

Evaluating Professional Learning From Integrated Arts Education Practices in Initial Teacher Education

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Abstract

Four teacher educators working in two higher-education institutes conducted a SCoTENS-funded self-study of possibilities and pitfalls of integrated arts practices in initial teacher education. Issues examined include most effective interdisciplinary methods, resolutions to issues encountered, professional development, and lived experiences. Using Guskey's five levels of professional development evaluation model as a lens for critique, and the SCoTENS research report as a data source, this article describes the nature and quality of professional learning stemming from integrated arts education practices. Findings indicate that all five levels of professional development had progressed. De-privatisation of practice, reciprocal exchange, and shared knowledge co-creation resulted in enjoyable and fulfilling differences to practice regarding methodologies, collaboration, and reflexivity. Benefits to students included a superior learning experience, increased theoretical insight, a better learner-teacher relationship, and increased modelling of practice. Guskey's model, though adequate in many respects, needed extending to account for the professional transformation experienced through engagement with integrated arts education practices and which encompassed other ways of perceiving, working, and being.

Keywords: integrated arts teacher education, interdisciplinarity, professional learning evaluation, self-study

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Developing an arts education practice in initial teacher education is an ongoing process that needs to be sustained with continuous professional learning. The opportunity to open and de-privatise practice with other teacher arts educators is, however, more

difficult to accommodate in smaller higher-education institutes with single-person departments. Research indicates that professional learning communities have considerable potential for continuing professional development (CPD) as they foster collaborative learning among colleagues (Grennan, 2017). As four teacher educators in the arts, we conducted a SCoTENS-funded self-study of teacher-education practices regarding the Possibilities and Pitfalls of Arts INTeGration (acronymised as PAINT) in initial teacher education. Its focus on interdisciplinarity was timely considering recent primary curriculum change and teacher-education programme developments to promote increased connectivism in learning (NCCA, 2020; Teaching Council, 2020). Using our report of the study (Flannery et al., 2021) as the key data source, this article examines and re-presents the types and quality of our professional learning from integrated arts education practices, drawing on Guskey's five critical levels of professional development evaluation.

Integrated Arts Education Practices

Cross-curricular learning is a longstanding practice in education that has well-documented benefits from both a teaching and learning perspective (Barnes, 2015, 2011; Moore, 2009; Pritchard, 2013). Transcending traditional subject divides, this approach is more holistic, comprehensive, effective, inclusive, creative, and memorable (Barnes, 2015; Moore, 2009; Pritchard, 2013; Sousa & Pilecki, 2013). As cross-curricular learning is less linear in design and more immersive in approach, it reflects how children naturally play and learn (Burnaford et al., 2007).

Integrated arts education practices (IAEP) comprise teaching and learning in addition to assessment and research practices that involve the integration of the arts disciplines alone. Many artists express themselves through multimodal work, whereby they explore, express and engage in a multisensory manner by visual, aural, oral, and kinaesthetic means. IAEP in primary schools comprise the cross-curricular integration of any arts discipline such as dance, drama, music, and the visual arts. As artistic expression is often a response to artists' observations, experiences, and questions about the world, artworks lend themselves as effective stimuli and starting points for cross-curricular connections.

Creative Habits of Mind

A key rationale for arts integration with non-arts disciplines is the transferability of studio habits (Hogan, et al., 2018) identified as:

- developing craft from technique and studio practice
- engaging and persisting from finding passion

- envisioning from imagining and planning
- expressing oneself through finding and showing meaning
- observing through looking closely
- reflecting through questioning, explaining, and evaluating
- stretching and exploring through play and using mistakes and discovery
- understanding art worlds.

These eight studio habits echo many of the skills and dispositions underpinning the so-called habits of mind (Costa & Kallick, 2008), and creative habits of mind (Lucas, 2016; Lucas et al., 2012). For example, the studio habit of *engaging and persisting* entails sticking with difficulty, daring to be different, and tolerating uncertainty. The studio habit of *reflecting* entails wondering and thinking about your thinking. The studio habit of *stretching and exploring* entails investigating, playing with possibilities, making connections, and remaining open to continuous learning.

Types of Arts Integration

Notwithstanding the benefits, the arts do not always fare well from cross-curricular integration. Bresler (1995) describes four arts integration relationships that pervade education. These include subservient, affective, social, and co-equal arts integration. The first three types do not value the arts as disciplines. Subservient arts integration inadvertently reduces the arts to methodologies for learning, and little learning in, or about, the arts occurs. Often, the quality of artistic expression is recipe-orientated, overly prescriptive, and somewhat contrived. Affective arts integration utilises the arts mainly in terms of evoking feelings and nurturing self-expression. Social arts integration integrates the arts with non-arts disciplines for the purpose of developing learners' communication and interpersonal skills.

