



Signature Pedagogies in Collaborative Creative Learning in Advanced Music Training, Education and Professional Development: A Meta-Synthesis

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Recent debates concerned with Western music performance training have grappled with the question of what kind of education and training will best equip music students to navigate an increasingly dynamic and complex professional environment. Increasingly, attention has turned to the role of collaborative creativity and how collaborative, creative skills can be nurtured. Therefore, this paper interrogates the signature pedagogies of collaborative creative learning in advanced music training, education and professional development. Two research questions were addressed: 1) how can creative collaboration in advanced music training, education and professional development be understood through the lens of signature pedagogies; and 2) what are the core values that underpin signature pedagogies of collaborative creativity in advanced music training, education and professional development. A meta-synthesis of relevant qualitative research published since 2000 was carried out. Ten studies were retained. At the implicit level of signature pedagogies of collaborative creativity, three third-order constructs included a *commitment to learning as participation in a community of collaborative practice, valuing collaboration in a creative artistic identity, and the capacity to embrace ambiguity*. A further three third-order constructs – *relational, experiential and creative exploration* – comprised the deep level of pedagogical principles. At the surface level, signature pedagogical practices were *structured as social and situated*, while *reflection in, on and for action* was at the core of collaborative, creative pedagogical practices.

Keywords: signature pedagogies, collaborative creativity, music, higher education, professional development (PD)

INTRODUCTION

Recent debates concerned with Western music performance training have grappled with the question of what kind of education and training will best equip music students to navigate an increasingly dynamic and complex professional environment (Gaunt et al., 2021). While the predominant master-apprentice model has been widely discussed and critiqued (e.g., Creech and Gaunt, 2012; Daniel and Parkes, 2017), more recently attention has turned to creative collaboration as being essential for professional training (Barrett et al., 2021), with a particular focus on the

fundamental role of collaborative ensemble experiences within advanced music education (Gaunt and Treacy, 2020). For example, music students develop expertise in collaborative small and large ensemble performance (bands, chamber groups, orchestras, choirs), as well as in the context of collaborative creative work in community contexts, between composers and performers, between performers and recording engineers, and within interdisciplinary contexts involving (for example) dance, opera, visual arts or cinematography. Questions have therefore emerged concerning the pedagogies (e.g., the facilitation of learning and the approaches or strategies that support learning) that can frame and facilitate collaborative creative learning in these contexts.

Theoretical conceptualisations of collaborative creative learning are informed by a view of creativity as social, communicative and/or distributed (Barrett, 2014; Glăveanu, 2014). From this perspective, creativity is seen as a social construct – whereby creative acts are joint endeavors comprised of ‘persons, processes, practices, places and ecologies that support collaborative creative thought and practice’ (Barrett, 2014, p. 3). John-Steiner (2000) paired this view of creativity with collaboration, proposing that creative collaboration may be distributed (occurring in shared thought communities), complementary (where knowledge, expertise, roles or individual characteristics partner in complementary ways in the service of shared goals), family (where collaboration is shaped by companionship, a sense of belonging and mutuality, and where roles and responsibilities are shared across tasks and may shift over time), or integrative (where joint endeavors effect transformative change) (John-Steiner, 2000). Crucially, “collaborative creativity exceeds collaborative knowledge construction, as something novel to the surrounding community has to be created” (Hämäläinen and Vähäsantanen, 2011, p. 174).

Over the past decade creative and collaborative learning pedagogies have become a focus for higher music education (see Gaunt and Westerlund, 2013; Gies and Sætre, 2019). This has been propelled in part by a changing professional landscape where musicians increasingly find themselves in potentially collaborative roles and interdisciplinary contexts requiring creative approaches (Gaunt and Treacy, 2020). For example, attention has turned to the value of improvisation as mindset, with Kleinmintz et al. (2014, p. 1) reporting that the “deliberate practice of improvisation may have a releasing effect on creativity,” with implications for decisions concerning the emphasis attaching to improvisatory pedagogical practices in advanced musical training. Notwithstanding many arguments in favor of collaborative learning as a form of professional preparation, others have cautioned that students may encounter a disjuncture between collaborative pedagogies and professional disciplinary practices that remain resistant to collaborative approaches (Christophersen, 2013).

Several researchers have explored and piloted innovative pedagogies that challenge the traditional apprenticeship model associated with instrumental teaching and learning (e.g., Rakena, 2016; Treacy and Gaunt, 2021; Zhukov and Sætre, 2022). For example, Treacy and Gaunt (2021) explored the role of reflection in making explicit artistic values, traditions, practices

and aspirations. Their exploratory interview study with music ensemble instructors and other higher education arts professors suggested that reflective dialogue was “potentially driving creativity and generating new knowledge and ensemble practices ... Interconnections between reflective practice and collective creativity [were] particularly important for supporting teachers and students in expanding their professionalism” (p. 498).

Beyond these previous studies, there has been little analysis and synthesis of the pedagogies that underpin and characterize the specific phenomenon of creative collaboration in advanced music education and training. This paper addresses that gap with a meta-synthesis of qualitative empirical studies specifically concerned with collaborative creative learning in higher music education and professional music training, framed by the theoretical idea of signature pedagogies (Shulman, 2005).

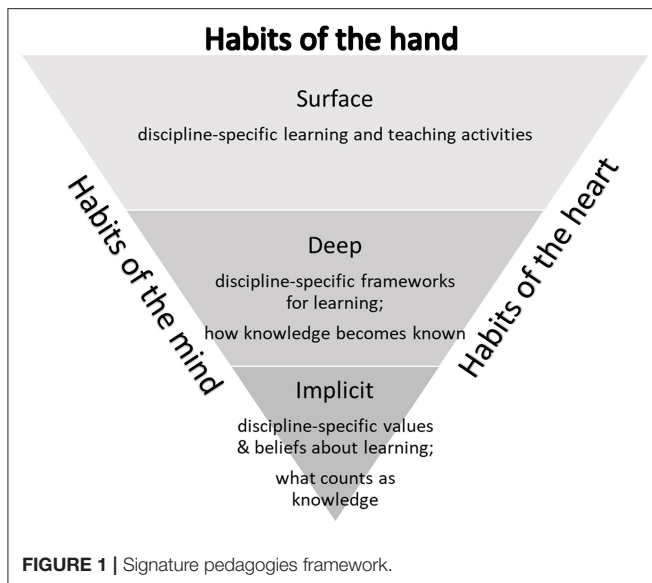
BACKGROUND

Signature Pedagogies

The term “signature pedagogy” was coined by Shulman (2005), referring to the characteristic ways of learning and teaching that connect professional education or training with professional practice within specific disciplinary contexts. Signature pedagogies reveal the heart of a discipline, encompassing its culture, ethos, and particular “ways” of approaching knowledge creation. Shulman conceptualized signature pedagogies as the conduit between professions and professional training or education, functioning as the operationalization of discipline-specific epistemological (what counts as knowledge) and ontological (how knowledge becomes known) positionality. From this perspective, a discipline’s signature pedagogies may be understood as a “microcosm of the wider discipline—including its assumptions and biases” (McLain, 2021, np).

Signature pedagogies, according to Shulman, have a temporal dimension, in that specific phases of professional education may be associated with distinctive (and different) signature pedagogies. Signature pedagogies are also thought to be multidimensional, concerned with training habits of the mind (how to think), habits of the hand (how to perform) and habits of the heart (how to behave with professional integrity). Finally, signature pedagogies are multi-layered. At the most profound *implicit level* may be found the values, beliefs or moral codes that reside at the foundation of disciplinary ways of thinking, performing and behaving. At a mid-level (labeled the *deep level* by Shulman) characteristic frameworks and principles for learning and teaching are found, while at the *surface level* are specific pedagogical practices. The relationship between these three levels provides an overarching coherence whereby professional values and beliefs are made transparent through orientations to learning and teaching and via specific activities that occupy learners and teachers in particular disciplines (Figure 1).

