

Building effective teaching strategies: The impact of differentiation and collaboration in music and dance teachers' education

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Abstract

This article explores innovative teaching strategies, focusing on the impact of differentiation and collaboration in the education of music and dance teachers. Methods: literature analysis, observation, open questionnaires, and descriptive experiments. Pedagogical technologies facilitate the communication of lecture material, acting almost as an extension of human perception, thus supporting a differentiated teaching environment. Throughout the 2021/2022 academic year, 24 students participated in activities designed to foster individual learning processes, social cohesion, and mutual respect. This research highlights the effectiveness of employing a variety of activities, providing choices in work forms, and incorporating regular reflection and self-evaluation in each lecture. The results confirmed that reciprocal collaboration and the unity of theory and practice resonate with students, promote an individualised approach, and encourage the freedom of choice in learning tasks. These findings underscore the importance of tailored teaching strategies that cater to the unique needs of future music and dance educators.

Questo articolo intende esplorare strategie didattiche innovative, concentrandosi sull'impatto della differenziazione e della collaborazione nella formazione degli insegnanti di musica e danza. Metodi: analisi della letteratura, osservazione, questionari aperti ed esperimenti descrittivi. Nello studio viene dimostrato come queste tecnologie facilitino la comunicazione dei contenuti del materiale didattico, agendo quasi come un'estensione della

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percezione umana, supportando così un ambiente didattico differenziato. Per tutto l'anno accademico 2021/2022, 24 studenti hanno partecipato ad attività volte a favorire i processi di apprendimento individuale, la coesione sociale e il rispetto reciproco. Questa ricerca ha messo in luce l'efficacia dell'uso di una varietà di attività significative per il soggetto, della possibilità di scegliere diverse modalità di lavoro e dell'integrazione di momenti di riflessione e autovalutazione in ogni lezione. I risultati hanno confermato che la collaborazione reciproca e l'integrazione tra teoria e pratica hanno un impatto positivo sugli studenti, favorendo un approccio personalizzato e incoraggiando la libertà di scelta nelle attività di apprendimento. Questi risultati sottolineano l'importanza di adottare strategie didattiche di formazione personalizzata per i futuri insegnanti di musica e danza, in modo da renderli capaci di rispondere alle esigenze specifiche della loro professione in aula.

Keywords: differentiation; reciprocal collaboration; individualization; pedagogical process; personalization

Parole chiave: differenziazione; collaborazione reciproca; individualizzazione; processo pedagogico; personalizzazione

1. Introduction

There is an ongoing reform in the Latvian education system which involves the outdated, almost authoritarian, pedagogy to a more democratic one where students are actively involved in the instructional processes and activities. It is a long-lasting and slow process across all levels of the education system (preschool age: 1,5-3; 3-5; 5-6, school grades: 1-4; 5-9;10-12; higher education institutions). The Ministry of Education and Science (MES) the National Centre for Education (NCE) in accordance with regulations of Cabinet of Ministers (2018) was working to ensure that a requirement for a democratic environment is implemented in the methodological materials of the Latvian education reform “School 2030” (VISC, 2019). Changes have been occurred in MES, and From January 1, 2025, the functions and tasks of NCE (VISC) have been taken over by the [State Education Development Agency \(SVDA\)](#).

The rapid changes in Latvia modern society structures necessitates children to grow fast and take up responsibilities beyond their age have created a need for teachers to transit from an authoritarian style of teaching to a reciprocal collaboration where students are increasingly responsive and take active participation in the instructional process. This transition relies on a mutual human relationship, shared responsibility, and mutual respect at all levels in education: between teacher-pupil, lecturer-student, head of educational establishment-teachers, management of MES-employees (Liduma, 2023).

In the 21st-century’s education reform School 2030 in Latvia there is the requirement to use student-orientated education, and approach of competencies (VISC, 2019) to involve students in the active learning process and promote transversal competencies (critical thinking, interpersonal skills (e.g. presentation and communication skills, organizational skills, teamwork, etc.), intrapersonal skills (e.g. self-discipline, self-motivation, etc.), global citizenship (e.g. tolerance, openness, respect for diversity, intercultural understanding, etc.), media and digital skills (e.g. ability to find and access information, as well as analyze and evaluate media content) (Rīgas Stradiņa Universitāte, 2025; UNESCO-UNEVOC, 2025).

During the study process, it is necessary to promote self-evaluation skills in the students’ reflection on the learning process of the study content (Hahele, 2006; VISC, 2019; Cabinet of Ministers, 2018). The four pillars of Education for the 21st century: ability to learn, live in a society, to be, and respect each other is necessary for acquiring competencies, as highlighted by Delors (Delors, 1996) cited in Sobe (2023) and Rodrigues (2021). Therefore, for this purpose, in studies, lecturers have to use activity methodological approach to create conditions and possibilities for students to self-fulfil themselves in a study subject (Špona, 2022) and test it immediately in practical action in their dance or music groups.

According to Hammond (2014), lecturers need to match the teaching strategies to the learning styles of different students. The essence of differentiated instruction is expressed in the flexibility of the content, process, and product, which is based on the student’s endurance, needs and learning styles (Gentry et al., 2013). Personalised and meaningful (Lee et al., 2022) (in our study, personally significant) learning occurs when students can perceive, understand, and explain the purpose and relevance of their learning. Therefore, the content should answer the students’ needs, and the instructional strategies should support students’ understanding of personally significant learning processes (Smith & Chestnutt, 2021). From Staake’s (2023) viewpoint, instructional strategies (or teaching and learning strategies) are the methods teachers use to achieve learning objectives.