It is only through the fourth type of co-equal arts integration relationship that both the arts and non-arts disciplines are valued equally (Bresler, 1995). This latter integrated arrangement ensures that the arts retain their subject integrity and that there is development of knowledge, concepts, skills, and values in the arts disciplines involved. To achieve a balance between interconnected and discipline-specific learning, Barnes (2015) encourages a double-focused approach that permits time for discrete subject teaching as well as integrated sessions. This aligns with Bresler's co-equal arts integration scenario. Barnes advises that newly qualified teachers should integrate no more than three subjects, since it takes a highly experienced practitioner to orchestrate learning with a greater number of curriculum areas. From a learner voice and choice perspective, he encourages opportunistic integration whereby learning

can digress off the planned track to pursue new questions arising from recent learning and adventure into the unknown. He recommends that any arts integration should culminate in a *performance of understanding* that illustrates students' learning by any means or mode.

Professional Learning

In Ireland, teachers' experiences of professional learning are characterised by performative and transformative learning (Sugrue, 2011). The former focuses on equipping teachers with measurable knowledge and skills and compliance with departmental expectations and standards, whereas the latter comprises critical thinking, collaboration, and creation. Groups of professionals who critically reflect upon their practice in a sustained, inclusive, and collaborative manner, with the shared aim of improving personal efficacy, can be described as a professional learning community (Grennan, 2017; Stoll et al., 2006). While some CPD can be removed from practice, limited by insufficient time or lack of follow-up supports, or have a focus more so on compliance (Cochran-Smith & Lytle, 2009; Kennedy, 2005; Sugrue, 2011), CPD from a professional learning community has the potential to be more practice-focused, prolonged, and participative (Thompson & Wiliam, 2007).

This kind of interactive exchange embodies "critical process elements needed for professional development to result in actual changes in teacher practice" (Thompson & Wiliam, 2007, p. 15) and holds "real promise for improving the learning of both students and educators, and for encouraging continued innovation and improvement" (Kaagan & Headley, 2010, p. xiii). Participants share norms and values, de-privatise their practice, and have a collective focus on pupils' learning that is explored through reflective dialogue and collaboration (Kruse et al., 1994). The exchanging of stories, challenges, and resolutions from practice develops meaningful interpersonal relationships in the professional learning community, which are considered critical for shared problem solving and knowledge construction (Cochran-Smith & Lytle, 2009; Grennan 2017). This article evaluates the type and quality of CPD within a professional learning community comprising four teacher arts educators engaged in IAEP-focused self-study research.

Guskey's Levels of Professional Learning

Guskey's five levels of professional learning evaluation model was adopted because of its prior application to physical, interdisciplinary, multiliteracy and higher-education contexts (Dauenhauer et al., 2022; Garone et al., 2022; Visser et al., 2013). Guskey (1999, 2002, 2016) posits that effective professional learning evaluation requires consideration of five critical stages or levels of information. Based on an adaption of Kirkpatrick's (1998) model for judging the effectiveness of CPD programmes in

industry, Guskey's five-level model is hierarchically arranged. Success at higher levels is usually dependent on progress made at lower levels.

The first (most common) level of evaluation examines participants' reactions to the professional learning experience. Questions focus on whether participants liked the experience and whether they felt their time was well spent. The second level focuses on determining any new knowledge, skills, and perhaps attitudes or dispositions that participants gain (Guskey, 2002). At the third level, the focus shifts from participants to organisational dimensions that may be critical to the success of the professional learning experience. Questions at this level ask whether the professional learning promoted changes that align with the mission of the programme/organisation and if sufficient resources had been made available, including time for sharing and reflection. Issues such as these often play a large part in determining the success of any professional learning (Guskey, 2016). At level four, the key question asks whether the new knowledge and skills that participants learned had made a difference in their professional practice. To answer this question, Guskey advises that sufficient time must pass after the learning experience to allow participants to adapt the new ideas and practices to their settings. Level five concerns evaluation of the impact of professional learning on students; key questions focus on the benefits of professional learning – attainment, progress, attitudinal or behavioural – and how these are evaluated and measured. In this article, the PAINT self-study research report is re-examined (Flannery et al., 2021), focusing on teacher arts educators' professional learning from IAEP in initial teacher education through the lens of Guskey.

Criticisms of Guskey's Model

Coldwell and Simkins (2010) assert that Guskey's model does not address the complexity of professional learning, is overly focused on teacher change as the outcome of professional development, and overlooks the ways in which this can be situated within broader social and cultural contexts. They propose further exploration of professional development within these contexts that include institutional cultures, power dynamics, and social identities. Compen et al. (2019) posit that Guskey's model has limitations in capturing the dynamic and complex nature of teacher professional development. They think it is too focused on a single point in time, rather than factoring in its ongoing and iterative nature. While Guskey's model recognises the importance of organisational support and change, Coldwell and Simkins (2010) believe it downplays other features of this level, such as organisational culture, social norms, and power dynamics.