Shulman emphasized the value of well-established and enduring signature pedagogies – whereby predictable and well-understood frameworks for learning could free the learners and their teachers to focus on learning complex skills and knowledge, without having to think about *how* the learning could be framed. Notwithstanding this, Shulman also acknowledged



the danger of rigid and repetitive ways of learning and teaching that risk perpetuating practices that have ceased to be relevant within a changing professional landscape. This apparent tension – between consistency and coherence on the one hand and responsiveness and flexibility on the other – is reflected in Shulman’s model, whereby signature pedagogies involve embracing uncertainty and ambiguity. In this vein, he highlighted that the professions involved student performance of their professional roles, thus introducing dimensions of unpredictability and context-dependence (i.e., when students “perform” their roles), accountability (i.e., students are accountable to their peers, or “co-performers”) and visibility (i.e., in the enactment of their professional roles, students become both visible and vulnerable). As Haynie et al. (2012, p. 7) have stated, “developing signature pedagogies in the professions might change as the nature of the professions shift and morph and as practitioners in the fields debate values.”

Applications of the Signature Pedagogy Framework in Creative and Collaborative Arts Disciplines

Since the publication of Shulman’s seminal work on signature pedagogies (2005), the concept has been applied in several disciplinary contexts (see Gurung et al., 2009; Chick et al., 2012) including the arts. For example, the idea of signature pedagogies has framed research and theoretical discussions concerned with architecture and design (Crowther, 2013; Caldwell et al., 2016; McLain, 2021), languages (Galina, 2017), literary studies (Heinert, 2017; Heinert and Chick, 2017; Clapp et al., 2021), dance (Kearns, 2017), theater (Kornetsky, 2017), visual arts (Sims and Shreeve, 2012; Motley, 2017) and music (Hastings, 2017; Love and Barrett, 2019).

Much of the previous work concerned with signature pedagogies in the arts has theorized the pedagogical role and purpose of “critique,” defined in the context of theater studies

as “the process of giving feedback (first oral and sometimes written) to a performer immediately after the performance ends” (Kornetsky, 2017, p. 243). Critique — practiced as “questioning, listening, and providing clear reasons for active choices” — provides the structure whereby theater students learn to justify their own performance approaches, learn to think critically about others’ performances, and in so doing learn to “use the language of the discipline,” applying this to artistic and aesthetic processes and choices (Kornetsky, 2017, p. 243). Likewise, in the context of literary studies Heinert (2017) and Heinert and Chick (2017) proposed that implicit values and beliefs about literary significance — including complexity, ambiguity and the multiplicity of meaning — were cultivated through modeling the habits of critique, articulated through pedagogies such as conversation, debate and questioning.

This concept of “critique” as a signature pedagogy that reveals implicit values has emerged as one prominent facet of signature pedagogies in other arts disciplines. For example, critique coupled with consultation was identified as a signature pedagogy in the visual arts (Gordon Cohen, 2013). While critique (a *deep* structure) is described as a formal framework for giving and receiving feedback (a *surface* structure), Gordon Cohen describes consultation as a constructive process (a *deep* structure) whereby teachers and students engage in iterative dialogue (a *surface* structure) about the student’s artistic development. Both critique and consultation in turn may reveal the *implicit* beliefs and values that shape the professional ethics of interaction, approaches to subject matter, conceptual development and even technical skills.

Critique is similarly theorized as being the core signature pedagogy in dance education (Kearns, 2017). However, Kearns highlights the “major pedagogical shift in dance” that has had implications for the nature of critique. In other words, while critique has remained as a deep structure, the implicit values that it reveals have shifted (now privileging “dancers as participants”), and so too have the surface-level pedagogical practices shifted from hierarchical master-apprentice approaches to those which now encompass “complex and meaningful discussions about dance” (Kearns, 2017, p. 267–268).

In graphic design education, critique has been characterized both as a process and as a tool that links the implicit, deep and surface levels of a signature pedagogy. Accordingly, Motley (2017, p. 231) defined critique as a “structured, student-focused learning activity that serves as an assessment and a generator of critical feedback, clarifying the discipline’s objectives and values and facilitating students’ understanding of how professionals achieve their goals.” In this vein, an empirical investigation of the experience of critique as a signature pedagogy in design education was reported by Schrand and Eliason (2012). The researchers were interested in how the pedagogical practice of critique in design disciplines, defined as “the formal and public delivery of feedback to students about their work” (p. 51), was experienced in comparison with other feedback practices in the liberal arts which typically were text-based, private and solitary. Notwithstanding the potential for public critique to function as a ritualistic activity that “dramatiz[es] the symbolic [and implicit] power that the instructors and professionals wield over the

students hoping to enter the field” (p. 56), the study suggested that the design studio fostered a collaborative community where critique took place within trusting relationships.

Peer critique, somewhat akin to the formative “preliminary critique” discussed by Schrand and Eliason (2012) has furthermore been identified as a signature pedagogical practice within the context of creative writing workshops (Stukenberg, 2017). This practice of giving and receiving peer feedback takes place within workshop settings, which provide both “occasion (including deadlines) and audience” (p. 278). Just as in the dance context, through the process of creation and critique within a collaborative environment (in this case, writing, having their work read, and engaging in deep discussion about their own and others’ emergent creative work) students “develop artistic appreciation through workshop, honing their tastes and preferences through contrast with their peers, and begin to learn the professional skills of receiving and deciding how to use feedback” (p. 278).

In accordance with the idea of “workshop” as the “vessel” within which critique could take place in creative writing (Stukenberg, 2017), Crowther (2013) conceptualized the design “studio” as a signature pedagogical structure. Within those spaces (i.e., workshop, or studio) implicit values concerned with the nature of expertise and related experiential and problem-based learning may be articulated through “surface-level” pedagogical patterns. These surface pedagogical patterns pair various forms of media with learning activities (e.g., interactive forms of media paired with exploring and investigating; communicative forms paired with debating). The “studio” as a framework for signature pedagogies in art and design was investigated empirically by Shreeve et al. (2010); also discussed in Sims and Shreeve (2012), whose study comprised an analysis of 35 semi-structured interviews with art and design instructors. The “studio” was seen as fundamental – “a space of shared, prolonged, communal activity in which the process of making is visible and a focus for comment and debate by all who wander through” (p. 134). The results again revealed critique as a central pedagogical phenomenon within the “studio,” but this was characterized as student-centered, encouraging exploration, experimentation and uncertainty expressed as space for unforeseen or unimagined outcomes. Overall, signature pedagogies in these disciplines were fundamentally social and visible, being open to public scrutiny and audience engagement.

In the context of music, the idea of signature pedagogies has been applied to theorize the relationship between practice and performance (Hastings, 2017). Hastings argued that it is through methodical, systematic practice that fundamental musical understandings are both revealed and developed, thus linking the “practice mindset” to the “performance mindset.” In Hastings’ theoretical model, self-critique and critique by teachers, coaches, peers and audience reside at the surface level of a signature pedagogy where the deep structure is the practice/performance mindset, which in turn is founded upon implicit values and beliefs about the nature of musical expertise and the pathways to expertise development.

One empirical case study in music (Love and Barrett, 2019) has employed Shulman’s theoretical framework of signature

pedagogies, in an interrogation of the training and development of composers participating in a professional orchestra workshop leading to public performance of their work. In this study, expert composers worked together with advanced composer-students in a five-day workshop that included individual lessons, orchestral rehearsals, orchestration lecture-demonstrations and master classes. While this study did not explicitly investigate collaborative learning, “community and collaborative aspects of the practice” (p. 564) were illuminated. Like Stukenberg’s exploration of pedagogical spaces for creative writing, Love and Barrett identified the “workshop” as the “case” - a signature space for composition training. Here, cycles of performance and critique were framed by risk-taking, as student composers made themselves vulnerable, exposing their creative work to critique. Critique was embedded in practical apprenticeship (the surface level of finding “appropriate” ways of making creative ideas work, through guided modeling and dialogue), cognitive apprenticeship (the deep level of learning to think like a composer) and moral apprenticeship (the implicit level of behaving with integrity according to professional code among the musicians).

In summary, the idea of signature pedagogies, applied in creative arts disciplines, has highlighted process (critique), hinting at its collaborative potential within structures or spaces (e.g., workshop or studio) for creative work. Critique requires the artist to make themselves vulnerable, often within a hierarchical power relationship. Critique, as well as the spaces within which it occurs, reveals the values that shape aesthetic choices and professional ethics, yet also provides a scaffold for creative work when practiced as collaborative dialogue, questioning and exploration.

