

A NEW INTEGRATED APPROACH TO TEACHING AND LEARNING CREATIVE SUBJECTS: AN EMERGING MODEL OF DIDACTICS IN THE ARTS

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Abstract

Creative subjects are interdisciplinary in nature, combining elements of different art fields. Integrated teaching has been practised throughout history and continues to be relevant. Students already use modern audio-visual tools integrating intuitively different creative fields on a daily basis, so today's school education also needs an up-to-date, informed and substantive integration of creative subjects. In the national curricula of primary and secondary school in Estonia, integration is supported through general competences and cross-cutting themes; the integration of creative subjects (music, art, dance, film) is less described.

The Model of Integrated Teaching and Learning of Creative Subjects, presented and described in this paper, offers a new approach to integrated learning and teaching of creative subjects. The goal of the model was to create innovative didactic solutions that would support teachers of creative subjects to integrate music, art, dance and film. We were intrigued by how to promote the integration of creative subjects in general education schools. This emerging model was a logical outcome that brought four different art fields – music, art, dance, film – together in a concise and visual way based on common and overlapping features.

The model is based on the commonalities of creative subjects: concept, narrative, composition and rhythm, which act as integration hubs. In order to use the model more meaningfully, we opened up the main goals and principles of each creative field and the principles of modern learning concept, integration, creativity and motivation.

Keywords: *didactic model, integrated teaching and learning of creative subjects, creativity, music, art, dance, film*

Introduction

Integrating subjects has the potential to support transformative learning, encourage openness and exploration, connections, collaboration, bringing together knowledge, experiences and beliefs from different fields. Integrating knowledge from different fields and creating connections with existing knowledge embeds what has been learned in long-term memory (Rinne et al., 2011; Marjanen et al., 2020). At the same time, it is difficult to empirically assess the impact of integrated learning (DeMoss & Morris, 2002; Mõistlik-Tamm & Lock, 2017). The idea of the integration found an outlet in the 1970s in the curricula of North America and Western Europe, during which the subject *multi-arts, integrated arts, performing arts, allied arts* was created (Selke, 2007).

The integrated education of music with all creative arts spanning all cultures has been put forward since 1993 by Yehudi Menuhin in the international MUS-E Initiative (MUS-E, 2020). Art integration and experiential learning have been realised recently with the Art Integrated Learning (AIL) model for all levels of school education in India (Singh, 2019; Sudhir, 2019). The Education Endowment Foundation in England puts forward Arts participation at schools defined as “*involvement in artistic and creative activities, such as dance, drama, music, painting, or sculpture*” in - and outside the curriculum that can support other subject areas, too (Arts Participation, 2023). Recently the Secretary of Education in the US Dr. Miguel Cardona has expressed that we should not underestimate the power of music and the arts – all students should get access to the best music and arts programs (Kalogeridis, 2021).

In Estonia, the need for integration has already been emphasised in the early decades of the last century, highlighting the need to connect singing and movement through various movement games in the curricula (Selke, 2007). However, we can talk about the integration of different artistic activities in official documents only since 1996 in the curriculum-type study program (ibid.). Further curricula have used integration more (Jaani & Aru, 2010).

In the Estonian curriculum for the year 2011/2023, subjects and subject areas have cross-cutting themes. Integration was seen as a shaper of general and field competencies (Primary School National Curriculum, 2011/2023). With the updating of the national curricula in 2023, the integration between art subjects relies on the points of contact between art and music, which have been formulated more concretely. Integration supports the achievement of general competences and the meaningful handling of cross-cutting topics for the student.

The aim of this article is to introduce and describe our Model of Integrated Teaching and Learning Creative Subjects which presents connections between four creative fields: music, visual art, dance and film. Our research group consisted of professionals from Tallinn University Baltic Film, Media and Arts School (researchers, university professors and lecturers) from above mentioned fields plus psychology, education and communication.