The purpose of this study is to examine the effects of differentiated and collaborative instructions on the professional development of music and dance teachers. The study addresses the following research questions:

1. Is there any significant influence of differentiated instruction on the education of music and dance teachers?

2. What is the impact of collaborative learning of the study subject content on the outcomes of music and dance teachers?

2. Theoretical background

The literature review analyses interrelated terminology: the concepts of pedagogical process, individualisation, differentiation, and personalisation.

Latvian scientist Špona (2022) defined the pedagogical process as a self-developing and self-regulating interaction of all its subjects to create opportunities and conditions for the self-development and socialisation of each subject through humane ideals and learning tasks. From the viewpoint of Lasmanis (2010) pedagogical process is a purposefully organised interaction of persons to promote personality development and socialisation. It is a process in which, according to the theoretical principles under the guidance of the lecturer, teaching and up-bringing tasks are implemented. These two formulations make it possible to establish that the pedagogical process's goal is to promote students' multifaceted development according to their respective levels of individual development and opportunities. Thus, the content of the pedagogical process displays two components: the relationship between the subjective component (personality abilities, skills, needs, interests, and duties) and the objective component (principles and tools: content, methods, forms, conditions) (Špona, 2022).

Individualisation is a requirement or a principle to respect the peculiarities, needs and abilities of a student's learning style, as well as the level of development, previous knowledge, and self-experience, setting learning goals and tasks, selecting methods, work organisation and materials in the educational process and program development according to the actual feasibility of each pupil. Individualisation in the educational process means teachers adapt instruction to individual students, monitoring and supporting learning progress where necessary (Kuznetsova, & Régnier, 2014). Individualised studies show great respect for the individual differences of students and can ensure a high quality of education. Individualisation involves creating conditions for the educational process that meet the learning needs of different students (Reich, 2019). Learning objectives are common to all students, but the speed of content acquisition is different (Zhang & Li, 2019). The individual approach as a pedagogical principle requires taking into account the characteristics, strengths, interests and needs of each student (Osewalt, 2020; Špona, 2022).

From the viewpoint of Tomlinson (2014), differentiation means providing students with many opportunities to acquire knowledge. Differentiation enables teaching and learning for each student, which should be the teacher's primary teaching goal. Differentiated teaching means that the teacher identifies students' similarities and differences and uses gained findings to organise work with the whole class, in small groups, or individually. Differentiation is a teaching approach to modify instruction according to students' needs (Osewalt, 2020) and it requires flexible grouping and student evaluation. This approach to instruction aims to involve all students in their learning, regardless of their learning experience. Teachers can support personalised learning experiences through differentiation and promote higher success rates (Main, 2022). From the perspective of Kibirige (2023), learning in music teaching and learning processes is explained as the acquisition of knowledge or skills through study, life and professional experience in interdisciplinary collaboration with others. Therefore, differentiation is a way of learning in which instruction is adapted to the current learning interests of individual students. According to Heacox (2014), differentiated instruction refers to the level of instruction a teacher provides in response to the student's needs. The author characterises differentiated instruction as rigorous, relevant, flexible, varied, and complex. Teacher's differentiated instruction is a teaching method for groups of students, but individualised instruction focuses on one student's individual needs (pp. 1-5).

Kanellopoulou and Darra (2021) study indicated the following:

Pedagogical differentiation in higher education is based on the information of the learners by the teacher about what is necessary to learn about a subject in order to achieve the connection of the curriculum with teaching and assessment. In the context of its implementation, the assessment is continuous and constantly gives feedback to the teaching (p. 141).

The structure of the current pedagogical experiment, which was organized in the author's lectures and workshops with prospective dance teachers (DTs) and music teachers (MTs), was established according to Gentry et al. (2013), Tomlinson (2014), and Magableh and Abdullah (2020) four stages to differentiate: content, process, product, and learning environment:

1. Content includes teaching material the teacher prepares, from which students will gain knowledge, understanding, and self-experience.
2. In the process, the skill of interaction between the teacher and the student during teaching and learning is realised.
3. The product is the level of knowledge and skills the student achieves, with which students demonstrate what they have acquired.
4. The learning environment includes the conditions in the classroom, including rules, activities, procedures, and equipment.

Summarising up, the differentiation of the pedagogical process emphasises the necessity and possibility of adapting the learning process to each student's interests, potential, and needs. That requires the pedagogue to learn modern theories ([Ventista & Brown, 2023](#)) about the possibilities of individualisation and differentiation of the pedagogical process to create learning content that would cause students to engage in personally significant activities and promote self-regulated learning.