Merchie et al. (2016) contend that Guskey's model is overly simplistic compared to one that accounts for the diversity of teachers and the varied social and cultural contexts in which they work. Savva (2019), who opted for a multiliteracies professional development model characterised by multiliteracy approaches, creative use of

technologies, and multimodal experiences, argues that Guskey's model does not tailor professional learning to meet the specific needs of teachers in diverse educational contexts. Notwithstanding those methodological limitations, Guskey's model was retained in this study because it offered an initial, straightforward, framework for analysis. Yet, it had to be extended to account for the different contexts and identities experienced as arts educators, discussed further in the findings.

Reflexivity, Professional Learning, and Qualitative Research

Reflexivity can be described as finding ways to self-question attitudes, values, thoughts, assumptions, prejudices and habitual actions to understand our roles in relation to those of others (Bolton, 2009; Bolton & Delderfield, 2018). A critical developmental process for any educator/researcher, it involves becoming aware of the way one is experienced and perceived by others and of the limits of one's knowledge and related practice. The role of a trusted other is vital. It enables researchers to recognise how their experiences, viewpoints, and backgrounds can skew or impact research findings (Tufford & Newman, 2012). Sharing one's positionality about a topic helps the reader glean the truths from one's research (Holmes, 2020). The reflective process afforded by Guskey's model enabled self-evaluation of research and arts educator practices in the wake of the PAINT project.

The PAINT Self-Study Project

The PAINT self-study project involved four teacher arts educators/researchers. Two of the four were teaching music and visual arts at Marino Institute of Education (MIE), Dublin; the other two were teaching music and art and design at Stranmillis University College (SUC), Belfast. The project proposal was drafted at MIE and advertised via the SCoTENS website. Following a response from SUC to a call for partnership, the four teacher arts educators/researchers co-designed a two-phased study of teacher-education practices project comprising two distinct self-study cases.

In line with self-study research practice, the importance of "dialogic" self-reflexivity was recognised in the project (Hamilton & Pinnegar, 2015). Phase 1 of PAINT was characterised by an iterative process of self-study practice and methods, and colleague conversations within and across each case. This further intensified in Phase 2 when the researchers came together as a group to share and analyse the emerging findings from each case. These collaborative moments held them accountable for systematic and careful data collection, helped them "to consider alternative perspectives", and resulted in a deeper process of shared meaning-making (Hamilton & Pinnegar, 2015, p.181).

Phase 1

Phase one of PAINT was conducted separately in each higher-education institute. This was important as there were distinct differences between the two sets of partners regarding IAEP. The MIE researchers had been exploring different IAEP iterations for a decade through arts education curriculum studies with whole-year groups of B.Ed. students ($n = 115$). It became a formal compulsory module component of the B.Ed. programme assessed by collaborative integrated arts performance and individual written reflection. In contrast, the SUC researchers were exploring non-assessed IAEP for one year with a smaller group of music/art and design specialist B.Ed. students ($n = 19$).

Framed by a joint literature review on arts education, interdisciplinarity, creativity and collaborative learning, each set of researchers composed discrete research questions concerning IAEP at their institute (Table 1), before formulating joint research questions designed to investigate differences and similarities between teacher arts educators' lived experiences of IAEP. The joint questions also sought to identify the most effective interdisciplinary methods, any successful resolutions to challenges encountered, and the ways in which teacher arts educators develop professionally because of IAEP. The researchers submitted their project design to SCoTENS, and were successful in their application for funding.

TABLE 1

Phase 1 Research Questions, by Self-Study Case

SUC self-study case: 1 year of IAEP	MIE self-study case: 10 years of IAEP
1. How can we develop students' confidence and subject-specific skills to lead arts in the primary school?	1. Is there added value in having an integrated arts component in pre-service teacher education?
2. What can initial teacher educators in the arts learn from each other, in terms of their students' engagement with the creative process?	2. How do we overcome the challenges of collaborative integrated arts approaches?
3. Is it valuable to establish more collaboration and communication between art and music students in future courses?	3. How does the utilisation of different analogue and digital technologies enhance interdisciplinary arts?
3a. If so, what forms may that take?	4. How have we developed professionally through interdisciplinary arts?

In addition to the two concurrent self-study cases at MIE and SUC, informed by questions in Table 1, the MIE researchers engaged in critical collaborative inquiry conversations that looked back over a decade of IAEP programme developments at their institute (Table 2). The reflective framework for MIE meetings was based on Gibbs' six-stage Reflective Cycle comprising description, feelings, evaluation, analysis, conclusion, and action plan. This framework facilitated systematic structured debriefing and analysis of a repeated experience, while ensuring that the content of each meeting remained relevant and to the point (Gibbs, 1988; Wain, 2017). Meanwhile, the SUC researchers co-reflected on recently introduced IAEP initiatives with a focus on looking forward to future development. They engaged in three online critical conversations on IAEP that utilised a reflective framework based on Brookfield's (2017) four lenses of critical reflection relating to theory, colleagues, self, and students (Table 2).