While several authors have theorized the signature pedagogies that characterize collaborative and creative education and training in specific arts disciplines, there has been very little discussion or empirical research concerned explicitly with the signature pedagogies of creative collaboration in advanced music training, education and professional development. Therefore, in this paper, our objective is to carry out a meta-synthesis of empirical studies concerned with collaborative creative learning in music, in order to contribute to understandings of the signature pedagogies that shape and support development in musical creative collaboration. Our research questions are:

How can collaborative creativity in advanced music training, education and professional development be conceptualized through the lens of the surface, deep and implicit structures of signature pedagogies?

What are the core values that underpin signature pedagogies of collaborative creativity in advanced music training, education and professional development?

METHODOLOGY

This meta-synthesis follows as the second phase of a systematic review of empirical research concerned with collaborative creativity in music (reported in Barrett et al., 2021). Our goal was to synthesize the themes and interpretations emerging from

previous research concerned with pedagogies of collaborative creative learning in advanced music training and education and to identify higher order constructs that encompassed the interpretations of research participants words and actions across a sub-set of studies identified in our systematic review (Barrett et al., 2021), concerned specifically with “collaborative creative learning ... and the related phenomenon of qualitative transformations in understanding [that] emerge from systematic and sustained cooperation between students and teacher” (Barrett et al., 2021, p. 10).

Positioned within an interpretive paradigm, meta-synthesis is an holistic approach to developing high-level conceptualisations of a phenomenon via synthesis of multiple non-contradictory and complementary perspectives or interpretations (Jensen and Allen, 1996). The process of meta-synthesis begins with data retrieval and progresses through an interpretive process of describing, comparing and reciprocally translating findings across studies. Our approach was framed by guidelines proposed by Jensen and Allen (1996), whereby the interpretive process begins with reading individual texts and identifying themes as well as specific detail concerned with the phenomenon of interest. This is followed by establishing relationships among the texts through identification of shared language, metaphors or themes. Finally, consensus with regard to overarching synthesis of understandings is achieved through repeated reciprocal translation of themes across studies, leading to the identification of higher order concepts.

Our methodological approach was further refined in accordance with guidelines for meta-ethnography, a well-established approach to meta-synthesis of qualitative research (Cahill et al., 2018). In this vein, we adopted a dialectic approach in comparing, contrasting and reciprocally translating the interpretations found among the retained papers (the second order constructs) to generate synthesized third order constructs that could be said to represent the essence of signature pedagogies in collaborative creative learning, in the specific context of advanced music training and education.

Data Retrieval

The studies included in this meta-synthesis were initially identified through a systematic review of literature concerned with collaborative creativity in advanced music training and professional education, reported in Barrett et al. (2021). Briefly, the systematic review search protocol (reported in Barrett et al., 2021): (1) had focused on the key concepts of collaboration, creativity, music, and learning; (2) was carried out using Web of Science, ERIC and JSTOR databases; (3) was limited to peer-reviewed journal articles concerned with creative collaboration or collaborative creativity in professional training and practice in music performance, improvisation and/or composition; and 4) was published in English between 1990 and 2021. Twenty-four final retained papers in the original systematic review (reported in Barrett et al., 2021) were coded using the SPIDER tool developed by Cooke et al. (2012). This included a sub-set of eight studies where “collaborative creative learning” was the focus, including: Barrett (2006), Barrett and Gromko (2007),

Blom (2012), Brinck (2017), de Bruin (2016), de Bruin et al. (2020), Dobson and Littleton (2016), and Virkkula (2016).

A further search was undertaken after publication of the systematic review, using the same search criteria as reported in Barrett et al. (2021), and limiting the year of publication to 2021. Two further studies were identified (Biasutti and Concina, 2021; de Bruin, 2021), making a total of ten papers to be included in our phase two meta-synthesis, reported in this paper.

The phenomena of interest, contexts and designs of the ten studies that formed the dataset for our meta-synthesis are set out in **Table 1**. Among the ten qualitative studies, eight carried out semi-structured interviews, five employed observational methods, three collected data in the form of reflective journals, one administered a questionnaire, and one collected audio recordings of activities. Approaches to analysis included thematic analysis (6), discourse analysis (1), content analysis (2) and interpretive phenomenological analysis (1). Theoretical frameworks included eminence theory of creative practice (Barrett, 2006); social constructivist perspectives (Barrett and Gromko, 2007; Dobson and Littleton, 2016); sociocultural theories of learning and creativity (de Bruin et al., 2020; Biasutti and Concina, 2021; de Bruin, 2021); community of practice (de Bruin, 2016; Virkkula, 2016; Brinck, 2017); and distributed collaboration (Blom, 2012).

Interpretive Synthesis

Our approach to interpretive synthesis comprised four steps. First, individual researchers extracted the principal themes and metaphors found in each individual research study and mapped those against the three criteria of Shulman’s (2005) signature pedagogies – surface, deep and implicit structures. These thematic analyses of individual papers were then collated and through a dialogic process consensus was reached regarding the labeling and definitions of themes for each paper at each of the three levels. Secondly, we undertook a “horizontal analysis,” whereby relationships among the papers were identified through iterative research team discussions focused on the reciprocal translation of themes and metaphors across the research papers. Third, we undertook a “vertical analysis,” whereby thematic coding was traced through the three levels of the signature pedagogy framework, identifying the ways in which implicit level themes could be traced through the deep and surface levels, across the studies. Finally, the fourth step comprised repeated dialogue and revision until consensus was reached with regard to the third-order constructs and how these could be traced through the implicit, deep and surface levels of the signature pedagogies framework.

FINDINGS

The process of interpretive synthesis revealed three ‘third-order constructs’ at each of the implicit and deep levels of the signature pedagogies, shared across all ten papers. The surface level of signature pedagogies (i.e., the specific activities that learners engage in with their instructors) was found to encompass two overarching third-order constructs uniting the ten papers. Findings from the ten studies of collaborative creative learning

TABLE 1 | Characteristics of the retained studies.

| References | Phenomenon of interest | Context | Design | Key finding |
|-----------------------------|--|--|-------------------------|---|
| Barrett (2006) | Teaching and learning beliefs, processes and practices of composition teaching | Higher Education: Composition | Case study | Mentoring, involving modeling, enterprise, composer voice |
| Barrett and Gromko (2007) | Nature of teaching and learning process in music composition | Higher Education: Composition | Case study | Reciprocity and collaborative dialogue; productive evaluation; problem-finding and problem-solving |
| Biasutti and Concina (2021) | Organization of compositional activities and the learning strategies adopted during a collaborative online task. | Higher Education and Professional practice: Composition | Case study | Leadership style and communicative modality varied and had implications for task management. Musical and vocal channels of communication were used. |
| Blom (2012) | Learning process of tertiary music students undertaking collaborative inter-arts improvisation with dance and theater peers | Higher Education: Improvisation | Qualitative exploratory | Complementary or co-equal collaboration approach. A rationale, and structural elements, time, space and resources were important. Learning occurred through cumulative dialogue. |
| Brinck (2017) | Artistic and pedagogical implications of “situated” (students alongside instructors) jamming and recording popular, jazz-groove music | Professional practice: Jamming, Recording studio practice, Performance | Ethnography | Professional interactive communication processes developed through jamming as a studio-recording practice; changing participation and changing music are reciprocal processes. |
| de Bruin (2016) | Lifespan learning practices of 5 Australian improvisers; diverse ways of learning & collaborating | Professional practice: Improvisation | Case study | Community participation, growth & development; a developmental journey of becoming, being & belonging |
| de Bruin (2021) | The instructional relationship in tertiary jazz ensembles | Higher Education: Improvisation, Performance | Qualitative exploratory | Students connect with content, pedagogical practice and teacher. A relational approach can foster more sophisticated musicianship and creative abilities. |
| de Bruin et al. (2020) | Interconnections and relationships and their implications for musical development in jazz ensembles | Higher Education: Improvisation | Case study | Teacher–student interpersonal relationships play a pivotal part in resolving complex, critical educational practice and in apprenticeship of mastery of musicianship and creativity |
| Dobson and Littleton (2016) | Technology-mediated collaboration in composition | Higher Education: Recording studio practice | Case study | Digital resources are anticipatory, foster possibility thinking and reflection, render composition as interactional accomplishment. |
| Virkkula (2016) | Student workshops with popular music and jazz professional musicians as active participants/players; inducting students into communities | Higher Education and Professional practice: Improvisation, Performance | Case study | Situated learning and problem-solving achieved in student-professional partnership |

were tabulated under implicit, deep and surface structures, with the third-order constructs and their underlying themes accompanied by illustrative quotes (see **Tables 2–4**).