Next, we focused on some pedagogical-psychological ideas to activate the pedagogical process with students. Prensky (2001) cited in Chen et al. (2024) and Špona (2022) recognises that a different approach to learning organisation is required nowadays, which is essential to this study. Learning apps and computer games are helpful for that, as pupils' perception transforms. They have different influences: a form of fun and play; games are interactive and adaptive and give students flow; as a rule, they give structure; as a goal, they give motivation. Game outcomes and feedback influence learning; give students ego gratification; conflict/competition, challenge/opposition; improve problem-solving through creativity. Games promote unity in social groups, but as images and stories, they give us emotion. In accordance with research of Casau et al. (2023) using the games in studies process promote students' involvement in action-based practical studies. Delors (1996) cited in Sobe (2023) and Špona (2022) emphasises that people in the modern day need to have the ability to adapt, live in an evolving society, and simultaneously maintain respect for each other. To be able to do this, it is essential for every student to realise himself in a personally meaningful way and to cultivate the five crucial mental skills. Gardner (2011) considers that in the workplace, especially in teaching, people need to be disciplined, creative, respectful, able to synchronise, have an ethical mindset, and continue to improve themselves during their lives. To create a reciprocal relationship, it is necessary to acquire interpersonal competencies (to listen, to perceive information, to evaluate, to decide, to defend a theoretically grounded position), teamwork abilities and equal collaboration in interactions between student-lecturer and student-student (Smith & Chestnutt, 2021) in an interdisciplinary way (Przybylski & Niknafs, 2015). Therefore, during lectures, it is important that students follow the instructor's example in collaboration with students to learn the theory of action and immediately thereafter carry out personally meaningful activities in workshops and in the workplace. More explicit awareness is needed to transfer practical skills to new contexts (Gaunt & Treacy, 2020). Authors Hahle (2006), Liduma

(2023) justify that students' learning abilities progress gradually in the study process, and, in the opinion of Tomlinson (2014), and Špona (2022), it is essential for teachers to organise differentiated study speeds which would foster everyone's individual skill development. From the viewpoint of Tomlinson (2014), "teaching is about learning, learning is about becoming, and making a history is about taking up a profession and making a life" (p. x). The United Nations International Children's Emergency Fund (UNICEF) Educational Commission (12 Jul. 2022) indicate that 21st-century children need to develop transferable skills. Transferable skills, or portable skills, are all the skills we can transfer from one job to another during our lifespan. They include cognitive, social, and emotional skills (UNICEF, 2022). Referring to the Eton Institute's blog discussion topic created by Nola (2023) on the seven roles of a teacher (controller, prompter, resource, assessor, organiser, participant, and tutor) in the 21st century, Ellman and Lucantoni (2023) emphasises that the teacher can widely support the student's abilities as a mentor.

Liduma (2023) found that bachelor's study programs enhanced students' analytical skills through development opportunities with preschool-age children during a subject study. Students from music and dance teacher bachelor programs, who, in addition to studying, were already working with pupils of different age groups: same age groups, mixed age groups and adult groups, were involved in this study. The development of human abilities occurs gradually in each age group; therefore, teachers have to organise an environment (the 4th component to differentiate) suitable for developing of each person's individual potential. Referring to the viewpoint (Ventista & Brown, 2023) for modern education prospective dance and music teachers need to learn modern approaches to teaching and learning processes.

Significantly, the regulations of the Cabinet of Ministers (§ 5.2.4.) describe collaboration at school as one of the essential competencies; that is, the student successfully collaborates in both homogeneous and heterogeneous groups, supports and directs constructive group collaboration, involves and applies diverse knowledge, skills and experience of its members in order to arrive at the best possible result, focusing on the expected benefit and goals significant to the group (Cabinet of Ministers, 2019). The research results will describe the reciprocal collaboration carried out during the teaching and learning of the study subject. It should be noted that various ways of collaboration with students were sought in learning the subject matter, which sometimes surprised them, as they had rarely been used in lectures.

The pedagogical process of the study subject "Individualisation and differentiation of pedagogical process" was organized according to four components of differentiation: the content of the study subject, the process of organizing the study, the product - the result of the acquired content, student evaluation of the result in a study environment suitable for the implementation of interaction. This is important in education based on a student-centered methodological approach in Latvia under the conditions of the Education reform "School 2030". The student-centered approach (Siemens, 2017) ensures the active participation and involvement of students in planning and choosing their studies, creating their own personal learning experience.

3. Materials and methods

Participants

Full-time students of prospective dance and music teachers' programme with work experience during the study process as dance or music teachers or assistants of dance or music teachers were selected for the study. Twenty-four students participated in the empirical study in 2021/2022. Twelve were prospective dance teachers (6 women, six men), and 12 were prospective music teachers (7 women, five men).

Research design

The study used a mixed methods design. Descriptive survey design of the correlational type was adopted, and data was collected through participant observation and open-ended questions. The literature analysis indicated that various methodological approaches were used in this study, with the lecturer collaborating with students during lectures and workshops.

Study duration

A descriptive experiment lasted ten lectures – 20 hours, during which experimental content was applied to four factors to differentiate: content of the studies, process of the studies, product – student evaluation of the result, and studies' environment.

Research methods

Observation

Observation during the lectures and seminars was done according to four criteria:

1. Simultaneous combination of several activities.
2. Options for choosing the form of work.
3. Reflection and self-evaluation in each lecture.
4. Reciprocal collaboration between a student and a lecturer.

Results evaluation was done according to Likert's 3-point scale, summarising points after every lecture.

Survey

To test the questions raised for the study, students evaluated the study content, process and results of the study process. They answered three questions:

1. With the first question: "Did the content of the study subject become personally significant?", the students' self-assessment of the personal significance of the study subject was clarified.
2. The second question: "What content of this subject will you use in your work?", was used to determine students' self-assessment of their understanding of the concepts of the subject.
3. With the third question: "What is your benefit from the collaboration between lecturer and students in this study subject", it was found out what methodological approaches are useful for students in practice.