TABLE 2*Phase 1 Conversations/Meetings, by Self-Study Case*

Focus of SUC conversations	Focus of MIE meetings
Conversation 1: Starting points. Our artistic and teaching identities: Who are we and what do we want to achieve? September 2020	Meeting 1: Reviewing IAEP in 2010 and 2011 comprising collaborative visual artwork as a stimulus for composing
Conversation 2: Sharing teaching evaluations. What is happening? November 2020 mid-teaching phase	Meeting 2: Reviewing IAEP in 2012 and 2013 comprising music composing and responding with shadow puppetry performance
Conversation 3: Reflection on students' work and reflections. Action planning. December 2020 post-teaching and assessment evaluation	Meeting 3: Reviewing IAEP in 2014, 2015, and 2016 comprising music composing and responding with overhead project performance Meeting 4: Reviewing IAEP in 2017, 2018, and 2019 comprising music composing and crankie performance Meeting 5: Reviewing IAEP in 2020 comprising music composing-led IAEP with digital technology

Note: A crankie is a moving illustrated scroll for storytelling performance.

Phase 2

Having completed the site-specific cases, all four researchers came together for Phase 2 of PAINT and engaged in further critical collaborative inquiry to analyse and extract meta-themes from their case findings. Data gleaned from both self-study cases were coded using Braun and Clarke's (2006) thematic coding strategy entailing familiarisation with data, generation of initial codes, combining codes into themes, reviewing potential themes, defining and naming themes and, finally, producing a report. The meta-themes were presented via an adaption of Brookfield's (2017) four lenses: theory, students, and teacher educator, the latter being combined from self and colleagues.

Ten meta-themes emerged from examining discrete findings and identifying commonality between the two cases in relation to the project's shared research questions. These are listed in Table 3. Findings showed that IAEP in primary teacher education triggered a move from compartmentalised to more holistic thinking. Teacher arts educators acquired a greater understanding and appreciation for multimodal and holistic processes, methodologies, and performances, enabling them to think about what they valued in their respective practices, and how IAEP was impacting course content and approaches. They found that, because of their engagement with IAEP, they had become more attuned to their students' varying dispositions towards the arts and creativity.

TABLE 3*Phase 2 Shared Research Questions and Meta-Themes*

Shared research questions	Emergent themes
What are the similarities between our lived experiences of orchestrating IAEP with pre-service primary school teachers?	<ol style="list-style-type: none"> 1. Holism (activating intellect, emotions, imagination, and body) and multi-modality (visual, aural, oral, kinaesthetic responses) 2. Creative habits of mind development
What are the differences between our lived experiences of orchestrating IAEP with pre-service primary school teachers?	<ol style="list-style-type: none"> 1. Reflexivity: Looking back and looking forward 2. Process, performance, and programme
How can we resolve the issues we encounter when engaging pre-service primary school teachers in IAEP?	<ol style="list-style-type: none"> 1. Preliminary and responsive planning, communication, and organisation 2. Introducing relevant theory to student teachers
What are the most effective methods to improve the quality of IAEP with pre-service teachers?	<ol style="list-style-type: none"> 1. Hands-on experiential learning 2. Performing and reflecting understanding
How have we professionally developed as teacher educators because of this collaborative research?	<ol style="list-style-type: none"> 1. Conceptual, theoretical, and methodological reciprocity 2. Re-evaluation of teacher-educator role

A final PAINT report (Flannery et al., 2021) was co-written by the full research team, in which two key messages were identified in relation to the teacher arts educators' own professional development: 1) the reciprocal, conceptual, theoretical, and methodological exchange regarding music and visual arts/art and design education; and 2) the re-evaluation of their teacher-educator role because of IAEP.

Phase 3

Two of the four teacher arts educators moved to other higher-education institutes during the report-writing process. As group members were now affiliated to four higher-education institutes, motivation grew to undertake a Phase 3 of collaborative research. Additionally, the programmes in two of these institutes were undergoing a Teaching Council re-accreditation and quality review. Other important happenings regarding the professional development of teachers included the recent publication of an evaluation framework for teachers' professional learning in Ireland (Gilleece et al., 2023) and the national professional development framework for those who teach in higher education (National Forum for the Enhancement of Teaching and Learning

in Higher Education, 2016). In the midst of these developments, teacher arts educator professional learning seemed a relevant and worthwhile topic to explore.

Phase 3 of the PAINT project consisted of a thematic analysis of the final PAINT report (Flannery et al., 2021). Thematic analysis is a qualitative research method that can promote reflexivity, provide a deeper understanding of one's professional development, and identify areas for improvement. A deductive approach was adopted using Guskey's five levels of professional learning as a priori codes. Before examining the data, these were identified as: enjoyment, fulfilment, new knowledge, new skills, new dispositions, organisational accommodations, organisational supports, differences to teacher arts educator practice, and benefits to students. The coding process was informed by Braun and Clarke's steps in thematic analysis (Braun & Clarke, 2006; Braun et al., 2016; Clarke & Braun, 2016). This entailed reading, highlighting, coding, extracting, and categorising data. Semantic and latent coding were utilised so that coding the report involved looking at what was written, and beyond what was written (Braun & Clarke, 2006). A codebook approach was adopted, whereby the researchers shared a digital codebook created in Excel. A codebook is a tool to aid the analysis of large qualitative datasets. It helps define the codes and themes, by giving detailed descriptions and restrictions on what can be included within a given code. It also provides concrete examples. One researcher led the coding process while the other three also analysed data and contributed as appropriate. All four researchers discussed the coding process and agreed the emergent themes derived from the data. Table 4 shows excerpts from the shared codebook.

