reading in students. They should show the students that they should not judge books a priori, as many a book that is boring or dull can become interesting and funny if we approach it in an appropriate manner. The teacher's appropriate approach in covering books contributes significantly to reading culture, to the student's satisfaction, and consequently, to the teacher's satisfaction. It is true that the appropriate approach means »a leap into the unknown« for many a teacher because they do not know the activities they could introduce to cover the content in a different way. Still, it is remarkably important for shaping the child into a personality that would, when they finish schooling in the future, reach for a book. Due to the perceived issues, we wanted to present the comparison of the reading effects of a classic (traditional) and an alternative book-report format in the present paper. To conduct research, we chose the fourth grade, as it is characteristic of the reading development of children of that age because they are capable of following a complicated story and understanding complicated characters, which we used to show that the children of that age are able to read books that include more different stories (and not only one that runs throughout a whole book) if they are, of course, presented in an appropriate manner. The research results show that the students prefer the alternative book-report format to the classic (traditional) one, as the students' responses to reading were more creative and effective both in creative writing and in role play.

Keywords: a book report, a classic (traditional) book-report format, an alternative book-report format, reading effects.

Pre-school children are introduced to the land of eternal snow and ice by means of the method of controlled research

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Abstract

It is very important for a child and the development of their personality to be introduced to their immediate social and cultural environment. The early introduction of the broader social and cultural environment, which is distant from us and we do not come across in our everyday life, is important as well. That makes it possible to introduce diversity in the world and the comparison of our social and cultural environment to others, and it offers a basis for fostering mutual tolerance and respect for differences. We perceived in interviews with preschool teachers that they too often deliver content for children, instead of researching a chosen problem with children, i.e., by directing children, guiding them, providing them with help, independent search, documenting and analysing found information, and »learning« with them. Due to the perceived issues, we wanted to test in the present paper the method of controlled research that makes it possible for children to be actively involved in all learning stages, in order to present how to organise a learning process, in which the task of the pre-school teacher will be to research the chosen problem together with the children in such a way that they provide support to the children, help with the independent search, the documentation and analysis of the found information, and they themselves »learn« together with the children. By the chosen method, we decided to make it possible for the children to experience the land of eternal snow and ice that is more distant from us and we do not come across in everyday life. By means of activities that were planned according to the steps characteristic of the chosen method of the controlled research of problems, we came to two conclusions, i.e., that the method of the controlled research of problems was suitable for the introduction of the broader social and cultural environment in the preschool period, and that the responses of the children to it were remarkably positive. Namely, the chosen method makes it possible for the children to be actively involved in all the stages of research, to be introduced to a theme by a holistic method, to face misconceptions, to think critically, which influences the maintenance of curiosity and a high level of motivation, and to be introduced to something new, from the first to the last step.

Keywords: a closed-type method of controlled research of problems, an opened-type method of controlled research of problems, broader social environment, broader cultural environment, Inuits.

What conditions best nurture creativity in the young?

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Abstract

Helping young people to develop their own creative skills should be a top priority for all countries. With ever increasing automation in the workplace it is estimated, according to the World Economic Forum ('The Future of Jobs' report, October 2020), that by 2025 globally 85 million jobs will be displaced due to a shift in the balance of tasks being done by machines, as opposed to being done by humans. Reassuringly, however, it is thought that simultaneously 97 million new jobs may evolve. It is crucial, therefore, that parents and educators provide young people with the opportunities they need to develop skills to access these new jobs. They will need to be able to work towards goals that are not fully predetermined, to think on their feet, and to work in collaboration with others. These are all creative skills. This presentation will unpick how creative skills, defined in this way, can be taught and nurtured, in and out of schools.

Using insights that have emerged from my own investigations, brought together as three common themes (or, as I propose, 'conditions for nurturing creativity'), I will explore practice in and beyond school settings that demonstrate the conditions having creativity-nurturing benefits when offered to young people. Examples of practice will include sharing findings from empirical research that I have undertaken with teachers and with teacher training students in the UK (using questionnaires, interviews and log journals) where they have reflected on the creative outcomes of the children they have taught and the pedagogy they employed.

Keywords: children, conditions for creativity, pedagogy, practice, theory.

Learning and innovation skills as valuable features of the teaching profession

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Abstract

Appreciating the value of the teaching profession, especially at a time of great socio-economic changes, the need to develop and improve those skills and competencies that contribute to the creation of the complete competency profile of the teacher, and in order to maximize his role in upbringing and education, is increasingly highlighted. The development of critical thinking, creativity and creative intelligence, as well as encouraging successful communication and collaboration, is an integral part of the professional development and lifelong learning of all participants in the educational process. These learning and innovation skills, also known as the 4C's skills of the 21st century, have been recognized and identified as the most important competencies of today by an organization under the name Partnership for 21st Century Learning or P21. A qualitative methodological approach was used in the work, with the application of the descriptive method and the method of content analysis. The goal of the research is twofold: by reviewing and analyzing recent and relevant literature, to point out the importance and value of encouraging, strengthening and applying the skills of deeper learning and innovation in the preparation of teachers for work in the teaching profession. It has been established that in contemporary pedagogical literature, these skills are cited as very important characteristics of the teaching profession. Consequently, the second goal of the research is to determine the representation of 4C's competences in the defined goals and outcomes of the program by analyzing the study programs of the teaching faculties of the University of Sarajevo. Based on the 21st Century Skills Framework, analytical rubrics were created with established indicators for each listed competency in order to define and prioritize the desired outcomes. The outcome rubrics serve as proof of the "coverage" of the competencies by the learning outcomes at the study programs. The results of the research indicate that there are certain deviations and differences in the creation of goals and learning outcomes in study programs and that there is diversity in the representation of each of the analyzed competencies. The knowledge obtained through this research can draw the attention of the general public to the value of 4C's competences, and indicate to the creators of higher education curricula the creation of opportunities for redesigning and enriching study programs with new content that encourage and strengthen the development of learning and innovation skills.

Keywords: learning and innovation skills, 4C's skills of the 21st century, critical thinking and problem solving, creativity and innovation, communication, collaboration.

Discourses on childhood and children in scholarly articles about creativity in the context of education in Croatia

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Abstract

This paper presents a review of the different discourses on childhood and children in scholarly articles about creativity in the context of education in Croatian scholarly journals. The theoretical underpinning of this qualitative analysis is the conceptualization of childhood as a social, symbolic, ideological and political construct, which is also the foundation for the conceptualization of children. Creativity has been the focus of academics for many years now, and in the last decades creativity in the context of education has become one of the more prominent topics within the academic community. Within this context, deliberations about creativity could be placed on a continuum, from a *romantic* understanding of creativity as a generic human attribute and authentic self-expression to an *instrumentalized* understanding of creativity as visible, for example, from international supranational organizations by emphasizing its implementation into national curricula in the context of the neoliberal approach to social development and the post-Fordist labour market. Within this approach, the emphasis is on the child's preparation for the continuation of schooling and the labour market (the so-called readiness discourse), where the creative child is seen as universal and naturally playful, without taking into consideration the specific sociocultural and class context. In order to gain insight into the discourses on childhood and children in Croatian academic literature about creativity in the context of education, a search of relevant journals was conducted, focusing on 207 scholarly and professional articles available at Hrčak, the central portal of academic journals in Croatia including all years of publication. After searching for the notion of *creativity* as the subject, the results were filtered according to scientific field(s) related to education and according to publication type, which resulted in the analysis of 122 scholarly articles. The qualitative analysis of the content of the filtered articles indicated that the authors balanced between viewing childhood and children as a value here-and-now and as a value in the sense of becoming future adults when writing about creativity in the context of education.

Keywords: discourses on childhood, the creative child, creativity, scholarly articles, qualitative analysis.

Student's conception of the past - textbook from the aspect of content that inspires creativity

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Abstract

In Serbia, textbooks continue to be the main didactically shaped teaching instrument that strives to encourage the adoption of knowledge, skills, social norms and attitudes, nurture creativity and critical thinking by contributing to the full intellectual and emotional progress of each student (Law on Textbooks, 2018). The current state reflects a more conventional approach to textbook design, despite evidence that modern textbook design should integrate structural solutions that accomplish successful communication with the learner, facilitate meaningful learning, and engage creativity. Consequently, modern textbooks typically only provide a rigid explication of data from various scientific fields. Students find it challenging to learn about distant history since they lack first-hand experience. Therefore, textbooks ought to have a bigger impact on their grasp of these issues, and creative content may be one of the solutions. Relying on Guilford's view basing creativity on divergent thinking, whose factors are Flexibility, Fluency, Originality and Elaboration (Guilford, 1968), the paper emphasizes that the creative process undergoes stages of Preparation (Brainstorming), Incubation, Illumination and Verification (Wallas, 1926). The paper highlights theoretical approaches that focus on various incentives for student creativity as they learn from textbooks: content problematization, guided discovery, project-based, discovery-based and game-based learning. The possibilities of textbook design which correlates the aspects related to nature, society and musical education are considered, striving to make complex topics about the distant past easier to grasp by including creative content. Problem-discovery and multimedia-multisource models are offered as fresh approaches to the didactic-methodical textbook design, with their application in the teaching topic "My Homeland and Its Past" (third grade). These approaches are a practical contribution to the improvement of the role of textbooks as media able to enhance student creativity, especially when learning about the past, i.e., to improve the complex process of introduction to the understanding of historical phenomena.

Keywords: classroom teaching, nature and society, music education, creative content.

Body percussion workshop for children: Activities of the music-theatre troupe Alice in Wonderband

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Abstract

Body percussion or body music is a technique of playing with the body and has been very popular worldwide in recent years. This playing skill knows no age limits of performers and is variable in all genres of music. However, in this paper, I will present the activities of the music and theatre group Alice in Wonderband from Serbia, which since 2019 has been actively engaged in organizing body music workshops for children and adults. The emphasis of the paper is on the analysis of their covers of traditional children's songs, which are included in the body music project for children "Detlići" in Elementary School "23. Oktobar" in Sremski Karlovci. The project aims to stimulate children's motor skills and develop speech through the performance of body percussion, specially designed for some examples from the children's vocal tradition.

In this paper, I will point out the traditional perception of counting out rhymes in the preschool system in Serbia and the solutions offered by Alice in Wonderband. Based on the innovative reproduction of folklore music material that was done within the project Detlići, I will try to highlight several important segments in the learning process that include the areas of both contemporary music pedagogy and applied ethnomusicology.

Keywords: Alice in wonderband, body percussion, Detlići; speech development, traditional children's songs.

Artistic actions for sustainability in botanical gardens

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Abstract

The presentation reports and reflects on the interdisciplinary project ABCDE. The project is an attempt to integrate experiential learning, participatory pedagogy and artistic actions in Botanical Gardens in Reykjavik, Vilnius and Dublin to create innovative educational workshops for in-service teachers and develop teaching material for primary schools. This material combines creativity and in-depth analysis of the natural world, thus providing teachers with tools to increase student engagement and interest in natural sciences and sustainability.

The artistic activities will be explained in connection to theories. Helping people to discover the joys of taking part in artistic actions in Botanical Gardens is one way to encourage it. There is growing societal awareness of the importance of getting people outside to connect with nature with both body and mind (Ives et al, 2018). Through different artistic actions that are based on natural science in botanical gardens, i.e., the soil, water and biodiversity, the participating teachers have learned to draw on natural and built environments. Outdoor learning in the context of education is aligned with goals that reconnect students with nature in their rural and urban communities (Louv, 2008). Knowing their local environment more fully increases the potential to become active members of society because it increases care about the places people live (Sobel, 2004). Using experiential learning in Botanical Gardens as a pedagogical tool results in more engaged students, diverse learning opportunities and aesthetic experience.

With a focus on participatory pedagogy, there has been a focus on students' voices and their choices, as they should have a say in their learning opportunities. This focus is under strong influence from the informed action that characterizes Freirean praxis, in which it is assumed that everyone has knowledge, both tacit and explicit.

Keywords: experimental learning, sustainability, interdisciplinary, integrated learning, participatory pedagogy.

A creative approach to learning: Mobile learning of the teachers of primary and secondary schools in the Republic of Croatia

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Abstract

In today's global world of fast Internet, virtualization, digitization, and artificial intelligence, students are used to new access to information and information distribution, as well as to new ways of communication, which consequently affects their life in general. Students are raised in a completely different way than their teachers and parents, which calls for the use of modern didactic methods and tools in order to modernize the teaching process for each subject. The key factor in the teaching process modernization is the teachers who should monitor the characteristics of the upcoming generations they work with and adapt the teaching process to students' needs. Nowadays, even in the lower grades of elementary school, there are the alpha generation representatives, who, compared to previous generations, learn and think in completely different ways. Consequently, mobile learning gains importance as the so-called alphas are familiar with it. Mobile learning is teaching and learning with the help of any mobile device (smartphone, tablet, or laptop) with Internet access. It is also called simple learning or BYOD ("Bring Your Own Device"). Students who use mobile devices can access teaching content 24/7, which nowadays plays an important role in their preparation for further education or the labor market. This research aims to examine the attitudes of English language teachers about mobile learning and to explore the application of this method in teaching English in primary and secondary schools in Croatia. 208 participants took part in the quantitative research. Teachers often use mobile phones and tablets for communication purposes, to access social networks, and find information or photos. The descriptive analysis data suggest that teachers have positive attitudes towards the use of mobile technologies in teaching, which is a necessary prerequisite for improving mobile learning in the teaching process.

Keywords: alpha generation, mobile learning, teachers.

Mathematics in pictures: Past experiences as a pledge for the future of teaching mathematics creatively

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Abstract

Problem posing and problem solving, imagination and openness to new experiences are some of the important features of creativity. Current scientific knowledge, however, points to the conclusion that these are insufficiently encouraged in teaching mathematics. Yet, it has been confirmed that the mentioned features contribute to the development of positive attitudes and motivation to learn mathematics, thus helping the process of learning mathematics. Considering the above, the presentation offers an overview of the relevant literature on teaching mathematics creatively. Aiming to encourage creativity in this field, the presentation offers and analyzes successive projects implemented within the framework of mathematics classes at the Faculty of Chemistry and Technology in Split (from the academic year 2013/2014 to the academic year 2015/2016). The projects include: *Mathematics in Pictures*, *Picture Assignment*, and *Mathematical Album: Collection of Open-Ended Assignments*. The goal of all projects was to encourage students to think creatively about and within mathematics, and the project tasks encouraged conceptual understanding and a creative approach to problems. The qualitative analysis of the results of the surveys conducted after completing the first two projects reveals undoubtedly positive student experiences of a creative approach to teaching mathematics in higher education. The content analysis of the third project confirms the pedagogical and methodical value of this approach in teaching mathematics. The aforementioned projects are, therefore, critically considered in the presentation from the point of view of modern knowledge about the importance and possibilities of encouraging creativity in teaching mathematics. Finally, the presentation argues the projects' value as a pledge for the future of teaching mathematics creatively.

Keywords: conceptual understanding, creativity, problem posing, problem solving.

A guide to reflective practice

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Abstract

Reflective practice represents one of the key components of the development of educational practice quality. By structured reflection of (one's own) behavior, learning, teaching and (or) background influences (cultural, social, family, school and (or) other circumstances that affect the life of students and the school), the practitioner is able to introduce positive changes in the educational system practice, improve students' achievements and develop professionally. Considering the complexity of the reflection process itself and the focus on raising the level of reflection, The Guide for Reflective Practice represents an important form of support.

In the paper that deals with the consideration of the implementation of reflective practice, the purpose is to determine the effectiveness of The Guide as a form of support for its performance. The research was conducted on a sample of primary school teachers (N=111) who spent a month conducting reflective practice with the support of The Guide. The results indicate the usefulness of the Guide as an important form of support in the structuring and implementation of reflective practice and can contribute to the improvement of reflective thinking, documentation and improvements in practice generally. We believe that the application of The Guide can encourage positive changes in educational practice both in the context of the development of the quality and achievement of students and in the context of the professional development of teachers.

Key words: teacher, reflective practice, guide, professional development.

The music tale as a creative incentive in raising sensitization for music art

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Abstract

The main goal of this paper will be to discuss what a musical tale is and whether it should be used in a sensitization of students and pupils for music art.

The paper is of a theoretical type and can be divided into several parts of the discussion. The paper contains the thoughts and research of many authors who emphasized the importance of music for children's development, in all areas, especially in emotional development. Also, it was established that the musical story is very (almost completely) neglected in music education in Croatian schools, and that the situation is similar in some European countries. Nevertheless, some European countries, in their curricula, leave room for the use of musical stories in lessons, and some even encourage children to create music, and in this context encourage the creation of musical stories.

For example, an original sound story is prepared for the purpose of this work by the interdisciplinary team: pianist, musicologist and piano pedagogue, horn player and pedagogue and primary education teacher. The the originally invented story by a primary education teacher is accompanied by already existing music by G. Rossini, E. Bozza and M. Prohaska. The music is played by two musicians, also the authors of this paper, and the project is recorded in collaboration with the Croatian Music Youth Society (Jeunesses Musicales Croatia) for the purpose of developing music and culture awareness and music education. The aim of this paper and project is to present how a well-designed musical story can represent a methodical artifact suitable for acquiring musical concepts or at least for motivational purposes, in order to arouse children's love for music.

Keywords: music, musical culture, music education, musical story/tale.

Encouraging the creativity of primary education students through mathematical activities

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Abstract

The role and importance of stimulating creativity in the teaching process have been emphasized several times before. The results of earlier research show that from creative teaching we have many benefits that are reflected in a pleasant climate, active participants in the teaching process, humor, lack of fear and the development of divergent thinking. Taking into account class teaching, which is the focus of this work, it is desirable that each subject be approached in a creative way through the use of creative teaching techniques. Some earlier research, as well as the personal experiences of students upon their return from practice, have shown that in mathematics classes, students' creativity is still insufficiently stimulated. One of the important prerequisites for stimulating student creativity is the creativity of teachers. Stimulating creativity in every subject, including in math classes, is a key element for good personal growth and the development of each student. Children's creativity develops best through play so, with the help of mathematical activities and games, we develop student creativity.

The aim of the paper was to investigate which activities, according to students, encourage creativity in math classes with students of younger school age. The research was conducted with the help of a structured interview with 20 fourth graders in an elementary school in Vinkovci. The results of the research show that various creative games (Caterpillar, Man Do Not Angry, Opening Cards) and activities (evening of mathematics; competitive tasks) encourage students to be active and creative in math classes.

Keywords: activities, encouraging creativity, students, teaching mathematics, teacher.

Creativity through extracurricular dance activities in the context of non-formal education during Covid-19

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Abstract

We observed 4 young girls between 14 and 16 years old and the cognitive and affective mechanisms of their creative process in the context of non-formal education during the Covid-19 pandemic. We were interested in how they would react to and respond to demanding artistic research. It is an innovative art form: choreopoetry - the embodiment of poetry, where dancers inspired by poetry dance it, and the choreography is sound equipped with an acting interpretation of poetry. Katja Goričan's poetry was the script for the performance. With their imagination and creativity, they expressed their own dance expressiveness with the help of an authentic dance movement.

Were creativity and the ability to think critically a guide that made it easier for them to survive the period of self-isolation? How were we able to establish new creative practices during Covid-19? What were the consequences?

The main question was: what does artistic creation mean to girls (connecting, sharing and expressing their own feelings with creative expression) and how do they experience isolation, physical and social distance, negative emotions, fears, and increased anxiety?

As part of the qualitative research, we used a methodology based on standardized, individual and group interviews. At the end of the research, we came to the final conclusions with the help of individual in-depth interviews.

Due to exceptional circumstances, the nature of artistic research has acquired a completely new meaning for young performers. In addition to improvisational dance techniques of authentic movement, we also used voice, breathing and other performative techniques in the performance. We found that the ability to develop kinesthetic imagination and empathy, which they developed through years of dance practice, helped them respond to an artistic challenge.

The case study showed us how, with the help of a dance-movement creative process outside the curricular process, we help to bridge the situation in the time of covid. Adolescents have maintained their well-being and psycho-physical health. The research showed that the creative process protected them from anxiety and antisociality and enabled them to express themselves, connect and overcome fear and general negative emotions.

Keywords: Covid, empathy, kinesthetic imagination, movement, self-expression.

