Collaborative learning in conservatoire education: catalyst for innovation

Roemjantsew, T.

2

COLLABORATIVE LEARNING IN CONSERVATOIRE EDUCATION: A SYSTEMATIC LITERATURE REVIEW*

*This chapter was submitted in an adapted form as:

Rumiantsev, T.W., Admiraal, W., & Van der Rijst, R.M. (submitted for review). Collaborative learning in conservatoire education: A systematic literature review.

Abstract

This review aims to synthesize the literature on relations between learning outcomes, learning activities, and learning context factors from collaborative learning in conservatoire education. 157 peer-reviewed full-text articles were screened from an electronic database search and major journals in music education published between 2000 and 2021. Assessment resulted in 22 articles complying with all selection criteria. The results indicated strong relations exist between learning context factors and learning outcomes, and between learning activities and learning outcomes. Collaborative learning appeared to support development of both cognitive and affective outcomes, more specifically the development of craftsmanship, metacognitive skills, and social and collaborative skills.

Keywords: conservatoire, higher music education, collaborative learning, systematic literature review

2.1 INTRODUCTION

As research into conservatoires and conservatoire pedagogy has increased (Carey et al., 2012), so too has criticism of the culture, curriculum, and pedagogy of these institutions (see, e.g., Burwell et al., 2019; Carey & Lebler, 2012; Creech, 2012; Gaunt & Westerlund, 2013b; Johansson, 2013). Conservatoire education has been found to maintain the one-to-one model of transfer in a teacher-centred, content-specific, and repertoire-based context (see, e.g., Creech, 2012; Gaunt & Westerlund, 2013b; Johansson, 2013). The teacher-student dyad and one-on-one interaction appeared to dominate also in group contexts such as group lessons, masterclasses, and ensembles (Gaunt, 2008, 2010; Hanken, 2016). Moreover, the traditional assumption that a "maestro performer" will also be a "maestro teacher" (Carey et al., 2013) appeared no longer to be valid.

Not only researchers but also students were found to be increasingly dissatisfied about the relevance of their education in relation to the limited employment opportunities in the versatile, complex, and competitive practice (Carey, 2010). According to Bennett (2008), one cannot do an undergraduate degree and "play the violin only" (p. 146), since contemporary professional performance and teaching practices demand the ability to engage in a variety of collaborative settings with a broad range of competencies and skills (see, e.g., Carey et al., 2013; Carey & Grant, 2015; Gaunt, 2008; Hanken, 2016; Virkkula, 2016a), such as ensemble, performance, teamwork, and self-critical skills; all hard to address in a one-on-one learning context (Luff & Lebler, 2013).

Based on their criticism of conservatoire curricula, Carey and Lebler (2012) designed a different curriculum which better prepares students for their prospective careers, including skills such as critical awareness, functioning in groups, movement and improvisation, self-assessment, and reflection. One of their recommendations included offering a wider variety of pedagogical approaches and implementing collaborative learning activities where appropriate. This systematic literature study aims to contribute insights into how collaborative learning has been applied in conservatoire education.

2.2 COLLABORATIVE LEARNING

Collaborative learning is used as an umbrella term for a range of "educational approaches involving joint intellectual effort by students, or students and teachers together" (Smith & MacGregor, 1992, p. 11), such as cooperative, collective, peer,

reciprocal, and team-based learning, where students work in pairs or in small groups with the aim of learning together (Hunter, 2006). In higher education, collaborative learning has been found to foster academic, interpersonal, and educational outcomes (see, e.g., Johnson et al., 2007; Slavin, 1996).

Research into collaborative learning in the conservatoire context appears to be rather limited and spread over years, topics, and contexts. In his narrative literature review, Luce (2001) indicated that this type of learning was noticeably absent within the field of music education. Luce's conclusion that social aspects of music-making and learning have been quite ignored in higher music education, was followed-up by the authors of the book *Collaborative learning in higher music education,* published in 2013, including both academic and practice-based papers. As argued by Gaunt (2013) and Gaunt & Westerlund (2013b), it is crucial to further investigate how collaborative learning can be implemented in the conservatoire curriculum next to other approaches to teaching and learning. It is potentially an excellent means to achieve learning goals such as critical thinking and problem-solving skills; also, students' development of creativity and collaborative skills may be facilitated through interaction with their peers.

2.3 AIMS OF THE STUDY

In various papers and studies, researchers of conservatoire education have acknowledged the value of collaborative learning and indicated that it provides opportunities to advance the educational development of students and prepare them for their future practice. The design and implementation of collaborative activities are essential in order for courses to remain relevant for aspiring students, practice, and society. A deeper understanding of the learning processes, outcomes, and context factors involved, may lead to effective implementation of such approaches in higher music education. To our knowledge, such an investigation of empirical research has not yet been conducted. In the current study, we aimed to collect and review empirical evidence from the literature on this topic.