TABLE 4*Codebook Excerpts Applied to Guskey's Five-Level Professional Learning Model*

Level	Code	Description	Reference
1. Participants' reactions	Enjoyment Fulfilment	Enjoying the visual effects using overhead projector	Students enjoyed discovering different visual effects projected onto the screen using their hands, two dimensional cut-outs and three dimensional objects
	Enjoyment Fulfilment	Enjoyment from the performative dimension	What is unique about the IAEP assessment is that it is social, theatrical, spectacular, and celebratory. It triggered feelings of excitement, anticipation, and showmanship among the "performers" and of empathy and encouragement from the "audience"
2. Participants' learning	New Knowledge Skills, Attitudes Dispositions	Process was collaborative, involving communication and exchange	Unlike other examination atmospheres, this performance-based assessment was social, exciting and enjoyable and we enjoyed the collaborative journey of continual communication with one another about the process; the exchange of ideas; the co-designing of rubrics and tweaking project foci from year to year
	New Knowledge Skills, Attitudes Dispositions	Pre-empting and resolving factors that can negatively affect group	We learned how to pre-empt factors that can negatively affect group dynamics and how to address the occasional issue of "individual loafing" in a manner that is fair to all students
3. Organisational supports and change	Time, Space	Negotiating time and space for rehearsals and performance; venue booking	The "performance of practice" aspect of the project involved a degree of stress, its performative nature meant working within a tight timeframe, while ensuring digital equipment was working and assessment records were maintained

	Resources	Managing equipment; availability of and access to resources	A particular challenge concerned the concluding “performance of understanding” as, in initial iterations, both visual and musical elements were jointly performed. This approach necessitated transporting either musical instruments or visual art products to the performance venue
4. Participants’ use of new knowledge and skills	Methods	Practice is more inclusive, collaborative/ performative learning	A key added value of the IAEP was the opportunity for student teachers of differing arts backgrounds and self-efficacy levels to explore performance first hand
	Communication	Co-designing rubrics and	We enjoyed the collaborative journey of continual communication with one another about project foci; the exchange of ideas, the co-creation of rubrics
	Collaboration	tweaking project foci from year to year	
5. Student learning outcomes	Co-creation		
	Student-teacher relationship	Being more attuned to students’ creative dispositions and artistic engagement	We are more attuned to considering students’ dispositions to creativity rather than focusing on practical skill-level and outcome, identifying two main actions to further increase meaningful engagement with arts practices
	Inclusive and relevant practice	Differentiating, scaffolding, sequencing content and connecting with school placement	We exchanged and appraised methods and content, group arrangements, school placement challenges, subject integrity and assessment emphases

Note. Two examples of references are shown for each level of professional learning. Further details and examples are available from michael.flannery@dcu.ie

Discussion of Findings

All five levels of Guskey’s model of professional learning were represented to varying degrees in the feedback from teacher art educators. All reported deriving enjoyment and fulfilment (level one) from the performative, communicative, collaborative, and reflexive nature of IAEP. Secondly, both sets of teacher arts educators acquired new knowledge, skills, attitudes and dispositions (level two) relating to the methodological, technological, and conceptual dimensions of teaching and learning as well as creative

habits of mind. Thirdly, the programmatic and organisational accommodation and support associated with professional learning in Guskey's model (level three), which in this study mainly involved rescheduling and practical space-management supports, were negotiated within a programme consisting of many modules, professional placements, and assessment components. Fourthly, through a process of reflection, a number of key differences were identified following IAEP (level four), reflecting a move from a "mine" to an "ours" arts education practice. The differences observed relate to the assimilation of information, perspectives, and ideas from the "other's" practice, increased collaborative and critical friendship, and more holistic, integrated, and reflective methods. Four key benefits for student teachers from IAEP (level five) were also observed: increased theoretical insight, a more impactful learning experience, and the opportunity to observe and model practice. Findings relating to each of Guskey's five levels are discussed in further detail below.