A creative presentation of certain tendencies in graphic notation through an analytical reading of Battistelli's Experimentum Mundi

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Abstract

The 20th century is a period in which composers, quite often, come up with their own (unique) composing systems, and therefore various ways in which such (non-traditional) music could be written down. One of the ways of recording "different" music is the use of graphic notation, which was largely developed in the fifties of the twentieth century. This type of notography can include visual symbols that are not characteristic of traditional music, or it can be combined with traditional notation. In the fourth grade of the Secondary School of Music, within the subject introduction to composing, a special field is the study of notography, that is, the study of new tendencies in notography and deviations from the traditional way of notating music. Accordingly, this paper will, through the analytical interpretation of Battistelli's opera Experimentum Mundi, point to a very creative approach, both to the creation of the musical piece and to its recording.

Keywords: graphic notation, Battistelli, Experimentum Mundi; visual symbols.

Stimulating creativity by using Montessori silence games

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Abstract

Montessori pedagogy is often mentioned as an alternative approach to upbringing and education that contains special didactic materials, rules, and organization. However, one of the essential Montessori principles is mentioned a little less: the importance of silence. Maria Montessori emphasized silence as a significant segment of human existence. It is necessary for an increasingly noisy and hectic lifestyle, which often affects the lives of children. Following this principle, Montessori developed particular silence games, still referred to as silence exercises in the literature. The role and goal of silence exercises are to calm the child, introduce him to a certain educational topic, or reflect the child's reflection on an already known topic. They have the effect of increasing sensitivity to the sounds around us and refining sensory perception. They encourage inner peace and discipline and increase respect and sensitivity for other children. Like everything in the Montessori method, quiet games have their own explicit rules and serve the child for his growth and development, they can be meditative, and children love them immensely. Given that silence exercises can be performed in an infinite number of different ways, it can be said that, apart from clear rules, they are limited only by the imagination of the one who plans, prepares and performs them. Each new game of silence can be unique and original, filled with numerous new ideas for children and adults, coinciding with multiple attempts by experts to define the concept of creativity. This paper aims to point out the possibility and importance of using Montessori silent games to develop and stimulate creativity in children. In this sense, creativity manifests itself mainly through developing a divergent way of thinking and encouraging the finding of different solutions to the problem that the educational worker puts in front of the child within the game of silence.

Keywords: silence games, creativity, Montessori pedagogy, Montessori silence.

Teachers' conceptions of creativity and pedagogical choices

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Abstract

This study aimed to explore teachers' pedagogies of creativity in the classroom through an analysis of their views on how teaching for creativity can be encouraged in their school. Its focus is on the particular examples that teachers chose to provide when asked to consider the notion of teaching for creativity in their professional practice. A sample of 682 teachers in mainstream schooling across all phases of education (from early years to upper secondary school) provided an example of a teaching activity that, in their opinion, demonstrated teaching for creativity in their school/college. Content analysis was employed for the detailed study of the teachers' examples. The initial coding and subsequent analysis were conducted using ACER's creative thinking skill development framework which provided a useful categorisation of creative thinking strands as the study's defining units of analysis (Three strands: generation of ideas, experimentation, quality of ideas). The findings indicated six categories (C) of teachers' conceptualisations of creative thinking on the basis of these examples. • A small number of teachers were unsure what creativity was (C1) while others (C2) gave very general answers (e.g. general topic/activity areas that could potentially be developed to promote creative thinking). • The third and fourth categories (C3&C4) of teachers either held an artistic view of creativity where the focus was on the use of the arts to enhance learning in other subjects or considered creative thinking to be synonymous with creative teaching. • About 50% of the teachers (C5) provided examples in line with the first two strands of creative thinking (generation of ideas and experimentation) with only 7% (C6) specifying the importance of the quality of students' creative thinking (Strand 3: quality - fitness for purpose, novelty and elaboration). The findings are discussed in terms of teachers' creativity conceptions and how these might affect their pedagogical choices.

Keywords: creativity conceptions, pedagogies of creativity, creative thinking skills, examples of creativity, content analysis.

Folklore and traditional music as an incentive for students creativity in primary school music lessons

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Abstract

Folklore and traditional music as art forms were created as a reflection of the creative spirit of a nation and are bearers of that nation's identity. Folk motifs can be found in musical education, as a "mother musical tongue" and as a part of other cultures. Folk songs, dances, games, tales and traditional customs are an essential part of musical education, as they play a crucial role in influencing a child's personality and their development of musical abilities:

- learning and preserving cultural values, aesthetics, and a feeling of cultural belonging,
- developing aural skills and rhythmic abilities through folk material with its unique musical characteristics: scales, melodic contours, rhythm, and timbre.

Folk motifs in musical lessons can influence the students' musical creativity in different ways: through variations on musical patterns; lyrics, melodic and dance improvisations; and dramatizations based on the roles in folk tales and customs.

Macedonian traditional music abounds in children's songs, word games, tongue-twisters, etc. Every aspect of children's folklore independently participates in and contributes to the preservation of the spiritual and corporeal health of child participants, in the development of their identity, as well as the development of their interpersonal relations with peers and adults.

Within the traditional music of Macedonia exists an already-formed reserve of songs and games for all ages, starting with the youngest. Our research is focused on the opportunities and practices of using folklore and traditional music in the early grades of primary education, as well as in cross-curricular integration. The main focus will be on crafting an inclusive and proactive approach toward the musical material that would inspire a manifestation of the students' creativity.

Keywords: creativity, folklore, music lessons, primary school.

Fear of error – enemy of creativity

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Abstract

Contemporary teaching and active learning focus on creativity as a quality that should be encouraged resolutely in students through active participation, creation, research, problem solving, and dealing with challenges. A modern school should be, as is to be expected, a place where students are encouraged to question, generate ideas, take reasonable risks, etc. However, many studies indicate that creativity is not given enough attention in the educational process and in school textbooks. One of the obstacles to the development of creativity at school is the fear of error and failure. Although errors are an integral part of every learning process, they are most often recognized as indicators of a lack of abilities, as an occurrence to be avoided, instead of a valuable learning opportunity among students and teachers. Maintaining a negative error culture (climate) in teaching not only hinders the development of creativity and innovation, but can also develop certain anxieties among pupils at school. This is why teachers' beliefs and attitudes about errors and the strategies they use to confront these challenges are of great importance. Teachers' adaptive strategies in handling errors result in many benefits in overall student performance and classroom climate, as recent studies show.

The aim of this paper is to investigate relevant and recent research on the connection between creativity and errors. The research focuses on the potential influence of attitudes about errors on creativity, teachers' adaptive and maladaptive strategies in handling students' errors, and the benefits and limitations of learning from errors for the development of students' creative potential.

Keywords: creativity, error culture, learning from errors.

The role of creativity in the education system and working with children with developmental difficulties

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Abstract

The paper defines the concept of creativity in more detail. What is creativity, in which areas do we encounter it, and how is it applied in the educational process? An overview of the concept of creativity throughout history.

Creativity is accepted as an important segment of the educational process and, as such, is foreseen by the National Curriculum. What is the effect of creativity on the educational process, and does creativity help in working with children with developmental disabilities, in working with minors?

The paper provides a historical overview of the development of creativity based on the available literature. The conclusion of the work is based on research that the creativity of teachers is stimulating and that it helps minors and children with developmental difficulties to learn.

Keywords: historical overview, creativity, teachers, children with difficulties, minors.

Creative methods for teaching adults

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Abstract

The identity of each individual develops throughout his life, from early youth to old age, and a significant part of identity development is the learning process because, through learning, the individual changes himself and the environment.

Lifelong learning can be formal or informal and is accompanied by a person's social, physical and psychological development. All this affects the formation of identity, and the image of oneself in a professional sense plays a big role in the development of the same. Becoming aware of and realizing what I want, what I'm interested in, what I want to do, and what I'm good at are frequent questions that young people think about. There is no perfect formula that will answer these questions, and the modern age and the pressure that is eminent through social networks are often very confusing for young people who are at a turning point in life.

The concept of lifelong education pushes the boundaries of education, which do not end with formal education. Considering the dynamic and accelerated changes that characterized the 21st century, the possibility of lifelong education allows us to change professions and titles even after formal education in adulthood, as well as to acquire additional competencies.

The paper systematizes the review of policies, guidelines, and resolutions that the European Lifelong Professional Guidance Policy Network (ELGPN) brought through various programs with the purpose of developing and promoting the concept of lifelong education with an emphasis on creative methods in teaching adults.

Keywords: creative methods of teaching adults, competences, lifelong learning.

Contribution of creative approaches in live and online classes

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Abstract

The primary purpose of this research is to compare possible differences in the contribution of creative approaches in teaching in live classes and online classes. The creative approach of the teacher is inherent in the successful teaching of online and live classes. In recent years, creative approaches have evolved to the point where teachers are increasingly utilizing digitization and adapting to the new modern age. This research discusses if online teaching can be equally diverting as teaching in live classes and in which ways exactly. The study was conducted by filling out a questionnaire with open-ended and closed-ended questions. The sample was selected from primary school teachers in Vinkovci for the sake of getting more credible insight into the different modes of various creative approaches of teaching in live classes and online classes. On the basis of the results, this research led to new cognitions in the field of teachers' different creative approaches to teaching, including the importance of high-quality online classes and live classes.

Keywords: creative approaches, subject teachers, online classes, live classes, primary school.

Selection of colors under the influence of emotions in children's art

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Abstract

Through visual language, children give us an insight into their emotions and their inner world. Artistic creativity is a form of communication between the child's inner and outer worlds. Practitioners who work with children and encourage them to express themselves artistically must be knowledgeable of children's developmental areas and the development of children's art. Knowing the stages of children's emotional development is important for the development of emotional literacy and the correct way of reacting to emotions. Through artistic activity, children express their current and suppressed emotions, so by observing and documenting, it is easy to discover in which developmental stage the child is. For the purposes of this paper, research was conducted on a group of preschool children. With various activities, attention was focused on the connection between emotions and colors in children's artistic expression.

The aim of this research was to investigate the influence of four types of emotions (happiness, sadness, anger and fear) on the choice of warm and cold colors in children's artwork.

The research is experimental. The data analysis method was qualitative and quantitative. The method of data processing is content analysis of children's artworks. The children's reaction to the art problem was investigated - color (warm and cold) and to the non-visual motif (emotions), which are manifested in their creative art process (in artworks).

The results showed that most children associate positive emotions (happiness) with warm colors and negative emotions (sadness and fear) with cold colors. The children depicted the emotion of anger with warm colors, of which red was the predominant color. In the highest percentage, children showed negative emotions in blue and green.

Keywords: children, emotions, artistic expression, color, research.

An approach to the development of children's and young people's reading competences through literary emotionology

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Abstract

In the first part of the presentation, literary emotionology will be discussed as a theory and methodology in the approach to literary texts. Then, the relationship between reading and emotions will be briefly presented according to literary theorists who were aware of this connection in order to further contextualize the role of emotions as an extra-literary factor in the formation of the "understandable meaning" of the text. The concept of emotional competences will be connected with language competences (emotional vocabulary development). An example of an intervention program for the development of emotional competences of primary school-aged children based on children's literature texts (Reading and Feeling) will be presented. The concepts of meta-linguistic, guided and transformative reading as a form of bibliotherapy practice will be explained and contextualized, and the differences with respect to the traditional school interpretation approach to the literary text will be pointed out. In addition to encouraging theoretical education about emotional competencies and forms of reading practices that focus on emotions, the presentation aims to point out the possibilities that an emotional approach can offer in the development of cognitive-affective abilities that young readers can achieve through literary texts.

Keywords: literary emotionology, reading competencies, emotional vocabulary.

Pre-service teachers' perception of the scientific creativity development in Science and social studies classes

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Abstract

This paper deals with the phenomenon of scientific creativity and the possibilities of its development in Science and social studies teaching. In this context, the results of the research aimed at determining pre-service teachers' attitudes towards the development of scientific creativity in the context of Science and social studies teaching, the contextual elements that promote its development, the characteristics of scientifically creative students, the factors that promote their development, and the challenges that arise in this process, are presented. The research was conducted by surveying a sample of 120 student teachers from the Faculty of Teacher Education, at the University of Zagreb. The results show that student teachers perceive Science and social studies as school subject that allows creative learning and teaching, but that they prioritise artistic school subjects in developing students' creativity. Pre-service teachers recognize the opportunities for developing scientific creativity in applying the model of scientific inquiry and the concept of problem-based learning, which stimulates the process of divergent thinking in solving problem situations. Dedication, curiosity, enthusiasm, questioning, and interest in experimentation are identified by student teachers as fundamental characteristics of scientifically creative students that can be successfully identified in Science and social studies classes. Certain factors that promote or hinder the process of developing scientific creativity were also identified. The emphasis on objectivity and the realization of a large number of learning outcomes, as well as the dilemma of assessing creative act, are considered to be the most common reasons for preferring convergent thinking and the reproduction of acquired knowledge in relation to the development of creativity. Based on the results of the conducted research, the following suggestions were made to revitalize the initial teacher education in the context of their training to stimulate and develop students' scientific creativity in Science and social studies teaching, and for the implementation of future research in this field.

Keywords: pre-service teachers' attitudes, primary science, Science and social studies teaching, scientific creativity.

Co-production of the curriculum: Incorporating the lived experience of marginalized groups

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Abstract

Co-production of learning goals contributes to shared ownership of both learning processes and learning outcomes (Jagersma, 2010). Such collaboration is particularly relevant to fields such as social education, where professionals in the field often work closely with disabled students or students representing other marginalized groups to develop support and services to actualize their right to inclusive education and effective participation in the classroom. The research upon which this presentation is based draws on a pilot program conducted in 2022 to effectively include the voices of people with intellectual disabilities for the purpose of enriching a first-year course in social education at the University of Iceland entitled "Disability and the Lifecycle." The research, which was funded by the University of Iceland, is qualitative and draws on data that includes the outcome of focus group sessions and in-depth interviews with the focus group participants, who all had intellectual disabilities or related impairments. The research's findings revealed several areas that had been insufficiently covered in the curriculum and, as a result, changes have been made to the curriculum.

The research findings demonstrate the value added by creating a platform for the co-creation of the curriculum based on lived experience. The findings, furthermore, draw attention to the importance of further opening the process of curriculum development to include voices and lived experiences of other marginalized groups, such as refugees, migrants and linguistic minorities.

Keywords: co-production, curriculum development, inclusion, intellectual disability, lived experience.

Development of critical thinking in extracurricular activities of primary education

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Abstract

The aim of this work is to establish to what extent classroom teachers develop critical thinking in students during extracurricular activities at school, and the specific goal is to establish to what extent they encourage students to independently develop the competence of critical thinking. The research methodology is quantitative in nature and consists of a questionnaire for the development and encouragement of critical thinking constructed for the needs of this research. The participants were classroom teachers (N=183), and the results were analyzed with regard to the total sample and differences according to gender, work experience, level of education, and urban and rural schools. The results show that teachers develop critical thinking in extracurricular activities to a lesser extent but they encourage students to develop this competence independently. It is obvious that there is a lack of space for the development of critical thinking in extracurricular activities, and the question of the reasons for such results and additional possibilities for increasing the level of work on the development of critical thinking opens up.

Keywords: competence, critical thinking, development, extracurricular activities.

Development and presence of a creative approach in organ improvisation

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Abstract

The paper will present the research that was carried out to determine the experiences and the feeling of being overwhelmed when performing improvised music. In this research, the feeling of being overwhelmed will be treated as an individual-subjective experience. Furthermore, an attempt will be made to clearly show how the environment, as well as the very moment of music creation, affects the respondents and their emotions. Students studying organ at the following institutions will participate in this research: Music Academy in Zagreb (Croatia), Academy of Music in Ljubljana (Slovenia), Faculty of Music Arts in Belgrade (Serbia), Academy of Arts in Novi Sad (Serbia), Institute of church music of the KBF in Zagreb (Croatia).

This research will compare and draw conclusions based on the comparison of two methods. One method is qualitative and the other is quantitative. The design we will use is mixed because both methods have equal importance in this research and are treated as such. Therefore, the used design corresponds to a greater extent to the convergently parallel design. In the first part of the research, the Flow State Scale - questionnaire will be used, and in the second, which will follow after the creative process, the interviewing procedure will be used, while the interview protocol will be used as an instrument. Following the above, the participants will fill out a questionnaire after the musical performance, regardless of whether it is a rehearsal, public performance, recording, exam, etc., and they will also be subjected to analysis during the conversation in order to get the most credible picture possible.

Keywords: creativity, interview, feeling overwhelmed, flow state scale, music improvisation.

The creativity of the literary space

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Abstract

About the concept of creativity, Mira Čudina says that "it is used in two meanings: creativity as creativity, the creation of new and original artistic, technical, and scientific creations, and creativity as a characteristic or a set of characteristics that will enable, encourage, challenge creativity - productivity" (1991: 49). The first is a psychoanalytical approach and the second psychometric. While the first emphasizes the role of the subconscious, the second emphasizes objectivity and the possibility of developing creativity. Numerous psychological and pedagogical researchers have tried to define the theory of creativity. The two previously stated points of view have somewhat converged. However, Mira Čudina states that, taking into account the complexity of the emergence of creativity and the richness and variability of its manifestations in everyday life, art and scientific thought, there is serious doubt that such a theory will ever emerge. This work also talks about "two fundamental approaches to creativity: the view of creativity as a trait and the view of creativity as a skill" (Vizek-Vidović et al., 2003: 80). The first approach that considers creativity as a trait is characterized by Guilford's model of intelligence, which includes convergent and divergent production, and the second sees it as a skill that can be encouraged and practiced. Today, "creativity is seen as a skill that should be practiced and encouraged in all children." Still, the authors Vizek-Vidović et al. emphasize that it is important to remove obstacles to creative thinking and behavior as well as to strengthen the creative attitude (Vizek-Vidović et al., 2003: 80-81). The same authors cite Gallagher's definition of creativity, which for him is "a mental process by which a person creates new ideas or products in a way that is new to him" (Vizek-Vidović et al., 2003: 80). The use of two terms: creativity and creativity is noticeable. In the work, creativity will be understood in the previously mentioned meaning, and creativity will mean productivity.

Keywords: creativity, textbooks, teacher, students.

Improving teaching practice and school programs by applying critical thinking in school

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Abstract

The successfully implemented program Schools for the 21st Century aimed to develop the competencies of students and teachers for critical thinking and problem-solving integration in school curriculum. This process enables students to solve non-routine problems and questions during classes and master techniques not taught in class that support the development of critical thinking and problem-solving skills. The study aimed to identify and examine the areas contributing to the development and application of critical thinking in teaching students aged 10 to 15 based on the successfully implemented three-year School for the 21st Century project in Bosnia and Herzegovina. For this study, we used Thematic Content Analysis (TCA) to examine 520 methodically designed teaching preparations. We identified four areas that provide the application of critical thinking and problem-solving in teaching. Those areas are learning environment influence, evaluation of the pros and cons of different positions, consideration of different perspectives on the problem, and understanding the deep structure of the question. This competence approach based on critical thinking affects improvement processes of teaching practices, school programs, and the entire education system in Bosnia and Herzegovina, which should lead to better student achievements.

Keywords: critical thinking, problem-solving, school curriculum, students, teachers, teaching practice.

Arts Entrepreneurship

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Abstract

Arts Entrepreneurship is a relatively new research topic in art management, cultural policy, and art education, as well as a relatively new research concept in entrepreneurship. Artists and entrepreneurs have a product or idea to sell and must go out on the market. Artists need basic business skills and a willingness to approach art sales as any entrepreneur would.

Tomorrow's economic changes are carried by our students in school today and in the labor market in a couple of years. Teaching young people to participate in the economy is essential, as it will be tomorrow. Entrepreneurial training in the arts does not offer any guarantees. However, it increases the likelihood of an artist's success. Students go to school to improve their prospects for professional work. Art education mainly offers to perfect artistic skills and techniques but does not market that art, contributing to the stereotype of a hungry artist. To help artists overcome this stereotype, they must be offered entrepreneurial skills learning. In this research, we will connect art and entrepreneurship and thus suggest how to teach entrepreneurial competencies in artistic fields. Research and studies of scientific works dealing with entrepreneurship in the arts will show how to teach this topic in the European Union. The existing education documents in the Republic of Croatia will be studied. An entrepreneurship subject in Croatia taught in secondary art schools and art academies will be investigated.

Keywords: art, entrepreneurship, creativity.