Theoretical Background

A. Teaching and learning creative subjects in an integrated way

Historically, integrated teaching of creative subjects has been called differently - arts integration, integrated arts, arts based learning, learning through art, multi-arts education, allied arts, etc. We chose *integrated teaching of creative subjects* as the term phrase to emphasise the importance of creativity. There are three common approaches:

- Creative subjects are integrated with a subject from another field, and the creative subject plays a supporting role in the learning of another subject (Overland, 2013; Mark et al., 2020);
- The arts are one part of science and technology combined programs (STEAM) and
- Creative subjects are integrated on an equal basis, as in this project.

Bloomfield & Childs (2000) noticed: although drama, dance, music and visual art possess their own epistemological knowledge areas, there are elements, which overlap. There is recognition of common processes that take place as children transform their ideas into the reality of artefacts such as paintings, dances, musical compositions or short plays. During this transformation process creativity and the ability to play are crucial aspects (Tracey, 2007; Marsh & Young, 2015). Many teachers and researchers confirm that integrated teaching of creative subjects supports students' creativity, holistic learning and worldview, cooperation skills and also learning outcomes, and students enjoy integrated learning more (DeMoss & Morris, 2002; Marshall, 2005; Russel & Zembylas, 2007; Overland, 2013).

On the other hand, there is little empirical evidence on the improvement of learning results with the help of integration (Russel & Zembylas, 2007), which may also be due to the complexity of impact assessment (DeMoss & Morris, 2002; Mõistlik-Tamm, Lock, 2017). Russel and Zembylas (2007) highlight teachers' self-efficacy and preparation for integrated teaching as an important challenge. Since the majority of teachers have been trained as subject teachers, it is understandable that they feel incompetent to teach subjects in an integrated manner if they do not have opportunities to gain more in-depth knowledge and skills in other subjects to be included.

Integrated teaching of creative subjects could build on how students acquire knowledge and skills and understanding of what dance, music and visual arts are. These fields have four possibilities of integration:

- Art making as a process,
- Realising through art by producing an artefact,
- Critical responses to the arts as process and product,
- Contextual understanding of arts (Bloomfield & Childs, 2000).

Creative fields are based either on plastic-spatial quality (painting, sculpture, etc.) or sound-temporal quality (music, film) or use both qualities (space and time with sound: dance). Common components are expressed in different ways: in creative fields where time is not of primary importance, the rhythmic qualities of movement are captured by visual means, but the organisation of space in these fields is akin to

choreographic understanding (Bloomfield & Childs, 2000). A figurative example, where both plastic-spatial and sound-temporal qualities combine, is the art of dance. Other arts have always been integrated into dancing, dance creation and dance analysis. The dancer usually wears some kind of costume, and when dancing for the audience, the dancer's clothing or even the lack there of it becomes the costume, almost always the dance takes place in some visually perceptible environment, often the dance is connected to music and always to some sound environment in which it takes place or which it creates etc. (Adshead, 1988; Preston-Dunlop & Sanches-Colberg, 2002).

Creative subjects are also united by creativity and creative teaching. The history of creativity research and creative learning and teaching are clearly connected. Creativity has begun to be actively studied and used in pedagogy after the 1950 speech of the American psychologist Joy Paul Guilford as the president of the American Psychological Association. He presented the concept of divergent thinking, which was expressed in a creative process where many different solutions to a problem are proposed. The opposite is convergent thinking, where only one solution or answer is correct and oftentimes have a logical approach. In 1968, Guilford proposed the idea of developing divergent thinking in schools.

Guilford (1950) first proposed the concept of 'divergent thinking', when he noticed that creative people tend to exhibit this type of thinking more than others. He associated divergent thinking with creativity, appointing it four characteristics:

- Fluency – that means the ability to produce a great number of ideas or problem solutions in a short period of time;
- Flexibility - the ability to simultaneously propose a variety of approaches to a specific problem;
- Originality - the ability to produce new, original ideas;
- Elaboration - the ability to systematise and organise the details of an idea in a head and carry it out.

Csikszentmihalyi (1990) described the concept of creativity and the experience which emerges when we are deeply involved in trying to reach a goal, or an activity that is challenging but well suited to our skills, and then one can experience a joyful state called 'flow'. The Flow Model of Csikszentmihalyi (1997) describes the relationship between task complexity and skill level.