Implicit Structure

At the foundational, implicit level three third-order constructs were revealed, with each one encompassing three related themes (**Table 2**). A first foundational third-order construct was a **commitment to learning as participation in a community of collaborative practice (CoCP)**. As discussed by Virkkula (2016) and further explored by de Bruin (2016) and de Bruin et al. (2020) in the context of situated learning among jazz students and professionals, creative and collaborative performance practice was thought to evolve within a community of musical practice, where it was shaped by relationships, shared purpose, and a commitment to exploration partnered with hegemonic practices

that underpinned a professional standard. Within the CoCP, the values of respect and reciprocity were consistently evident. For example, Barrett and Gromko (2007, p. 214) highlight the idea of “thought communities” characterized by “mutual zones of proximal development” among composer students and teachers, while Blom (2012) described the values of mutual recognition and boundary crossing within a multi-disciplinary arts project. Similarly, Brinck (2017) noted that

“...reciprocally changing relations within the changing practice leads to such analytic perspectives of newcomers and old-timers iteratively shifting: At a moment when the guitar player burst into an energetic but very ambient solo I remember myself taken by surprise, calling for a radical adjustment of my playing. At that very moment I was the “newcomer” and the guitarist the “old-timer””. (p. 219)

TABLE 2 | Implicit structure.

| Third-order construct | Themes | Examples |
|--|--|--|
| Commitment to learning as participation in a community of collaborative practice | Creative Collaboration Community of Practice (CCCoP) | <p>“Creative artists are not born, but are made within social communities. The creative product, therefore, is one that bears the stamp of the history, culture, and social interactions within the community of which the artist is a member” (Barrett and Gromko, 2007, p. 227).</p> <p>“The ensemble work provided a sense of belonging within a valued community of practice” (de Bruin et al., 2020, p. 217).</p> <p>“Teachers created responsive social interactions with students through maintaining fluid teacher-student relationships, demonstrating a connectedness with students by developing a community of learners and encouraging collaboration” (de Bruin, 2021, p. 13).</p> <p>“Communities of practice provide the environment, the location and the circumstance for “fateful moments” that act as transition points and impact significantly on member musical outlook, motivations and musical independence” (de Bruin, 2016, p. 317).</p> |
| | Relationships are respectful and reciprocal | <p>“Members require both commitment and reciprocal responsibility, which connects the members of the community to each other” (Virkkula, 2016, p. 29).</p> <p>Teacher-composer “treats everyone with respect” (Barrett, 2006, p. 211).</p> <p>Student groups are “building confidence and being valued” (Blom, 2012, p. 727).</p> <p>“The teaching and learning relationship hinged on reciprocity” (Barrett and Gromko, 2007, p. 226).</p> <p>“Reciprocally changing relations” that lead to “analytic perspective of newcomers and old-timers iteratively shifting” (Brinck, 2017, p. 219).</p> |
| | Relationships are both horizontal and vertical | <p>Shared and distributed leaderships as well as vertical relationships of recognizing group leaders (Biasutti and Concina, 2021, 2021).</p> <p>“Long-term digitally resourced music composition is a complex interactional accomplishment” (Dobson and Littleton, 2016, p. 347).</p> <p>“A synthesis of personal intent and group interaction ... [that] reflects the symbiotic relationship to ones” fellow conceptualizations, techniques, strategies, identity and personal voice in performance” (de Bruin, 2016, p. 319).</p> <p>Cooperative or relational learning and complementary roles (de Bruin et al., 2020).</p> |
| Valuing collaboration in creative artistic identity | Belonging and Being: Collaborative creative artist identity | <p>“Transferring artistic endeavor into an educational practice suggests an increased focus on students “sitting in” with professional bands, and teachers playing alongside with students” (Brinck, 2017, p. 214).</p> <p>Personalized to each group “according to the working modality and processes that the participants selected for their compositional activity” (Biasutti and Concina, 2021, p. 71).</p> |
| | Becoming: Growth as a collaborative creative artist | <p>Teacher-composer set parameters for composer identity by encouraging the student “to consider what was unique about her work as a composer and linked to the notion of an emergent “voice”” (Barrett, 2006, p. 203).</p> <p>Student-composer grew over a semester of study into an artist who “had a responsibility to be more than merely innovative” (Barrett and Gromko, 2007, p. 227).</p> <p>“Generate new opportunities for learning through knowledge sharing, but more importantly, through inter-thinking, and the creation of a continually developing dynamic common knowledge” (Dobson and Littleton, 2016, p. 347).</p> <p>Importance of creating a positive environment where students can present and share their ideas with peers in an inter-arts improvisatory context and grow as collaborative and creative artists (Blom, 2012).</p> |
| | Personally and collaboratively motivated learning | <p>“Students positively reinforced their belonging and aspirational goals by operating within a safe and caring environment” (de Bruin et al., 2020, p. 217).</p> <p>“Collaboration with a professional musician in a music community supported a growth in identity by providing the framework for developing and using the skills” (Virkkula, 2016, p. 34-35).</p> <p>“Learning partnerships between teacher and student can establish democratic and dialogical relationships that place students at the vanguard of developing one’s musical thinking and motivation in the pursuit of artistic musical outcomes” (de Bruin, 2016, p. 321).</p> <p>“What is essential in actual work is the activities which are interactive and authentic in relation to a musician’s work ... if a student shares in these aspects, he [sic] will most obviously increase his autonomy and responsibility for his learning ... This is apparently connected to the increase in study motivation” (Virkkula, 2016, p. 36-37).</p> <p>“A professional musician brings extra motivation to the situation and a desire to succeed... His/her positive attitude to collaboration was an extra bonus” (Virkkula, 2016, p. 35).</p> <p>“Hearing and observing female leadership in performance and education was a motivating experience for some students, who felt a connection and sense of community with these artists” (de Bruin, 2021, p. 13).</p> |

(Continued)

TABLE 2 | Continued

| Third-order construct | Themes | Examples |
|-------------------------------|-----------------------------------|---|
| Capacity to embrace ambiguity | Enterprise is a key “mindset” | <p>“The nature of teaching and learning when engaged in an artistic enterprise where the focus is a student’s creation of an original artwork differs from the process by which a student might work to achieve a more specific predetermined outcome” (Barrett and Gromko, 2007, p. 227).</p> <p>“Joint enterprise in action” (Virkkula, 2016, p. 32).</p> <p>“To be enterprising includes showing initiative and imagination, and taking risks in new endeavors. Implicit in this is the capacity to recognize potential opportunities and to take advantage of these” (Barrett, 2006, p. 211).</p> |
| | Diversity is a key characteristic | <p>“Pedagogies that cater for diversity and openness to exploring and creating in improvised music promote inclusivity, capability and positive personal agency” (de Bruin, 2016, p. 321).</p> <p>“Innovative contexts are needed to promote divergent skills by stimulating interactive communication and positive socialization” (Biasutti and Concina, 2021, p. 71).</p> <p>“The diversity (of different instruments and musicians and ideas) becomes a resource for this changing practice” (Brinck, 2017, p. 219).</p> <p>“Students might begin by considering a greater diversity of tools, particularly in the early stages of collaborative planning” (Dobson and Littleton, 2016, p. 347).</p> |
| | Embracing unpredictability | <p>Students swapping roles, taking chances and crossing disciplinary boundaries (Blom, 2012).</p> <p>“Acting together students motivate each other and encourage risk-taking that facilitates social and musical growth” (de Bruin, 2016, p. 312).</p> <p>“The teachers were enthusiastic of our efforts and our risk-taking” (de Bruin, 2021, p. 11).</p> <p>“Embracing the unpredictability of the changing (jam) practice to be a precondition for our changing participating in that practice” (Brinck, 2017, p. 219).</p> |

The values of reciprocity and mutual respect did not preclude the idea that the CoCP could encompass horizontal as well as vertical leadership relationships. For example, Biasutti and Concina (2021) demonstrate how collaborative online composition activities were achieved by groups with different orientations to leadership, influenced by the “age, professional expertise and cultural background” (p. 70) of group members. While some groups adopted a top-down vertical approach with clear leaders and followers, others achieved the task through a horizontal, distributed model of leadership. However, as highlighted by de Bruin et al. (2020, p. 210), “a diversity of relationships can exist that foster growth via help for tasks and challenges, emotional support in daily activities, and companionship in shared activities.” Accordingly, whether the leadership style was predominantly horizontal or vertical, the creative task emerged from interaction patterns that were empathetic and sensitive to contrasting ideas. Overall, the signature pedagogies discussed across all of the ten papers were founded upon a commitment to “the apprenticeships of everyday music practices” (Brinck, 2017, p. 217) and a belief that learning is located within the “deep collective nature of human social practice” (Brinck, 2017, p. 221).