Vida Matjan's musical dramatizations as a way to develop students' musical imagination and creativity

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Abstract

Within the framework of the project entitled The role and significance of Vida Matjan in the development of cultural and musical life in Montenegro, which is co-financed by the Ministry of Culture and Media of Montenegro, we explore the life and creativity of Vida Matjan (1896-1993), the founder of the music school in Kotor, one of the most important music pedagogues, composers, choirmasters and organizers of musical life in Montenegro. Our special attention is drawn to her specific and unique approach to music teaching, which is based on connecting singing, playing, dancing, movement, acting and mime into a unique whole, with the aim of developing students' imagination and creativity. Searching for Vida Matjan's manuscripts, stored in the Kotor City Archive, we find her rich legacy, including many preserved teaching aids and sheet music, which can be used in contemporary music teaching. A special approach comes to the fore, especially in musical dramatizations, which Matjan designed for the needs of initial music lessons. Short songs, composed to the lyrics of her longtime collaborator Miloš Milošević (1920–2012), served as the basis for the creation of small musical performances. Along with singing, the students played Orff instruments, acted and danced, thus entering the magical world of art. In cooperation with the School for Elementary Music Education in Bijelo Polje, we brought to life some of Vida Matjan's creations, created in the sixties of the last century, and investigated how students in the modern age react to her dramatizations. The paper describes the pedagogical work of Vida Matjan, her creative ideas and way of working in elementary music classes, and practical experiences in contemporary teaching practice.

Keywords: Vida Matjan, music teaching, musical dramatization, imagination, creativity.

Action research as a way to stimulate and understand musical creativity in the classroom

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Abstract

The methodology of action research is itself a creative process in which the teacher-researcher strengthens his/her reflective abilities. At the same time, through feedback and constant interaction with students, it builds a relationship of trust and appreciation as a precondition for stimulating a safe environment in which students express themselves creatively. This paper presents the experiences of action research involving 30 fifth-grade students and their music teacher in one primary school in Montenegro. The aim of the paper is to present how through methodically designed steps carried out in two cycles, creative musical activities were realized and how they were reflected in several aspects, both musical and extra musical. A special accent will be placed on the presence of motivation, cooperation in creative processes, and the performance and evaluation of the creative products by the students. In addition to the fact that this form of research arises strongly from the practice itself, trying to change it, it also contributes to the understanding of the ways in which students think musically and build a creative identity that connects them with a strong and natural need to express themselves. If the conduct of action research is stimulated in order for teachers to develop their research potential, at the same time rich information is obtained to create theories that explain how musical creativity can be realized in often not so favorable school conditions. By respecting the "voice of the students" and encouraging their reflections, we get valuable information about how children of a certain growth think musically, and how the creative process itself is a dynamic cycle of constant interactions in which both cognitive and affective elements intertwine strongly in all actors who participate in it.

Keywords: action research, motivation, musical creativity, reflective student, reflective teacher.

Evaluating students' creative work – the teachers' role in encouraging and developing creativity

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Abstract

A prerequisite for successful learning, work and life in the 21st century, the basis for the development of sustainable social communities and a competitive economy is a combination of knowledge, skills and attitudes. Evaluation of the learning process and the achievement of outcomes encompasses the procedures of collecting and analyzing information. Assessing student learning and interpreting results require the full professional integrity of teachers and the use of objective information about learning and student achievement. For students, evaluation is an extremely sensitive area that can significantly determine their motivation for learning, their approach to learning, and even their willingness to participate in the educational process. In the paper, emphasis is placed on evaluating the creative work of students. Creativity is a prerequisite for the creation and development of an inventive society, and nowadays it is one of the most important characteristics of successful individuals. Creativity is a prerequisite for art, expression and progress. The aim of the paper was to present an overview of scientific research in the field of evaluating the creative work of students in elementary school of primary education in the last 20 years of the 21st century. The research was conducted by analyzing recent literature on the evaluation of students' creative work and scientific papers available online, which include methods, elements and criteria for evaluating students' creative work. The purpose of this paper is to create a comprehensive picture of the evaluation of the creative work of students in primary school education with an emphasis on the role of teachers in encouraging and developing creativity. The success of students in the development of creativity largely depends on the qualifications of the teachers themselves. The creative abilities of students can be successfully developed through the planning and expert work of teachers in class. It is important to adhere to certain elements, criteria and foundations that make it easier for teachers to evaluate the creativity of each work and activity of a student, and it is necessary to determine what exactly is encouraged and rewarded.

Keywords: creation, creativity, evaluation, student, teacher.

Active learning and teaching through the eTwinning project

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Abstract

Projects like eTwinning projects encourage and produce an interactive, project-based, innovative and collaborative way of working with the use of new technologies. They enable students to develop communication, social and ICT skills and contribute to the development of not only competences, but also a sense of solidarity, responsibility and empathy, while providing teachers with a safe environment for national and international cooperation.

This paper shows how students, through work in groups and teams within schools and through work in mixed groups made up of students from different schools and countries, cooperate and work on a project in a physical and/or online environment. By jointly breaking down assigned activities into smaller sub-tasks and sharing roles, they use collaborative program tools for joint creation and editing of digital content, collaborate on shared documents, and develop skills of discussion, negotiation and persuasion in a digital environment. By working in mixed groups, students learn to listen to other people's arguments and defend their own ideas, while teachers using this way of working become mentors who monitor, advise and guide. By designing and implementing activities, students develop critical thinking skills with continuous self-evaluation and peer evaluation, which provides them with feedback on the basis of which they improve their own learning. By managing information and applying learning and teaching strategies, they activate and deepen existing knowledge and acquire new knowledge and skills to adapt to real situations. They systematically develop creative thinking, where they independently plan and adjust their approach to learning in order to increase efficiency and progress. Carefully designed collaborative activities contribute to the development of personal identity and the recognition and respect of the national, natural and cultural heritage, while at the same time respecting diversity and different ways of thinking and living. Through project activities, students are trained and empowered to actively and effectively perform a civic role within the class, school, local, national, European and global community. The work contributes to the richness of ICT teaching, creative methods of teaching and research. The work provides an example of good practice for everyone who wants to work at the international level and, at the same time, enrich themselves and others by actively learning and teaching.

Keywords: eTwinning, active learning, teaching, evaluation, digital training, richness of diversity.

Creation of the Sports Club for Health online learning tool

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Abstract

"Sports Club for Health" (SCforH) is the largest EU initiative that promotes health in sports settings. Significant European and world organisations recognised the initiative. SCforH guidelines are the main resource developed, and they have been used to educate stakeholders in the field of sport. However, the relatively low implementation of these guidelines, even after their extensive dissemination, motivated us to think of more creative and stimulative ways of sharing their content and knowledge, and to inspire academics in higher education institutions on their use. Thus, our aim was to create an educational SCforH online learning course that would be adapted to the currently growing digital age, interactive, multilingual, and open to all.

The "SCforH online learning course" was created in 2020 and 2021. Three researchers conducted a comprehensive literature review and a detailed internet search on similar interventions and tools. According to our findings and visions, with IT professionals and graphic designers, we created the first course version. Thirty experts in sport, health, and education from 15 countries revised that version. Finally, we made changes according to their comments and created the final SCforH online course, which was translated into 25 European languages by language professionals. All communicated through e-mails and Zoom calls.

The online course includes the following features: (i) a participation consent form, (ii) textual, pictorial, and video learning materials, (iii) interactive learning exercises, (iv) in-course quizzes, (v) a link to the available SCforH online materials, (vi) a certification form, (vii) a participant feedback module; (viii) an optional SCforH evaluation survey.

This interactive online learning course is a modern alternative to traditional modes of learning that can help teachers creatively present the findings of the health-enhancing programmes in sports clubs and wider, and possibly improve and stimulate students' learning experience.

Keywords: educational online learning tool, health-enhancing physical activity, Sports Club for Health, SCforH guidelines, SCforH online learning course.

Ways of planning activities in kindergartens in the geographical area of Istria in the Republic of Croatia and in the area of the municipality of Kopar in the Republic of Slovenia

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Abstract

Children's participation in activity planning has become the subject of numerous studies and was included as the first principle in the Croatian National Curriculum in 2014. With regard to the child's participation in decision-making, the traditional approach is characterized by determinism, which is still present, so the question arises as to where the need for it comes from, that is, for the introduction of a modern approach. The child's participation in decision-making can be found in Plato and Aristotle through the idea of the importance of the child's free play and the tendency for everyone to manage their own lives. In the last thirty years in Reggio pedagogy, there is no specific, finished nor completed curriculum, but activities with children are designed and carried out based on the documentation created on the basis of children's reactions, interests and needs. In contrast, Steiner's pedagogy is characterized by immutability that originates from the source of understanding man as seen by anthroposophy, so the child's participation in planning activities is considered unnecessary and inappropriate for children's age.

For this reason, research was conducted in the Slovenian and Croatian part of the Istrian peninsula with the aim of examining how the interviewed preschool teachers classify their approach in planning work with children; how they classify the approach in time planning for working with children; how they classify the tendency to change pre-planned activities in the course of their implementation, considering the children's reaction, and whether there are differences between the responses of the Croatian and Slovenian part-time teachers. The research sample includes a total of 171 teachers. Based on the survey questionnaire, we obtained results that show that the respondents from the Croatian part of Istria use a more spontaneous approach to leadership and that they more easily give up pre-planned activities. We looked at the results from the context of Slovenian preschool teachers who are faced with the older Kindergarten Curriculum from 1999, which is still in force and requires amendments regarding the theory of children's participation in planning.

Keywords: planning, activities, children, educators, kindergartens, Istria, Municipality of Kopar.

Social networks as an incentive for the development of creativity in primary school students

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Abstract

Nowadays, more than ever before, there are numerous forms of creative expression, including Social Networks. These have become an indispensable part of our lives, being used both for communication and for keeping up with informative, entertaining, sports-related and educational content. New technologies and various media have created a completely new world for newer generations. It is a challenge for a teacher to extract advantages from social networks and include modern innovative methods in teaching, thus adapting to the needs of new, online generations. The purpose of this paper is to explore and determine the frequency of using social networks (*TikTok, Snapchat and YouTube*), the type of content they provide and its quality, and creative use by primary school students. The research also seeks to gain a broader insight into parental awareness of the research participants' time spent using these networks. A sample of ninety-seven (N=97) fourth and fifth-grade students from two primary schools in the Vukovar-Srijem County were surveyed for this study.

The results of the research show that 50.5% of the surveyed primary education students use the mentioned social networks; they target them, looking for creative, interesting and useful ideas that motivate them in hobbies, future occupations, better organization of free time and encourage them to be creative in activities related to the teaching process (home works, projects etc.).

Keywords: creativity, *Snapchat*, social networks, students, *TikTok, YouTube*.

Digital educational content as an incentive for musical creativity of music school students

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Abstract

The digital turn (Camlin and Lisboa, 2021) was intensively implemented in the education system in March 2020, when classes began to be held entirely in virtual space due to the COVID-19 pandemic. In the initial period of distance learning, there was a significant lack of so-called digital educational content (DEC) that teachers could use in the teaching process. This issue has been particularly noticeable in music schools, both in music theory and instrument classes. However, thanks to the e-Schools project: Complete informatization of school business processes and teaching processes to create digitally mature schools for the 21st century, CARNET created the Edutorij portal where teachers could publish and share digital educational content. In this paper, therefore, using qualitative analysis, the materials published on Edutorij (N=377) intended for art schools were analysed by their subject matter and components to show how digital educational content can stimulate the musical creativity of music school students. The research methodology is based on a qualitative analysis of content, according to clearly defined observed variables, and the results interpreted by narrative description are contextualized in the framework of relevant scientific research and show that digital educational content can be a quality addition to music lessons and, due to its interactivity, encourage students to further research, which directly develops their creativity.

Keywords: creativity, digital educational content, Edutorij; music, pupils.

Creative development of language and professional competencies in secondary education illustrated by the example of free dictation

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Abstract

The paper presents the results of field research conducted among Croatian language teachers (N = 125) and secondary vocational school students from the educational field of economy, trade and business administration (N = 320). Teachers of Croatian assess whether the education reform has brought creative changes in their work and student activities. Students following four-year programs in the educational field of economics, trade and business administration (economist, business secretary, administrative referent, commercialist) took part in a free dictation exercise, which included sound reproduction and writing down important facts on a computer. After the dictation, students and teachers completed the survey questionnaire. Participants believe that this form of practice, which includes extracting important facts from the listened text, is an extremely creative and useful way of developing language and professional competencies necessary for performing everyday work tasks, especially due to the interdisciplinary and multimedia approach.

Keywords: Croatian language, creativity, secondary education, free dictation, vocational education.

The role of the school band in encouraging the creativity of elementary school students

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Abstract

Extracurricular activities are an inseparable part of the educational system, the purpose of which is to encourage students' potential and interests in various fields and use their free time more purposefully. In this paper, the research subject is the procedure of encouraging the creativity of elementary school students through participation in the school band. This extracurricular activity is an integral part of the authentic program of the elementary school, where the pilot project "Enriched one-shift work" is implemented in order to develop students' creativity. The paper presents the results of a survey of teachers and students' opinions of how students' participation in the school band can encourage their creativity. The research was carried out at the Elementary School in Odžaci "Branko Radičević," which organizes the work of the school rock band "Novi talas" as an extracurricular musical activity within the pilot project and is an example of good practice in school and the wider community. The characteristic of this school band is reflected in its participant structure, which consists of third-grade students and their teacher - the leader of the band - and professional musicians-collaborators who are also included in the work of the school rock band. The results of the research show that the majority of respondents recognize the significant role of the school band in the development of students' creativity, which is achieved through the following methods of encouragement: curiosity, interest, self-initiative, original performances of students, fostering the authenticity of musical expression, musical improvisation in the performance of music by singing and playing popular music.

Keywords: creativity, extracurricular musical activity, free time, one-shift work, school band.

"The teacher must be the one who "ignites" the spark of interest in his students" - university teachers on a (positive) attitude towards teaching

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Abstract

The academic careers of university teachers should be based on successful research and high-quality teaching (Paris Communique, 2018). In research, the measurable criteria of academic performance can be defined relatively precisely, but when it comes to evaluating the success of teaching, room for debate opens up. The role of university teachers today is demanding and complex. Against the backdrop of global crises, the emphasised need for digital transformation, and the increasing massification and diversification of the student body, they are expected to prepare students for the unpredictable jobs of the future. Moreover, they are also expected to perform their teaching activities with high quality, enthusiasm, and passion (Hagenauer and Volet, 2014). On this basis, this paper considers the role of university teachers using a conceptual framework for exploring positive attitudes toward teaching. The conceptual framework consists of four dimensions - (1) the emotional dimension, (2) the professional development dimension, (3) the constructivist approach to teaching dimension, and (4) the teaching-research nexus dimension, which can be used for a broader consideration of (positive) attitudes toward teaching. The paper presents the mentioned conceptual framework and the preliminary results of qualitative research, the aim of which is to determine how university teachers employed at the University of Rijeka understand and evaluate the mentioned framework. Snowball sampling and creative qualitative methods were used (e.g., determining keywords, evoking opinions through visualized photographs, responses to vignettes, and written discussions about the proposed conceptual framework). The research findings open a space for discussion about redefining the teaching profession in the future and reflecting on new approaches to exploring the complex and changing role of university teachers.

Keywords: creative qualitative methods, positive attitude toward teaching, university teachers, higher education.

Project-based learning – a stepping stone for creativity and EFL learner autonomy

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Abstract

A large volume of published studies addresses a creative approach to foreign language teaching as one of the main factors in determining the quality of a student's learning performance. Creativity has been granted national recognition as one of the crucial goals of the English curriculum in Croatia. Recent tendencies in the research focus on creativity as a skill that can be developed and a talent that every person and every language learner has. As creativity comes in so many different forms and is not susceptible to clear definitions, the present paper focuses on fostering learner autonomy and creative thinking through project-based learning activities. It considers the necessity and implications of developing autonomous learning and creativity through two different projects conducted among groups of university EFL learners at the undergraduate and graduate levels. Data for this study were collected using the content analysis of the two project products – e-portfolios and the resource packs collected and created by the students. Based on the given set of criteria, the positive and negative outcomes of the projects are enumerated, with suggestions on how to alleviate the shortcomings and reinforce the strong points. The projects aimed at providing the students with some procedures they could later implement in their teaching practice or apply for professional development. It was found that although negative outcomes such as self-efficacy and difficulty of assessment were found, the increased motivation, skill diversity, creativity and tangible products outweigh the negatives. The student-centered nature of the projects also pointed out some significant differences among the undergraduate and graduate EFL students in their strategy use, preferable learning styles and resourcefulness. Based on the merits of the two products, suggestions are discussed for future projects that would further utilize creativity enhancement and student engagement in the EFL classrooms.

Keywords: creativity, e-portfolio, learner autonomy, project-based learning, university EFL learners.

Creating something out of nothing: Developing my professional creative practices

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Abstract

Creativity is a fundamental pillar of education in Iceland, particularly important for the development of young children. Preschools that use the Reggio Emilia approach treat children as capable individuals born with “a hundred languages / a hundred hands / a hundred thoughts / a hundred ways of thinking / of playing, of speaking.” The teacher’s role in creative work is to facilitate opportunities for working creatively, emphasising the process rather than the outcome. This paper describes an action research project I conducted on my work in preschool. The purpose of this project was to promote creative practices in my unit, with emphasis on the children reaching a ‘state of flow’ while working on projects based on their ideas.

Data collected included a research journal, observations on creative work practices in the classroom, and photographs. Data were analysed consistently and as a whole by the end of data collection. Alongside gathering data, I regularly analysed them throughout the process. I scrutinized the data available, analysed and evaluated, and then planned my next steps based on the evaluation. That way, I was able to influence my practice and change it on the way. However, I did not become conscious of the changes and their nature until I had gathered all the data and scrutinized them as a whole in comparison to each other.

The research findings show the importance of preschool teachers being active listeners and establishing mutual respect with the children. When working on enhancing creativity, it is important that children’s environments are supportive and that the teacher is aware of conditions that increase the likelihood of children attaining a state of flow while working. One of the main lessons of this process was realising the negative effects staff shortage had on my ability to promote creativity in the classroom.

Keywords: action research, creativity, flow, preschools’ daily schedule, preschool teachers’ role.

Reggio pedagogy and possibilities of musical expression

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Abstract

The aim of this work is to determine and present the role of music in the Reggio pedagogical conception and to identify the key features and possibilities of musical expression in accordance with the principles of the same conception. A hermeneutic approach through literature analysis will offer an interpretation within which it is possible to further observe, analyze and interpret music in the curriculum of early and preschool education institutions. The basic principle of the Reggio pedagogy is to stimulate and encourage children to explore and express themselves in their immediate environment, that is, to express themselves through the child's "hundred languages." In such an environment, children learn through discovery and develop personal potential, autonomy and a sense of responsibility in interaction with other children. The highlighted syntagma implies expression through words, movement, drawing, play and music. An important role in Reggio pedagogy is played by the atelierist, that is, the artist who works within the atelier and supports children in creative expression, which is usually focused on the artistic language of the child. It should be emphasized that the adult has a great responsibility to provide a stimulating environment for the complete development of the child and to plan and ensure purposeful interaction with children. The fundamental determinants of this pedagogical concept are in accordance with the musical development of children, which begins at birth. In the first stage of musical development, children explore the world around them using their senses, which is followed by an expressive stage. Therefore, in the Reggio pedagogical conception, music should also be visible as one of the child's hundred languages.

Keywords: curriculum, early and preschool education, musical expression, Reggio pedagogy.

How creative is creative? Students' reflection on creativity in higher education

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Abstract

The concept of creativity has been heralded as one of the main drives in the teaching process. Creativity is recognized to facilitate learning and thinking skills and indirectly prepare students for the complex world of work. However, little attention has been paid to the students' viewpoint of creativity in higher education. As a result, this study aims to investigate university students' perceptions, experiences, and suggestions on creativity and its application in the teaching process.

The data was collected via surveys distributed to university students from different departments (Bosnian Language and Literature, English Language and Literature, Turkish Language and Literature, Philosophy-Sociology, Psychology-Pedagogy, Journalism, History, and Social Work) within a single faculty. As many as 260 students took part in the survey process. The students were asked to explain how they understood creativity, to what extent the teaching process at the university could be described as creative, and what could be done to increase the level of creativity in university education.

The results indicated that the majority of students described university education as lacking in creativity, with some positive practices by a small number of teaching staff. The results also revealed that students studying foreign languages found their classes to be more creative than students in other departments.