We adopted Biggs's 3P model (2003) as a conceptual framework for presenting our findings in an organised way. According to Biggs (2003), the basic components of student learning are included in the sequence of Presage-Process-Product stages, representing student factors and teaching context, learning-focused activities, and learning outcomes. The 3P model was developed from the perspective of student learning

in the whole of the learning system and can be applied in course design. The 3P model moves from left to right, although all aspects influence each other and are interrelated. Lebler (2008) used the 3P model to increase understanding of peer learning in an undergraduate popular music programme. In the current study, we adapted the model to develop understanding of collaborative learning in conservatoire education (see Figure 2.1). This study aimed to review existing research on conservatoire-based collaborative learning activities and was directed by the following questions:

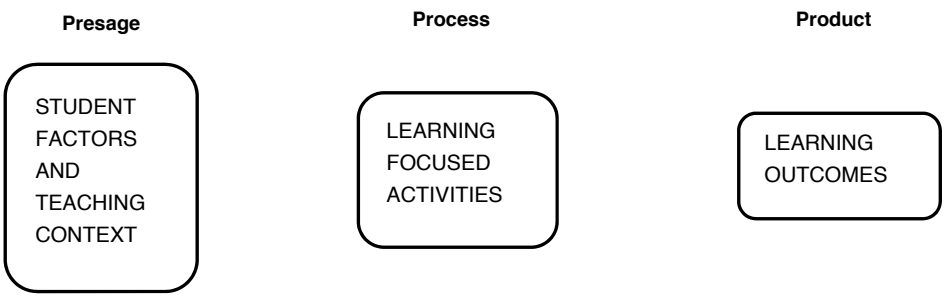
(1) What are the learning outcomes of collaborative learning activities?

(2) How are learning-focused activities related to these outcomes?

(3) How are learning and teaching context factors related to these outcomes?

FIGURE 2.1

BASIC COMPONENTS OF THE 3P MODEL (BIGGS, 2003).



2.4 METHODS

In line with the methodology of a systematic literature review, we used PRISMA principles (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) as guidelines to commence, carry out, and report our review (Liberati et al., 2009; Moher et al., 2009); we also consulted the updated version (Page et al., 2021).

2.4.1 DATA SEARCH

An extensive electronic database search was performed on all databases available at a research university library (Leiden University) in the Netherlands to retrieve the relevant literature. This meta-database includes databases such as Web of Science, JSTOR, Springer Open, SAGE complete, and Taylor & Francis. Search terms were

grounded in the definition of collaborative learning put forward by Smith and MacGregor (1992). Databases were searched using keywords and Boolean logic, including conservatoire, higher music education, music academy, collaboration, peer, group, team, and community. The first search was done on 20 October 2020, resulting in 1,389 database items; the search was repeated using the same keywords on 1 June 2021; this served as the cut-off date for our last check for evidence of published articles, resulting in 1,417 database items.

2.4.2 DATA SELECTION

A PRISMA flow chart (Page et al., 2021) was used to demonstrate the various steps in the study selection process (Figure 2.2). Besides the database search result of 1,417 articles, we browsed a relevant selection of major music education journals by hand, including British Journal of Music Education, International Journal of Music Education, Music Education Research, Research Studies in Music Education, and Psychology of Music, bringing about 62 extra items. Searches were merged and overlap was removed in Endnote X9, following which 894 items remained. Title, keyword, and abstract screening followed, which resulted in the exclusion of all articles that did not meet the selection criteria. Peer-reviewed studies were included if they met these criteria:

(a) Must relate directly to the research questions.
(b) Recency: must have been published from 2000 onwards.
(c) Language: must be written in English.
(d) Participants: must include undergraduate students (Bachelor's or first cycle of studies).
(e) Must be based on empirical research (any design).

Based on these criteria, the first author assessed 894 studies to determine “yes”, “maybe”, or “no” (Liberati et al., 2009). Studies with “yes” or “maybe” were shifted into the next phase. Studies were excluded based on title, keywords, and abstract (n = 758), for reasons such as not being focused on higher music education or on pedagogy; after this, 136 studies remained. Next, full-text versions were obtained and screened for eligibility based on the same selection criteria. Subsequently, studies were excluded based on full-text screening (n = 85), for reasons such as not being empirical research and not including undergraduate students; after this, 51 studies remained. Snowballing was performed on selected articles, resulting in extra items (n = 21), of which only three articles were eligible. In the last screening of 51 full texts, we excluded studies focused on

other strands or directions (i.e., music therapy, music education), and studies not on collaborative learning as defined in the current study (n = 32). The combined total of full-text articles that were screened (n=157), led to a total of 22 articles to review (see Appendix B), which complied with all selection criteria, consisting of articles from automated search (n = 19) and from snowballing (n = 3).