When teaching, one must take into account the change in creativity in relation to the child's development. After adolescence, the concept of how we understand adult creativity can be applied. In childhood, creativity is emphasised on imagination and inspiration, and it is constantly developing (Heinla, Puhm, 2020).

B. Creative approaches to teaching creatively

Based on Heinla (2020), three directions are distinguished in teaching creativity:

- Teaching creativity, where creativity and various creative practices are the learning content (for example, various improvisation tasks);
- Teaching creative competences, the aim of which is to develop students' creative thinking and self-efficacy (for example, problem-solving tasks);

- Creative teaching, in which the main emphasis is on the teacher's creativity, personality traits and experiences (for example, unexpected turns during learning).

For all the mentioned directions, the *Four C Model of Creativity* (Beghetto & Kaufman, 2007; Helfand, Kaufman, Beghetto, 2017), which divides creativity into great (genius) creativity (big-C), professional creativity (pro-C), everyday creativity (little-c) and learning creativity (mini-c), could be a support for the teacher. Noticing the latter and creating an environment for the manifestation of learning creativity is one of the key factors in supporting students' creativity. Learning creativity manifests itself in different situations for every student. It is important to pay attention to the students' personal discoveries and reflect on them together. The main role of the teacher is to find and create connections between the learning content and children's interests, to give time for thinking and discussion, and to encourage learning from mistakes and being different from others (Dineen et al., 2005; Rinkevich, 2011; Collard & Looney, 2014; Houman, 2017).

Amabile (1989) lists creative thinking and working competencies as one of the three components of creativity, along with field-related competencies and intrinsic motivation. In addition to successes, it is important to give examples of failures in the creative work process and factors hindering creative activities, which can be several psychological reasons such as excessive self-criticism, perfectionism and performance anxiety, and the teacher's role in creating a creative atmosphere and mood becomes important (Kiik-Salupere & Ross, 2020). The teacher could also pay attention to avoiding or minimising creativity barriers: evaluation, reward, competitiveness and limitation of choices (Amabile, 1989). According to Csikszentmihalyi (2013), it is easier to induce creativity when the environment is made to encourage creativity.

Creative teaching is based on both the personality characteristics of the teacher and the community in which he/she works (Karwowski, 2011; Bramwell et al., 2012). The teacher's creative self-efficacy directly affects the student's creative self-efficacy (Nemeržitski, 2020). The personality characteristics of a creative teacher are similar to those characteristic of creative individuals in general, such as tolerance of ambiguity, flexibility, playfulness and ability to focus (Steers, 2009) as well as determination, enjoyment of the field of activity, enjoyment of the activity itself, courage to take risks, tolerance of mistakes, ability to be in the minority, ability to be different, independent thinking, ability to be creative, coping with expectations and reality, and knowledge baggage, as already highlighted by Torrance (1962).

To all this is added curiosity and learning orientation, the ability to create connections, valuing relationships between individuals and the community, autonomy, originality, willingness to take risks, as well as the fact that a creative teacher is a disciplined expert and can use their creative ability in the classroom (Rinkevich, 2011; Bramwell et al., 2012). Thus, in addition to personality traits, teachers' competencies also influence creative teaching, including attitudes toward creativity and creative teaching, for example, whether creativity is understood as a personal or social quality.

Method and Sample

The method to achieve the aim presented in this article – to create innovative didactic solutions that would support teachers of creative subjects to integrate music, art, dance and film – is modelling. Modelling works with analogies, metaphors, mappings and dynamic idea generation and makes it often easier to explain phenomena or express one's own understanding (Coll & Lajium, 2011). Modelling takes place in the cognitive space of ideas (Harré & Rothbart, 2004), it deals also with beliefs, metaphysics and other models, and can be a guide to future research (Cartier & Stewart, 2001) – models are like narratives of conceptual constructions “*under the control of a storyteller*” (Harré & Rothbart, 2004). Models can be physical, theoretical, mental, cognitive, mathematical, computational, static and dynamic etc. Models have a function (aim, purpose: I prediction/expectation, II explanation, III exploration, IV composition/analysis, V teaching/learning) and use different methods (modelling techniques: a) mathematical, b) representational, c) cognitive, d) theoretical, e) conceptual) (Lock, 2017).