While the study was conducted on a small sample size, there is strong evidence to believe that a larger sample would produce similar results. Nevertheless, the results serve as an indicator that higher education requires systemic reform.

Keywords: creativity, higher education, students, university, survey.

Traditional creativity in artistic expression in kindergarten

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Abstract

Activities related to traditional creativity in the system of early and preschool upbringing and education are an important part of the culture and fundamental peculiarities of a region. Building a culture of living in which love for the homeland and customs is manifested is a great responsibility for the educator. In modern times, life is full of speed and changes, and culture and tradition are unfairly neglected. Children's communication with culture and traditional creativity takes place in DV Cvrčak, PO Stonoga, Novo Selo Rok through the topic of traditional values. Preserving traditions is important to many cultures and nations. Children need to be introduced to the process of heritage discovery and research with respect. Discovering the artistic creativity of children, encouraging them with respect to the topic of traditional culture, researching different traditions with children, and implementing modern techniques in carrying out activities with children, are the best way to protect and preserve national heritage in the future. This paper describes many art activities with various materials through which children got to know the traditional culture of Međimurje. They researched licitar hearts, traditional masks, traditional toys, scarves, lace and fabrics. Motivating children of early and preschool ages to love their homeland and to further explore traditional motifs and customs is the goal, which is fulfilled through art and rounded off by visits to the Međimurje Treasury and the Dance performance Gđa pozoj spi. The experiences gained by the children are the best way to further develop creativity and preserve the cultural heritage of Međimurje.

Keywords: heritage, native identity, art activities, early and preschool education, Croatian tradition.

Headteacher's creativity as the response to professional challenges

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Abstract

Headteachers in the Republic of Croatia and their colleagues worldwide face working conditions that have a common basic characteristic, change. As schools are constantly affected by changes in their communities and society, headteachers as professional and pedagogical leaders are being set on the first line of defence against these processes. Therefore, in view of the nature of their work places and the roles that they take on in the educational process, headteachers need to possess skills, knowledge and attitudes (competences) that enable them to cope with these challenges. At the same time, the headteachers' ability to think and act creatively, which contributes to the improvement of the learning and teaching processes that take place in a school that strives to be a learning community, is highlighted. A creative approach to leadership, which implies critical reflection, divergent thinking, originality and innovation in solving problems, is a contemporary imperative, so the question arises as to how much the headteachers' creativity is recognized as a subject of scientific research.

The goal of this paper is to research the presence of creativity in the scientific literature on primary and secondary school principals. For this purpose, an analysis of the research trend of headteachers' creativity in available relevant scientific sources published in the period from 2002 to 2022 will be applied. The objective is to find answers to the following research questions: What is the quantum of the research of headteachers' creativity in the relevant databases during the last two decades? In what ways is the headteachers' creativity in the processes of school leadership defined over time? What kind of methodology is used in the research of headteachers' creativity within the analysed period? How is the role of creativity described in the headteachers' work within the same period? The results of the research will describe the trend in the research of the creativity of headteachers (continuous/discontinuous, ascending/descending) and what its terminological, methodological and phenomenological terms characteristics are. This will contribute to a more complete understanding of the problem of creativity of primary and secondary school headteachers and encourage further scientific research.

Keywords: creativity, headteacher, leadership skills, school, trend analysis.

Musical creativity in students of teacher education

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Abstract

The curriculum for teaching music in the lower grades of primary education in Croatia is implemented by the primary education teachers within the domain of expression through music and with music, which also includes forms of musical creativity. In order to encourage children's musical creativity, the teachers should be musically creative themselves. Since creativity in the domain depends on competence in the domain, the musical creativity of the teacher depends on his or her musical competence. Teachers in Croatia acquire their musical competencies in the context of music courses during their teacher education. Considering the necessary competencies for teaching music and the fact that students' musical competencies begin to develop only at the beginning of teacher studies, the question arises whether and to what extent the musical creativity of future teachers can be achieved already during their studies because it is necessary to foster their future students' musical creativity.

The goal of this study is to determine the appearance of musical creativity in students of teacher education, as well as the relationship between students' musical creativity and their musical competencies. Students from all five years of teacher studies were included in the study (N = 249). For this study, three questionnaires were designed and administered: a Self-assessment of musical competence questionnaire, a Self-assessment of musical creativity questionnaire, and a Musical creative behavior questionnaire. The data were processed using quantitative methodology.

The results of the study showed that students' musical creativity is poor in the first years of teacher education and develops only after the second year of musical courses in teacher education. It was found that students' musical creativity is positively related to musical competencies and that a higher level of musical competencies is associated with a higher level of musical creativity. The musical creativity of student teachers is also related to the encouragement and reward of creative behavior in music by the environment and fostering of creativity in music by their teachers in previous education.

Therefore, to develop musical creativity in future teachers, it is necessary to facilitate the acquisition and development of appropriate musical competencies in university education and to encourage and reward students' creativity and originality in music.

Keywords: musical competencies; musical creative behavior; music education; primary education teachers.

Furthering skill development through a creative learning climate in language and literature classes

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Abstract

The turn of the 21st century brought significant changes in the approach to competency and skills in the labor market. Strong communication, sophisticated interpersonal, refined problem-solving, and excellent writing skills, sometimes in more than one language, are the standard expectation in most fields. Additionally, dependent on the exact nature of the position, a range of practical and academic knowledge, ideally paired with experience, is also required by many employers. The presented research examines a specific learning environment in the Serbian school system, the language and literature education of Hungarian native speakers, and, more precisely, how a creative learning climate can be created in this field. Several education reforms have been implemented in Serbia in the past decades, but these changes have yet to produce significant results in skill development. One conclusion of the PISA 2018 test is that 37.7% of Serbian students are functionally illiterate. Despite this fact, and due to the leniency of the educational system, most of these students not only manage to finish elementary school but also graduate high school. In the past three years, this educational stage was concluded within the highest grade range by 40-45% of the students. These data illuminate the paradoxical position the Serbian educational system has come to be in in the 21st century, simultaneously producing poor and surprisingly excellent results. The education of national minorities suffers from the same problems as the whole system; the curriculum is still heavily burdened by its Prussian roots, which means that the weight of developing a methodology for cultivating skills falls entirely on the teachers. The paper aims to evaluate if the current educational system can further develop these highly regarded skills in students and examine methods and technics that teachers could employ to further competencies that require a certain level of creativity, even in absent circumstances.

Keywords: creative learning climate, literary education, Serbian educational system, skill development.

How creative were Geography teachers during the COVID-19 pandemic?

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Abstract

Until the COVID-19 pandemic outbreak, the education system in the Republic of Croatia had never been confronted with a similar situation and did not have elaborate protocols. As a first response to the COVID-19 pandemic, schools were closed, and educational processes moved to virtual classrooms. In a short period of time, geography teachers adapted their teaching methods. The aim of this paper is to point out the creativity (potential) teachers used during online teaching, no matter the teaching method or didactic materials concerning the specifics of geography. A total of 185 geography teachers in primary and secondary schools participated in the survey and obtained results that indicate they successfully overcame numerous challenges during online teaching. Also, a series of semi-structured interviews were conducted among geography teachers in order to gain more thorough insight and to determine if teachers were creative, as their creativity could enable new teaching and learning strategies. The evaluation of student achievements, a lack of motivation among students and problems of a technical nature were mentioned as the most frequent issues during online teaching. The question remains whether the lesson has been learned regarding how to behave in case of similar occurrences in the future and whether teachers used their creative potential.

Keywords: creativity, geography, pandemic, online teaching.

A creative approach in designing the content of a modern textbook for secondary music school

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Abstract

At every level of education, including secondary school, it is necessary to create conditions for modernizing the teaching process and enabling the use of new creative practices within it. That's why significant activities have been carried out in the system of secondary music education in Montenegro in recent years: the Curriculum and Educational Programs (2019) have been reformed, including the program for the subject Harmony. According to the program, examples from classical music, as well as traditional and popular music, should be used in the teaching process. Due to the lack of appropriate textbook literature, the Center for Vocational Education and the Institute for Textbooks and Teaching Aids launched an initiative in 2021 to publish a modern textbook for Harmony, which would be connected with the reformed program.

This paper will present examples of a creative approach to designing the content of a modern textbook for Harmony. It includes standard contents of the subject but also examples of classical, traditional and popular music, whose interaction helps in achieving subject outcomes. In the new approach, excerpts of musical pieces and their analysis have a more significant place in the textbook and the educational process, and the use of pieces from different musical genres contributes to the connection and durability of knowledge. The inclusion of contents that represent a novelty in the textbook, such as methodological instructions for resolving harmonic tasks and analysis, knowledge tests for the purpose of self-evaluation, lists and explanations of harmonic symbols, bilingual register of harmonic terms, also represent a creative approach in designing the textbook.

Keywords: modern textbooks, secondary music school, Harmony, examples for analysis.

Primary education students' perceptions of creative teaching

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Abstract

The study is based on a qualitative approach and the descriptive method of pedagogical research. It focuses on the perceptions of creative teaching of Primary Education students at the Faculty of Education, University of Ljubljana, Slovenia. We address two research questions: 1) What indicators of teacher creativity do students recognise? and 2) How can teacher creativity be fostered during undergraduate studies according to students?

The results will help to understand students' perceptions of creative teaching, identify indicators of teacher creativity, and suggest ways to promote student teachers' creativity during their undergraduate studies. The findings will also serve to better prepare future students for their initial teaching practice.

Keywords: creative teaching, innovativeness, didactical competence, teaching practice.

Team teaching in the education of English language teachers

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Abstract

This paper deals with team teaching (TT) as a form of teaching in which two or more teachers teach a class simultaneously. Previous research has shown that young Croatian learners of English, as well as pre-service English language teachers, welcome TT as an approach to teaching this foreign language in Croatia and that the principles of TT may present a welcome novelty in the education programmes of future primary English language teachers in Croatia (Authors, 2017a; Authors, 2017b).

The aim of the present paper was to further investigate Croatian educators' attitudes toward using TT in the English language classroom and the possibilities of systematic implementation of TT into the higher education of pre-service English language teachers to young learners (age 7-11). To achieve this aim, we triangulated data gathered from three groups of participants partaking in the educational process – university professors, in-service teachers and pre-service teachers of English as a foreign language (EFL). First, we carried out semi-structured interviews focused on the opinions and suggestions on TT by 3 EFL methodology university professors from one faculty of teacher education in Croatia. Second, we carried out an online survey targeting in-service teachers of English in Croatia and collected 59 responses showcasing their attitudes. Third, we investigated the attitudes of a group of 29 students of English who had previously been familiarized with the principles of TT. They were asked to complete a paper-and-pen questionnaire and provide their opinions on TT.

The results confirm predominately positive attitudes of all three participant groups towards TT as a welcome form of teaching EFL, and outline suggestions for its implementation into early English language learning in Croatia. The next necessary step is to implement team teaching into the programmes of pre-service English language teachers' higher education.

Keywords: attitudes, Croatia, English as a foreign language, higher teacher education programmes, team teaching.

Collaboration of Unikom d.o.o. and the Faculty of Education as a contribution to creative education

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Abstract

Unikom d.o.o., the utility company from Osijek, has numerous services in its portfolio, which include the Quality System and Environmental Protection Service, the Service for the Development and Implementation of Projects, Information Technology and Public Relations, the Waste Management Sector, the Utilities Sector and the Zoo. In collaboration with the Faculty of Education, they often create various educational projects on environmental protection, sustainable waste management, and the like. This collaboration gave birth to numerous workshops and educational materials that enable high-quality and creative project-based, extracurricular and integrated teaching. This paper provides an overview and analysis of the main determinants of this collaboration as a model for successful experiential education.

Keywords: extracurricular teaching; project teaching; sustainable waste management; The Zoo.

Figure and work - representations of musicians in the works of Vanja Radauš

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Abstract

Music, as an extremely immaterial art, implies a complex visual presentation. Despite this, its presentation is often reduced to symbols: artists are shown holding an instrument in their hands, musical notation symbols are added, and the like. Portrait sculptural representations of musicians (busts and statues) do not have to but occasionally do contain symbols of music. Such an approach to portraying musicians can easily fall into the trap of already used patterns and molds.

The great Croatian and Slavonian sculptor, painter and poet, Vanja Radauš certainly influenced Croatian music as well with his many sculptures of national musicians, two of which are located in Osijek. This paper includes analyzes of his famous works that describe musicians with particular reference to the way in which he attributed their "musicality." The analyzes of these works intend to show a creative approach that does not reduce the depictions of musicians solely to their skill.

Keywords: music, musicians, Osijek, sculpture, Vanja Radauš.

Towards transformational competences in school: A parallel model of fostering creativity

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Abstract

This theoretical work deals with the topic of the teacher's role in encouraging and developing creativity - one of the key competencies that a 21st-century school should nurture. More specifically, the goal is to present one's own author's idea about the possibility of simultaneously reconciling and maintaining the tension between professional teacher autonomy and institutional demands/pressures. How, then, to overcome the paradox in the teaching/learning process: to become and remain creative and free under structured, often rigidly determined conditions imposed by the educational/political system? The search for an answer to this question on the basis of prominent psychological theories about human creativity, the paradigm of constructivism and the method of theoretical analysis and synthesis resulted in the Parallel model of encouraging creativity, the core of which is the parallel, simultaneous and (or) consecutive communication/operation of both students and teachers (all level) within the teaching content, of which the first content is given (curricular) and the second is open and is not strictly conditioned by the teaching domain. Open content has a contextual creative role of ideation, broader and deeper problematic cognitive elaboration, transfer, affective-motivational stimulation and mnemonics, "events" in class. The teacher's search for open contents and their (un)thematic, new reading is a condition for locating the given content in an unusual, challenging context. The fundamental message of this paper is that the role of the teacher in a theoretical and consequently professional sense should shift from instructionism (usually resulting in superficial knowledge) to extremely demanding guided improvisation, (possibly) leading to creative knowledge, skills, attitudes and values that reflect transformational - creative competencies of the school/learning society of the 21st-century: generating, elaborating and connecting ideas, solving problems and original, innovative work.

Keywords: fostering creativity, Parallel model, transformational competencies.

Behavior profiles of creativity in students of education studies

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Abstract

This study explores a) the prevalence of creative behaviors in students of education studies (i.e., two groups: 1. future pre-K, and 2. future basic school teachers in grades 1—6/8), b) the predictive relevance of self-assessments of personality traits, abilities, vocational interests, and eight key-competences for lifelong learning for the domains and micro-domains of thematically corresponding creative behavior, and c) the participants' creative behavior profile group differences. This study, therefore, addresses the focal criterion problem in creativity research and education for creativity by exploring creative behavior frequency, structure, and its correlations with personality dimensions in groups of students of education studies (future educators). The total of 103 study participants included students of university teacher studies (N = 34) and students of preschool education studies (full-time studies, N = 30; part-time studies, N = 39), all in their third year of study, all women, aged 20 to 42, all from one city in the Republic of Croatia. The self-report instruments used in this study included: a) the Big Five personality questionnaire (Croatian Translation of the 50-Item lexical IPIP Big-Five factor markers), b) the UPI-48 scale based on RIASEC taxonomy of interests, the c) the author's Inventory of creative behaviors (ICB-330 items), and d) demographic and sorting questions including self-reports on key competences for lifelong learning. The results point to a) the overall art-biased prevalence of creative behaviors, b) the predictive validity of personality measures for domain-specific creative behaviors, and c) the participant group differences in creative behavior profiles. The findings are discussed within the educational context (i.e., competence acquisition and educators' professional development), and the role of educators in modeling, identifying, and fostering creativity in students in early and basic education.

Keywords: creativity; creative behavior; creative activity; Little-C; fostering creativity.

Becoming aware of framing in teaching for creativity: Action research of seven arts and crafts teachers

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Abstract

Arts and crafts teachers are expected to cultivate and support creativity. It can thus be expected that educators can learn from their experience and how they work to enhance creativity in their learners. In this paper, I present a model called the Framing model and how it was used as a part of a two year action research project with seven arts and crafts (industrial/sloyd) teachers to analyze pedagogy. The model is built on Bernstein's theories of framing and classification and was designed as an analytical tool in 2011. The model was used to identify freedom versus control in the classroom. I share how the action researchers, teaching different subjects, used the model to support their understanding of cultivating creativity in their students' learning.

In 2016-2018 eight arts and crafts teachers on three school levels conducted an action research project, led by the author, focusing on how they went about supporting learner creativity. They gathered different data about their teaching: journal entries on their teaching focusing on creativity, lesson plans, school and class curricula and students' artifacts and work. Collaborative reflection meetings with the group were held once a month, where the group shared stories from the classroom, discussed challenges, issues and benefits of arts and crafts education and how they worked. Each teacher interviewed another and made collages to describe their professional working theories and interpreted them vocally. Furthermore, they did an analytic exercise on a chosen part of their teaching using the Framing model, where they identified what kind of control they applied in their teaching. Using the model, the teachers identified different strengths of framing from strong teacher control to weak framing with ample student freedom and agency.

The model can be used by teachers on any school level to identify and analyze which elements they control in teaching and learning processes and where and how they can support students' creativity.

Keywords: action research, control, framing, freedom, teaching for creativity.

Possibilities of conducting creative musical activities in solfeggio lessons in primary-level music schools

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Abstract

Children who want to engage in music more intensively are advised to enroll in a music school, where they have the opportunity to learn to play a musical instrument, but also get the opportunity to develop their rhythm and intonation skills within the framework of solfeggio classes. One of the important tasks of teaching solfeggio is the development of students's creative abilities, which is achieved through the involvement of students in various musical creative activities. Along with other tasks that need to be completed within these lessons, teachers often do not have enough time for such activities. In addition, the insufficient focus of textbooks and manuals on activities in the field of musical creativity is a problem. In this paper, we will provide a systematic review of the literature dealing with this topic (scientific and professional texts) and select representative examples of musically creative activities suitable for teaching solfeggio in certain classes of primary music schools. We will divide these activities into two groups: musically creative activities in the areas of rhythm and melody. It will be a good starting point for conducting new research in this area and helping teachers plan and implement solfeggio lessons.

Keywords: musical creativity, solfeggio lessons, primary music school.

The emotional contents of drawings by preschool children

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Abstract

In the last years of the previous century, as well as through the 21st century, drawing has found a place with various experts and therapists. Besides entertainment, visual expression contributes greatly to the development of the child on motor, cognitive and intellectual levels. Emotional aspects of a child's drawing are rarely considered but are one of the most popular models of psychotherapy that involve the analysis of drawings. Emotions are, of course, a very interesting tool to explore, especially if we are talking about children. Emotions are very difficult to see, especially because children do not even understand what their real meaning is. It is very easy to explore the elements of children's drawing. If we take into account that there are clear limits to the child's successful visual expression, which are appropriate and expected for their age. Emotions recognized in the drawings of children can reveal some of the problems or their personality traits. So, the main goal of this work is to determine the presence of emotional aspects in the development of an artist's expression for preschool children. The aim of this work is to detect and learn to recognize elements that can be very crucial in the orderly development of children.

Keywords: drawing, emotion, preschool age.

Developing creativity skills through game-based learning in adult education

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Abstract

Education must keep pace with technological and social changes in the modern world, and innovative ways of learning be developed. Gaming is an activity that occurs at the earliest stages of human development and is critical at the stages when learning is most effective. Game-based learning (GBL) remains one of the most effective methods for developing individual competencies, but its role in traditional adult education is negligible.

To improve and promote the use of GBL in adult education, we have launched an international project, Game-ED, under the EU Erasmus+ program. Its main goal is to improve the quality of teaching and learning methods used to build and develop creative skills in adult learners. This will be achieved through the introduction of a game-based learning approach based on originally elaborated studies, guidelines, and methodologies for adult educators, and will promote game-based learning for adults overall.

Specific goals of the project are to improve the professional horizons of adult educators by collecting methods for developing creative skills in adults, to increase their knowledge by collecting best practices in game-based learning methods, to develop a methodology for selecting game mechanics suitable for achieving creativity skills, and to identify board games suitable for the selected game mechanics.

The best way to achieve these goals is through an international project because such an approach allows us to exchange and contrast ideas, practices, and methods in order to reach the target groups, disseminate the results in other EU countries and validate the results of the project in several countries to have cross-national relevance.

Keywords: creativity skills, game-based learning, methodology.