4. Results

4.1 Relations between content and process of pedagogical research

The pedagogical experiment was conducted in 10 lectures - 20 hours, during which experimental content was applied in the study subject "Individualisation and Differentiation of the Pedagogical process". There were ten interactive lectures in total. Each lecture had two parts: the lecturer's information about the new topic and the students' presentation at the workshop. Students were given the free choice to choose the topic and present their prepared material individually, in pairs or in small groups at a time convenient for each. In this way, they learned reciprocal collaboration skills according to principles of activity, collaboration, and interaction.

Students started their studies by learning the terminology: *pedagogic essence, historical formation, and scientific categories; upbringing, self-upbringing, learning, teaching, development, collaboration, essence of pedagogical process in the unity of theory and practice*. In a narrative discussion, students explained their understanding of the *historical formation of pedagogy, the scientific categories and the equal position of the teacher and pupil as subjects of the pedagogical process*. For use in pedagogical practice, *students created a description of organising learning methods for pupils of different ages based on the knowledge about the pupils' psychic development: attention, perception, memory, thinking, motivation, a new formation of the psyche, individual needs: intellectual, material, communicative, emotional etc. and specific interests in music, dance, rhythm*.

The content of the study subject was organized so that bachelor's degree students could understand and adopt pedagogical process instructional strategies in reciprocal collaboration with the lecturer. This approach was consistent with the view of Tomlinson and Imbeau (2022):

The process of teaching—that is, engaging students with meaningful content so that they develop essential foundational knowledge and skills as well as understanding of how the content works, how it relates to their lives and experiences, and how they can use what they learn beyond a specific classroom (p. 40).

This would provide individual teaching approaches, differentiated pedagogical tasks, knowledge about the lecturer's position, and equal collaboration in rights from the requirements of United Nations (2023). Teacher-pupil education competence is based on theoretical and pedagogical models and contents creatively adapted to the needs of pupils of various ages. The essence of learning and teaching comprises an objective and subjective component in nurturing. Thus, knowledge of developing a comprehensive: physical, mental, social and harmonious – balanced psychic: intellectual, emotional, volition – human personality will help create a positive collaboration between the teacher and student. Therefore, positive relationships of mutual trust between student and lecturer require knowledge and insight into the possibilities of adapting the teaching-learning process to the individual learning style of students (Siemens, 2017). Complying with the activity methodological approach and promoting collaboration, detecting students' knowledge levels and coordinating study subject learning requirements with defined student groups is necessary. The expected result predicts possibilities to incorporate new knowledge into existing knowledge: students will understand *the essence of the pedagogical process and the methodological approaches: activity, integrity, anthropological, humanistic approach to upbringing/self-upbringing*. That will give them self-experience in methods, techniques, and approaches for promoting pupil individuality in the pedagogical process. Students will master the theory about lecturing competencies which include attitudes, knowledge, skills, and self-experience. The unity of education and nurturing complements the promotion of personality development. Implementing individual goals in student activity improves the pedagogical process for everyone. There is an exchange of views in a discussion on the personal significance of the students' learning objective. According to the instructions on collaboration of the Organization for Economic Cooperation and Development (OECD, 2019; OECD, 2020), systemic interaction between the teacher and the students assists in achieving the set goals and promotes the personal development of both.

Subject research-type learning was organised to promote creativity. It was facilitated by the unity of theory and practice in the lecturer's purposeful pedagogical work: appropriate for a particular situation to promote students' competencies, using an individual approach and differentiated home tasks to plan learning content acquisition. Considering the individual needs such as student interest and responsibility and the specificity of the interest-related education subject in music, dance and rhythm, the students created a description of the curriculum and methodology to promote personally significant learning for students of different age groups. This took place in a research study process, creating an understanding of the educational and nurturing value of the pedagogical process for ensuring the comprehensive and harmonious development of a student. While

independently preparing for several different training workshops, it was found that students practiced learning new skills because they were able to:

1. Realise a personally significant activity in teacher-pupil collaboration with a theory-based pedagogical process (teaching-learning and upbringing/self-upbringing).
2. Create differentiated tasks and exercises corresponding to various pupil age groups with a mutual teacher-pupil interaction: perceiving, evaluating, and influencing immediately.
3. Improve an individual approach for the promotion of pupil cognitive interests and achievement evaluation: self-evaluation and self-regulation attitude formation (Špona, 2022).

During this process, it is essential to base the skills on documents approved by the European Parliament about the European common teaching values in school (Veugelers et al., 2017) and Tomlinson's (2014) opinion that "a nurturing environment encourages learning" (p. 4). That is a guarantor of the reliability of the subject content in the learning process. In the 21st century, illustrative explanatory exercises provided by Information Technology that can be used both during lectures and independently at home at an individual pace are beneficial by enabling easy acquisition of study content and strengthening the knowledge base.

The students' work follows the principle of free choice and individual approach. Differentiated instruction can help students make learning choices and evaluate their improvement (Magableh & Abdullah, 2020). Students created differentiated tasks and substantiated their usefulness in the pedagogical process for promoting pupils' cognitive interests at different age groups (preschool age, school age and mixed age) in formal education or interest-related education (Saeima, 1998) of their pedagogical practice. The lecturer diversified the study content learning with an individual approach and differentiated tasks. In a purposefully organised pedagogical process, students were able to prove themselves through different forms of work.

4.2 Results of the pedagogical research

4.2.1 Results of observation

During lectures and workshops, the lecturer of the study subject, who is also the author of the experimental study subject and the one of the co-authors of the article, conducted direct observation as a research participant according to 4 criteria in order to clarify the answer to the research question:

"What is the impact of collaborative learning of the study subject content on the benefits of music and dance teachers?"