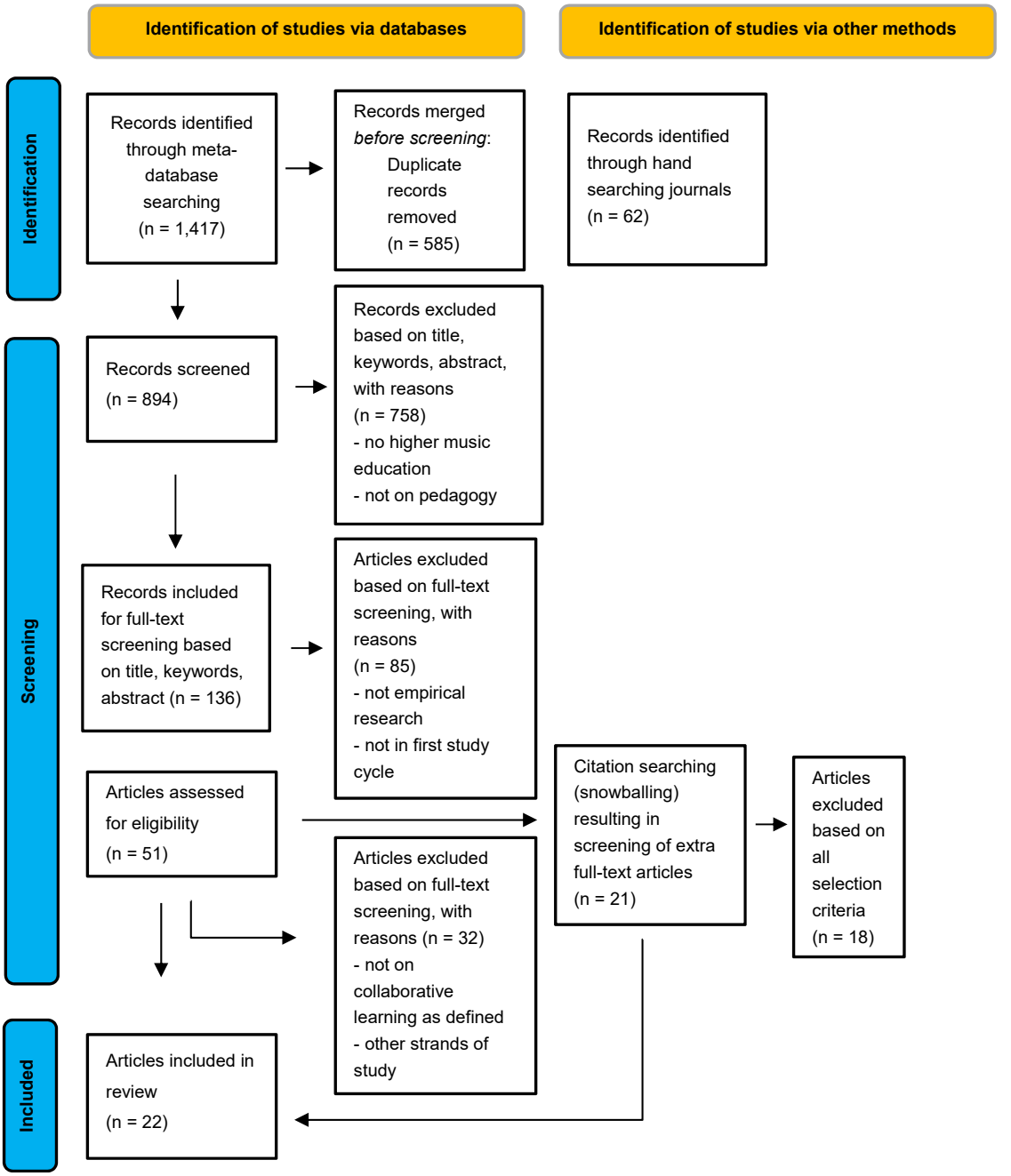
2.4.3 DATA EXTRACTION AND ANALYSIS

Descriptive data (author(s), date, country, methodology, aims, results) and data related to our research questions (learning outcomes, learning activities, learning environment) were extracted from studies meeting all inclusion criteria. Data related to our research questions were extracted from the results and conclusion sections. To determine the trustworthiness of results in relation to the weight of evidence, we also included methodological data. We refrained from quality appraisal of the selected studies. The co-authors independently reviewed 20% of the articles; all authors discussed their outcomes. The authors discussed disagreements until they were resolved.

A thematic analysis of selected studies was performed in stages (Braun & Clarke, 2006). First, a systematic description was made for the included studies in a descriptive map (Appendix C). Subsequently, the analysis of our findings was guided by the research questions and by the adopted conceptual framework of Biggs's 3P model (2003). To organise and synthesize our findings, we used an adapted version of the 3P model framework (Figure 2.3). We categorized our findings (Appendix D) according to the factors of learning outcomes (product factors: cognitive quantitative, cognitive qualitative, and affective outcomes), learning-focused activities (process factors: collaborative learning including active participation, interaction), and learning and teaching contexts (presage factors: student background, and learning context setting, approach, and teacher role).