A common feature of modelling is representation, but representation is related to enculturation (Hipólito, 2022) therefore not always universally and clearly understandable to people from different cultural backgrounds. Representation is often synonymous with visualisation that is a core feature of modelling either as main or additional means of expression. Therefore models enable us to grasp easier and visualise systematic thinking and comprehension in science, the arts and education (Lock, 2017).

The type of our Model of Integrated Teaching and Learning of Creative Subjects is, on the one hand, II explanation and IVb analysis, the method is theoretical; on the other hand, it enables III exploring and IVa composition, the method is conceptual. Finally the model supports V teaching/learning. Therefore this model has three functions in analogy to (as a metaphor of) the two sides and the perimeter/the whole of a coin:

- One side is theoretical explanation of core structural elements (based on integration hubs: conception, narrative, composition, rhythm) of music, art, dance and film;
- The other side enables to interdisciplinary explore and compose with these structural elements in a creative manner. The coin as a whole supports both teaching and learning.

The Model (see Figure 1) was developed during an action research, which we will introduce hereby briefly. The motivation for Tallinn University's didactic development project “*Integrated Teaching and Learning of the Arts*” was the contradiction between the built-in connection of the arts and subject-based school reality in Estonia. The arts (in this study: visual art, music, dance and film) share common elements, and creative work is often interdisciplinary. In order to understand the position of teachers of general education, our research group conducted interviews (N=27) with teachers of art (N=9), music (N=5), dance (N=4) and film/multimedia (N=9). We chose purposive sampling considering the equality of teachers from different subjects. We were interested in

- a) *How teachers encourage students' self-expression using a variety of the arts in an integrated manner?*

- b) Which methods they use supporting students' creativity?
- c) What are the stages of creative process in their lessons?
- d) Which kind of teaching material or training they miss?

We used semi-structured interviews as a data collection method and qualitative content analysis as a data analysis method. In order to test the Model, we conducted a research of impact, which was initiated by the educational science researchers of Tallinn University.