Increased Enjoyment and Fulfilment

The four teacher arts educators involved in PAINT derived enjoyment and fulfilment from the performative, communicative, collaborative, and reflexive opportunities that IAEP presented. Sharing and collaboration created new understandings in performative and visual practices, leading to a valuable and enjoyable teacher-educator experience for all partners. In the SUC self-study case, the re-visioning of the learning space, and consequently of assessment, stimulated an environment where risk-taking, awareness, and openness to the creative self could flourish, leading to innovative and changing modes of assessment. In the case of MIE, "each IAEP iteration produced little innovations regarding what and how we teach and helped us formulate new modes of assessments" (Flannery, et al., 2021, p. 37). IAEP instigated ten iterations of collaborative performance-based arts assessments, which were more enjoyable and fulfilling than the discrete arts assessments previously conducted:

Unlike other programme assessments, the performative arts assessment was enjoyable to orchestrate and experience. We enjoyed being part of the audience to experience and critique student group performances. Unlike other examination atmospheres, this performance-based assessment was social, exciting and enjoyable (Flannery et al., 2021, p.36).

Equally, IAEP at SUC presented an opportunity for the teacher arts educators to "engage in dialogue and hold up their work to increased scrutiny" (Flannery et al., 2021, p. 50). This functioned as a first step on a more enjoyable and fulfilling longer-range journey to more sustained integration across the arts – starting with conversations, then building collaborative relationships, and finally creating collaboratively (Flannery et al., 2021). Looking forward, their shared IAEP teaching and learning would:

bring the music and art and design cohorts together to discuss creative theories; mapping musical and artistic concepts as they are implied in the primary curriculum...sharing and developing their creative identities...using digital media to create a total artwork, "gesamtkunstwerk" with sound and image (Flannery et al., 2021, p. 50).

In both self-study contexts, IAEP was perceived to be a more enjoyable and fulfilling teacher arts education paradigm because both students and teacher arts educators had opportunities to communicate, collaborate, and be reflexive together. Conversations comparing their learning experiences of IAEP allowed personal and collaborative reflection on their own creativity and their roles as facilitators of little 'c' creativity (Craft, 2008; Flannery et al., 2021; Kaufman & Beghetto, 2009). This manifested in collaborative interdisciplinary arts performances and in emergent identities as artist and teacher of the arts. "In terms of our own professional understanding, [IAEP] provided a concrete opportunity to share good practice in the arts, through ongoing discussion and reflection" (Flannery et al., 2021, p. 50).

New Knowledge, Skills, and Dispositions

Re-examination of the PAINT report revealed how teacher arts educators acquired new knowledge, skills, and dispositions from IAEP. These concerned the pedagogical, the conceptual, the technological, and creative habits of mind. From a pedagogical CPD perspective, IAEP motivated, permitted, and obligated the teacher arts educators to seek and exchange knowledge for integrated module, rubric, and mark sheet design, and refinement. They learned new strategies from one another regarding differentiation and inclusion in the arts to support students with varying artistic/creative self-efficacy levels. They exchanged and strategised ways to manage different group dynamics for collaborative creative processes, or addressed occasional challenges such as individual social loafing:

Together, we refined skills related to module, rubric and mark sheet design. We learned how to pre-empt factors that can negatively affect group dynamics and how to address the occasional issue of individual "social loafing" in a manner that was fair to all students (Flannery et al., 2021, p. 37).

IAEP also extended theoretical knowledge about creativity, collaborative, and cross-curricular learning types and taxonomies. From a CPD perspective, teacher arts educators generated an integrated lexicon concerning the arts elements and introduced new conceptual criteria for multimodal arts performance into their practice, such as synchronicity and complementarity between the arts modes. From a technological perspective, they exchanged and acquired new skills relating to analogue and digital technologies. For example, they learned how to construct and perform a crankie, an old storytelling art form comprising a long illustrated scroll

that is wound onto two spools. They also benefitted from incidental skills exchange relating to navigating college systems and procedures including the virtual learning environment:

There was ongoing incidental skills exchange such as how to operate a crankie or soundscape as a precursor to composing; how to differentiate for students with low artistic self-efficacy; how to deal with poor attendees (Flannery et al., 2021, p. 37).

From a creative habits of mind development perspective, teacher arts educators extended several creative sub-habits of mind relating to collaboration, imagination, discipline, inquisitiveness, and persistence (Lucas, 2016; Lucas et al., 2012). Through the de-privatisation of their arts practice, they shared what and how they taught, and gave and received feedback about what they observed. Through collaborative co-planning, teaching and evaluation, they began making connections between their arts disciplines and teaching. They also had to trust their intuition and tolerate uncertainty more when experimenting with visual arts responses to music and using different visual arts modes as a stimulus for composing or exploring new models for reflection. Lastly, IAEP challenged their individual or joint assumptions about interdisciplinary arts and interdisciplinarity:

[IAEP] challenged us to think about what we value as teacher educators and how it impacts on content, teaching, and assessment...we acquired greater understanding and appreciation for multimodal and holistic processes, methodologies and performances (Flannery et al., 2021, p. 51).