FIGURE 2.2

FLOW DIAGRAM OF STUDY SELECTION PROCEDURE.

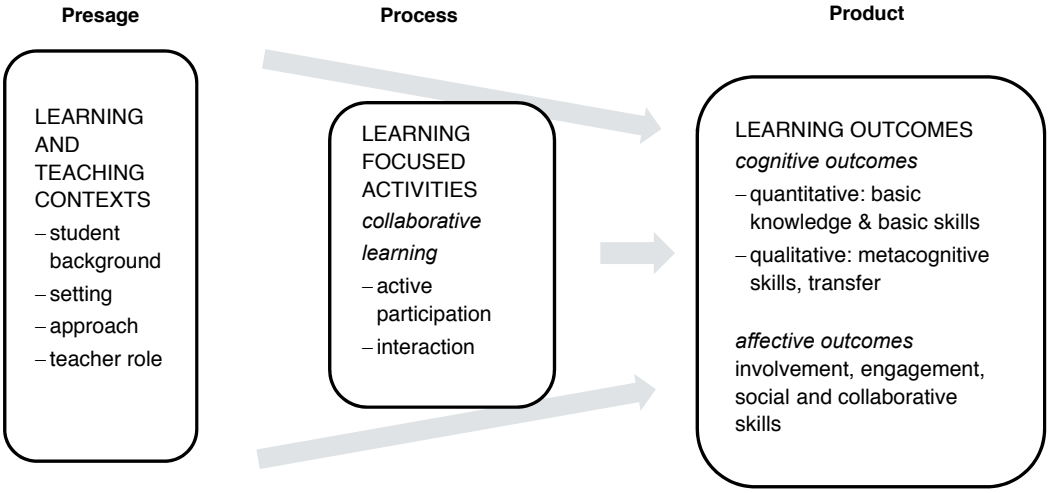


We subsequently compared and grouped our findings according to the verbs and descriptors related to the SOLO taxonomy (Biggs & Collis, 1982; Biggs & Tang, 2007). The SOLO taxonomy (Biggs & Collis, 1982) stands for Structure of the Observed Learning Outcome; it describes development in learning from basic to complex tasks, including cognitive and affective outcomes. In this taxonomy, the quantitative cognitive phase is divided into uni- and multi-structural levels incorporating basic knowledge and skills. Quantitative cognitive outcomes include an increase in knowledge (Biggs & Tang, 2007, p. 76). They relate to information, ideas, and perspectives that learners need in order to develop an understanding that allows for further learning. Qualitative cognitive outcomes have related and extended abstract levels, including integration and transfer involving a deepened understanding through structuring information and integration in the whole. Affective outcomes refer to involvement and engagement in the learning situation. Our findings are summarized in tables (Appendices C & D); to enable deep insight, we used a narrative to synthesize the research.

2.5 THEMATIC OVERVIEW OF COLLABORATIVE LEARNING

First, we present our findings according to the learning outcomes of collaborative learning activities. We then proceed to how learning outcomes were influenced by related factors (learning-focused activities, learning and teaching contexts) in the learning system (see Figure 2.3).

FIGURE 2.3
ADAPTED 3P MODEL FOLLOWING BIGGS (2003).



2.5.1 LEARNING OUTCOMES FROM COLLABORATIVE LEARNING ACTIVITIES

The product stage in the 3P model (Biggs, 2003) includes quantitative cognitive (facts, skills), qualitative cognitive (structure, transfer), and affective (involvement, engagement) outcomes. Both qualitative cognitive and affective outcomes appeared more in the reviewed studies than did quantitative cognitive outcomes.

Quantitative Cognitive Outcomes. Evidence of the development of basic knowledge and skills was found in six studies related to musical knowledge, repertoire and style knowledge, remembering music, knowledge of instruments (Barratt & Moore, 2005; Kokotsaki & Hallam, 2007; Varvarigou, 2017a, 2017b; Zhukov & Sætre, 2021), and the operation of studio equipment (King, 2008; Lebler, 2007, 2008). Verbs associated with this phase include memorize, identify, recognize, define, find, label, match, name, quote, recall, recite, order, tell, write, imitate, describe, list, report, discuss, illustrate, select, narrate, outline, and separate (Biggs & Tang, 2007, p. 80). Nine studies were identified in which students developed identifying, describing, and discussing skills related to listening to their peers' playing (Bjøntegaard, 2015; Blom, 2012; Blom & Poole, 2004; Daniel, 2004a, 2004b; Reid & Duke, 2015; Rumiantsev et al. 2017). Other studies (e.g., Barratt & Moore, 2005; Daniel, 2004a; Kokotsaki & Hallam, 2007; Lebler, 2007, 2008; Varvarigou, 2017a, 2017b; Zhukov & Sætre, 2021) reported on learning outcomes related to the development of basic musical, technical, analytical, aural, performance, creative, improvisational, inner listening, ear-training, and sight-reading skills.