The second implicit-level third-order construct was concerned with the **value accorded to collaboration as part of a creative artistic identity**. For example, the practice of collaboration was privileged through situated creative activities where students experienced a sense of belonging and being collaborative creative artists, participating as equals alongside professionals (Brinck, 2017). In a similar vein, Virkkula (2016) demonstrated how popular and jazz music workshop-based opportunities for students to play alongside professional musicians supported growth in musical identity. Likewise, parameters for growth in relation to a creative, collaborative identity were established through a collaborative pedagogical

relationship (Barrett, 2006). Personal and collaborative sources of motivation were furthermore found to drive the development of a creative artistic identity. For example Virkkula (2016) proposed a direct relationship between motivation and interactive approaches, autonomy and growth as a collaborative musician, while de Bruin et al. (2020) suggested that motivation emerged from the collaborative regulatory processes that formed a foundation for “cultivating a musical/creative identity” (p. 214) among students, their peers and teachers.

Finally, one further implicit-level third-order construct was the **capacity to embrace ambiguity**. Here, researchers described collaborative creative pedagogies that valued an enterprising mindset, whereby students were imaginative risk-takers (Barrett, 2006). In this vein, diversity and divergence from established norms were valued implicitly. For example, Dobson and Littleton (2016) discuss pedagogies of creative collaboration in composition, premised upon “possibility thinking” (p. 347) manifest as joint exploration and openness to diverse tools. In a similar vein, Brinck (2017) described signature pedagogies of creative and collaborative “jamming” and recording practice that necessitated a willingness to embrace the unpredictable, while likewise Blom (2012) described a multi-disciplinary performance arts collaborative project where a valued practice was exploratory boundary-crossing outside of students’ own disciplinary norms.

Deep Structure

The deep structure of signature pedagogies of collaborative creative learning was found to encompass three third-order constructs, each one encompassing a number of related themes (Table 3). First, the idea that **learning is relational** framed the ways in which learning and teaching was structured. Four underlying themes representing pedagogical principles underpinned this first third-order construct. The first of

TABLE 3 | Deep structure.

| Third-order construct | Themes | Examples |
|----------------------------------|--------------------------------|--|
| Learning is relational | Cooperative learning | <p>“A cooperative activity where the individual can be transformed” (Blom, 2012, p. 725).</p> <p>“Their relationship was based on democratic cooperation” (Biasutti and Concina, 2021, p. 66).</p> <p>“Searching for a resolution lead to joint problem solving, where each participant contributed to the decision-making process in a cooperative and collaborative endeavour” (Barrett, 2006, p. 208).</p> <p>“Group cooperation significantly influences the learning relationship as joint goals, mutual rewards, and complementary roles define mutual actions” (de Bruin, 2021, p. 3).</p> |
| | Joint goals and mutual rewards | <p>“Too tight assumptions about what the songs should sound like we deemed un-productive to the “learning to jam” endeavor, and this way our joint ambition of the band and the students together making completely new collective interpretations of the frameworks came across from the very beginning” (Brinck, 2017, p. 220).</p> <p>“Collaborative discourse showed a joint exploration of situations imagining” (Dobson and Littleton, 2016, p. 347).</p> <p>“Differences in experience and knowledge between the composer-teacher and the student-composer provoked sharing and discussion, that lead to learning. The result we suggest was a joint interpretation” (Barrett and Gromko, 2007, p. 227).</p> |
| | Interactional accomplishments | <p>“Teachers’ interactions and feedback play a significant part in engaging students in creative pedagogies within (and beyond) the ensemble, where modeling, collaboration and communication shaped students’ approaches to creative thinking” (de Bruin et al., 2020, p. 218).</p> <p>“Verbal interactions were complementary to the musical activity: participants co-constructed the musical piece, supporting and motivating their actions with verbal instructions, indications and feedback” (Biasutti and Concina, 2021, p. 70).</p> <p>“The individual becoming enhanced by interactions” (Blom, 2012, p. 733).</p> |
| | Empowered and valued | <p>“More students could also become empowered and develop holistic educational practices by expanding and crossing boundaries, sharing, borrowing and transforming material, encouraging the individual to see themselves as part of a larger whole” (Blom, 2012, p. 734).</p> <p>“Positive musical and emotional attachments to peers and teachers promote not only healthy social, emotional and intellectual functioning but also positive feelings of self-worth and self-esteem” (de Bruin et al., 2020, p. 217).</p> <p>“The key point here is that their values inform the collaborative negotiations and the emerging composition practices, shaping their subsequent actions and a local ecology of collaborative practice” (Dobson and Littleton, 2016, p. 346).</p> |
| Learning is experiential | Authentic settings | <p>“What is essential in actual work is the activities which are interactive and authentic in relation to a musician’s work, its problems and their solutions” (Virkkula, 2016, p. 36).</p> <p>“Authentic music-making scenarios are designed to challenge and promote skill development, knowledge and collaborative capacity” (de Bruin et al., 2020, p. 219).</p> <p>“It surfaced and re-surfaced <i>naturally</i> through the life of a specific project” (Dobson and Littleton, 2016, p. 346).</p> |
| | Achieved through doing | <p>“You discover something by doing it and realize it doesn’t mean that at all, it means this” (Barrett, 2006, p. 201).</p> <p>“Authentic ensemble learning provided an experience that had less to do with the transmission of skills and more to do with the process of discovery” (de Bruin, 2021, p. 11).</p> <p>“Several students wanting “more doing, less talking”” (Blom, 2012, p. 728).</p> <p>“Collaboratively monitored the progress, reviewed the output when needed and decided which further actions should be taken” (Biasutti and Concina, 2021, p. 66).</p> |
| | Participatory | <p>“During the student participation, the student could solidify observations in his mind about models of thinking and action which were starting points for imitating and developing personal solutions” (Virkkula, 2016, p. 35).</p> <p>“Developing improvisers meet complexity of needs through evolving participation” (de Bruin, 2016, p. 317).</p> <p>“The promotion of the learner as active participant in the targeted cultural practice” (Barrett and Gromko, 2007, p. 215).</p> <p>“To analyse learning as a matter of changing relations in changing collective practice we need to develop our recognition of what constitutes this changing collective practice – and then analyse deeply contextually embedded changing participation in such practice as learning” (Brinck, 2017, p. 222).</p> |
| Learning as creative exploration | Possibility thinking | <p>“Collaborative music tasks may take advantage of the use of technological and multimedia tools: technology has been innovative in the music composition world and led to new ways of thinking about music, amplifying musical creativity” (Biasutti and Concina, 2021, p. 58).</p> <p>“Holding the groove together in different ways at different times (the changing practice) becomes inseparable from the musicians’ changing participation and constitutes what is being learned” (Brinck, 2017, p. 221).</p> <p>“I hope that I will get a lot of new ideas of my own during the workshop” (Virkkula, 2016, p. 33).</p> |

(Continued)

TABLE 3 | Continued

| Third-order construct | Themes | Examples |
|-----------------------|-----------------------------------|--|
| | Divergent and convergent thinking | <p>“Collaborative work is achieved through negotiation, meaning making and “possibility thinking” around compositional ideas, technical knowledge, anticipated actions and conversations and individual computer-based composition preferences” (Dobson and Littleton, 2016, p. 343).</p> <p>“While the teachers promoted student thinking to appropriate technical, harmonic, and vocabularic approaches, they also emphasized this within a wider goal orientation in developing ones’ personal voice” (de Bruin, 2021, p. 10).</p> <p>“Extending thinking and providing possibilities and multiple alternatives” (Barrett, 2006, p. 213).</p> <p>“We make it clear to each student musician in the ensemble that they are expected to rise to the challenges in the ways they take on the creative thinking and collaboration of ideas” (de Bruin et al., 2020, p. 217)</p> <p>“The composer-teacher’s thinking was both divergent and convergent as she responded in-the-moment to the student’s expressed thoughts and artistic product and brought her expertise to an interpretation and reconstruction of his experience” (Barrett and Gromko, 2007, p. 226).</p> <p>“The collaborative project offered theater and dance students the opportunity to expand and cross boundaries indicating how imaginative thinking can lead to discovery of one’s art” (Blom, 2012, p. 734).</p> <p>“Encouraging creativity that develops critical thinking and problem-solving capacity may well place the innovative and imaginatively developing practice of improvisation as central and key to learning” (de Bruin, 2016, p. 321).</p> |

these concerned cooperative learning, referring to democratic structures that allowed scope for shared responsibility for problem-solving (Barrett, 2006). For example, de Bruin et al. (2020) reported that cooperative learning (interpreted here as proxy for “relational”) was manifest as a significant aspect of an ensemble experience where students, teachers and guest artists pursued a “professional standard” of “values and skills” in ways that involved “creative thinking and collaboration of ideas” (p. 217). As previously discussed, Biasutti and Concina (2021) described composition activities framed by “democratic cooperation” (p. 66) where roles were non-hierarchical, tasks were distributed equally and decisions were based on communicative exchanges and collaborative evaluation of ideas. Similarly, and with a focus on orientations to facilitation, de Bruin (2021) highlights the idea of “teachers as facilitators that democratize knowledge making and meaning rather than functioning as door-keepers of knowledge” (p. 2).