Creativity in piano lessons

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Abstract

The paper deals with the issue of teachers' creativity in teaching piano playing. Teaching piano, as well as other instruments, is characterized by several factors that distinguish it from group teaching and that influence and determine the way teachers perceive creativity and its implementation in teaching. It is organized in an individual form; the main teaching aids are an instrument, a metronome, and sometimes devices for sound and image reproduction are used as aids. The teaching contents are sheet music scores of piano compositions. In such a pedagogical environment, the teacher and his teaching method are crucial for motivation and are factors in the development of students' creativity both during practice and when interpreting compositions. In the whole process, which is essentially creativity in devising ways of practicing technique and organization and ways of performing musical concepts during interpretation, the teacher is required to be creative, which will also develop the students' musical creativity. The paper will present the results of the research on four focus groups: two of piano teachers and two of piano students about the collected opinions and attitudes about creativity. Collected data from two opposite sides of the pedagogical direction and their analysis will provide datum that are a representation of the pedagogical present and will have echoes for the pedagogical future. It will be applicable to improve the creativity of teachers when teaching and can be used to improve the education of piano teachers.

Keywords: piano teaching, musical pedagogy, musical art, playing teaching, higher education teaching.

Activities of applied design in institutions of early and preschool education as a medium for learning and development of competencies in the context of sustainability

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Abstract

Research for the needs of this thesis was conducted in a kindergarten in Međimurje County. 53 parents and 29 children between the ages of five and seven participated in the research. The goal of the research was to investigate whether applied design activities of early and preschool children affect the strengthening of competencies for sustainable development.

The research was conducted using a qualitative method and action research in three steps. In the first action step, the knowledge of the concept of sustainable development was tested on a sample of 45 parents of kindergarten students, as well as their habits, i.e., initial attitudes about sustainable development and the potential role of preschool education institutions in the adoption of the mentioned concept. In the second action step, eight art projects were carried out in three months on a sample of 29 children between the ages of five and seven attending kindergarten. Cardboard cartons for milk and other drinks, plastic bottles and caps, glass bottles, recycled paper, canvas bags, and cans were used in the activities. In the third action step, an exit questionnaire created in a Google form on a sample of 53 parents examined the changes in the habits of children and parents after the activities in kindergarten and the parents' attitudes about the usefulness and contribution of the art activities to a more sustainable way of life.

Based on the results of this research and feedback from children and parents, it can be concluded that applied design activities have a positive effect on strengthening competencies for sustainable development in children of early and preschool age.

Keywords: applied design, sustainable development, child, handcraft, creative.

Contextualization of the relationship between teacher enthusiasm and student engagement in creative activities in higher education

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Abstract

The teacher's enthusiasm, i.e., the enjoyment of teaching and the accompanying behavioural non-verbal and verbal expressions of that emotional experience, are related to his or her approach to teaching and have numerous positive outcomes for students. For example, a teacher's enthusiasm is a very strong predictor of his own creativity in teaching, that is, designing and implementing classes that encourage and develop students' creativity. At the same time, teacher enthusiasm is a strong predictor of students' intrinsic motivation, one of the key factors in fostering their creativity. If students feel satisfaction and pleasure while participating in productive, engaging and personally challenging activities in a stimulating environment they are more likely to be highly creative. Otherwise, if they feel pressure or limitations and if their engagement depends only on extrinsic motivation they are less likely to be creative. Given that teaching and learning processes are contextually conditioned, i.e., that their quality depends primarily on the teacher-student relationship, the aim of this qualitative research was to find out the characteristics of the context or relationship in which the teacher's enthusiasm contributes to student engagement in creative activities in university classrooms, from the students' perspective. Data were collected through focus groups in which a total of 15 students double-majoring in education participated. Qualitative data analysis indicated the importance of relational pedagogy in higher education, i.e., the authenticity of students expressed through their creativity is possible when teachers' enthusiasm is primarily based on a caring relationship with students.

Keywords: caring; creativity; university; pedagogy of relation; teacher enthusiasm.

Students' reading habits and the challenges of teaching classics

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Abstract

The aim of this paper is to present the results of research on reading habits, interests and attitudes towards books, which were obtained by anonymously surveying students of French language and literature at the University of Zadar. Attitudes about mandatory readings in literature courses, methods of preparation for reading classes and compatibility of reading titles with students' reading abilities and interests were investigated. The discussion will problematize the role of literature courses in study programs of foreign languages, possible ways of developing their reading habits and developing critical and analytical reading skills. Special emphasis will be placed on the issue of teaching canonical texts from literary periods that precede modernism. The aforementioned corpus of literary texts can be approached by students, but also pupils, by means of multimodal learning and the use of various film, theater and comic adaptations of literary texts.

Keywords: classics, literature, multimodal learning, reading habits.

Developing the culture of the hand using a graphic tablet in the kinetic reconstruction of drawing

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Abstract

The research will present the possibilities of graphic tablets in the analytical method of kinetic reconstruction of drawings and the influence of such a method on developing a culture of the hand that can be accepted as an alternative learning strategy in visual art teaching. It starts from the idea that every man needs to record his thoughts and ideas with linear clues and signs. Such expression belongs to the domain of visual literacy, which, like any literacy, could be developed by learning in a particular environment and with the help of specific methods. An analytical method of kinetic reconstruction of the drawing will be presented, by which the hand repeats each movement of the artist during the drawing to force the eye to explore the complexity of the line's character and syntagma. Thus, research looking and eye nurturing is trained, which quality affects the aesthetic experience of the artwork. Nowadays, digital devices take on the role of manual labor in art, so it becomes questionable how to develop hand fine motoric skills. Although drawing is a process used to experience the interrelationships between paper and pencil, it can arise in digital form and thus gain new values. By repeating the artistic process during drawing with the help of a graphic tablet, it is possible to modify, transform or store the drawing drawn on paper as a moving image. Such a procedure can also be useful in analyzing drawings because parsing the entity into parts and raising awareness of the character and role of each part in the entity is a fundamental process of understanding and interpreting the artwork. The paper will present animations of the drawing reconstruction process created by analyzing famous masterpieces and the possibilities of this method in comparing the stylistic and individual drawing characteristics of certain authors from different historical periods.

Keywords: analysis, drawing, graphic tablet, culture of the hand, kinetic reconstruction.

Building a culture of creativity in the school environment

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Abstract

The post-information society demands the possession of transferable skills that will help individuals face the upcoming challenges. One such skill is creativity. It is a generally accepted point of view that creativity is considered a crucial ability for the survival, progress and well-being of individuals and society. Accordingly, education is expected to develop and nurture the creative peculiarities of students. Moreover, some authors expressly note that the pedagogical activities of noticing, awakening and cultivating the creative aspirations of students are obligations and duties of the school. However, at the same time, the conclusions of a large number of studies, according to which the current educational reality is considered a barrier to developing and promoting creativity, are worrying. Despite the enormous number of manuscripts on (the pedagogy of) creativity, it seems that it remains insufficiently clear how to make changes to the methodological organization and welcome opportunities for creative teaching. The aim of this paper is to map and analyze the assumptions for building a culture of creativity in the school environment. A review of the literature found that pedagogical intervention is necessary to change the discourse and practice of creativity. This pedagogical interference is a prerequisite for a methodically more correct organizational, performance and evaluative creation of the teaching process. An insight into the literature shows the need to change six settings regarding creative learning. First, the framework of education for creativity should be shifted from implicit to explicit theories of creativity, which contributes to the demystification of the construct of creativity. Designing a school environment that supports students' creativity requires a systematically elaborated methodology, based on scientifically validated theories and models. Second, in creative teaching, it is advisable to advocate a pragmatic approach, which requires a transformation from a static to a dynamic theoretical framework. Furthermore, the pedagogy of creativity does not stay only on instructionism, but also integrates constructivism into its framework. Creative learning is more meaningful and effective if students are involved in social constructivist activities. In this regard, supporting creative processes also requires a shift from transmissive to interactive learning. Fifth, learning strategies designed to stimulate and promote creativity in students are based on encouraging divergent and convergent thinking, not just convergent thinking. There is no creative process without divergence, which is important for the generation of ideas, but also convergence, which is important for evaluating them. Finally, under the influence of the activities of divergent and convergent thinking, creativity appears in different forms. Therefore, it is necessary to distinguish between academic and non-academic creative expression. It is clear that non-academic creative breakthroughs will be seen as something undesirable and unacceptable. On the other side, creative expression that occurs in the context of academic learning will be seen as a valuable and useful goal. Based on the research findings, we provide guidelines and open questions for future studies.

Keywords: creativity, culture of creativity, school environment.

Support or punishment during learning

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Abstract

Many characteristics of our personality are given at birth. Growing up, maturing and progressing are factors that we do not choose when we are born. It is impossible for man to act on many traits because he carries the program in his DNA. Whenever we look into the past, we can analyze our motivation and how punishment or a kind, friendly word affected our progress and learning results. Teachers are also unrecognized psychologists, pedagogues and experts in their profession. It is necessary to approach each student individually. Unfortunately, this is not possible in many schools. Students are treated according to the scale of the adopted contents. In large classes, students' talents, problems or sensitivities to circumstances remain hidden. Many people do not like the stress that is increasing during schooling. As a human being, I equally believe in the positive formation of the student as a member of the community but also as an excellent, resourceful specialist after schooling. Some forget that the methods they teach students can one day be passed on to their children. These are the methods they will feel when they get weaker in old age. This research aims to understand the conditions in which students thrive, through support or punishment, using questionnaires on a sample of 200 students in Croatian secondary and primary schools. The key questions relate to success after punishment, i.e., success after praise.

Keywords: empathy, humanity, learning, pressure.

An emotional climate for learning

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Abstract

The conditions in which we acquire knowledge largely control our success. Learning throughout life maintains our cognitive functions and the development of a sense of value. Learning is not only related to school conditions and schools. The focus of this paper is on the emotional climate for learning. How can a child, student, or adult progress in unfavorable life circumstances? Adversity is a "school of life" in itself, but one cannot be equally focused on pure survival and passing exams. If a student does not achieve at least average results, there is a hidden problem. This problem can be the student's health, an unfavorable family situation, family violence, school violence, or material problems. A grown man also miscarries in the results of work and progress in an unfavorable climate. These negative factors can be caused by violence, mobbing, asociality, and hostility. No one came into this world to suffer undeservedly, and it is necessary to be aware of the empathy that, if shared freely, returns many times over with gratitude. Children, students, and adults thrive in such an environment. This research aims to understand what kind of emotional climate in the environment of growing up and working encourages or hinders success, satisfaction with work, and results. A questionnaire will be used on the research sample of 100 children, 300 students, and 300 working adults in Croatia.

Keywords: circumstances, empathy, hidden problem, learning, materialism.

Creative experiments in the music lab

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Abstract

Students' creative activities are a very important aspect of learning in music class. Encouraging students' musical expression leads to meaningful learning and allows for the application of knowledge acquired in other areas of learning. In the area of music listening and performance, students acquire musical terms and typical melodic and rhythmic patterns, learn about musical phenomena and rules, and apply this knowledge to creative musical tasks of varying complexity. Although engaging pupils in musically creative activities plays an important role in enriching their musical experience, children's musical creativity is often neglected in classroom practice. Pupils are insecure, shy and reserved when it comes to creating and presenting musical ideas, thus hiding their creative potential. Encouraging students with different musical abilities is a challenging task for the teacher. It requires more complex lesson preparation so that the children's musical expression is often compensated by the implementation of another learning area. We have examined the possibility of improving teaching practice in the area of children's musical expression with the help of the music application Song maker. The mentioned application offers the possibility of free experimentation with musical material and is available as one of the musical experiments offered by Chrome Music Lab. The research was conducted with 56 second-grade students to determine the musical characteristics of the children's creative works and their attitudes toward the new musical task. A richly developed rhythmic component and melodic patterns correspond to the motivic content of learned children's songs, which will be explained further in the paper. Listening to the children's collaborative work at the end of the lesson encouraged discussion among the students and allowed the teacher to make a more detailed analysis of the works and provide feedback to the students on the success of the task.

Keywords: elements of musical expression, experimentation in the Music lab, musically creative activities of students, Song maker.

A story - a stimulus for the development of musical abilities and creativity in children

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Abstract

This paper presents a theoretical reflection on the relationship between exploratory talk and divergent thinking in music listening classes. Divergent thinking is characteristic of the creative process and creativity, and it implies that a more extensive, potentially unlimited number of solutions is created based on one initial idea. Considering the concept of teaching that is still present in the school system, in which the solution in the lesson is perceived and accepted as the only correct one, and where the frontal type of teaching is widely present, it is clear that divergent thinking cannot develop its full potential, which limits the development of creative thinking. One of the potential solutions proposed by didactics is the inclusion of exploratory talk in the teaching process, where an exploratory talk is a form of interaction in which all participants take equal part and are motivated to express their observations and knowledge self-initiatively publicly and critically examine and consider specific ideas and proposals. Collaborative thinking leads to a certain consensus, so this type of conversation encourages, among other, divergent thinking. The primary assumption is that the networking of the exploratory talk with listening to music improves the quality of listening and the emotional-cognitive experience. By including exploratory conversation in the teaching, students are allowed to self-initiatively express their cognitive-emotional observations and discuss different aspects of the played musical piece, which results in a network of different ideas and leaves the system of schematic, predetermined answers, which encourages divergent thinking. Accordingly, the concept of dialogue in teaching will be discussed from the point of view of didactics. The research conversation and the subject area of listening to music will be analyzed with an emphasis on their overlap to understand practical procedures that potentially encourage divergent thinking.

Keywords: dialogue in class, exploratory talk, listening to music.

Development of language competence in language studies through the use of artwork templates

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Abstract

This paper aims to illustrate how student artworks created outside the framework of the study program can be used to develop students' language competences, specifically in foreign language studies. By utilizing such a means of instruction, the students are encouraged not only to speak about their own artwork but also to expand their current level of linguistic competence in the process (cf. Muller, 2013); additionally, there is a favorable effect of diminishing the students' foreign language speaking anxiety. Such a divergence from established classroom practices makes way for new ways of teaching, namely it promotes students' agency and responsibility for their own learning. In addition, it facilitates their intercultural competence, critical thinking skills, as well as creativity in both their L1 and L2. The research is based on a case study of an online exhibition project that required undergraduate students of French language and literature to orally present their artworks. Various analyses were conducted, including the analysis of different stages of the project, language and content analyses of the students' final performances, and qualitative analysis of student questionnaires. According to the findings, an innovative form of teaching such as the one presented here positively reflects on student motivation for language learning and oral language development, alongside the promotion of creativity and various competences, such as independent use of language learning strategies. After being exposed to this approach, visible progress can be observed regarding the students' language competences, especially at the phonetic, lexical, and morphosyntactic levels.

Keywords: French as a second language, glottodidactics, creativity, visual arts in second language teaching, development of language competences.

Challenges in contemporary music education regarding new generations' educational preferences

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Abstract

The increasing, numerous challenges in teaching new generations of students, i.e., the digital natives characterized by impatience, fast reception, as well as faster selection and parallel processing of information, can be overcome effectively only by creative teachers. That is, individuals who readily and quickly introduce changes in all aspects of their teaching. In other words, teachers who have recognized that memorization and reproduction of factual knowledge are outdated in contemporary teaching and have turned toward creative teaching strategies, active and collaborative learning, and focus on the integral development and realization of the potential of each student.

In this paper, the importance and need for active learning as a modern didactic paradigm is actualized through the presentation of different teaching strategies in music teaching. In addition to the cognitive, the emotional involvement of students in the learning process and the need for greater implementation of experiential learning is especially emphasized. Through active and experiential learning, by way of modern strategies, the student is able to expand and deepen their knowledge, interdisciplinarily connect different contents with regard to personal preferences, and develop critical thinking. Special attention is given to gamification, a modern teaching construct that corresponds to the preferences of new generations.

Keywords: active learning, gamification, creative teachers, music education.

Great artists in the eyes of young children

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Abstract

Art creation is one of the favourite activities of preschool children. A stimulating material environment, as well as a reflective practitioner educator, contribute to this. In a preschool institution, it is important that the educator provides equal opportunities for children to express their artistic abilities. When a child actively, freely and independently discovers the world around him, explores and participates in the creation of everyday activities and environments, he is actually working on his overall development. Educators, as co-creators of the learning process in preschool institutions, offer children a stimulating environment and materials, but they do not criticize children's work because, in this way, they influence children's creativity, self-confidence and the development of their need for research and curiosity. In this paper, artistic activities were carried out, which were inspired by the works of art of the painter Gustav Klimt from the art direction of art nouveau and Jackson Pollock, the art direction of abstract expressionism. The activities were carried out in the Cvrčak Kindergarten in Čakovec. The goal of these activities was to guide observations and encourage a personal experience of the work of art and create opportunities for children to experience it adequately. The children who participated in the activities accepted all the tasks well, and they were most occupied with action painting. In the works of art inspired by the work of Gustav Klimt, they tried to imitate colours and motifs, while in the art works inspired by the work of Jackson Pollock, they tried to imitate the way of painting, action painting, which is also visible in the results of their artworks. Although the stimulating works of art were different in terms of motives and methods of painting, the children participated in all activities with equal concentration and success.

Keywords: children's art creation, work of art as a stimulus, preschool child, Gustav Klimt, Jackson Pollock, artistic activities.

Encouraging self-care skills with practical life activities

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Abstract

Preschool educators often deal with children who have difficulty performing simple activities related to self-care. Many children have difficulty tying shoelaces, doing up the buttons, pouring water from a pitcher into a glass, etc. In this paper, the focus is on practical life activities as a developmental area of Montessori pedagogy. For this paper, action research was conducted with the aim of training children to dress and undress independently and to fasten and unfasten various zippers, buckles, and buttons. The research was conducted in "Sunčica" Kindergarten in Osijek and it included 25 children aged five and six. The results of the initial testing showed that the children were more independent than expected. The final test showed that the children developed the ability to fasten and unfasten various zippers. Fastening the belt and tying the shoelaces presented the most difficulty. Two children with disabilities achieved almost the same results as most typically developed children. While practicing buttoning and unbuttoning, the children improved their social skills and practiced patience. The disadvantages of this research are the long duration and difficulty finding a suitable space, as well as the withdrawal of the participants. Action research in preschool setting would certainly raise the quality of early and preschool education to a higher level in the future.

Keywords: action research, preschool children, Montessori pedagogy, practical life activities.

Pestalozzi through the eyes of Pedagogy Department students

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Abstract

Creativity, as an important component of the educational process, occupies an important place in the preparation of future teachers and pedagogues. Students' interest in pedagogy begins through research into the roots of this science and its importance and presence in the life of every individual. In the moment students become familiar with the forerunners of pedagogical thought and the selflessness of their approach to the child and his needs, their interest in deeper research increases and they become curious and witty. Then their investigative spirit takes off. One of such true pedagogical pioneers is precisely J.H. Pestalozzi, who witnessed with his life the importance of love for a child and respect for his integrity, as well as the seriousness of the educational approach. The work is aimed at presenting the research results obtained by analysing the content of student papers, which are related to the character and work of Pestalozzi. The sample consisted of the contents of written works such as a letter, a poem, a promotional leaflet, a picture book, and a booklet that the students, through their own creative expression during the course and in the field of the general history of pedagogy and schooling, sent to Pestalozzi. 48 students of the Department of Pedagogy participated in the activity. The results of the content analysis showed that students understood Pestalozzi's contribution to the development of pedagogic thought and the importance of promoting his ideas within the framework of contemporary theory and practice of education. They clearly distinguished the basic educational principles, but also his attitude towards the child. The results of the research are, therefore, twofold. On the one hand, they refer to their critical reflection on the significance of Pestalozzi's works and the possibility of incorporating his ideas into pedagogy today. On the other hand, students' sensitisation and motivation to participate in creative research activities were observed. The work, therefore, represents an example of a creative approach to learning and teaching at a higher education institution.

Keywords: pedagogy, Pestalozzi, content analysis, creativity in learning and teaching.

Extracurricular activities as promoters of children's creativity and the art of teaching

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Abstract

One of the main missions of the modern school is to stimulate the creativity of students, who are placed at the center of the educational process, and teachers are required to move away from traditional work methods and apply flexible, innovative approaches to work, which are a prerequisite for the stimulation and development of creativity. The aim of this research was to examine, analyze and interpret the concept of creativity and the ways and possibilities of creative work in extracurricular activities. This paper investigates the extent and way extracurricular activities stimulate students' creative activities and which methods and forms of work are more effective in encouraging creative ways of work. The examination of higher and lower grade primary school teachers in the Republic of Croatia was carried out using the Internet survey method, and the obtained data was processed using descriptive statistics procedures.