Qualitative Cognitive Outcomes. Regarding practical application and the integration of thinking and management skills, we found a report of the development of organisational and problem-solving skills and effective planning (Virkkula, 2016b), and also one related to recording and production tasks (King, 2008). Relational aspects of the learning outcomes may be described using verbs like apply, integrate, analyse, explain, predict, conclude, summarize, review, argue, transfer, make a plan, characterize, compare, contrast, differentiate, organise, debate, make a case, construct, review and rewrite, examine, translate, paraphrase, and solve a problem (Biggs & Tang, 2007, p. 80).

Reasonable evidence of relational aspects and the integration of knowledge and skills was found in students' constructive contributions in a peer learning environment (Daniel, 2004a, 2004b; Forbes, 2020; Hill, 2019; King, 2008; Latukefu, 2009, 2010; Lebler, 2007, 2008; Reid & Duke, 2015; Rumiantsev et al., 2017): leveraging

connections, valuing feedback, sharing ideas, connecting and collaborating, relating to classmates, taking responsibility for assessing peers, and sharing opinions. In student-guided settings, students participated in discussions, reflected on the processes, and employed critical listening and critiquing of peers as ways of benchmarking themselves (Reid & Duke, 2015). In a vocal course (Latekefu, 2009), students revealed a greater awareness of ideas and perspectives, identification of quality, the ability to reflect, and better comprehension of musical aspects. In other studies, students exhibited a comprehensive understanding of the complexities of the music they were studying (Zhukov & Sætre, 2021), better understanding of the significance of players' mutual interactions (Virkkula, 2016a), more risk-taking in thinking, and increased identification of others' creative styles (Blom, 2012). Students were found to possess more control over their own learning of singing: they worked out what to do; they devised strategies for fixing problems, for improving their practice, and they moved towards the goal of self-regulated learning (Latukefu, 2009).

Furthering relational aspects and showing the ability to transfer these to other contexts or domains are described in the extended abstract level (Biggs & Collis, 1982). Examples of verbs include generalize, reflect, generate, create, compose, invent, and originate (Biggs & Tang, 2007, p. 80). Students showed a sense of ownership through critically evaluating the performances of peers and through self-reflection, revealed other approaches to learning, and were ready to take on more and other roles in the context of performance (Blom & Poole, 2004). The transfer of acquired knowledge and skills to other contexts was found in an inter-arts project, where students had transformed existing knowledge through proximity, embedded reflection, and interactional dynamics (Blom, 2012).

Affective Outcomes. Affective outcomes including involvement, level of engagement, and students' attitudes towards their learning were found across various studies (Barratt & Moore, 2005; Bjøntegaard, 2015; Blom, 2012; Blom & Poole, 2004; Daniel, 2004a; Hanken, 2016; Forbes, 2020; Hill, 2019; Latekefu, 2010; Lebler, 2007, 2008; Reid & Duke, 2015; Varvarigou, 2017a, 2017b; Virkkula, 2016a, 2016b; Zhukov & Sætre, 2021). For example, Varvarigou (2017a) described how students gained confidence by playing together, how they complemented each other, developed social skills, provided and received support from peers, taught one another, and developed

leadership, social awareness, communication, and teamwork skills in their group classes in playing by ear.

Students collaborating with a professional musician in ensembles showed more commitment and reciprocal responsibility. They worked on joint enterprises, created solidarity, and reflected critically on personal and collaborative actions (Virkkula, 2016a). Students behaved like responsible group members, were more constructive in their remarks, and showed more interest in each other's playing (Bjøntegaard, 2015). Forbes (2020) described how students in heterogeneous ensembles experienced influential connections, fun and inspiring challenges followed by changed perspectives, access to new ideas, and engagement in new learning experiences and skills resulting in improved performance standards. Students showed more consciousness of belonging, doing, and experiencing. Students displayed more openness and flexibility towards new musical ideas, and enhanced intrinsic motivation for music through group music-making (Kokotsaki & Hallam, 2007; Zhukov & Sœtre, 2021). They were involved in learning new repertoires and skills, leading to higher levels of enthusiasm (Varvarigou, 2017a, 2017b), and they engaged in different playing situations and appeared more interested in what happened around them (Virkkula, 2016a, 2016b).

2.5.2 LEARNING FOCUSED ACTIVITIES

Related to the process stage, learning-focused activities are regarded as having deep or surface approaches to learning, where the first refers to an integrated process leading to better understanding, while the second is a more fragmented approach resulting in unconnected bits of knowledge (Biggs, 2003). We found descriptions of a deep approach to learning in all studies through core factors like active participation and interaction, as included in our adapted version of the 3P model.