Observations in the lectures established that the students gradually got involved in the prepared forms of work. There needed to be a better understanding of equal relations between students and lecturer during the study process. Since the study subject was the Individualisation and Differentiation of the Pedagogical Process, the lecturer had a complicated task to involve each student in learning such a personally significant study subject, the content of which could be immediately applied and tested in practice with their groups.

The observation was done during ten lectures according to four criteria: a simultaneous combination of several activities, options for choosing the form of work, reflection and self-evaluation in each lesson, and reciprocal collaboration between a student and a lecturer.

Results evaluation was done according to Likert's 3-point scale points summarising. Every prospective teacher could receive 4 to 12 points during each lecture. The average results are depicted in Figure 1.

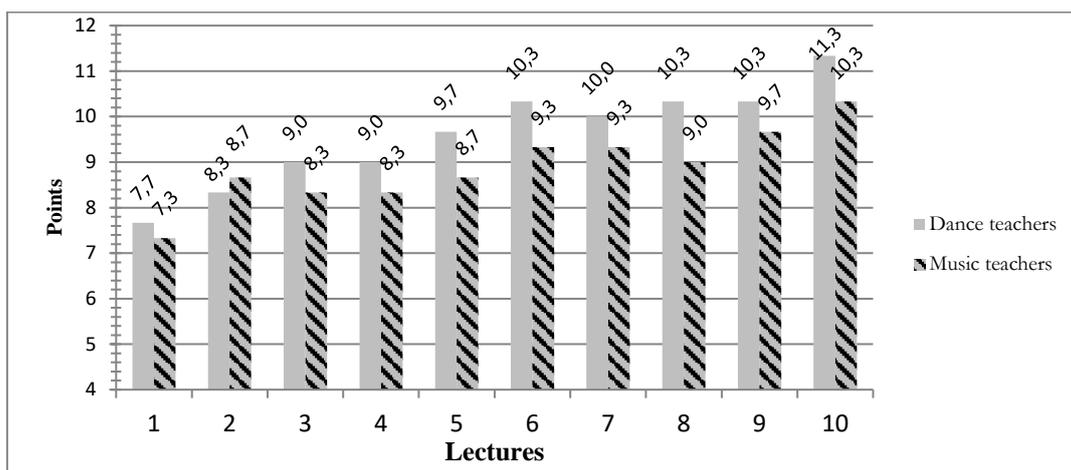


Figure 1. The average results of the 12 prospective dance teachers and 12 prospective music teachers participating in the study were over ten lectures, as evaluated by the expert.

The observation revealed the specificity of prospective dance teachers’ (DTs) profession. They were more active throughout the study period, convincingly expressing their opinions, presenting the prepared topic, and performing a dance demonstration. Prospective music teachers (MTs) were more reserved and reticent in expressing their opinions and avoided expressing them in seminars.

4.2.2. Students survey results

The survey provided answers to the research question: Is there any significant influence of differentiated instruction on the education of music and dance teachers?”

After the pedagogical experiment, the lecturer asked the students to evaluate the impact and benefits of the experimental subject content in open-ended questionnaires. The students answered three questions. The first question sought to determine students’ attitude towards the significance of the content of the experimental study subject:

1. Did the content of the study subject become personally significant?

Nineteen students (10 DTs and 9 MTs) answered that the content of the study subject became personally significant and relevant because it was immediately usable in their practice. Five students pointed to shortcomings: 2 DTs needed more lectures, and 3 MTs pointed out complicated terminology (table 1).

Table 1. Students’ personal significance of the study subject

Group	Personal significance	
	Significant	Partially significant
Dance teachers (DT)	Ten students answered that the subject’s content is versatile. It can be used immediately with our dance groups to educate interests.	Two students answered: The small number of lectures needed to have allowed for a thorough evaluation of personal significance.
Music teachers	Nine students answered that the content of the study subject is valuable. We use it in	Three students answered that it is difficult to evaluate the content fully—

(MT)	practice with students at school and in education of interests.	lots of new and complicated terminology.
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At the end of the study process, students understood the usefulness of the individual approach provision in assessing pupil’s evaluation and self-evaluation. The content of the study subject is updated: an individual approach and evaluation of differentiated tasks. Students pedagogically and psychologically justify pupils’ achievement evaluation/self-evaluation as a basis for personally significant activity. Children’s achievements, self-evaluation, and evaluation rapprochement - getting closer - in teacher-pupil reciprocal collaboration is a stimulus for pupils’ personally significant activity in the learning process.

The practical applicability of the study was evaluated with the second question:

2. What pedagogical categories from this subject content will you use in your work?

Summing up the tested 24 students’ reflections on this question, it is concluded that pedagogy categories, individualisation and differentiation explanations in the pedagogical process, activity, collaboration, interaction; the teacher’s position in the individualisation and differentiation of the pedagogical process and the evaluation/self-evaluation of the pupil’s achievements in the pedagogical process have been learned and will be used in future (table 2).

Table 2. Students’ opinion on the applicability of pedagogical categories in practice

Pedagogical categories	Learning methods for pupils of different age	Equal (in rights) collaboration with pupils	Personality psychic processes	Differentiated tasks and individual approach	Evaluation skills, Self - evaluation skills, self-regulation skills	Activity methodological approach	The unity of theory and practice
Dance teachers (DTs)							
12	12	10	12	12	10	12	10
Music teachers (MTs)							
10	11	10	12	8	7	12	10

The results show that the students from MTs programme have the lowest self-esteem in evaluation, self-evaluation, and self-regulation skills. These results are close to the results of observation.