Cooperative learning was closely interrelated with the second theme concerned with relational learning, which focused on “joint goals and mutual rewards”. As de Bruin et al. (2020) explained in the context of jazz workshops that brought together students, teachers and guest artists, “joint cooperation between student cohorts, as well as those crafted between students and professionals in the ensemble, asserted the presence of joint goals, mutual rewards ...” (p. 215). In a similar performance workshop context, Virkkula (2016) alludes to “joint effort” (p. 27), “joint enterprise” (p. 29), “joint-evaluation discussion” (p. 32) and “a clear goal [that] linked the students together and motivated them to work for a shared aim” (p. 32). Joint goals in turn were associated with mutual rewards “such as sharing of resources and belonging through social capital” (de Bruin, 2021, p. 3).

A third theme embedded in the third-order construct of “learning is relational” was concerned with learning as an interactional accomplishment. From this perspective, creative collaborative learning in the context of composition was a “long-term process of developing common knowledge ... achieved

through negotiation, meaning making ... and conversations” (Dobson and Littleton, 2016, p. 340–343). Similarly, in the context of a multi-disciplinary arts collaboration, learning was framed by interactional skills, including “how to listen and respond appropriately, how to collaborate, how to communicate” – both socially and musically (Blom, 2012, p. 724). Finally, the fourth related theme was concerned with a framework for empowering and valuing learners. For example, Blom’s (2012) multi-disciplinary arts setting was designed to empower students through expansive and holistic practices, while de Bruin et al. (2020) describe pedagogical “collaborative unions” characterized by a sense of belonging and enhanced self-worth, “sustained shared meanings, values and goals and higher-level aspirations” (p. 217).

Learning is experiential was identified as a second third-order construct at the deep level of signature pedagogies of collaborative creative learning. This comprised three themes identified as authentic settings, learning through doing, and participatory learning. Thus, collaborative creative learning was achieved within authentic scenarios or contexts that resembled the “real-life” professional settings inhabited by professional musicians (Virkkula, 2016), where new knowledge or skills emerged organically and naturally, as they would through professional practice (Dobson and Littleton, 2016). Learning within these authentic settings was therefore participatory and active (learning through doing). In this vein, Barrett (2006) noted in the context of composition training, transformative learning — involving changes in perception and deep insights — was framed by discovery through experimentation. The participatory facet of experiential learning was also tempered by the idea of an “evolution” in participatory patterns. From this perspective, Barrett and Gromko (2007) describe a process over time whereby a student-composer became progressively collaborative, for example as evidence by being more engaged in dialogue, initiative-taking and problem-solving. de Bruin (2016) similarly highlighted the evolving nature of

TABLE 4 | Surface structure.

| Third-order construct | Themes | Examples |
|---|---|---|
| Structuring activities as social and situated | Observation, listening, imitation, adjusting to one another | <p>"Thoughtful observation of differences and similarities, before action could commence, may be especially important during inter-arts collaboration, where an understanding of the way other disciplines operate is a good starting base" (Blom, 2012, p. 734).</p> <p>"Four-part singing harmonies require exact listening to both the band and other singers" (Virkkula, 2016, p. 34).</p> <p>"Popular and jazz music have traditionally been learnt in interaction with experienced and peer musicians, for instance by discussing, listening, observing and imitating" (Virkkula, 2016, p. 31).</p> <p>"Early learning was shaped by exploration and enculturation through listening, copying, experimenting and enjoyable collaborative experiences" (de Bruin, 2016, p. 314).</p> <p>"It was always a delicate challenge for the professional band drummer to balance his playing with the young drummer" (Brinck, 2017, p. 221).</p> |
| | Describing and explaining tasks and contexts | <p>Teacher-composer "encouraged task identification" (Barrett, 2006, p. 208).</p> <p>"His art needed to make sense within the context of what had already been created" (Barrett and Gromko, 2007, p. 227).</p> <p>"Setting tasks that were appropriately challenging, assigning work that students felt was important and meaningful, and by utilizing material that aroused motivation, curiosity and interest in the students" (de Bruin et al., 2020, p. 217).</p> <p>"Comments indicate there needs to be a time balance between talk and action" (Blom, 2012, p. 728).</p> |
| | Setting collaborative objectives | <p>"Music learning tasks that positively enhance relational perspectives have the propensity to support learning, community, and belonging" (de Bruin, 2021, p. 14).</p> <p>Teacher-composer "encouraged goal setting" (Barrett, 2006, p. 202).</p> <p>"These interchanges prompted explanations from the composer-teacher concerning precedents in dealing with similar music issues (signposting)" (Barrett, 2006, p. 204).</p> <p>"Both composers shared equal roles in planning and making decisions in a collaborative process" (Biasutti and Concina, 2021, p. 66).</p> |
| Reflection in, on and for action | Personal reflection | <p>"These learners explain that self-reflection is a powerful medium for improvement that can be used as an effective means of developing and refining strategies" (de Bruin, 2016, p. 219).</p> <p>"The composer-teacher prompts reflection on the student-composer's identity through identification of what she is "not"" (Barrett, 2006, p. 203).</p> <p>"The ensemble experience offered a fertile environment [for] the promoting of self-monitoring, self-reflection and self-assessment" (de Bruin et al., 2020, p. 218)</p> <p>"Group composition supports in-depth critical reflection of actions and decisions through the evaluation of proposals and feedback by other group members" (Biasutti and Concina, 2021, p. 60).</p> <p>"Students reflected on the synthesizing of learned skills and the importance of developing personal strategies and meta-cognitive capacity" (de Bruin, 2021, p. 10).</p> <p>"The workshops influenced both the development of the student's musical skills and the key competences of lifelong learning, which are self-motivation and activity" (Virkkula, 2016, p. 34).</p> <p>"Students demonstrate intentionality setting goals needed to attain new behaviors, adjusting their motivation and self-efficacy to change and adapt" (de Bruin et al., 2020, p. 211).</p> |
| | Collaborative reflection | <p>"Our mutual practice constituted numerous possibilities for (changing) participation, hence learning" (Brinck, 2017, p. 221).</p> <p>"Creative ideas could "fall out" of consideration in cumulative talk, whereas ideas that had been dropped also sometimes resurfaced and leading to exploratory talk at other times" (Dobson and Littleton, 2016, p. 347).</p> <p>"There was evidence of disputational talk when criticism was accepted by all" (Blom, 2012, p. 729).</p> <p>"This allowed students to build positively but uncritically on what others had said, to construct a common knowledge by accumulation, offering ideas and hearing ideas of others, taking turns to express ideas and after listening to the ideas of others" (Blom, 2012, p. 728).</p> <p>"The function of questioning in the teaching and learning process was a central component of the student-composer's recollection of his lessons" (Barrett and Gromko, 2007, p. 225).</p> <p>"The whole group then listened and evaluated the musical products, deciding democratically whether to accept or revise them" (Biasutti and Concina, 2021, p. 67)</p> |

participatory learning, whereby personal voice, identity, growth and development all emerged over time within an experiential and situated framework.