Active Participation. Active participation, as opposed to passive listening, was a feature of all selected studies. Students participated actively in teacher-guided horn (Bjøntegaard, 2015), piano (Daniel, 2004a, 2004b; Hanken, 2016), songwriting (Hill, 2019), violin/viola (Hanken, 2016), or vocal (Hanken, 2016; Latukefu, 2009, 2010; Rumiantsev et al., 2017) group lessons. Playing or presenting prepared compositions, songs, or pieces by students in group lessons was followed by discussion, peer feedback, and reflection on musical matters and on the provided feedback. Reflection covered both

asynchronous reflective journal-writing (looking back on actions) and real-time synchronous reflection in the actual context or situation (in action).

In other studies, students engaged in less formally organised activities like group music-making in rehearsals and performances within instrumentally heterogeneous chamber music ensembles (Kokotsaki & Hallam, 2007; Zhukov & Sætre, 2021), popular music groups (Forbes, 2020), and jazz and pop ensembles (Virkkula, 2016a, 2016b). Students engaged in aural training, group creativity, and improvisation (Varvarigou, 2017a, 2017b), and also in music production in a recording studio (King, 2008; Lebler, 2007, 2008), leading to better developed creative skills. Together with students from dance and theatre departments, students engaged in interdisciplinary collaboration (Blom, 2012), which resulted in a wide range of learning outcomes, including collaborative and teamwork skills, increased communication and negotiation, and an expansion in creativity. Overall, active participation has been found to have a positive effect on the acquisition of basic knowledge and skills, and on the development of metacognitive skills (critical and reflective skills), creativity, and group responsibility and social awareness.

Interaction. Peer interaction was a significant factor in the learning process. A peer is generally considered to be a student in the same learning situation, or, in the conservatoire context, of the same instrument. Peer interaction has been regarded as a process of collaboration needed to reach learning goals (Webb, 1989), including both domain-specific content and social aspects. Next to musical skill development, peer interaction (including working with like-minded people and making friends), social involvement, group success, social skill development, and teamwork skills were amongst the highest rated outcomes related to participation in ensembles (Kokotsaki & Hallam, 2007).

Interactions taking place in peer-assessment engaged students in forms of discussion, critique, observation, attentive listening, questioning, peer feedback, and reflection. Negotiation as a form of interaction took place when student assessors negotiated assessment criteria (Blom & Poole, 2004; Latukefu, 2010), when students negotiated their ideas in discussions and peer feedback (Bjøntegaard, 2015), and when co-constructing knowledge and in reflection on experiences (Virkkula, 2016a). Another type of interaction we found concerned novice vocal students achieving tasks while scaffolded by a more capable learner or expert (Latukefu, 2009), with just enough support to reach their zone of proximal development (ZPD; Vygotsky, 1978). The various forms of interaction increased students' social skills and metacognitive skills.

2.5.3 LEARNING AND TEACHING CONTEXT

In our adapted version of the 3P model, we included the following presage factors: the backgrounds of students as student factors; and setting, approach, and teacher role as learning context factors.

Student Factors: Background. Nearly all studies included students with a musical background, who had passed entrance auditions; one study included mixed music majors and non-majors (Hill, 2019). Within the selected studies, students had backgrounds in pop music (Forbes, 2020; Hill, 2019; King, 2008; Lebler, 2007, 2008), jazz (Barratt & Moore, 2005), jazz and pop (Rumiantsev et al., 2017; Virkkula, 2016a, 2016b), and classical music (Bjøntegaard, 2015; Daniel, 2004a, 2004b; Hanken, 2016; Kokotsaki & Hallam, 2007; Varvarigou, 2017a, 2017b; Zhukov & Sætre, 2021). Some studies (Forbes, 2020; Varvarigou, 2017a, 2017b) specifically mentioned including a heterogeneity of students. Heterogeneous groups were found to optimize learning: students who differed in musical training, level, age, life experience, gender, and personality increased opportunities for interaction and negotiation. In some studies, student background was specifically taken into consideration as a factor influencing the design of learning context and learning-focused activities (Forbes, 2020; Lebler, 2007, 2008).

Learning Context: Setting. Collaborative learning was found to take place in a variety of situations, sometimes in heterogeneous groups (Blom, 2012; Forbes, 2020; Hill, 2019; Latukefu, 2009; Varvarigou, 2017a, 2017b) and sometimes in homogeneous groups (Bjøntegaard, 2015; Daniel, 2004a, 2004b; Hanken, 2016; Latukefu, 2010; Reid & Duke, 2015). Other settings included were those of students working in groups on open-ended tasks (Varvarigou, 2017a, 2017b), in discussion groups (Reid & Duke, 2015), in the recording studio (King, 2008; Lebler, 2007, 2008), in a performance seminar (Daniel, 2004b), and in chamber music groups (Kokotsaki & Hallam, 2007; Zhukov & Sætre, 2021). Described collaborations in the recording studio were related to informal learning, such as in popular music practices (see Green, 2001). Integration of peer assessment in a setting led in some studies to students assessing their peers in assessment panels (Barratt & Moore, 2005; Daniel, 2004b; Lebler, 2007, 2008).