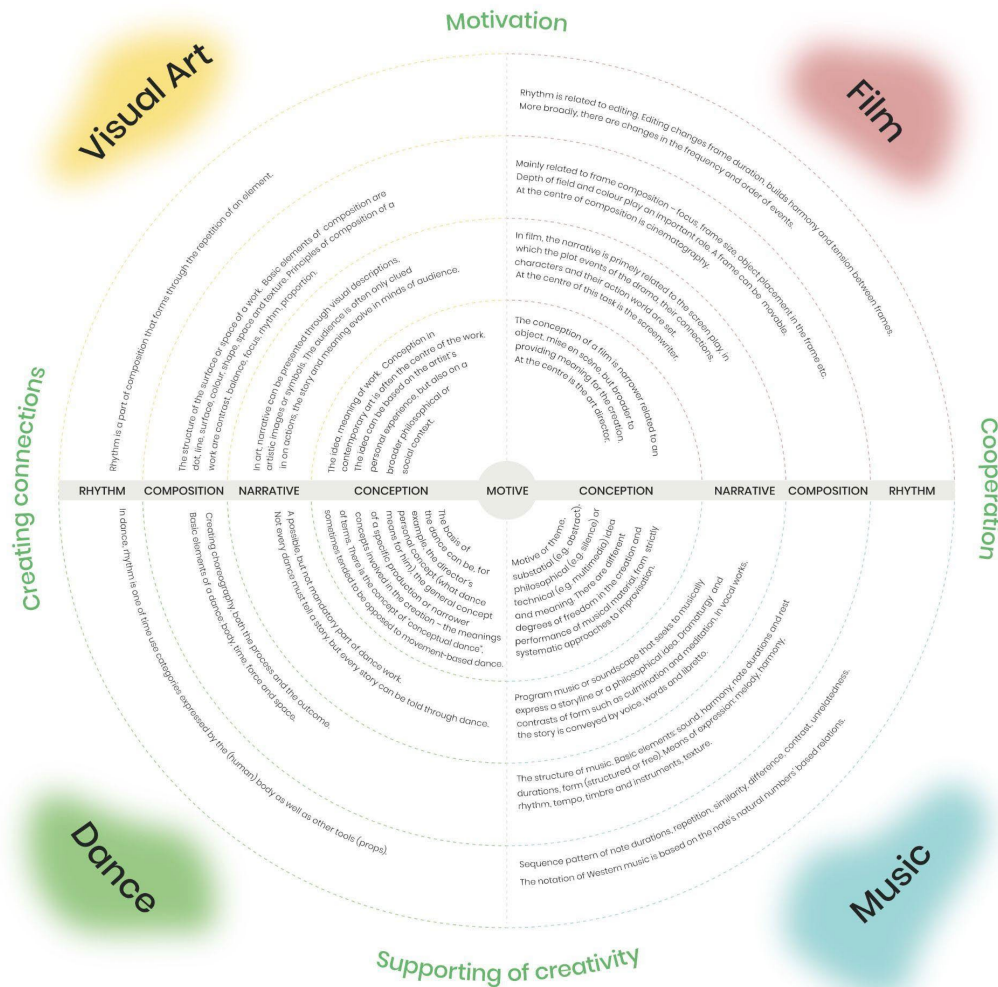


Figure 1. The Model of Integrated Teaching and Learning of Creative Subjects

At the given time the Model is in static 2D form and for better understanding we provide the content of the Model on Table 1.

Table 1. Content of the Model of Integrated Teaching and Learning of Creative Subjects

	Visual art	Film	Music	Dance
Conception	The idea, meaning of work. Conception in contemporary art is often the centre of the work. The idea can be based on the artist's personal experience, but also on a broader philosophical or social context.	The conception of a film is narrower related to an object, <i>mise en scène</i> , but broader to providing meaning for the creation. At the centre is the art director.	Motive or theme, substantive (e.g. abstract), philosophical (e.g. silence) or technical (e.g. multimedia) idea and meaning. There are different degrees of freedom in the creation and performance of musical material, from strict systematic to improvisation.	The basis of the dance can be, for example, the director's personal concept (what dance means for them), the general concept of a specific production or narrower concepts involved in the creation – the meanings of terms. There is the concept of 'conceptual dance', sometimes tended to be opposed to movement-based dance.
Narrative	In art, narrative can be presented through visual descriptions, artistic images or symbols. The audience is often only clued in on actions, the story and meaning evolve in the minds of the audience.	In film, the narrative is primarily related to the screenplay, in which the plot events of the drama, their connections, characters and their action world are set. At the centre of this task is the screenwriter.	Program music or soundscape that seeks to musically express a storyline or a philosophical idea. Dramaturgy and contrasts of form such as culmination and meditation. In vocal works, the story is conveyed by voice, words and libretto.	A possible, but not mandatory part of dance work. Not every dance must tell a story, but every story can be told through dance.

Composition	The structure of the surface or space of a work. Basic elements of composition are dot, line, surface, colour, shape, space and texture. Principles of composition of a work are contrast, balance, focus, rhythm, proportion.	Mainly related to frame composition – focus, frame size, object placement in the frame etc. Depth of field and colour play an important role. A frame can be movable. At the centre of composition is cinematography.	The structure of music. Basic elements: sound, harmony, note durations and rest durations, form (structured or free). Means of expression: melody, harmony,	Making dance choreography, both the process and the outcome. Basic elements of a dance: body, time, power and space.
Rhythm	Rhythm is a part of composition that forms through the repetition of an element.	Rhythm is related to editing. Editing changes frame duration, builds harmony and tension between frames. More broadly, there are changes in the frequency and order of events.	Sequence pattern of note durations, repetition, similarity, difference, contrast, incoherence. The notation of Western music is based on distribution on the basis of natural numbers.	In dance, rhythm is one of the time use categories expressed by the (human) body as well as other tools (props).