It was particularly important in the study to determine changes in students’ understanding of the benefits of reciprocal collaboration between lecturer and students, as the lecturer created differentiated lessons for the content of an experimental study subject. It was evaluated in the students with the question:

3. What is the benefit of lecturer-student collaboration?

It should be mentioned that during the lectures, all respondents said that it was unusual and quite difficult to perform two activities at the same time, because it was necessary to divide attention and listen to the lecturer’s suggestions or answer the lecturer’s questions. However, they admitted that such differentiated training is helpful for future practice in their professional teacher’s work (table 3).

Table 3. Students’ benefits of lecturer-student collaboration

Bene- fits	Free choice of topic and forms	Reciprocal collaboration (in rights) with lecturer	col- laboration equal with	Unity of theory and prac- tice	Simultane- ous per- ception training	An ap- propriate environ- ment	Presenta- tion at the semi- nars
Dance teachers	12	10		10	12	12	12
Music teachers	10	9		11	12	12	12

The lecturer’s example of equal collaboration in rights and the implementation of students’ free choice in selecting seminar topics were mentioned as significant benefits. It was a great benefit to prepare for each workshop, present what was prepared to fellow students and observe what others have done. It was considered essential to have an appropriate environment for practising learned skills.

5. Discussion

The activity of the pedagogue to ensure the learning of the content of the study subject was active, purposeful, and thoughtful. Since it is necessary to acquire the theory, the connectivity paradigm of the 21st century (Downes, 2022) is valid for the study process. The lecturer in this study subject needs to show that learning the content requires different means of organising students’ work, which ensures interactive involvement in the work process in each lecture, workshop and outside the direct study process. Since every student is different, it is important for the lecturer to systematically provide several means of stimulating activities, for example, his own interested attitude, content, methods, forms. Learning the subject of study in a personally significant activity becomes more accessible, which leads to the passionate involvement described in the Flow theory. In this state, a person forgets about time, space, and his/her physiological needs. Achieving flow requires balancing the task’s difficulty level and the subject’s skill (Csikszentmihalyi, 2017). This is possible if the teacher provides the opportunity for everyone to choose a suitable type of activity for themselves (Abele, 2018; Zhang & Li, 2019). In our pedagogical experiment, students, for self-examination of study content, prepared differentiated tasks and exercises: for the pupil’s cognitive interests fostering in music with the acquisition of various music instruments, for individual work with pupils in a general education school, and for work at vocal studios and dance (sports, folk, etc.).

At any level of education, including university studies, it is useful to show the possibility of teaching through play (Zhukov & Sætre, 2022) to learn the content of the study subject with passion and value. Thus, students are given the opportunity to realise the need for theoretical knowledge in their profession and the unity of theory and practice, especially the methodological principle of pedagogy in the daily activities of a teacher at school and in the interest-related education.

Such interactive collaboration between the lecturer of the study subject and the students stimulates self-regulated learning among the students (Department of Education (Victoria), 2020). Self-evaluated learning refers to

a person's ability to understand and self-control their learning environment. Self-regulatory abilities include goal setting, self-monitoring, self-learning, and self-reinforcement. Excellence in teaching and learning, positive climate in learning promotes personally significant activity and the opportunity to self-evaluate one's benefits in the study subject positively. At the end of the study, all students evaluated the collaboration with the lecturer in the study subject as applicable and personally significant.

In the content of the competence reforms of the last years in the Latvia education system collaboration has been highlighted as an essential competence to be learned (United Nations, 2023). In the study subject "Individualisation and Differentiation of the Pedagogical Process", an opportunity was provided to create student-student, lecturer-student equal collaboration, which encouraged prospective teachers to create student-teacher equal collaboration both at school or in the education of interests in a larger or smaller participant group of different ages. The students' reflections revealed that they had gained insight into the nature of collaboration.

6. Conclusion

In this study, the differentiated approach to research and promotion of students' possibilities was analysed during the acquisition of content in the study subject, "Individualisation and Differentiation of the Pedagogical Process".

The significance of the theory of activity, substantiated collaboration and interaction as a personally significant value, and the unity of theory and practice in the lecturer's pedagogical activity were explained and updated. Students acquired skills in using free choice and options.

The performed research indicates the importance of proximate the lecturer's evaluation to the student's self-evaluation, which guarantees equal collaboration in rights competence in the 21st IT knowledge society for the purposeful organisation of the pedagogical process. It contributes to the certainty of students and mutual trust during the lecturer's personally significant, organised process and students' personally significant study subject learning and for further collaboration in their pedagogical activities.

Bibliografia

Abele, A. (2018). *Sporta psiholoģija: teorija un prakse*. Rīga: Raka.

Cabinet of Ministers. (2018). Regulations Regarding the State Basic Education Standard and Model Basic Education Programmes. Cabinet Regulation No. 747. <https://likumi.lv/ta/en/en/id/303768>

Cabinet of Ministers. (2019). *Regulations Regarding the State General Secondary Education Standard and Model General Secondary Education Programmes*. Cabinet Regulation No. 416. <https://likumi.lv/ta/id/309597-noteikumi-par-valsts-visparejas-videjas-izglitiba-standartu-un-visparejas-videjas-izglitiba-programmu-paraugiem>.