Learning Context: Approach. Although all studies used peer-to-peer interaction, some differences in approach were discovered. We found four different approaches: (1) peer assessment, (2) teacher-guided group lessons, (3) participative music making in music

groups (across various studies in communities), and (4) student-guided teamwork. In all studies, the chosen approach was deliberately designed, implemented, or piloted.

(1) Peer Assessment. According to Blom and Poole (2004), peer assessment may be regarded as an extension of peer-to-peer interaction, the learning process as a whole, and the education of musicians. Six studies included peer assessment (Barratt & Moore, 2005; Blom & Poole, 2004; Daniel, 2004b; Latukefu, 2010; Lebler, 2007, 2008). Engaging students in the discussion and development of assessment criteria formed a crucial aspect of peer assessment. The peer-assessment approach was found to lead to increased qualitative learning outcomes, including mostly metacognitive skills such as critical, reflective, evaluative, critiquing, and (self) assessment skills.

(2) Teacher-guided Group Lessons. In teacher-guided group lessons (Bjøntegaard, 2015; Daniel, 2004a; Hanken, 2016; Hill, 2019; Latukefu, 2009; Rumiantsev et al., 2017), one student would perform while others were listening, observing, providing feedback, and sometimes discussing specific topics. Typical qualitative learning outcomes included an increase in communication and feedback skills. Affective learning outcomes included benchmarking with other students, self-assessment, an increase in self-confidence, independence, and responsibility.

(3) Participative Music Making. Several studies reported on participative music making taking place in a community (of practice, of learning), where students would work together with a professional musician (Forbes, 2020; Virkkula, 2016a, 2016b; Zhukov & Sætre, 2021). In this approach, students showed strong development of collaborative skills, feedback skills, discussion skills, and communication skills.

(4) Student-guided Teamwork. Some studies included the approach of student-guided teamwork (King, 2008; Kokotsaki & Hallam, 2007; Reid & Duke, 2015; Varvarigou, 2017a, 2017b). This resulted in increased cooperation; collaborative, social, communication, and creative skills; increased feelings of group responsibility, self-esteem, self-achievement, and self-confidence; and intrinsic motivation. Students gained confidence through negotiation of meaning or vision (Blom, 2012), and through self-reflection.

Learning Context: Teacher Role. In various studies (Lebler, 2007, 2008; King, 2008; Kokotsaki & Hallam, 2007; Reid & Duke, 2015; Varvarigou, 2017a, 2017b), the teacher took on the role of organiser of the course and facilitator of the process, while not being present in the same room as the students. The facilitating role consisted of design and organisation of the course or project, carrying out preparations (prescribing exercises,

providing course materials), being available for questions and support, and clarifying and evaluating assignments.

In teacher-guided group lessons, the teacher facilitated the feedback process and took a similar position to that of the students according to some set rules (Bjøntegaard, 2015; Daniel, 2004a; Hanken, 2016; Latukefu, 2009). In some studies, newcomers or less advanced students were assisted and encouraged by the teacher. Reduced guidance, with or without the teacher present, resulted in increased teamwork; collaborative, social, communication, and feedback skills; and metacognitive development, including reflective, critical, and evaluative skills. Furthermore, students had greater self-confidence and self-efficacy beliefs, and increased their agency over the learning process.

2.6 DISCUSSION AND CONCLUSION

We have provided a thematic overview of learning outcomes related to collaborative learning and factors influencing those learning outcomes. First, we found that qualitative learning outcomes were omnipresent; affective outcomes were present in various studies, and quantitative learning outcomes were present across some studies. Second, regarding the relationships between learning outcomes and learning-focused activities, we found that there was a slight difference between active participation and interaction. Although they both led to qualitative learning outcomes like increased metacognitive skills and better communication skills, the development of social skills was given slightly more weight through aspects of interaction, and aspects of metacognition were given slightly more weight through active participation. Third, the learning context, meaning the approach used and the role of the teacher, was influential. As regards the approach, we found generally that the teacher's reduced guidance stimulated students to take on more responsibility, which led to increased self-confidence and self-esteem.

Regarding the different types of approaches, peer assessment led to greater qualitative learning outcomes, especially in metacognition, with better reflective, evaluative, and critical skills; group lessons and participative workshops led to increased communication and feedback skills; while no teacher intervention during collaborative work resulted in a variety of both qualitative and affective learning outcomes; the latter led to outcomes such as collaborative, social, and creative skills, group responsibility, and increased feelings of self-confidence and self-efficacy.