The results showed that the majority of the surveyed teachers believe that extracurricular activities, especially productive-natured ones, are extremely important for encouraging students' creativity. A positive classroom teaching atmosphere and a more open and innovative approach to work with the application of more flexible methods in the wake of an open curriculum also contribute to successful creativity. The teachers also think that the creative educational process, among other things, requires greater involvement of counselors in assessing the giftedness of students in order to adapt the methods to their particularities. This paper aims to contribute to strengthening awareness of the need for additional efforts in the direction of detecting and encouraging creativity as one of the characteristics of gifted students, engagement in shaping the curriculum of extracurricular activities and can also serve as a basis and incentive for further more complex research.

Keywords: giftedness, innovation, creativity, teacher, student.

Application and use of digital tools in the teaching of art history in secondary and higher education in Split

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Abstract

During the first/winter semester of the school/academic year 2022/2023, the authors conducted a survey in secondary schools and faculties in Split (containing art history subjects/courses in their curricula) with a view to determining the prevalence of modern digital tools in teaching specified groups of subjects/courses. The research surveyed high school teachers/faculty professors and pupils/students. Using the mentioned method, the authors researched high-school teachers'/professors' awareness of existing digital tools, their competences for applying them in teaching, as well as the methods of their training for the application of specialized digital tools in teaching. The questionnaires intended for pupils/students analysed their awareness of the existing specialized digital tools, and the extent to which their art history teachers/professors use them in class, as well as how much these tools, in their opinion, promote and improve the effectiveness of the teaching process and their adoption of the presented teaching content.

Starting from the analysis of questionnaires on the application and use of digital tools in teaching art history, the authors present the results and compare the prevalence of digital tools in the teaching of secondary schools and faculties in Split in order to raise awareness of the need/necessity of using specific digital tools in teaching at all educational levels to achieve a higher quality of teaching content and capture the attention of pupils/students more effectively, as well as to achieve their greater active involvement in the teaching process.

Keywords: digital tools, teaching process, art history, survey, Split.

Historical diversity in the service of developing creative thinking in history teaching

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Abstract

Historical diversity as a concept in history teaching methodology has been present in the UK since the 1990s. It concerns the requirement that students should understand how historical experiences and understandings of change in the past differed according to the social, age-related, religious, national, ethnic, gender, and other groups and subgroups to which people belonged. Although the concept of historical diversity is not directly addressed in the recent history curriculum for elementary and high schools, the request for its implementation is indirectly present in the description of the learning purpose of the subject, the domain contents, and the concepts of continuity and change and historical perspective. The application of diversity as a concept and as a strategy in learning and teaching history encourages the development of critical and creative thinking in students. Through the analysis of similarities and differences in individual experiences of historical events, students are encouraged to question the credibility of generalizations in history lessons and textbooks and are motivated to critically (re)shape historical thinking.

The work aims to determine the presence of historical diversity in history textbooks and to detect critical and creative thinking elements in the examples found. The methodology of the work is based on an analysis of examples from second and third grade high school history textbooks. Quantitative analysis includes, in addition to the number, the categorization of the application of the concept according to given criteria (topic, content, target group). The qualitative part of the paper includes an analysis of the accompanying methodological and didactic tools in selected examples (text analysis, question analysis, source selection, multiple perspectives) and answers the question to what extent and in what way the selected examples of diversity stimulate students to think critically and creatively.

The research results show that only some target groups and subgroups are represented in the textbooks (ethnic groups, non-European civilizations, women, children, marginalised groups and religious groups). Furthermore, the qualitative analysis shows the lack of critical and creative tasks that stimulate higher cognitive levels of knowledge, the lack of multiperspectivity and the total absence of didactic steps in which diversified groups would be key actors in understanding historical events.

Keywords: creative thinking, critical thinking, historical diversity, history textbooks.

Facilitating student creativity through various student grouping forms

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Abstract

Student grouping forms are a key didactical element of instruction. Each of them - whole-class or direct teaching, individual work, pair work and group work - has its own characteristics, advantages and disadvantages, and can contribute in different ways to facilitating student creativity.

We present the results of an empirical research involving a representative sample of 398 Slovenian primary school teachers. The purpose of the study was to find out how important they consider the instructional aim of facilitating student creativity. We also wanted to find out if there are any statistically significant differences between teachers who rate this instructional aim with different rates in relation to which student grouping forms they predominantly use in their classrooms.

The results show that on a five-point scale, most teachers rated this aim as *important* or *very important*. These were the two subgroups of teachers we compared in terms of the frequency with which they use various student grouping forms. When it comes to group work, the results show that there are statistically significant differences between teachers who consider facilitating student creativity *very important* and those who consider it *important*. Teachers who rate this aim as *very important* use group work more frequently than those who rate it as *important*. Our quantitative results are further enriched by teachers' insights into how different student grouping forms can contribute to student creativity.

Our findings highlight the importance of indirect instruction in facilitating student creativity, with a special emphasis on group work which allows students to share and develop original ideas with peers, support each other in problem solving, and challenge each other's critical thinking.

Key-words: student grouping forms, students' creativity, problem-solving, critical thinking

Creativity in education revisited: Drawing a line 'from birth till art' through music

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Abstract

This presentation aims to show that a sensory and artistic attitude, based in the temporal arts, can be central to 'an education for the future.' By combining Biesta's (2018) proposal for an arts education beyond expression and creativity with our own extensive expertise in music and the Early Years, we aim to empirically demonstrate how education in general can and should be based on how we relate to each other and the world.

The musicality of the early mother-infant dyad reveals that our very lives start with relating to others. Their interactions exhibit the core aspects of the temporal arts, which overlap with the basic psychology we need to creatively navigate through life. Here we find the cradle of how a child becomes skillful with reality in a social and material sense. It is also the moment when our intelligence is born in the context of shared, blurred experiences, in which we look for what we have in common.

Taking the musicality of the early mother-child dyad as the evolutionary prototype of education, I will highlight how, in formal education, a creative approach to music can still remind us what it means to navigate intelligently through any other domain of expertise. Especially music can serve as a model to investigate what it means to explore, to improvise, to vary and to compose in the context of shared, embodied experiences based in the senses. Hence, the temporal arts should be at the core of education.

From our own artistic practice, we will point out how this model inspires creative interactions among older children and their teachers. We'll show that a different stance on education is possible, that such an approach isn't difficult to understand and apply and can gradually slip into the given school system.

Keywords: artistic attitude; educational prototype; mother-infant dyad; sensory.

Research-based learning and problem-based learning as an incentive for the development of creativity and critical thinking

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Abstract

Modern teaching strategies have developed as a response to the traditional forms of teaching, which are often criticized as not being able to induce creativity and critical thinking, instead of which they exclusively promote passive absorption and reproduction of information. Research-based learning and problem-based learning, as salient examples of modern teaching strategies that are focused on the development of competencies for the modern world, are essentially founded on constructivist principles. The main object of this paper is to investigate the real contribution of research-based learning and problem-based learning as teaching strategies in developing a learner's creativity and critical thinking skills. Firstly, the paper gives a description of the above-mentioned teaching strategies. They are described in terms of those elements that can be defined as facilitators of creative thinking, as well as necessary prerequisites that affect the development of critical thinking. By commenting on research-based and problem-based learning in today's context, the paper will attempt to provide a historical and philosophical overview that influenced the creation and formation of a comprehensive contemporary approach derived from the wider field of active learning. The paper emphasizes the importance of the strong influence of philosophical and pedagogical schools, both directly on the development of the teaching strategies themselves, and indirectly on the approach to the development of creativity and critical thinking in modern teaching. The contribution of this work is manifested precisely in the attempt to emphasize the approach to creativity and critical thinking in today's school through the context of the historical period and social environment in which the foundations of modern teaching strategies of research-based learning and problem-based learning were created.

Keywords: research-based learning, problem-based learning, critical thinking, creativity, modern teaching strategies.

Creative transition strategies from kindergarten to primary school

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Abstract

Children's transitions from kindergarten to primary school are often stressful periods for all participants in this process. In addition to the child, they involve parents, educators, teachers and professional development teams in kindergarten and elementary school, and the wider community can also be involved. Cooperation among participants in the transition is important for the well-being of the child.

The aim of the paper is to present creative strategies that can provide benefits for the child during the transition period. Action research with ethnographic elements was carried out with the teachers, students, elementary school principal and the researcher in a Croatian elementary school. The research was carried out in accordance with the ethical code. The filled research consent form was obtained from teachers, students' parents and principals.

Qualitative methodology was used for data collection and analysis. For the purpose of the validity of the research, triangulation was used in the collection and processing of the data. The research activities included documenting the activities and the participants' reflections in the transition process, on the basis of which the data analysis and evaluation of the implemented activities was done. Ethnographic records (photos, videos, notes from the research diary of the teacher who led the project), audio transcripts of interviews with educators, children, teachers and the professional development team, as well as the results of a survey with parents, were used as the research tools. The strategies were analyzed through three research periods during which teachers' and researchers' reflections were used to discuss the collected documentation, the survey results and interviews and various problems in the organization of children's transition in order to consider further activities.

The research results highlight creative transition strategies. The practical application of the research results can be reflected in the application of the presented transition strategies, which can encourage further research with the aim of developing different strategies and activities in the child's transition between the two educational institutions.

Keywords: activities, documentation, ethnography, reflections, teachers.

Creative foreign language learning in kindergarten

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Abstract

Learning a foreign language in kindergarten is carried out by integrating a foreign language into the curriculum of the kindergarten group. Such groups are usually of mixed age, where children can have the opportunity to learn a foreign language starting from the age of three. Preschool teachers who work in such groups are certified and have at least a B2 language level. Children learn a foreign language every day, situationally, through various activities.

The aim of the paper is to present creative activities of foreign language learning in kindergarten. Action research with ethnographic elements was carried out in Zagreb by the preschool teacher and researcher, an external collaborator. Twenty children from one kindergarten group with integrated English language in the regular curriculum participated. The research was carried out in accordance with the ethical code. The filled research consent form was obtained from the preschool teacher, students' parents and a principal.

Qualitative methodology was used for data collection and analysis. For the purpose of the validity of the research, triangulation was used in the collection and processing of the data. The research activities included documenting the activities and the participants' reflections in the children's foreign language learning, on the basis of which the data analysis and evaluation of the implemented activities were done. Ethnographic records (photographs, video recordings, transcripts of conversations between children and children and preschool teacher, transcripts of records from the research diary of preschool teacher and researcher) were used as the research tools. The strategies were analyzed through three research periods during which teachers' and researchers' reflections were used to discuss the collected documentation and various problems in the learning activities in order to consider further activities.

The results of the research highlight the creative activities of learning a foreign language in kindergarten. The practical application of the research results can be reflected in the application of the presented foreign language learning activities in kindergarten, which can encourage further research with the aim of developing the field of foreign language learning in kindergarten.

Keywords: activities, documentation, ethnography, preschool teacher, reflections.

The concert experience from the perspectives of students and teachers: Creative outcomes and critical evaluation

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Abstract

The comparative scientific research project called Schools@Concerts: Tuning Up for the Music Experience was completed in 2021 after several years of parallel implementation in eight countries. From the resulting study, it is possible to follow the musical experiences, creative outcomes and creative achievements of students, teachers and the concert management realized in the stages before the concert, during and after the concert. The author's intention is to point out the expectations, impressions and associations of students and teachers from Croatia, guided by the results of the questionnaire, validated constructs (musical self-concept, STOMP), open questions and drawings. The results indicate that the students experienced the music they listened to as pleasant, that they liked attending the concert and listening to live music, and that this experience was an incentive for them to get to know art music to a greater extent. The teacher pointed out the need for more frequent trips to concerts and the importance of preparing students for concert events. The results will be supported by quantitative and qualitative analyses with an emphasis on the statements of students and teachers, which will reveal their creative and critical thinking about music through musical and non-musical components.

Keywords: music experience, concert, creativity, students, teacher.

The International Children's Song Festival "Golden Snowflake" - a creation that lasts

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Abstract

The international children's song festival "Golden Snowflake" has been held in the small town of Rozaje for 30 years in the north of Montenegro. The idea of the festival, as with most similar manifestations, is to enrich the repertoire of children's compositions. Every year the festival hosts a prominent musical performer, such as Vlatko Stefanovski, Dragoljub Đuričić, Aldino, Rambo Amadeus and others, which gives child performers a unique opportunity to meet famous artists. The first festival evening is dedicated to performers from Montenegro, and the second evening is of an international character

where performers from abroad perform. The "Golden Snowflake" festival gathers prominent composers, songwriters and arrangers of children's compositions, and has so far produced over 2,000 children's songs. The organizer of the festival is the "JU Center of Culture Rožaje," and the creator and initiator of "Golden Snowflake" is the cultural worker, ethnographer and choreographer Ibiš Kujević. The developmental path will be shown in the paper of the festival and its duration throughout the years, with a special focus on thematic frameworks, which are recognized each year of the festival. The importance of the festival in context of the development of creativity and manifestation of children's musical abilities will be highlighted. This festival can be viewed as a kind of artistic and cultural phenomenon and, above all, in the context of financial difficulties it faces and the way it overcomes them, a phenomenon that despite everything is enriching the musical life of Montenegro.

Keywords: artistic phenomenon, children's songs, creativity, interpretation, festival.

Creative teachers – creative students

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Abstract

At the Zagreb Academy of Fine Arts, students learn how to link their artistic practice to a theoretical approach to developing their whole personality. This provides students with the ethical and moral values that will guide them in the future and provide a catalyst for change. In this way, students are thoroughly prepared for their future work in schools, as they embody the knowledge, abilities and skills they should teach their pupils. During their university course on the Teaching Methodology of Fine Arts, students consider how to reconstruct their own creative processes and how to use any rules they have discovered to aid the creative processes of their pupils. In addition, they learn methods and techniques for stimulating creativity and fully examine the relationship between creative teaching and teaching creativity. It is equally important that students realize their true nature through their artistic expression. Consequently, the teaching process must always be envisaged as a participative art; such that teaching becomes a form of personal expression, that is to say, an artistic form. In this way, the teacher also becomes an artist, primarily an artist who creates new personalities and new relationships in a way that enables them to experience self-realization through the teaching process. This all-pervasive relationship between teacher and artist comes to the fore, particularly in designing and implementing graduate research, where students start from their personal interests. They investigate their chosen subject from two perspectives: as their own creative expression and as the process of creative teaching. As a result, graduate research can become a complete and original artistic project that will greatly benefit both students and pupils. An example of this approach will be presented in a qualitatively processed *case study*. The aim of this research was to recognize the rules and links in the student's creative process and topic of interest (prejudices and stereotypes in relation to women) into pupils' creative process. The result is a complex student's artwork and pupils' progress in the reflection of prejudices and stereotypes on a given topic.

Keywords: academy of fine arts, creative process of students, creative process of pupils, teacher studies, approaches to learning and teaching.

Project planning as the basis/framework for preschool children's creativity development

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Abstract

This paper considers the possibility of project planning and integrated learning affecting preschool children's creativity development. Based on the theoretical foundations and curriculum framework for early childhood education in the Republic of Serbia, this paper has shown an initial project plan named "How is the sound made?". Key determinants of project activities have been analyzed – research approach, content integration, the interactive relationship between children and preschool teachers and children's creative expression. The descriptive method and content analysis have been used. Given that developing the initial project topic represents a creative process that includes shared ideas and activities of children and preschool teachers, flexibility and openness to new experiences, the discovery of different meanings, cooperation, understanding and valuing the opinion of others, the described manner of planning preschool educational work enables children to express themselves spontaneously and contributes to the encouragement and development of their creative potentials.

Keywords: creativity, integrated learning, preschool children, project planning.

Re-framing discussion: A focus on co-operative and reflective practice

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Abstract

The paper explores the background, the goals and the experiences of a university discussion course in a culturally diverse classroom based on reflective-cooperative practice. In our case study discussion, it is not only regarded as a key skill for students to learn and improve but a way of emphasizing the inclusion of a variety of perspectives (Brookfield and Preskill 2005), as well as handling conflicts and controversies. During the course, we have created conditions for promoting critical conversations, facilitating cooperative learning and reflective practice. Cooperative group activities provided the impetus for better framing problems and also increased the likelihood of manifesting creativity. Studies have shown the positive effect of cooperative learning on students' motivation and critical and creative thinking skills (Marashi and Khatami, 2017), and it has been suggested that "interaction in groups can be an important source of creative ideas and innovation" (Catarino et al, 2019). Studies have proven that cooperation resulted in higher-order reasoning, creative thinking and transfer of learning, and results revealed that less-creative individuals, while working together, would perform as well as highly-creative individuals (Hua Xue, 2018). By generating material for consideration, acknowledging and evaluating that material, and making collective decisions, students were positioned as contributors to knowledge. They were encouraged to create their own ground rules and to learn and practice the dispositions of democratic discussion: hospitality, participation, mindfulness, humility, mutuality, deliberation, appreciation and hope. (Brookfield and Preskill 2005).

The practical implication of the paper is a possible response to the need for methodological changes in university courses. There is an urgency to focus more on personal development and use pedagogy which puts the learners at the center of activities, uses participative methods and assists the acquisition of specific transversal competences, such as critical thinking, collective knowledge building, problem-solving, and cooperative spirit.

Keywords: democratic discussion, reflective-cooperative practice, transversal competences.

The influence of new media on the creativity of young school-age pupils

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Abstract

In this paper, we decided to deal with a topic that is very important and current, namely, new media and creativity in the teaching of fine arts, that is, the development of creative abilities of younger school-age children through the teaching of fine arts using new media. The question is often asked how new media and modern technology affect teaching and learning and how schools are ready to accept new technologies in teaching. We decided to investigate how they influence the development of creative abilities of students at a younger school age through art classes.

We believe that the significance of this work and research, in addition to looking at the theoretical reasoning, will be of great importance for pedagogical and methodical work with the aim of improving and raising the quality of art education.

In accordance with the set problem, goals and tasks of the research, we decided to approach the research from several angles in order to get a more complete picture of the set research subject. The first part of the research will be empirical and will include the application of the survey technique. The survey questionnaire would first be checked with a pilot study, and then the teachers would be surveyed, and with this instrument data would be collected about the representation and quality, that is, the way of creating and applying new media in the teaching of art in younger school age, as well as the reasons for their existence or non-existence.

The second part of the research would include an analysis of the content, more specifically of textbooks and reference literature for teachers in the field of art teaching, and in this way, they would see from a different angle the representation and quality of the application of new media in the teaching of art in younger school age.

We emphasize that modern teaching technology should not replace traditional approaches to teaching, but overcome their weaknesses with its possibilities of innovating the teaching process.

Keywords: creativity, new media, pupils, teachers, young school-age.

Creativity in teaching about cultural heritage

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Abstract

This paper includes a literature review about the importance of teaching and creative teaching of cultural heritage.

Cultural heritage is the basis of preserving cultural and national identity and the cultural development and sustainable development of an area. Therefore, it can be said that it is the fundamental bearer of the identity of the human community, so it is necessary to raise awareness of the importance of including heritage topics in children's education from the youngest age and to clarify the importance of heritage protection. Through education, it is important to teach, value and preserve the unique cultural heritage.

With an appropriate approach and a creative, integrated way of imparting knowledge and skills, it is necessary to encourage and stimulate students' interest in the contents of cultural heritage and to impart knowledge about their own culture. It is important to actively involve students by encouraging experiential learning, developing empathy and imagination, creative projects, interaction with peers and exchange of experience, self-reflection and the like. For all this, it is necessary to have a creative teacher who will always use creative procedures and methods in a new and interesting way. This will also make the teaching creative and will enable the students to have creative potential and complete development, and in this case, develop a love for the homeland and interest in the preservation of cultural heritage.

This work will also encourage teachers to reflect and make them aware of the importance of the role of a creative teacher in the life of every student, especially in the development of creative potential.

Keywords: creativity, teaching, cultural heritage.

Promoting creativity in crafting professions within school curriculum

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Abstract

The school curriculum stems from the national curriculum, and stays in line with the (supra)national trends in education while respecting the specific needs of students and the local community, thus demonstrating the uniqueness of each school. Each school autonomously decides on the school curriculum, which is a characteristic of decentralized school systems. Achieving that balance between general and specific is a collaborative task of all school employees and other stakeholders who plan, implement and evaluate the school curriculum. Given that school curriculum is a document created by the joint efforts of various stakeholders, it incorporates individual and collective values that make up the hidden curriculum. The school curriculum, alongside the hidden curriculum, will contribute to the unique culture of an individual school. It is precisely in crafting professions that creativity is necessary for innovating practical work, and it needs to be encouraged by providing a wide range of extra-curricular activities that enable students to develop skills and express their own creativity.