Outcome: The essence of the Model

The Model is based on the commonalities of the arts, which act as integration hubs. In order to use the model more meaningfully, we described the main goals and principles of each creative field and some contemporary approach to learning, integration, creativity and motivation.

While discussing the basic concepts of different creative fields within our team, we selected four interconnected main terms – concept, narrative, composition and rhythm – which became the integration hubs in our didactic solution – a model of integrated teaching and learning of the arts. These are components that all creators, both professionals and students, encounter in the creative process. In addition, the main goals and principles of each creative field were described in the model, for example how to consider the contemporary approach to teaching and learning, support creativity, motivation and collaboration.

The Model is accompanied by suggestions for integrative learning of creative subjects based on the specialties of the fields: music, dance, visual art, and film (see Table 2). These integrative learning suggestions have been compiled together with the teachers who participated in the Tallinn University’s didactic development

project workshops. They are based on the principles introduced in Table 1 above and are further developed to serve as suggestions and guidelines in each field.

Table 2. Suggestions and guidelines for learning creative subjects

Visual Art	Music
Take time to develop the concept of your artworks – this is the core for most of contemporary art.	Be aware that listening skill is substantial in music.
Feel free to use and experiment with different styles of representation.	Consider the role of the basic elements of music: sounds (and pitches), rhythm, harmony, dynamics, form, texture, room acoustics, and timbre.
For an effective expression of your idea, use a visual trope: metaphor, analogy, hyperbole, irony, metonymy, ellipse etc.	Try to feel the analogies of basic modes of expression of music in other creative subjects: i.e. silence (monochrome of colours) – high dynamic volume in colours, smallness – largeness in shapes, dynamics of motion in other arts.
Use small interventions and dislocations to quickly and spontaneously provide meaning.	Perceive and create atmosphere, emotion and mood.
Think about and combine the basic elements of composition in visual art: dot, line, surface, colour, shape, space and texture.	Be aware that every sound is motion and motion creates sound.
To achieve an impact, use principles of composition such as contrast, balance, dynamics, proportion, rhythm, focus.	Notice the information that the sound conveys – is it soothing, stimulating or joyful?
Consider the perceiver as an important creator of meaning in the reception of art and thus also the making of art.	Use traditional instruments, found objects as musical instruments and digital tools.
	Consider basic compositional connections: repetition, similarity, variation, contrast, relatedness.
Dance	Film
Be aware that dance is creative and meaningful movement where the body of a dancer uses force, space and time to express an idea or a feeling.	Consider framing stories in a dramatic manner to provide audiences with an immersive experience through the perspective of the characters. This way the audience learns without perceiving it as teaching.
Consider that dance is always communication – interaction with the audience, between dancers, with the dancer	A film is created through cooperation in various fields. What is done with the camera and in front of the camera are of

oneself or between the dancer and one's cultural context.	equal importance. Both what happens in the sound and in the picture, matter.
Use dance to express yourself using no words.	Use detailed planning before shooting to avoid surprises and problems.
Remember that dance art always integrates other art forms – watching dance we see something visual and usually hear a sound.	Knowing how frames are cut helps to plan them beforehand.
Sometimes the process and dancers' experience are more significant than the outcome.	Watch your favourite films and stories. For example, films based on superheroes comics help learning dramaturgy.

We have added four prerequisite conditions – **motivation, cooperation, supporting creativity, creating connections** – which facilitate the harnessing of the model. Their theoretical background is presented here with bullet points, and practical suggestions how to use them are given in Table 3 below.