The final third-order construct at the deep level of signature pedagogies for collaborative creative learning was defined as "**learning as creative exploration**". Here, a first underlying theme was "possibility thinking," representing the capacity for "thinking outside of the box" and innovation in tools,

spaces, activities or participation. For example, Biasutti and Concina (2021, p. 58) highlight innovative composition tools that have "led to new ways of thinking about music, amplifying musical creativity." Thinking outside the box, though, existed in a complementary relationship with the communication of masterful standards, as demonstrated in Brinck's (2017) ethnographic study of jamming and recording popular music; here, "learning constitutes changing participation in changing

practice ...this telos depends on communication of masterful standards” (p. 221). Others have highlighted the interplay between ambiguity, flexibility and tradition; for example, de Bruin et al. (2020, p. 15) describes a pedagogical framework for collaborative improvisation as “ambiguous and open to multiple interpretations by both students and teachers ... [this] challenges the importance of a prescribed canon of skills as a prerequisite for successful improvisation.” The juxtaposition of possibility thinking with the communication of masterful standards was also found to contribute to a process of developing a personal artistic voice, including “a personal melodic landscape, architecture and creative concepts” (de Bruin, 2021, p. 13).

A second and closely-related underlying theme was “divergent and convergent thinking.” While divergent thinking was similar to possibility thinking, involving exploring multiple solutions or innovative avenues of practice (Biasutti and Concina, 2021), convergent thinking was more focused on single, effective strategies. Both ways of creative thinking were found to be part of a collaborative pedagogy, as highlighted by Barrett and Gromko (2007, p. 226) who stated that “the composer-teacher’s thinking was both divergent and convergent as she responded in-the-moment [to the student] ... and brought her expertise to an interpretation and reconstruction of his experience”.

Surface Structure

The surface structure of signature pedagogies for collaborative creative learning was found to comprise two third-order constructs. The first of these was “**structuring activities as social and situated**”. Social and situated activities included a strong emphasis on reciprocal observations among students, teachers and professional colleagues, involving close listening, imitation and interpretation. For example, in workshop settings, students could “solidify observations in his [sic] mind about models of thinking and action which were starting points for imitating and developing personal solutions” (Virkkula, 2016, p. 35). Mutual observation was furthermore the basis for understanding and adjusting to one another’s creative contribution and level (Brinck, 2017). Accordingly, Blom (2012, p. 734) noted that “thoughtful observation of differences and similarities, before action could commence, may be especially important during inter-arts collaboration.”

In addition, social and situated activities involved describing and explaining tasks and contexts. For example, a pedagogical strategy was to encourage students to identify, describe and explain tasks (Barrett, 2006), while Biasutti and Concina (2021, p. 66) highlight that peers made regular plans of work where they described anticipated activities, sharing “equal roles in planning and making decisions.” Surface-level pedagogies of collaborative creativity also involved activities organized with the intention of supporting the development of collaborative objectives. For example, Barrett (2006) highlighted strategies such as signposting specific musical examples as well as collaboration in setting specific goals.

One further third-order construct at the surface level of signature pedagogies of collaborative creative learning was “**reflection in, on and for action**,” comprising a dynamic interplay between personal reflection (the first underlying theme)

and collective reflection (the second underlying theme). Personal reflection involved spontaneous improvisation emerging from tacit knowledge as well as self-monitoring (reflection in action), self-assessment (reflection on action) and personal goals (reflection for action). In some instances, student reflection and self-analysis was prompted by instructors as a strategy for “making intuitive knowledge explicit” (Barrett, 2006, p. 212). Blom (2012, p. 729) added that self-reflection was an essential precursor to “justifying and declaring your own ideas to a collaborator,” which in turn was an “essential part of professional life.” Therefore, learning was also organized in such a way as to promote collective, collaborative reflection. For example, a persistent strategy for creative work in collaborative, technology-mediated composition among undergraduate students was discussion and reflection, whereby “the composers’ interthinking in dialogue engages them further in the process of building a local knowledge for creative action” (Dobson and Littleton, 2016, p. 342).

DISCUSSION

Our aim in this paper was to interrogate the signature pedagogies of collaborative creative learning. To achieve this, we undertook a meta-synthesis of relevant qualitative research published since 2000, when John-Steiner’s seminal work on creative collaboration was published. In addressing our first question concerned with how creative collaboration in music can be understood through the lens of surface, deep and implicit structures of signature pedagogies (Shulman, 2005), we began by analyzing each one of ten papers retained for the meta-synthesis, identifying themes that aligned with the surface (visible pedagogical practices), deep (pedagogical principles that frame learning) and implicit (the professional values that underpin learning) levels. We then undertook a reciprocal, horizontal process of analysis, considering the applicability of each theme (at each of the three levels) across the set of ten papers. In this way, we identified the higher order concepts (referred to as “third-order constructs”) that could be said to be representative of underlying shared themes.

As set out in the Findings section, three third-order constructs were found at the implicit level of signature pedagogies of collaborative creativity. These included a “commitment to learning as participation in a community of collaborative practice,” “valuing collaboration in a creative artistic identity,” and “the capacity to embrace ambiguity. A further three third-order constructs comprised the deep level of signature pedagogies, corresponding with the principles that guide and frame collaborative creative learning. At this deep level, our meta-synthesis suggested that learning was framed as relational, experiential and creative exploration. Finally, at the surface level, “habits of the hand” (Shulman, 2005, p. 59) – learning activities concerned with how to perform - were structured as social and situated, while, as Treacy and Gaunt (2021) suggested “habits of the mind” (learning how to think in disciplinary ways) were achieved through reflection in, on and for action.

Overall, at each of the implicit, deep and surface levels, signature pedagogies of collaborative creative learning were found to be closely aligned with authentic professional settings. In accordance with other disciplines such as literary studies (Heinert, 2017), theater studies (Kornetsky, 2017), visual arts (Gordon Cohen, 2013) and dance (Schrand and Eliason, 2012), authentic, experiential workshop settings that approximated or embedded students in professional practice functioned as the space where the implicit-level values were articulated through social and situated practices such as modeling, observation, discussion and improvisation. Likewise, the implicit values concerned with collaboration as part of growth in artistic identity, as well as a capacity to embrace ambiguity were reflected in the reflective practices of exploratory critique and consultation.

Our second research question corresponded to the implicit level of signature pedagogies, being concerned with identifying the core values that underpin signature pedagogies of creative collaboration in music. In accordance with the theory of situated learning in communities of practice (Lave and Wenger, 1991), signature pedagogies of creative collaboration reflected implicit beliefs concerned with learning as a relational and deeply contextual achievement, being shaped by characteristics of the artistic community (including its shared goals and focus) and social participation within that community.

Wenger (1998) discusses social learning through participation in terms of opening the possibilities for refinement of established practices, where collaborative exchange may be conceptualized as a process that involves “old-timers” as culture-bearers (collaborating within a context of privileging the disciplinary culture and its standards) in a participatory apprenticeship relationship with “newcomers.” Expanding on this idea, the findings of this interpretive synthesis suggested that creative collaborative learning was premised upon an iterative pedagogical process that navigated between horizontal and vertical power relationships, accompanied by potential tensions “between on the one hand desire for democratic exchange, and on the other hand belief in leadership emanating from heightened artistic credibility and charisma” (Gaunt and Treacy, 2020, p. 433). Therefore, the commitment to learning as participation within a community of collaborative practice also encompassed the potential for newcomers and old-timers to collaborate as “culture-builders” (building on established disciplinary practices and through improvisatory or exploratory approaches that tolerated disruption of known practices) or indeed as “culture-brokers” – in a collaborative relationship open to expanding disciplinary practices through crossing disciplinary or cultural boundaries (Willingham and Carruthers, 2018, pp. 609–610). In this vein, non-linear and reciprocal signature pedagogies provided a bridge between professional training and the exploratory, diverse and unpredictable nature of professional practice of collaborative creativity in music (Barrett et al., 2021).