Programmatic and Organisational Accommodations

Programmatic and organisational considerations can be vital to the success of any professional learning experience. Elements such as alignment with programme mission, organisational grading policies, and availability of sufficient resources, including time and space, can hinder or prevent success (Guskey, 2016). In this case, IAEP proved to be effectively aligned with both the mission and requirements of the programme so that key programmatic accommodations such as timetable rescheduling and practical assistance were supported. Integrated approaches to music, art, and design/visual arts required some additional accommodations for students' interconnected learning journey. Time had to be scheduled for music rehearsals, to arrange studio space, and to enable access to musical instruments/visual arts material. Procedures were put in place to ensure equity and access for all. Additional time also had to be found for sharing and reflection to enable successful implementation of IAEP.

Practical issues relating to IAEP performance-based assessment did involve some degree of stress. Staging a performance often meant working within a tight timeframe

and dealing with associated timetabling and practical challenges. These included transporting instruments and art equipment, and ensuring that digital equipment was working while maintaining assessment records during live performances (Flannery et al., 2021). The absence of sufficient time to collaborate to bring all these elements together was not ideal. One regret in the MIE self-study case was the lack of opportunity:

To have students perform for a larger audience in a hall. 'It would be lovely [to have the] performance... in the Amharclann (Hall) [with] the lights down... an audience would love that!' Too many practical impediments prevented it from happening despite our best intentions (Flannery et al., 2021, p. 31).

Differences in Teacher Arts Educators' Professional Practice

Through the process of reflection, differences identified in teacher arts educator practices concerned methodology, collaborative and critical friendship, assimilation from the other arts education practice, and increased reflexivity. New pedagogical knowledge and understandings developed in the collaborative IAEP led to refinements of content and methodology. Methodologies exemplified increased multimodal processes in content delivery, such as "hearing" images and "visualising" sound, as well as interdisciplinary assessment in the form of a "performance of practice" (Barnes, 2015). In different performance iterations, artworks were animated and performed synchronously with music compositions. Various animation techniques were explored: shadow puppetry, overhead projector art animations, and crankie creations (Flannery et al., 2021). Foundational to these new developments were:

conceptual criteria...such as synchronicity, complementarity, opacity and staticity. Prior to IA[EP], the visual arts education explored concretised art works mainly, but, with the integration of music, that canon was expanded to include kinetic, multimodal and time-based works (Flannery et al., 2021, pp. 36-37).

Such innovations and differences were possible because of increased collaboration and co-planning, and cross-pollination of ideas, strategies, and methods. Through cross-curricular exchange and appraisal, the teacher arts educators became critical friends for one another and, over time, assimilated concepts and techniques from the other arts education practice, facilitating integration that was double-focused and co-equal (Barnes 2015; Bresler 1995). Discrete knowledge and skills in different arts disciplines were consciously developed in tandem with integrated approaches, the totality of which seemed "greater than the sum of the parts" (Carlile & Jordan, 2013, p. 126).

Practice was also enhanced by increased reflexivity. New perspectives, ideas,

and thinking developed regarding the teacher arts educators' role and its impact beyond primary teacher education. There began a shared evaluation of practice which challenged and expanded what were regarded as essential qualities and characteristics in teacher and primary arts education. In both of the self-study cases, greater theoretical insight on creativity and collaborative learning was evident in ideas that developed beyond compartmentalised thinking. Seeing a bigger picture resulted in a number of core actions:

[Firstly], a re-visioning of the learning space, where creative learning experiences must provide an environment for confidence and risk-taking to flourish. Secondly, this has encouraged a re-visioning of assessment as a process that stimulates awareness and openness to the creative self throughout the course (Flannery et al., 2021, p. 49).

Benefits to Pre-Service Teachers

Results of analysis suggest four key benefits for student teachers:

- an improved learning experience
- increased understanding of the conceptual similarity and interchange within the arts and the creative process
- the opportunity to model and explore practices based on creative habits of mind and IAEP theory in a critical "safe-space"
- a more open, and equitable, relationship between the arts educator and pre-service teacher.

These benefits were noted by students throughout their engagement with IAEP, a process in which students were encouraged to "let go" of deep-seated identities, and, in some cases, pre-conceptions of limited ability within both music and visual arts domains. Students expressed the value of a collaborative workspace to think differently, to share and reflect, and to make connections between the arts:

I feel significantly inadequate...I often feel overwhelmed by the total autonomy to independently make decisions...However, using a piece of visual art as a stimulus acted as a catalyst, inspiring and assisting...when creativity began to diminish (Flannery et al., 2021, p. 45).

With educators' critical adaptation of projects over time, students moved from the illustrative and literal aspects of IAEP (e.g., using illustration and narrative devices) to a more interpretive level of thought, and the depth and quality of their work improved. Teacher arts educators became more adept at helping students to make deeper conceptual connections between the arts. Students reported deeper awareness and engagement in the creative process because such connections were made visible in

teaching sessions and in interactions with their groups and tutors.