- **Motivation** is an important component in the expression of will and directly affects how we choose to think or act. Hennessey (2021) has emphasised that without the right kind of motivation, we are unlikely to play with ideas, take risks, or feel at all comfortable with the possibility of failure. West, Hoff and Carlsson (2013) pointed out that when motivation is intrinsic people get the sense that they are playing rather than working. Hidi (1990) has noted that when people approach new concepts with great inner curiosity and interest, they learn better about the material and remember what they have learned better. Pitman, Emery and Boggiano (1982) concluded that intrinsic motivation promotes memory and persistence. Amabile et al. (1994) point out that intrinsically motivated people are more focused and persistent on their task and they are more likely to take risks to complete the task and this situational combination is favourable for the emergence of creativity.
- **Cooperation** in creativity, often referred to as collaborative or team creativity, is the process of individuals working together to generate innovative and creative ideas, solutions, or artworks. Cooperation in creativity offers numerous benefits, but it also comes with challenges. Bradley et al. (2012) have described that if the atmosphere encourages people to take initiative and not be afraid to make mistakes, then the team can benefit from multifaceted problem solving. Osborn (1963) has described brainstorming as a group-based method of creative thinking, where group members are encouraged to let their imagination run wild and come up with novel ideas without any criticism.
- **Supporting creativity** is crucial for fostering innovation and problem-solving. For creative thinking, it is important to create an environment that provides the opportunity for spontaneity, which enhances emotional courage to use divergent thinking. Runco (2016) has proposed that divergent thinking is one component of creative potential and there are many factors that can inhibit or facilitate actual creative achievement. According to Russ (2014), groundwork for creativity is the notion that through the play children practise and develop their fantasy and imagination. Piaget (1967) viewed creativity as involving understanding and spontaneity.

- **Creating connections** between different art subjects can give the opportunity to see actions and things in a new and original way. According to generalised definitions of creativity, creative refers to purposeful, novel, and ethical processes and the ability to combine elements of the existing ideas with new ideas (Runco & Jaeger, 2012; Goldberg, 2018). Developing creativity in the integration of different artistic fields requires an open mind, a willingness to learn from others and a commitment to crossing traditional boundaries.

Table 3. Supportive conditions to facilitate the application of the model

1) Maintaining motivation
<p>To stay motivated, you more or less all the time need to feel these three emotions (also called basic psychological needs): (1) What I learn is valuable and necessary to me and I can make choices based on my own interests (autonomy); (2) I can handle everything and I know what I am expected of and how to get there (competency); (3) People around me care about me and we get on well together (relatedness).</p> <p>When these three needs are supported, a self-meaningful and self-directed interest and the will to act (autonomous motivation) are likely to arise. Try to discover your personal interest or need, focus and comprehend learning. It is natural that not everything you have to study seems necessary or interesting at the beginning – a discussion with the teacher and co-students will convince you. It is common that trying out new things is intimidating. The purpose of learning is not making everything perfect but developing step by step and finding out something that is exciting and new. Negative feelings are normal to learning!</p>
<p>To increase the feeling of relatedness, take an interest in co-students and support them, co-operate, bring out your own interest and point of view. Help your companions feel important and pay attention if anyone is falling behind or losing interest. Try to indicate them being important to the group.</p>
<p>To increase the feeling of autonomy ask the teacher why we do something, or even better; try to target learning for you. It is not always easy. Maybe it somehow contributes to moving towards one of your dreams? Think through your expectations, interests and point of view by other activities offered. Speak about them. Think of where you want to develop. Be aware of your responsibility by learning, justify the solutions and formulate your thoughts. You can always decide on your attitude to a learning situation – choose to see learning opportunities, not success or failures.</p>
2) Contributing cooperation
<p>Learn to cooperate! Teachers and students working together are happier, more trusting towards themselves and others, more willing to explore and take risks.</p>
<p>Both group work and collective creation are based on recognising and implementing the roles of one's own and of others. Take different roles in a working process. By changing roles with your co-students you learn to understand each other faster – of what to expect from each other as well as how to make work more efficient and share responsibilities.</p>
<p>Creative process means self-expression and communication. Emphasise the recipient of your creation – viewers, listeners, beholders. Try looking at your creation through the eyes of the target group. Think of those who else in addition to your target group relate to your creation.</p>