Our meta-synthesis therefore suggested that signature pedagogies of collaborative creative learning provided a framework for newcomers and old-timers together to explore a space between improvisatory creative exploration on the one hand and the development of expertise framed by known professional standards on the other. When functioning well, pedagogies of collaborative creativity therefore offered

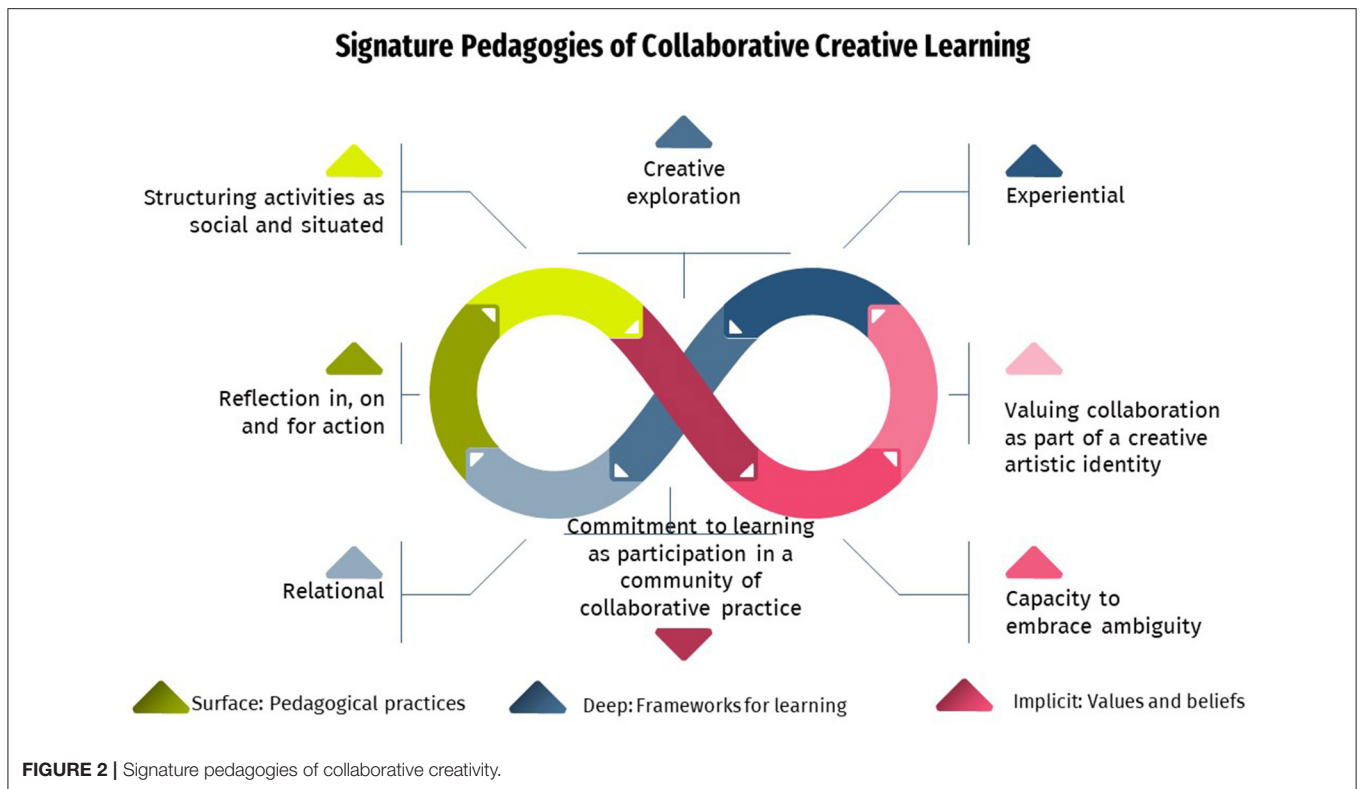
the potential for a dynamic and fluid partnering of the communication of masterful standards (Brinck, 2017, p. 221) with possibility thinking (Barrett, 2006). Nevertheless, as Gaunt and Treacy (2020) highlight, collaborative settings also present potential tensions, for example concerned with one-way transmission of ideas vs. mutual listening, familiar vs risky practices, or conflict avoidance vs conflict as an opportunity for creative development. This point has been explored by other authors. For example, Christophersen (2013, p. 78) acknowledges that collaborative learning has great potential as an “open, inclusive and democratic” pedagogical space (as our model of signature pedagogies of collaborative creative learning would suggest), yet also cautions the limitations in conceptualizing this pedagogical orientation as a “bridge” to disciplinary practices. In this vein, Christophersen raises the question of “whether collaborative learning experiences in higher music education will help the students cope with the demands of specific work contexts and, for example, the direction and authority wielded by conductors, bandmasters, directors, producers, supervisors, principals and deans” (p.78). Similarly, Love and Barrett (2019) highlight the ways that creative learning in composition could be constrained in “real-life” professional contexts, for example through encounters with orchestral etiquette, protocols and performance conventions. In brief, the underlying premise of a pedagogy of collaborative creative learning is that learners and more knowledgeable others interact as “willing and accepting collaborators” (Christophersen, 2013, p. 83) – a pre-condition that we found to be largely absent in the literature we reviewed.

Our meta-synthesis reinforced the key importance of reflection in resolving these potential tensions. Strategies that supported this complementary intersection of improvisational practices with disciplinary standards included acknowledging interdependence, developing shared goals, engaging with co-regulation and accepting guidance toward collaborative solutions to creative problems.

Whether interacting in horizontal or vertical power relationships, a commitment to learning as participation in a community of collaborative practice was furthermore consistently underpinned by value attached to reciprocal and mutually respectful relationships, suggesting a dimension of moral apprenticeship, or “habits of the heart” (Shulman, 2005) associated with behaving with integrity and according to a professional code. Core values at the implicit level also included the value accorded to collaboration in the growth of creative artistic identities, which in turn was linked to the capacity to embrace ambiguity. These core values were reminiscent of the “habits of the mind” in the context of professional composer education (Love and Barrett, 2019), which centered around learning to think like a composer through a willingness to make oneself vulnerable, to take risks and to engage in critique.

Figure 2 represents this reciprocal and inter-connected nature of the three levels of signature pedagogies of collaborative creative learning. Our model adopts the idea of an infinity loop to represent the deeply embedded and non-hierarchical nature of signature pedagogies of collaborative creative learning.

As theorized by Shulman (2005), the implicit values of a signature pedagogy are revealed through the deep and



surface levels. To explore this idea in relation to the signature pedagogies of collaborative creative learning, we interrogated the pathways by which the three implicit-level third-order constructs were manifest at the deep and surface levels. For example, a commitment to learning as participation in a community of collaborative creative practice was manifest in the deep-level framework for learning as being relational, and then further articulated in structured activities that were social and situated. Looked at conversely, social and situated activities (such as observation or mutual listening in a workshop setting) were framed within a relational, intersubjective space which in turn revealed a commitment to learning as participation in a community of collaborative creative practice. Similar reciprocal pathways were evident in relation to reflection in, on and for practice (surface-level pedagogical practice) which in turn revealed underlying pedagogical principles and artistic values and traditions (Treacy and Gaunt, 2021). Accordingly, pedagogical practices of reflection were framed by experiential, creative exploration (deep-level frameworks for learning) which in turn revealed the implicit-level values attached to the capacity to embrace ambiguity and collaboration as being integral to a creative artistic identity.

CONCLUSIONS

Based on a meta-synthesis of ten qualitative studies concerned with collaborative creative learning in higher music education, we have proposed a model of signature pedagogies that demonstrates deeply inter-connected pathways between implicit

values, pedagogical principles and pedagogical practices. Previous research concerned with signature pedagogies in arts disciplines has tended to identify particular practices or frameworks at the surface or deep levels. Our new model, derived from a meta-synthesis of research concerned with signature pedagogies of collaborative creative learning in higher music education, identifies higher order concepts at each of the three levels, as well as demonstrating interrelationships across the multilayered signature pedagogies framework.

At the most foundational level, learning was found to be premised upon a commitment to learning as participation in a collaborative community of practice, where collaboration and the capacity to embrace ambiguity were valued highly as part of artistic identity. The principles and practices of pedagogy flowed from these underlying values, with collaborative creative learning thought to be necessarily relational, experiential and to be achieved through creative exploration. The practices that reflected these values and principles were social and situated, with reflection playing a vital role in resolving potential tensions concerned with interpersonal dynamics, purpose, structure or content. This model is derived from research carried out in western settings that included jazz improvisation, popular music jamming, recording studio practice and composition. In this sense, the findings of our meta-synthesis may be limited in applicability to the many other cultural and collaborative contexts that musicians inhabit. Nonetheless, within a higher education and professional music context where interdisciplinarity is increasingly valued, the lessons

learnt from collaborative creative practices in specific disciplines and contexts may have valuable implications for pedagogical experience more broadly across higher music education and professional development.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

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