Casau, M., Dias, M., Amorim, M., & Bratitsis, T. (2023) Advancing entrepreneurship competences in higher education: A systematic literature review of game-based learning applications. *Creative Education*, 14, 2703-2720. doi: [10.4236/ce.2023.1413172](https://doi.org/10.4236/ce.2023.1413172).

Chen, Y., Xie, Z., & Chiu, D. K. (2024). Analytics of motivational factors of educational video games: LDA topic modeling and the 6 C's learning motivation model. *Educ Inf Technol*, 29, 22023–22056. <https://doi.org/10.1007/s10639-024-12726-8>

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DOI: <https://doi.org/10.6092/issn.1970-2221/20269>

- Csikszentmihalyi, M. (2017). Flow: How to be totally in the 'now' with Mihaly Csikszentmihalyi at Happiness & Its Causes. https://www.youtube.com/watch?v=fXIeFJCqsPs&ab_channel=TED.
- Delors, J. (1996). *Learning: The treasure within*. Report to UNESCO of the International Commission on Education for the Twenty-first Century. UNESCO publishing. UNESCO Paris. 46 p. <https://unesdoc.unesco.org/ark:/48223/pf0000109590>.
- Department of education (Victoria). (2020, October). High impact teaching strategies Excellence in Teaching and Learning. First published by the Department of Education and Training, Melbourne June 2017, revised and updated October 2020. Retrieved February 13, 2025, from <https://www.education.vic.gov.au/Documents/school/teachers/support/high-impact-teaching-strategies.pdf>
- Downes, S. (2022). Connectivism. *Asian Journal of Distance Education*, 17(1), 58–87. <https://doi.org/10.5281/zenodo.6173510>
- Ellman, M. T., & Lucantoni, P. (2023). *From Teacher to Trainer*. Cambridge Professional Learning. Cambridge University Press, 250. DOI: <https://doi.org/10.1017/9781009272681>
- Gardner, H. (2011). *Frames of mind: The theory of multiple intelligences*. Hachette Uk.
- Gaunt, H., & Treacy, D. (2020). Ensemble practices in the arts: A reflective matrix to enhance teamwork and collaborative learning in higher education. *Arts and Humanities in Higher Education*, 19(4), 419-444. <https://doi.org/10.1177/1474022219885791>
- Gentry, R., Sallie, A. P., & Sanders, C. A. (2013). *Differentiated instructional strategies to accommodate students with varying needs and learning styles*, ED545458, 1-21. <https://files.eric.ed.gov/fulltext/ED545458.pdf>
- Hahele, R. (2006). *Pašvērtējums mācību procesā*. Rīga: RaKa.
- Hammond, Z. L. (2014). *Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. Corwin. <https://www.corwin.com/books/cultural-responsv-teaching-brain-241754>
- Heacox, D. (2014). *Differentiating instruction in the regular classroom: How to reach and teach all learners*, Book with Digital Content Edition. Free spirit publishing.
- Kanellopoulou, E. M., & Darra, M. (2021). Defining pedagogical differentiation in higher education, *International Journal of Education*, 13(4), 139-154. <http://dx.doi.org/10.5296/ije.v13i4.19209>
- Kibirige, R. (2023). *Dance-musicking: non-prescriptive dance, music, and dance-music engagement in cross-sectoral collaborative teaching and learning*. NTNU Norwegian University of Science and Technology/Makerere University. <https://www.ntnu.no/ojs/index.php/ps/article/view/5055/5055>
- Kuznetsova, J., & Régnier, J. C. (2014). Individualization of educational process according to C. Freinet: A pilot experiment in a group of language learners. *Procedia - Social and Behavioral Sciences*, 154, 87-91. <https://doi.org/10.1016/j.sbspro.2014.10.117>
- Lasmanis, A. (2010). *Mācību retrospektīvs raksturojums un perspektīva izglītības iestādē*. Rīga. <https://profizgl.lu.lv/mod/book/view.php?id=517>

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DOI: <https://doi.org/10.6092/issn.1970-2221/20269>