3) Supporting creativity
Try to notice and be aware of moments when you discover something new and exciting for you or doing something in a new or special way. It helps you learn!
Notice, be aware and enjoy the state of creative flow, while you are focused, time flies and creative work prospers. Have fun!
Dare to make mistakes! Notice and use mistakes for generating something new or finding unexpected solutions, those help you further. Making mistakes, uncertainty and doubts are inherent in a creative process. To overcome them, work actively and persistently.
For creativity to appear, both creating links in working memory as well as knowledge and experience in the long-term memory are relevant. For being creative, it is useful to know and experience a lot.
Solve tasks of creative thinking and problem-solving. Study different stages of a creative process. Understanding them may help realise and enhance one's creative process.
Fantasise and use your imagination.
Discover different solutions and possibilities. Before you decide, think of alternatives.
Avoid barriers to creativity: competition, comparing, perfection, thinking of reward.
If you see, your ideas and solutions are at a dead-end, stop what you are doing and for a while do something else. Come back rested and notice the change.
4) Creating connections
Establish links – within the subject, with other fields, with your experience and interests.
Creative subjects have a lot in common, yet every subject has its own basic elements. They have common elements such as conception or idea; narrative or story, composition or structure and rhythm of the work. Use and integrate them in your creative work.
Consider multiple tools for expressing your idea: sounds, movement, colours, shapes, light etc. Integrate different forms of art like dance, music or film to create new combinations such as dance film, music video, performance art, video art, multimedia etc. When integrating, value the strength and originality of each creative subject.

The Model offers support to teachers who need more knowledge, structure and principles for meaningful integration of the elements of other arts with their main field of teaching. The Model can also be used by students in independent learning. The Model's creative, exploratory and compositional application (the other side of the coin) can be described as follows. The circles for each "centre of integration" (concept, narrative, composition and rhythm) can be mentally rotated around the central point (motive – the motivation to create) and as a result the principles of concept in music can be applied for creating small dance, art or film exercises or pieces; those of narrative in dance can be applied for art, film or music; those of composition in art can be applied for music, dance or film; those of rhythm in film can be applied in music, dance or art etc. The possibilities to get these principles via multiple rotations mixed between these fields are numerous. The rotation can be achieved using chance, similarly to the game Wheel of Fortune – this is a playful component and poses new challenges to the students every time. The static form of

the model so far can be seen as a limitation. However, the mental principles should be clear and our research group is aware of the necessity to develop the model further towards digitalization and practical interactivity.

The principles being essential for the integration hubs can be found in different synonymous concepts interdisciplinary, so the model is not restricted to only these given hubs. For example, when the subject of the study unit in school is patterns (a synonym for rhythm), they can be integrated with different fields, including also those not covered by our model: music – a pattern in music can be a rhythm or a melody that repeats; physics – the rhythm of the operation of an internal combustion engine; art – drawing patterns; crafts – transferring a geometric pattern from an object to paper; science – patterns in nature; humanities – behaviour patterns; history – cyclical nature of historical events; chemistry – composition, structure, crystals, molecules, smallest parts of substances.

Conclusion

The Model of Integrated Teaching and Learning of Creative Subjects provides teachers with a framework for integrating creative subjects in teaching. It is a support for music teachers and others who need basic knowledge, structure and principles for meaningfully integrating elements of various creative subjects into their lessons. We consider it important that the Model can be used independently by students as well. Also, by creatively transferring the concept of the Model, it can also be used in natural sciences, language learning, and technology subjects.

The Model allows choosing more unusual combinations for integration – creativity, chance and playfulness are included on the principle of the game Wheel of Fortune in order to discover which solutions work together and how. We see the Model as beneficial for class teachers and school management to see better the connections between creative subjects in the school curriculum and the process of planning events and creative projects. This opens up the opportunity to foster parents and society in general about the nature of arts integration and its possibilities.

Currently, the limitations of the emerging model include scarce implementation in practice and the need for inclusive workshops and teacher training courses for the use of it in the best ways – as a practical model, its best conditions will be revealed in practice. The interactive version of our model will be accessible both in Estonian and English on the Tallinn University's website, empowers teachers to seamlessly incorporate integrated teaching and learning into their teaching practice.

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