The final *performance of understanding* provided opportunities and benefits. The event was an enjoyable form of assessment for students as it “triggered the excitement of a social, theatrical, spectacular, and celebratory event” (Flannery et al., 2021, p. 29). The intertwined performance of art and music in real time brought in a deeper synesthetic experience, as visual art “danced” with music. One student noted the value of this shared seeing and hearing for personal reflection and as an opportunity to consider the relevance of the project for the primary classroom:

It was interesting to see everyone's different interpretation of the task. It made me think that, if children were given a similar task, with the correct guidance, stimulus and assistance, they could write creative compositions of their own (Flannery et al., 2021, p. 43).

IAEP projects enabled teacher arts educators to model roles and relationships that fostered creative habits in the primary classroom. The dialogue between students and with their arts tutors, as they negotiated different skill sets and engaged in collective problem solving, was valued both in terms of the project outcomes and their own professional learning, as one student reported:

I can take risks, and experiment with different media to be more creative. This benefits my teaching as I can ...encourage children to be more creative by experimenting, by taking risks, knowing that it is not about this perfect piece of art, it can be about the process and techniques learnt through completing a piece of art (Flannery et al., 2021, p. 47).

Extending Guskey's Model to Teacher Arts Education

While Guskey's model served well in relation to summarising five levels of professional learning from IAEP, it did not fully capture the transformative learning resulting from critical collegial exchange (Sugrue, 2011). For example, there was a significant engagement with transformative “identity work and reflection on our personal creativity and our role as facilitators of ‘little c’ creativity” (Flannery, et al, 2021, p. 45). In addition, the teacher arts educators compared, contrasted, and critiqued their respective practices and curricular provision at primary-school level enabling them to challenge assumptions and cultivate awareness of other ways of working.

The collective participation facilitated by the PAINT project provided opportunities to discuss, share, and learn with each other as fellow teacher arts educators in an interdisciplinary context (Teaching Council, 2016 as cited in Gilleece et al., 2023). The aim of Guskey's model is the evaluation of improvement of participants' and students' learning, crucially at levels four and five. When applied to an artistic, reflective, and collaborative process, however, experience from the PAINT project suggests that

deeper thinking might take place through students' prolonged engagement with interdisciplinarity, particularly in a community of teaching practice. Developing deeper thinking through sustained collaborative arts is as, if not more, important than the mere adaption of practices suggested by Guskey: "time needs to be given to allow students to adapt new practices to their setting" (2016, p. 35).

Extending Guskey's model facilitated description of the transformative learning, (Savva, 2019) concerning multimodality, multiliteracy, and multiplicity of new approaches, that was achieved across our teacher arts education practices. For example, music is received aurally, is mostly expressed through sound, and mainly experienced in a time-based spectacular manner. Visual arts/art and design are predominantly expressed through silence and experienced in a time-concretised spectacular way. IAEP enabled engagement in reciprocal, critical, collegial exchange, resulting in assimilation of the arts elements, a shared language, and practical pedagogical approaches into the combined practice of teacher arts educators. It lent itself to new aural, kinaesthetic, musical, oral, visual and written teaching, learning and assessment experiences; encouraged development of critical, cultural, digital, and social literacy elements; and extended the arts canon to include multimodal, kinetic, and time-based works (Flannery, et al., 2021).

Extending the model prompted consideration of the potential of IAEP for initial teacher education and its reach into broader social and cultural contexts (Coldwell & Simkins, 2010), such as students' arts education practices in the classroom. "While open-ended artistic experiences are exemplified and promoted, we found that many student teachers still teach in an overly prescriptive manner that is partly attributed to low student teacher creative self-efficacy" (Flannery, et al. 2021, p. 15). While this study cannot measure the degree of impact of professional learning from IAEP on students' classroom teaching, the observed benefits to students include increased enjoyment, fulfilment, understanding, and skills that develop creative self-efficacy, all of which can positively impact their teaching experience.

Conclusion

Using Guskey's professional development evaluation as a lens for critique, this article examined the nature and quality of professional learning from IAEP among four teacher arts educators in a cross-border collaboration project. Using the PAINT project report as the data source, findings indicate that all five levels of professional development progressed to varying degrees. Any variance may be attributed to the provenance and nature of the IAEP in each higher-education setting, our own prior knowledge, or previous teaching experience, of the other arts disciplines, and the degree of de-privatisation of our practice before the introduction of IAEP. Engagement in the collaboration exercise proved to be a productive and enjoyable experience for both teacher arts educators and student teachers and one that is

worthy of recommendation to teacher arts educators in other higher-education institutions. The reciprocal exchange that characterised the collaboration resulted in shared knowledge creation and transformed ways of perceiving, working, and being. Guskey's model, though adequate in many respects, needed extending to capture the extent of professional transformation experienced from the de-privatisation and cross-pollination of practice. Despite a number of potential obstacles – the varying artistic self-efficacy levels of pre-service teachers, the related challenges of implementing IAEP, and knowing that the arts do not always fare well from cross-curricular learning – we must conclude that IAEP in pre-service teacher education is an enriching, enlightening, and rewarding experience. It is an effective means of teacher arts educator professional development resulting from the de-privatisation of practice, reciprocal exchange, shared reflexivity, and knowledge co-creation.

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