- Lee, D., Huh, Y., Lin, C. Y., & Reigeluth, C. M. (2022, August 10). Personalized learning practice in U.S. learner-centered schools. *Contemporary Educational Technology*, 14(4): ep385, 1-13. <https://doi.org/10.30935/cedtech/12330>
- Liduma, A. (2023). Scientific analysis of 21st century preschool reform terminology, in proc. of *the Int. Scient. Conf. Society. Integration. Education*, 2, 79-88. <https://doi.org/10.17770/sie2023vol2.7138>
- Magableh, I., & Abdullah, A. (2020). On the effectiveness of differentiated instruction in the enhancement of Jordanian students' overall achievement, *International Journal of Instruction*, 13(2), 513-548. <https://doi.org/10.29333/iji.2020.13237a>
- Main, P. (2022, February 9). *Structural learning. Differentiation strategies: A teacher's guide*. <https://www.structural-learning.com/post/differentiation-strategies-a-teachers-guide>.
- Nola, A. (2023, January 24). The 7 roles of a teacher in the 21st century. Eton Institute. <https://www.etoninstitute.com/blog/the-7-roles-of-a-teacher-in-the-21st-century>
- OECD. (2019). Education Policy Outlook 2019. *Working Together to Help Students Achieve their Potential*. OECD Publishing. <https://eric.ed.gov/?id=ED598851>
- OECD. (2020). *Talis 2018 Results (Volume II): Teachers and school leaders as valued professionals*. TALIS. OECD Publishing, Paris <https://doi.org/10.1787/19cf08df-en>
- Osewalt, G. (2020, October 22). Individualized instruction vs. Differentiated instruction. <https://www.understood.org/en/school-learning/partnering-with-childs-school/instructional-strategies/individualized-instruction-vs-differentiated-instruction>
- Prensky, M. (2001). The games generations: How learners have changed. *Digital Game-Based Learning*, 2, 1-26. McGraw-Hill, 2001.
- Przybylski, L., & Niknafs, N. (2015). Teaching and learning popular music in higher education through interdisciplinary collaboration: Practice what you preach. *Popular Music and Education*, 5(1), 100-123. <https://doi.org/10.5429/ij.v5i1.706>
- Reich, J. (2019). *The importance of personalized learning*. Harvard Education Review.
- Rīgas Stradiņa Universitāte. (2025). Studentcentrētas mācīšanās un mācīšanas pieejas glosārijs. <http://www.rsu.lv/>
- Rodrigues, B. Z. (2021, January 18). Education: A study based on the UNESCO report on the four pillars of knowledge. *Revista Científica Multidisciplinar Núcleo do Conhecimento*. 01(04), 53-60. <http://dx.doi.org/10.32749/nucleodoconhecimento.com.br/education/four-pillars>
- Saeima, L. R. (1998). *Education Law. Interest-related education*. Chapter I. Section 1. §. 3. <https://likumi.lv/ta/en/en/id/50759-education-law>
- Siemens, G. (2017). Connectivism, in R. E. West (Ed.). *Foundations of Learning and Instructional Design Technology* (pp. 247-254). EdTech Books.
- Smith, A., & Chestnutt, C. (2021). Differentiation for Equity, *Journal of Higher Education Theory and Practice*, 21(6), 232-241. <https://doi.org/10.33423/jhetp.v21i6.4390>
- Sobe, N. W. (2023, July 7). Reworking Four Pillars of Education to Sustain the Commons. Reorienting the four pillars of education towards building capacity for commoning actions and strengthening the common good

offers a compass and map well suited for the collective challenges of our present. UNESCO.
<https://www.unesco.org/en/articles/reworking-four-pillars-education-sustain-commons>

Staake, J. (2023, March 24). 44 Powerful Instructional Strategies Examples for Every Classroom.
<https://www.weareteachers.com/instructional-strategies-examples/>

Špona, A., (2022). *Pedagoģija. Pārdomas. Atziņas*. Rīga: Raka.

Tomlinson, C. A. (2014). *The Differentiated Classroom: Responding to the Needs of All Learners*. (2nd ed.). In Katie Martin, Eds., ASCD, 196 p. 25 May 2014.
<https://files.ascd.org/staticfiles/ascd/pdf/siteASCD/publications/books/differentiated-classroom2nd-sample-chapters.pdf>.

Tomlinson, C. A., & Imbeau, M. B. (2022). *Leading and Managing a Differentiated Classroom*. (2nd ed). ASCD (Association for Supervision and Curriculum Development). Library of Congress Cataloging-in-Publication Data. 200 p. <https://files.ascd.org/pdfs/publications/books/Leading-and-Managing-A-Differentiated-Classroom-2ed-sample-pages.pdf>

UNESCO-UNEVOC. (2025). United Nations Educational, Scientific and Cultural Organization-International Centre for Technical and Vocational Education and Training. *TVETipedia Glossary*.
<https://unevoc.unesco.org/home/TVETipedia+Glossary/lang=en/show=term/term=Skills+vs.+Competence#start>

UNICEF. (2022, July 12). Around 3 in 4 youths lack skills needed for employment, a new report says. New York.
<https://www.unicef.org/eca/press-releases/around-3-4-youth-lack-skills-needed-employment-new-report-says>

United Nations. (2023, August 12). The Universal Declaration of HUMAN RIGHTS: 30 articles.
<https://villagevoicenews.com/2023/08/12/united-nations-the-universal-declaration-of-human-rights-30-articles/>.

VISC (Valsts Izglītības Saturs Centrs). (2019). *Skola 2030*. <http://www.skola2030.lv/lv/macibu-saturs/macibu-satura-pilnveide/nepieciesamibas-pamatojums>

Ventista, O. M., & Brown, C. (2023). Teachers' professional learning and its impact on students' learning outcomes: Findings from a systematic review. *Social Sciences & Humanities Open*, 8(1), 100565, 1-19.
<https://doi.org/10.1016/j.ssaho.2023.100565>

Veugelers, W., Groot, I., & Stolk V. (2017). *Research for CULT Committee – Teaching Common Values in Europe*. European Parliament. Policy Department for Structural and Cohesion Policies, Brussels.
http://www.europarl.europa.eu/RegData/etudes/STUD/2017/585918/IPOL_STU%282017%29585918_EN.pdf

Zhang, Y., & Li, Y. (2019, June 27). The Implementation strategies of individualized education in the field of basic education. *Open Journal of Social Sciences*, 7, 223–232. <https://doi.org/10.4236/jss.2019.76018>

Zhukov, K., & Sætre, J. H. (2022, April 1). “Play with me”: Student perspectives on collaborative chamber music instruction. *Research Studies in Music Education*, 44(1), 205-218.
<https://doi.org/10.1177/1321103X20974804>

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