Research was conducted with the aim of exploring the activities that stimulate student creativity and are an integral part of school curriculum. In order to find out a) how many creative activities and b) what types of creative activities are incorporated in the curriculum, a quantitative and qualitative content analysis of the school curricula of Croatian vocational schools that educate students for crafting professions was carried out. The results suggest that creative activities are an integral part of the school curricula of crafting professions, but that their share should be larger, which implies the need to update school curricula.

Keywords: creative activities, competences, hidden curriculum, school culture, school curriculum.

Exploratory talk in the role of encouraging divergent thinking in Music Listening classes

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Abstract

This paper presents a theoretical reflection on the relationship between exploratory talk and divergent thinking in music listening classes. Divergent thinking is characteristic of the creative process and creativity, and it implies that a more extensive, potentially unlimited number of solutions is created based on one initial idea. Considering the concept of teaching that is still present in the school system, in which the solution in the lesson is perceived and accepted as the only correct one, and where the frontal type of teaching is widely present, it is clear that divergent thinking cannot develop its full potential, which limits the development of creative thinking. One of the potential solutions proposed by didactics is the inclusion of exploratory talk in the teaching process, where an exploratory talk is a form of interaction in which all participants take equal part and are motivated to express their observations and knowledge self-initiatively publicly and critically examine and consider specific ideas and proposals. Collaborative thinking leads to a certain consensus, so this type of conversation encourages, among other, divergent thinking. The primary assumption is that the networking of the exploratory talk with listening to music improves the quality of listening and the emotional-cognitive experience. By including exploratory conversation in the teaching, students are allowed to self-initiatively express their cognitive-emotional observations and discuss different aspects of the played musical piece, which results in a network of different ideas and leaves the system of schematic, predetermined answers, which encourages divergent thinking. Accordingly, the concept of dialogue in teaching will be discussed from the point of view of didactics. The research conversation and the subject area of listening to music will be analyzed with an emphasis on their overlap to understand practical procedures that potentially encourage divergent thinking.

Keywords: dialogue in class, exploratory talk, listening to music.

POSTER PRESENTATIONS

The learning strategies of secondary school students

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Abstract

Learning is governed by principles of self-regulation, and learning strategies are the central construct of most models of self-regulation of learning. The components of learning strategies include the Cycle of (meta)cognitive learning control, which represents strategies related to the learning process, then Deep cognitive processing, which represents strategies related to learning content, and Surface cognitive processing, which represents a low level of investment of cognitive effort during learning.

The aim of this research was to examine and analyze the gender and age differences of high school students in learning strategies. 202 students of the first, second and third grades of secondary schools in Split participated in the research.

For the purposes of this research, the General Data Questionnaire and the Learning Strategies Scale were used. Three multiple regression analyzes were conducted to examine the role of gender and age on learning strategy component scores. Independent variables explained 2.1% of the Cycle of (meta)cognitive learning control component, 4.7% of Deep cognitive processing and 1.4% of Surface cognitive processing. The ANOVA results of multiple regressions show that the multiple regression model of the Deep Cognitive Processing component is statistically significant ($F=4.906$, $p<0.01$). The results of the multiple regression analysis showed that age (class) has a statistically significant influence on the results of the Cycle (target) component of cognitive learning control ($p<0.1$) and this coefficient value is negative, i.e. the results of the specified component are significantly lower with increasing age (class). Gender ($p<0.1$) and age (grade) ($p<0.01$) have a statistically significant influence on the results of the Deep Cognitive Processing component, in such a way that girls achieve higher average results compared to boys, and the results of the said component are significantly lower with increasing age (class).

Based on the obtained results, we conclude that students may lack knowledge about adequate learning strategies, then lack of internal and external motivation, and personality instability during adolescence.

Keywords: students, learning strategies, gender differences, age differences.

Do teachers' characteristics and attitude towards gamification predict the use of gamification?

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Abstract

The purpose of this study was to identify predictors of behavioral intention to use gamification during teaching. The present study was conducted with 151 Romanian k-12 school teachers, with an average of 8.68 years ($SD = 9.52$, ranging between no experience and 42 years) of work experience. Half of the participants were teaching in schools in urban areas. All scales were filled out online. Results showed that teachers' levels of wellbeing at work, teachers' attitudes towards gamification, perceived usefulness of gamification, technology proficiency and teachers' self-efficacy were positively associated with behavioral intention to use gamification during teaching. Results from the regression analysis show that teachers' levels of wellbeing at work, teachers' attitudes towards gamification, perceived usefulness of gamification use, technology proficiency and teachers' self-efficacy predict 54% of behavioral intention to use gamification during teaching ($R^2 = .545$; $F_{(6,144)} = 28.69$; $p < .001$). The results emphasize the importance of personal variables such as teachers' attitudes towards gamification, perceived usefulness of gamification, technology proficiency and teachers' self-efficacy on behavioral intention to use gamification during the teaching-learning process k-12 school teachers and highlight their predictive role for teachers' intention to teach by gamification.

Keywords: gamification, predictors, Romania, k-12 school teachers.

The relationship between learning ability and birth weight in hyperactive children

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Abstract

Attention-Deficit/Hyperactivity Disorder (ADHD) has a harmful influence on deficits in cognitive functions, thereby affecting learning abilities. According to research experience, in addition to the symptoms of ADHD, indirect causes also play a role in the intelligence profile, such as birth weight.

We are looking for a correlation between perinatal biomarkers (birth weight) and intelligence profile/learning failure in children with ADHD. The focus of this study is whether birth weight can predict intelligence performance, which is a basic factor for learning success.

Participants included 23 children with ADHD and 23 children without ADHD. The cognitive abilities can be well tested with the Wechsler Intelligence Scale for Children–Fourth Edition (WISC-IV).

Comparisons of these groups suggest that children with ADHD have poorer performance on the subscale, (Perceptual Reasoning, Working Memory, Processing Speed) and subtests (Block Design, Matrix reasoning, Digit span, Letter-number sequencing, Coding, Symbol) and in the Full-Scale research, more so than children with typical development. A significant difference can be seen compared to the control group. However, the rest of our results differed from the experiences of international research. The regression analysis did not confirm the correlation between birth weight and lower performance of intelligence profile.

The intelligence structure of hyperactive children is typically varied compared to the normally developed children. In the future, it will be necessary to examine other perinatal factors, such as the gestational week or the analysis of the Apgar value.

Keywords: ADHD, intellectual disability, learning disability, birth weight, WISC IV.

Incentive methods in mathematics lessons as support for the development of students' creativity

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Abstract

Creativity can be defined as a blend of divergent and convergent thinking. Divergent thinking is associated with the production of variability, while convergent thinking is associated with the investigation of variability. Typically, mathematical creativity is regarded as a domain-specific skill that cannot be transferred to other domains. Some educators view creativity as both a procedure and an outcome. Product-view is commonly used in academic research to evaluate the written solutions and mathematical creativity of students. The less-used process-view attempts to capture the processes that students employ during creative moments. However, numerous issues within the concept of mathematical creativity remain unresolved; for instance, there is no universally accepted definition of mathematical creativity, nor is there a single model for assessing it. Haylock's definition of creativity as the capacity for divergent production in mathematical contexts is commonly used to define mathematical creativity, where originality, fluency, and adaptability are referred to as its primary characteristics.

This paper provides a review of methods described in the literature for eliciting students' mathematical creativity. The first is problem solving, while the second is problem-posing. Problem solving involves dealing with open mathematical tasks such as those involving multiple solutions and multiple strategies tasks. Solving open-ended problems is a creativity-oriented activity because it promotes and requires mental flexibility and affords numerous opportunities for the generation of original ideas. Problem posing expands the student's capacity for flexible and strategic thinking. The ability to generate additional questions regarding a mathematical phenomenon demonstrates a high level of originality. Both approaches can be evaluated along the dimensions of fluency, flexibility, and originality.

Keywords: mathematical creativity, problem-posing, problem solving, open-ended tasks, divergent thinking.

Provisions of Mažuranić's Act on organisation of public schools and teacher training schools and legislative frameworks for encouraging creativity in education

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Abstract

Ivan Mažuranić, Croatian Ban who reigned from 1873-1880, implemented significant reforms in education, administration and judiciary since his political programme focused on the provision of a modern legal framework for Croatian autonomy. During the second year of his reign, on 19th August 1874, Ban Mažuranić proposed a draft Act on organisation of public schools and teacher training schools (original in Croatian *Zakon ob ustroju pučkih školah i preparandijah*) to the Parliament, which was adopted and confirmed by the Austrian Emperor and Hungarian-Croatian King Francis Joseph I on 14th October 1874. That Act is considered to be the first Croatian autonomous school law and one of the most liberal school laws in Europe as it secured the schools a status of secular institutions.

Many of the provisions of that Act are still accurate and applicable in the Croatian educational system today. However, being proposed back then, they caused serious debates and protests of all social classes. A qualitative comparative analysis of the Act on the organisation of public schools and teacher training schools and the current Act on education in primary and secondary schools will compare the legislative frameworks for encouraging creativity in education, which provide prerequisites for the creative and autonomous work of teachers. Having passed this law, Ban Mažuranić proved himself to be serious in fulfilling his election promises. Along with other laws enforced in judiciary and administration, this Act opened the way for the modernisation of the former Croatian state and its faster adoption of European standards for a modern civil state.

Keywords: Ivan Mažuranić, reforms, education, judiciary, creativity.

Creative corner – activities with potentially gifted students in primary school

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Abstract

Special attention has been paid to potentially gifted students in the last few years at Elementary school Ivana Zajca in Rijeka.

A series of activities and workshops have been organized with the aim of identifying potentially gifted students, including them in extracurricular activities according to their interests and continuous monitoring. These activities form a project called "Potakni dar." The project coordinator is the principal, and the members of the project team are primary classroom and subject teachers, a librarian and a pedagogue.

Realization is achieved through testing, increased monitoring of students, extracurricular activities, workshops and employees' education.

The presentation of the work of the extracurricular activity Creative corner, which is part of the project Potakni dar for school students, is included. The objectives of this extracurricular activity are the enrichment of creative and abstract thinking and higher thought processes, as well as active learning with an individualized approach to the student.

Keywords: potentially gifted students, identification, monitoring, extracurricular activity, individualization.

Training to creative activity in a training context, the evolution of concepts and teaching practices

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Abstract

Training future teachers in creativity is a priority for the 21st century (OCEDE, 2018). In this context, our study focuses on the development of creativity in pre-service teachers at the kindergarten (cycle 1) and primary (cycle 2) levels. Also, we are interested in the presumed gap within two training profiles (cycle 1 and cycle 2) at the University of Teacher Education of Canton Vaud (Hereafter HEPL). This research questions the gap between the profile of the creative personality and the conception of creative practices in teaching. In this exploratory quantitative questionnaire study, the sample was composed of 180 participants aged 19 to 56 years (M=24 years, 86% female). Their perceived creativity was measured through the Short Scale of Creative Self test (Karwowski, Lebuda, Wisniewska & Gralewski, 2013, Karwowski, 2016). Their creative teaching was obtained through the teaching creativity test (not yet found the test). The results presented in this poster are from pre- and post-passages of a module dealing with creativity in the fall 2023 semester. The mean obtained on the SSCS pretest dealing with the creative self is around 3.47 (range =0.25), with a significant difference between male/female means of +0.13 (P=0.05). Regarding the creative identity of our population, the mean is 3.51 (Mm: 3.12, Mf:3.58). Self-efficacy was 3.45 with an inverse trend between men and women (Mh: 3.12, Mf:3.58). Finally, their practices of creativity in their teaching from the teaching creativity test amount to 4.60 (deviation = 0.37). The first results indicate that self-perception as well as creative self-identity are more important in females than males while creative self-efficacy reverses between genders. From the perspective of creative teaching, the initial data indicate that one out of two students considers practising this type of teaching. The collection of post-tests and their analysis will shed more light on these first elements.

Key words: creativity, training, schooling.

What differentiates winning from defeated teams at 2022 European handball championship

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Abstract

The aim of this research was to determine the situational efficiency indicators between the defeated and winning teams in the group stage of the 2022 European Handball Championship. The sample consisted of 24 men's handball teams that played in the group stage of the competition. In the processing of the results, matches that ended in a draw were not included, and therefore a total of 35 matches out of 36 played in the group stage of the competition were processed. For research purposes, 17 situational efficiency variables were used, 14 in the attacking phase and 3 in the defensive phase. The Mann-Whitney U Test was used to determine differences in indicators of situational efficiency between winning and losing teams. Variables lost balls (TO), successfully realized counterattacks (FBUS), won balls (ST), successfully realized breakthroughs through the defense (BTUS), successfully realized shots from the wing (KRILOUS) and the number of assists (AS) significantly distinguish winning from defeated teams, while no difference was found in other variables. Considering the results obtained, it can be concluded that the winning teams make fewer mistakes, play a better and more aggressive defense that leads to more counterattacks and more easily scored goals, and find better technical-tactical solutions to create better goal scoring opportunities when attacking the set defense.

Keywords: attacking phase, competitive performance, defensive phase, handball, parameters.

Creative teaching in physical education

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Abstract

Many European and international government bodies highlighted the promotion of creativity and creative thinking as an important element for the growth of societies (EC 2008/C 86/01; UK Department of Education, 2013). Many studies explored issues regarding creativity in schools and physical education (Welch, Alfey and Harris, 2021). Creativity is considered an important driver for innovative physical education teaching (Parisi, Mouratidou, Karatza and Karaoglanidis, 2020). Physical education teachers list different barriers and inhibitors of creativity when working with children in school, such as lack of technical equipment, inappropriate sports facilities, a large number of children per class, inadequate curriculum and similar (Konstantinidou, Vasiliki, Katsaroum, Michalopoulou, 2015).

The aim of this study was to conduct a systematic review of the creative teaching ability of Physical education teachers. The databases used were Web of Science, SPORTDiscus (EBSCO), and SCOPUS. Publication date restrictions were not implemented in the search. Articles were selected based on the following criteria: a) published in a peer-reviewed journal; b) availability of a full text in English and/or Croatian; c) related to physical education teachers/educators and creative teaching ability. Creative teaching of physical education teachers seems to be related to educational background and full-time or part-time work. Teaching effectiveness shows positive effects on creative teaching (Xiong, Sun, Liu, Wang and Zheng, 2020). Other authors suggest that the key to success for creative teaching is understanding teachers' personality traits and paying attention to their development. Providing the required support in school systems and developing problem solving skills improves creative teaching in PE teachers (Deng, Zheng and Chen, 2020).

This research will highlight the key issues and challenges in the area and show the current understanding of creative teaching among physical education teachers. Creative teaching, teaching ability and teachers' motivation affect children and students and their motivation for physical activity. Therefore, these skills are important for physical activity promotion in the school system and should be further investigated.

Keywords: creative teaching, curriculum, physical activity, physical education, teachers.

The teacher's role in development of primary school students' artistic expression

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Abstract

The framework of this research is made out of the opinion that the teachers and art teachers have a multilayered role in the process of developing students' artistic expression and creative potential. The research conducted sought to answer the question: to what extent the teacher's initial academic education, work experience (years of service) and professional training in the field of art influence primary school students' artistic expression development? The research was conveyed during 2016 and included part of Vojvodina's territory and Belgrade. The sample consisted of 210 primary school pupils attending the second and sixth grade. The instrument used was a modified *Seven drawings test*, which assesses the child's artistic expression through the assessment of art-form development. Data on initial academic education, years of service and professional training of teachers in the field of art were collected with the help of the questionnaire which was made especially for the purpose of this research, with a sample of 87 respondents. The key results of the research had shown that the pupils whose teachers had initially studied at artistic faculties and those whose teachers constantly upgraded their level of art education achieved notably better results in the field of art-form development compared to ones whose teachers had studied at teacher training faculties and do not upgrade their level of art education. It is interesting to point out that the teacher's work experience has not been shown as a factor that affects art-form development of primary school students. The obtained results unequivocally confirmed that the teacher's role in the achievement of educational goals in art education is very important. The results may be used as starting points for new research concerning the promotion of higher education policies and the teachers' professional upgrade throughout training and lifelong learning.

Keywords: creativity, art education, children's art creation, art-form development, teacher.

WORKSHOPS

Experiencing an undergraduate creativity course: An entire semester in a single workshop

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Abstract

Welcome to EDPS 211: Development of Creative Thinking! This workshop will transport you into a university course designed to introduce undergraduate students to the field of creativity. Teaching an introductory course on creativity can be intimidating, given the pressure to not only teach the field's fundamental concepts, but to do so creatively. While we will discuss the course structure, including methods to increase student engagement and corresponding media resources, we will spend the majority of time experimenting with actual lessons. Throughout this fast-paced session, you will have the opportunity to: (a) explore Guilford's seminal work using ribbons and note cards, (b) understand the importance of sociocultural contexts through poetry and developmental psychology, (c) use creativity to enhance personal mental health and well-being by bearing witness to one's own experiences, and (d) dissect the creative process using failed businesses and storyboards. All participants will leave with exciting, new lesson ideas that can be adapted for multiple settings depending upon student educational levels and course domains. Together, we will share and experience an entire semester in a single workshop.

Keywords: creativity, professional development, undergraduate education, university teaching.

Applied improvisation in the English language classroom

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Abstract

Applied improvisation is the implementation of improvisational theater techniques in non-theatrical contexts (see Applied Improvisation Network; Dudeck and McClure, 2018). In the English language classroom, the improvisational approach can be a valuable educational remedy. Based on numerous research which confirmed the benefits of improvisational techniques on the development of language skills, social skills, conversational fluency and critical and divergent thinking as well as the effects of modifying public speaking and language anxiety, this workshop focuses on specific EFL/ESL areas where additional practice is required. Based on the theory of improvisational theater (primarily the approaches and methods of Viola Spolin and Keith Johnstone), this workshop will provide an overview of selected exercises and games that can be applied in the lower elementary foreign language classroom. They are designed to provide a structured yet informal framework for practicing vocabulary, grammar, pronunciation and intonation, reading, writing, and communication in real-life contexts. Such an approach allows students to communicate spontaneously and naturally without the fear of making mistakes, play with language and use language creatively (as in the case of storytelling). For teachers, this requires additional training in improvisational methods. Therefore, the workshop also works with the concepts of 'side-coaching' and 'evaluation' (Spolin, 1999) that enable teachers to direct the course of instruction and get the most out of the linguistic uncertainty and an abundance of ideas that are characteristic of Impro and applied improvisation.

Keywords: applied improvisation, improvisational theater techniques, EFL/ESL instruction, English language acquisition, improvisational games and exercises.

Methodology of narrative analysis

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Abstract

Narrative analysis or storytelling analysis is a type of qualitative research method that is conducted on the transcript of a speech sample. It can be interpreted as a methodology for the study of individual lived experiences or a linguistic analysis of the structure of storytelling.

In practice and in everyday work with children, we often encounter the storytelling method. Storytelling is required in teaching content and rehabilitation procedures. In this workshop, the ways in which a told story can be analysed will be presented. In storytelling and retelling, it is essential to pay attention to the macrostructure and microstructure of the narrative discourse.

Using examples of transcribed speech samples, each participant will go through the analysis of macrostructure and microstructure. In the macrostructure, we most often observe parts such as the goal-attempt-outcome sequence, while the microstructure, through a linguistic approach, provides data on productivity and vocabulary diversity.

Keywords: narrative abilities, macrostructure and microstructure of storytelling, measures of dictionary diversity.

Combining the art of movement with the art of teaching: English and dance workshop (EDW)

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Abstract

The workshop presents the author's own approach to teaching English combined with the teaching of movement and dance as an art form, entitled English and Dance Workshop (EDW), designed for (very) young, pre-primary and early primary learners.

The author worked as a dance pedagogue and teacher of English, both separately and combined, and is presently a senior lecturer at the English Teaching Department, Faculty of Teacher Education, University of Zagreb.

The approach was created in 1998 and subsequently developed and conducted by the author over a period of almost ten years. The programme included teaching English, movement, rhythmic and dance simultaneously, integrating the development of communicative competence, creative and artistic expression, as well as the development of social skills, encouraging self-expression, self-confidence and a positive self-image. Combining movement with language and speech provided the learners with a holistic learning experience in which children become active participants in meaningful communicative situations. Movement-based activities correspond to children's natural development, thus enabling teachers to easily adapt the learning and teaching process to their learners' needs.