2.6.1 SELF-REGULATED LEARNING

Collaborative learning settings offered a rich learning environment, stimulating students to participate and interact actively, involving personal and social awareness and consequences, initiative, trust, flexibility towards new ideas, and different (learning) strategies. Reflective practices appeared to bring new perspectives and levels of awareness to students, and encouraged self-regulated learning. Collaborative learning processes were reinforced by interactive, supportive, progressive, structured, authentic, and in some cases situated environments, and students were actively engaged in the process. The different strategies that stimulated students to learn included scaffolding, legitimate peripheral participation, and informal learning.

We found in all studies that collaborative learning activities and situations offered ample opportunity for peer-to-peer interaction, resulting in increased talk, discussion and debate, peer feedback, observation, negotiation, and group awareness, leading to improved collaborative skills, critical skills, and problem-solving skills, and instigating changed self-perceptions, perceptions of others, and perceptions of the profession. The inclusion of reflection on content, process, and self also led to increased self-evaluation and self-regulated learning.

2.6.2 STUDENT-CENTRED LEARNING ENVIRONMENT

A large variety of curricular activities was included, ranging from a small group horn lesson to participative ensembles with professional musicians collaborating with students, to a short-term interdisciplinary project. All studies indicated differentiation in the roles and tasks of teachers and students, and groups were organised and arranged based on the urge to develop a more student-centred environment and stay away from the teacher-led master-apprentice model. Teachers were regarded as designers of a learning environment and facilitators of a process rather than as transmitters of expertise.

The situations investigated involved students from jazz, pop, and classical departments, and ranged from a teacher-guided group process in which the teacher, as a group member, also addressed comments to the students, to situations where no teacher was present and only conditions for group collaboration were facilitated. Students presented work-in-progress and reported feeling supported to ask questions and experiment. Questioning, making mistakes, and peer-to-peer explanations have been found to better stimulate learning when learners do engage in such interactions (Webb, 1989).

The review showed that the conservatoire curriculum inherently includes activities and situations suitable for collaborative learning, since group music-making in ensembles is already part of the curriculum, as are small group "skills" lessons such as ear training, music theoretical aspects (analysis, harmony, counterpoint), and, depending on the department or faculty, subjects like sight-reading, improvisation, and drama.

In sum, collaborative learning was found to foster and sustain a positive, safe, student-centred environment, including co-construction of knowledge and understanding, development of social, metacognitive, and professional skills, and high feelings of self-efficacy amongst students. Personal, social, and self-regulated learning competences were addressed in collaborative learning, forming building blocks for lifelong learning (European Commission, 2019).

2.6.3 LIMITATIONS OF EVIDENCE AND OF REVIEW PROCESSES

A first important limitation of evidence concerns differences in empirical settings in the reviewed studies, as well as limited comparability of included aspects due to differences in the theories, concepts, and terminology used. While conducting the review, aspects such as methodological quality, methodological relevance, and topic relevance were screened; however, quality appraisal of these aspects was not a component in the selection process. It was our aim to provide a broad and comprehensive overview of empirical research on the topic and we regarded the peer-review process the articles had been subjected to as an assurance of quality.

A second aspect that might limit the evidence derives from the fact that 12 of the 22 articles were conducted by teacher-researchers; this perspective may have led to some bias. Another potential limitation is publication bias, meaning that generally positive outcomes or positive experiences lead to publishing: i.e., positive results are published more often. A third limitation involves the selection criterium of including literature in the English language only, which explains the large number of anglophone studies in our sample and the neglect of studies in other languages.

2.6.4 IMPLICATIONS FOR PRACTICE AND POLICY

Moving to a more multi-faceted curriculum implies reconsidering the teacher's role in developing a more student-centred environment. Reducing the hierarchical structure in the organisation of learning would allow students to take more responsibility for and

agency over their own learning, and would support self-reflection, the shaping of a professional identity, and increased feelings of self-efficacy.

Another implication is that teacher professional development would also be needed for the adaptation of teaching approaches and the pedagogical support of students. One of the recommendations of a lifelong learning policy and competency-based approach is to embrace longer-term support for changes in teaching, and support of collaborations between teachers (European Commission, 2019).

A final implication entails the recommendation for higher music education institutions to attune their internal quality assurance and external validation more to educational processes and significant interactions between learners, and between teachers and learners, than to course evaluations.

2.6.5 RECOMMENDATIONS FOR FUTURE RESEARCH

The positive outcomes of this review on collaborative learning add to the growing body of research on such approaches in the context of higher music education. In furthering understanding of collaborative learning within the conservatoire, teacher perspectives on teaching in group settings and teachers' perceptions of collaborative learning activities, approaches, interactions, and effects, form areas for future research. Other relevant areas include collaborative learning in music teacher education, music therapy, and inter- and transdisciplinary collaborative settings within the breadth of higher (arts) education. Finally, the inclusion of alumni studies, providing views of career paths and lifelong learning as perceived by conservatoire alumni, might increase understanding of collaborative learning experiences and longer-term influences.

It is our hope that the exploration of collaborative learning described in this review will assist readers in understanding its value for their own context.