The workshop consists of three parts. The first part includes a presentation of the approach, the idea itself, the development of the programme, the theoretical foundation and background, as well as the positive implications of employing movement in (language) teaching. The possibilities of using movement-based activities in both specialized programmes and everyday teaching will be exemplified.

In the second part of the workshop, the presented ideas will be demonstrated through various movement-based activities, which the participants will be encouraged to take part in. Different ways of using sound, rhythm, intonation, movement, music and dance in language teaching will be presented, as well as some of the ways of adapting movement-based activities for upper-primary learners.

The last part provides an opportunity for a discussion.

Keywords: artistic expression, creativity, dance, early language learning, early language teaching.

Encouraging creativity through thematic content in mathematics lessons

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Abstract

Globally, attention is heeded to creativity in all scientific fields because of the educational benefits. Creative potential is hidden in every teacher and student; it is only necessary to create conditions in which it can be encouraged and developed. Contemporary mathematics instruction presents fertile ground on which teachers can encourage students' creativity.

In primary education math classes, teachers have the opportunity to transform a subject area that traditionally fails to engage students' creativity by creating lessons with higher quality and more interesting content for students. Hence, creativity in teaching can be encouraged through the use of various instructional methods, for example, brainstorming, the six-hat method, open-ended tasks, problem tasks, etc. In these methods, students' divergent thinking is encouraged, without which creativity is inconceivable, as it is the basis of every creative thought and process. Students question, research, look for "different" solutions, doubt and argue their positions, and discover cause-and-effect relationships. Their solutions to everyday problems become more original, instinctive, and flexible. This workshop demonstrates how a classic lesson plan on measurement can be transformed into a thematic, interactive lesson where students explore measurement through everyday objects' length or the path from home to school. The workshop includes creative activities aimed at encouraging students to reflect and debate and nurtures different approaches to mathematical problems, thereby contributing to the development of logical thinking and reasoning skills. Throughout the lesson, students learn about different measuring instruments, how to measure straight and curved lines, and how to solve problems involving different measuring units. By retrofitting challenging problems to reflect students' everyday life and encouraging creativity, independence, and freedom when solving tasks, instructors respect students' unique personalities and encourage hands-on activity. Through creative expression and teaching, instructors motivate students and actively involve them in the teaching process — what every teacher strives to do.

Keywords: divergent thinking, creativity, logical thinking, mathematical problems, mathematics instruction.

Creativity through movement

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Abstract

The workshop is based on personal experiences of using creativity in teaching music through Bodypercussion. The experience was gathered during music classes with 3rd to 8th-grade students and extracurricular activities and workshops with mixed groups of students. It is quite a challenge to use creativity to teach music. This is why the process needs to be carefully planned, structured and maintained. What makes it challenging are the limited time and the music curriculum. During the workshop, teachers will learn about the common mistakes that can happen when creativity is used in the teaching process, as well as solutions on how to overcome the difficulties they might encounter. They will be acquainted with assessment methods and techniques that could help them make the process better and more structured. The aim of the workshop is to empower and encourage teachers to feel safe in using creativity through Bodypercussion. They will get an opportunity to familiarise themselves with the creative process and methods to analyse and assess different types of activities. The workshop consists of five modules: 1. Why Bodypercussion? (7 minutes) 2. Case study analysis (workgroup, mobile phones and Internet access required) (15 minutes) 3. Let us get creative as students do (workgroup in line with instructions, presentation, and assessment) (40 – 50 minutes) 5. Conclusion (10 minutes)

Keywords: assessment, Bodypercussion, creativity, planning.

Castle of Mind (COM) as an innovative educational methodology in the service of current educational challenges

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Abstract

The studying and learning needs of the 21st century have considerably changed from what was needed a few decades earlier. Competency development and efficient education of both children and adults has been a central question of pedagogy. Game is an intrinsic learning method for humans. We have been examining how game based learning can be used nowadays, what the efficacious approaches to education and development through games are and how especially cognitive skills can be developed. During our research, we have been developing and testing various movement-based and board games, about which we conduct surveys and practical examinations. The iterative research process is based on conducting surveys with several in-house versions of the games until we reach the developmental effects we aimed for in the planning phase. Based on this work, we concluded which games work best for competence development and development in general. The flagship research is based on and around the board game Castle of Mind (COM), which also doubles as a development tool. COM has an essential component, which is that the hit from a step occurs separately from the step, i.e., the consequences of an action can and will happen at a different location from the step itself. Our research showed that playing with COM efficiently develops concentration, logic, seeing relations, critical thinking and the development of problem solving skills. Game based learning is a feasible and efficient learning method for both children and adults, provided that the basic rules of the game are included in the rules or framework of the educational method.

Keywords: game-based learning, developmental tool, mental development, castle of mind, educational methodology.

Integrating creative dance in classroom teaching

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Abstract

Creative dance is a distinct kind of dance that focuses on the holistic development of children. Within it, the emphasis is on the process of dance as well as on the encouragement of personal and spontaneous expressive movements depicting thoughts and feelings. Since children have a very noticeable natural need for movement and are highly active at the beginning of classroom teaching, movement is seen as the most natural way of encouraging their personal and social development, creativity and learning. Numerous research studies indicate educational advantages of creative dance, seeing it as a contribution to the development of imagination and creativity and a valuable approach to learning and teaching. Therefore, the aim of this workshop is to present the participants with the possibilities of integrating creative dance into classroom teaching. The use of different teaching forms throughout the workshop will encourage the participants to explore, rethink critically and creatively express themselves through movement. They will experientially become aware of the importance of using movement and their bodies within the educational process and the strength it has in creating creative innovations in their own teaching practice. In the final part of the workshop, the participants will reflect on the workshop activities and provide their own views on the topic of the workshop as well as on the possibilities of applying creative dance in their own practice.

Keywords: classroom teaching, creativity, movement and dance, school, students.

STUDENT FORUM

Digital tools in early childhood education and their (dis)advantages - field study focused on competence of educators

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Abstract

Digital tools are becoming an ever-increasing part of early childhood education. However, their usefulness is sometimes hard to gauge and/or quantify. For the same reason, training early childhood educators and equipping them with proper tools and techniques proves to be troublesome.

Because of that, this research will explore the importance of digital competence of early childhood educators, how new technologies are changing the ways of transferring knowledge to children, and the actual usefulness of digital technologies in early childhood education – all through the lens of the educator. This lecture will showcase the results of a questionnaire answered by the educators on the topics mentioned above.

The questionnaire focused on questions such as: what are the resources educators are using for teaching digital competences, how much support do they have in acquiring these resources and what are their personal opinions about the implementation of this approach to teaching and learning?

Keywords: digital, tools, early education, possibilities.

Emotions in music lessons

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Abstract

Every positive emotional experience in class affects the student's motivation and interest in work and has successful implications for future educational activities. The creation of an emotional experience that a student experiences in class is influenced by numerous factors, and one of the most powerful is determined by the role of the teacher and teaching, which is by the student's interests and needs. Formal musical knowledge is acquired in general education schools and gymnasiums, as well as in music schools and academies. This knowledge is the result of a mentally active and analytical approach to musical works that is systematically realized through the activity of listening. Listening to music in which its aesthetic value and artistic experience are presented (the final goal of the cognitive process), forms the basis of a musical educational intervention with the purpose of directing young people's preferences towards musically valuable works. From the aesthetic side, musical intervention, which primarily takes place in classes, but also in numerous extracurricular activities within project activities and workshops, makes a significant impact on the music preferences of young people. Music also manifests itself through factors such as cognitive ones (motives for choosing certain music, expressing personal values or identity, acquiring information, contacting), physiological factors, cultural and social, but also emotional.

Keywords: emotions, teaching, music, musical listening activity, teacher.

Listening to music leads to creativity: An example of a teaching unit

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Abstract

In music teaching, important areas are listening to music and understanding music. Listening to music, although cognitively oriented, shows better results if it is considered interdisciplinary and multimodal (Vidulin, Plavšić & Žauhar, 2020). In the framework of this presentation, the intention is to point out didactical innovations in music teaching, whereby listening to music will precede the students' creative activities. With the aim of motivating students, musical activities/areas will be connected with non-musical ones, during which improvisation and freedom of students' expression will come to the fore. Considering that popular music is modestly represented in music teaching (Marin, 2022), on the example of a teaching unit for the 8th grade, using the song *Zajedno* (Vanesa Petrac – Ivan Marojevic) it will be shown how from the initial activity of listening to music with movement create the central part of the class through an improvisation activity. It is necessary to prepare the classroom in advance in such a way that the students can move through it. After the introductory part of the lesson, where the students get to know the music piece through listening and analysis (awareness of rhythm, melody, tempo, and dynamics) and detecting emotions, the central part of the class follows, conceived through the activity of improvisation. In the central part of the lesson, students improvise with movement. The students will be divided into smaller groups, and each group will get one card with one musical and one non-musical term, which they should highlight through improvisation. The students have to agree on the structure of the improvisation. In the final part of the lesson, students demonstrate what they have come up with. Just some of the ways to encourage students to freely express their emotions are through improvisation, free movement with music, etc. The goal of the lesson does not have to be only the acquisition of new music content but also their motivation and the encouragement of diverse opinions. Therefore, it is necessary to make a teaching process in which students will learn, discuss, create and enjoy music making in school.

Keywords: creativity, listening to music, movement, music teaching, popular music.

Students' in-class creativity in the music culture lesson

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Abstract

In the course entitled Children's musical creativity, we learned how important musical creativity is for the general development of primary school students, and we were introduced to different musical creative activities. With this music workshop, we would like to explore how involved children are in the creative process and in what ways they can participate in creative activities in music lessons. The workshop will begin by dividing students into four groups, which we will call stations. Each station will have a different task for the students. In the first station, different board games will be played, within which musical concepts will be clarified and drawn, and certain concepts will be explained by pantomime. At the second station, the students will create a poem or a counter (depending on the age of the students). At the third station, students will make musical instruments: drums, guitars, rattles, etc., and at the fourth station, they will create a dance. After each group of students has finished with the task, they will merge into a large group that will perform what was previously designed. The goal is to get a whole in which one group will perform a song or counter, another will play music, and the third will perform a dance. In the framework of this workshop, we will encourage students to express themselves creatively and we will show different interesting ways of creative expression of students in the Music Culture lesson.

Keywords: music, creativity, learning through play.

"Am I a creative person or an emotional person?"

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Abstract

Artists and scientists throughout history have noted the bliss that accompanies a sudden creative insight. Einstein described his realization of the general theory of relativity as the happiest moment of his life. The paintings in the Lascaux cave, the Pyramids of Giza, Plato's philosophical works, Copernicus and the heliocentric system, Miles Davis and his trumpet, Darwin and evolution, Watson, Crick and the DNA molecule, and Kubrick's films are works and ideas that always prompt the same question: "Why didn't I remember that?". However, you can relax and not compare with the previously mentioned creatives. Namely, creative thinking does not always have to result in revolutionary ideas but occurs in various forms, ranges and intensities. The creative brain is amazing. It is playful, emotional, free and tireless. It does not believe in finite things, for it the world is full of possibilities and it chooses to be connected to everything in order to learn from almost every stimulus. Curious as we are, to this day, we still hold misconceptions about creativity and the creative brain. We think, for example, that the ability to create innovative and original ideas is associated with intelligence, which is not true. Therefore, let's understand that creativity is a personality with which we all come into the world and with which we can connect our reality with past experiences and dare to create new and challenging things. With the workshop, we will try to approach the concept of creativity as a neurobiological process in all people, and not only as a set of abilities reserved for artistically gifted people. Through the lens of neurobiology and psychology, we will describe how emotions affect the success or failure of the creative process. With various workshop activities, we will train your creative brain and you will discover your own creative potential.

Keyword: divergent thinking, emotions, convergent thinking, creative potential, synapses.

Application of atonal music examples in solfeggio teaching – interval processing

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Abstract

Atonality arose in the 20th century as a response to the problems of two levels of tonality – harmony and counterpoint, which reached their limits in impressionism and modernism. Atonality, in the beginning, meant total surrender to the arbitrariness of the artist without anything that would suggest some kind of tradition. The clear need to organize atonal music was first expressed by Schoenberg (Arnold Schoenberg, 1874-1951).

Then dodecaphony is born - a composing technique that uses a sequence of twelve tones of the chromatic scale. In atonal compositions, the melodic “flow” is unpredictable and traditional chords are not encountered in it. Traditional functional harmony was also abandoned, and with it, although not completely, the form. At this time, atonal music in Montenegro is still not sufficiently present on the art scene, and the lack of literature on atonality in our language is also evident.

In this regard, atonal music rarely finds its wider application in solfeggio teaching, so it is clear that didactic examples of atonal music in solfeggio teaching are also not too common. The purpose of this paper is to present examples of atonal music as efficient and expedient didactic examples when processing intervals in the solfeggio class of the final grade of a high school music school. The paper presents concrete methodological procedures, followed by examples from the literature. Better use of atonal music in solfeggio lessons can be a kind of challenge for students in the final year of music high school.

Atonal music is based on equality between all twelve tones of the sequence, while in tonal music, we perceive certain scale degrees as scale stable and some as scale unstable. In this way, students would leave the well-known tonality and functional harmony, potentially expanding their knowledge and improving their skills in the field of melody and musical dictation.

Keywords: atonal music, didactic examples, intervals, solfeggio.

Differences in children's creative expression in extracurricular dance activities

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Abstract

By applying dance structures, in addition to physical health, creativity, rhythmicity, harmony and style are developed. On the other hand, positive effects on mental health are also important as a sense of competence, self-confidence, self-worth, acceptance by peers, and the like.

The goal of this research is to find an answer to the question of whether there are differences in the characteristics of creativity of children who joined an extracurricular dance group for the first time in the current school year and children who have been dancing in the same group for more than two years with the purpose of raising awareness of difficulties and developing strategies that encourage freedom of creative expression.

The measuring instrument was created for the needs of this research on the basis of certain educational goals of dance structures and certain characteristics of creativity related to dance. The results were analyzed by t-test.

The results show that there are statistically significant differences between girls who joined the group for the first time and girls who have been dancing for a longer time. Differences are significant in the areas of emotional expressiveness in movement, accomplishment of free nature tasks, independent design of movements and spontaneity. It is assumed that the girls did not feel competent enough after arriving in a new environment, which affected their freedom in creative expression. For this reason, the teacher's role is to provide children with an environment in which they will feel free, safe and socially accepted.

The results help dance teachers to become aware of the difficulties that may occur when children arrive in a new group in the context of free creative expression and provide guidance for improving adaptation, whereby dance teachers can plan positive strategies to cope with stress and to promote and maintain a high level of inclusion, adaptation and creative freedom of children.

Keyword: children, creativity, dance structures, extracurricular activities.

Exploring the link between creativity and critical thinking through comparative Croatian and US cases

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Abstract

This bilingual workshop, led by students, will compare common educational practices in Croatia and the United States. The workshop will highlight the link between creativity and critical thinking skills developed in school. It will also explore the different opportunities students have for creative thinking in their countries with day-to-day and long-term educational examples. Topics will cover student assemblies, recess, essay writing practice, and performance tracking through standardized tests. The workshop will include audience interaction with survey questions that prompt the audience to explore their own critical reactions to the workshop content. By the end of the workshop, the audience will be aware of creative learning opportunities in Croatia and the United States, connect the development of creativity and critical thinking, and question whether or not schools hold the most responsibility for helping children reach their full potential for creative and critical thinking.

Keywords: creative thinking, critical thinking, creative learning opportunities, school responsibility, comparisons.

Counters in the function of developing and encouraging the musical creativity of younger school age students

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Abstract

Counts are children's songs performed by saying a simple text in the same tone. They are most often used as an introduction to the game and are performed with rhythmic movements, clapping hands, patting knees, stepping, snapping fingers and squatting.

The importance of counters is far greater than children's pastime and play. Counts encourage the development of speech, musical creativity and rhythmic abilities. They favor the improvement of communication skills, promote socialization, contribute to the acquisition of knowledge about the environment and society and the establishment of healthy emotions among children. That is why their application in classroom teaching is particularly important and useful, especially with respect to the integration of native and foreign language teaching, Music culture, Physical and health education, Nature and society. In order to achieve these goals, a suitable socio-emotional climate is needed in the classroom; a competent, creative and motivated teacher who will wisely incorporate the contents of the counters into educational work programs so that the function of the counters does not remain at the level of children's entertainment and play. Unfortunately, students at younger school ages use counters less and less, so teachers have the additional responsibility of fostering their existence as an important segment of oral folk tradition by implementing counters in classes.

The suitability of this content for the development of all the aforementioned abilities also stems from the fact that counters are an integral part of traditional culture, and that is why their subject matter is close to children, and the texts are mostly of a humorous nature that is interesting and easy to learn. Contemporary authors of counters use this characteristic very effectively in creating multifunctional counters that are also illustrated in a creative way.

The aim of this work is to emphasize the importance of using counters in the psychophysical development of children, to present their peculiarities, classification and representation in folklore tradition, as well as their adequate and purposeful application in teaching. Special attention will be paid to pointing out the motivational role of counters for students' creative work, encouraging their to musical, linguistic and artistic creativity, as well as creative expression in extracurricular activities.

Keywords: counters, musical creativity, musical tradition, encouragement, rhythmic ability.

Creative music activities and their impact on group connection and music creativity in choirs

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Abstract

When a choir aims to achieve a higher level of musical performance, it should nurture musical abilities, a group connection, mutual trust and self confidence in its singers. A choir is not a single entity but is composed of different individuals with various levels of musical knowledge, personality characteristics and social engagement.

These goals can be achieved with different types of team-building and creative musical activities. Different exercises aim for different results; there are activities for harmonic perception, movement-based activities, activities for voice agility and the development of individual vocal technique, and non-musical team building activities.

With these types of activities, a conductor can improve the individual's skills where they need it most and achieve a more connected group of singers through better social connections, growth of musical and non-musical creativity and a positive social climate.

With the use of these types of activities, the conductor can achieve higher goals in less time, compared to only working on the technicalities of the repertoire pieces.

Keywords: choir, group connection, music creativity, team building.

Autism spectrum disorder and music creativity

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Abstract

Meeting children with special needs is almost inevitable for music teachers in the educational field. It is important that teachers are well-equipped with the knowledge of characteristics of such groups of children. Students like that are often faced with specific difficulties related to their special needs in learning music or an instrument. As educators, we need to recognise these problems and, through a precise choice of activities, help pupils to face difficulties and develop their musical skills. We can develop their musical abilities at listening, performing and creating using creative methods and activities (Piber, 2016). I used a case study as a methodology. My research was about a 17-year-old student with autism and absolute pitch with an interest in the activities of creating and creative recreating in piano lessons. I regularly used the imitation method for teaching the piano, where the activities of performing and listening were at the forefront. With a creative teaching approach, I wanted to perform activities of musical creation which were more difficult for him. The pupil showed no desire to create anything in the first few piano lessons. He would only perform melodies, harmonies and dynamics by imitating his teacher. He showed great talent and fast learning but no interest in creating something by himself. In the study, I would like to know whether it is possible to develop his ability and desire to create musical content and encourage his original musical recreation ideas. His creative musical expression has developed greatly within four months.

Keywords: music, creativity, Autism spectrum disorder, piano classes, development of musical expressiveness.

A didactic approach to arranging, improvising and composing in the music classroom

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Abstract

The aim of this workshop is to present different approaches inspired by jazz music that can be applied to creative activities in the music classroom. We will then use this knowledge to compose a simple song. The main focus of the first part of the workshop will be learning simple approaches to arranging and improvisation in a simple song that can be applied to creative activities in the music classroom. We will learn how we can vocally improvise with the song's melody and use simple scales, such as a major pentatonic scale, to explore different ways of accompanying and improvising with Orff instruments. We will continue with arranging a simple song in groups. This part of the workshop will end with a short concert of our newly arranged songs and a discussion about the results of our work. In the second part of the workshop we will use our new knowledge to compose a song. We will create a short melody and write the lyrics and then arrange it. We will talk about approaches to writing the lyrics and adding the melody to it, that are suitable for use in the school. At the end, we will perform the composed song together and have a short discussion about encouraging creativity and critical thinking skills in the music classroom.

Keywords: arranging, improvising, composing, music classroom.