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Generating Cultural Capital? Impacts of Artists-in-Residence on Teacher Professional Learning

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Introduction

In 2008, the Australian Government established the Artist-in-Residence (AiR) program as a four-year \$5.2m initiative to improve young people's access to quality arts education. Managed by State and Territory Government Education and Arts Departments, the program funded professional artists-in-residence in schools, early childhood centres and universities for a minimum of one month. One of the core principles of the program, which made it distinct from other programs for arts in schools in Australia, was that artists and educators were to work in collaborative partnership in the AiR projects to support teacher professional learning. Context-based and collaborative professional learning strategies have been identified as offering the possibility for 'immersive' experiences and exemplars that can be applied later in teachers' own classrooms (Burrige & Carpenter, 2013). It was anticipated that partnering with artists would benefit teachers of all levels of experience and proficiency in teaching about the arts and through the arts, including those teachers with no arts experience at all. The AiR program was implemented at a time of significant reform in Australian education, including the development of the country's first national curriculum, and the renewal of a creativity agenda for Australian schools. Evidence of such an agenda is found in discourse about twenty-first century learning (Marsh 2010; O'Toole, 2012b; Robinson, 1999; Thomson, Jones & Hall, 2009) and the inclusion of critical and creative thinking as one of seven core competencies to be implemented across all subject areas of the new curriculum.

The study presented here links the AiR program to this creativity agenda through an investigation of teachers' perceptions of the impact of the program on their own professional learning. In particular, we were interested to discover how teachers used discourses of creativity and inferences about creative learning to articulate the value of the program. Using a working definition of creative learning as both *teaching creatively* and *teaching for creativity* (Sefton-Green, Thomson, Jones, & Bresler, 2011, pp. 1-2), our initial aim was to gain insight into how partnership programs such as AiR enabled teachers to generate "creative capital" (Fisher, 2004, p. 14) through engagement with both arts content and pedagogy. This raised questions, however, about the capacity, nature and distribution of that capital to effect sustainable change in teacher practice. In this article, we therefore consider the study's findings in the light of alternatively theorised perspectives on contemporary teacher professional learning in creative education (Hatcher, 2011) beyond the acquisition of arts-based skills and knowledge. In doing so, we make reference to the broader impacts, implications and potential for arts-based programs to help prepare and support teachers to engage meaningfully with Australian education's creativity agenda.

Background to the Study

Concepts of creativity and creative thinking have long held significance in educational research (Alter, 2010; Weilgosz & Imms, 2007). However, as Pope (2011) wryly observes, the term creativity is ill-defined, given that the range of potential meanings can span “the divine, the specifically artistic and the generally human” (p. 109). Yet, creativity as a phenomenon has recently gained prominence in contemporary Australian educational discourse with the inclusion of “critical and creative thinking” as one of seven general capabilities of the new Foundation to Year 12 Australian Curriculum (ACARA 2013b). These capabilities, which are intended to span all curriculum content areas, aim to “encompass the knowledge, skills, behaviours and dispositions that...will assist students to live and work successfully in the twenty-first century” (ACARA, 2013b). Specifically, the Australian Curriculum describes creative thinking as a capability that “involves students in learning to generate and apply new ideas in specific contexts, seeing existing situations in a new way, identifying alternative explanations, and seeing or making new links that generate a positive outcome” (ACARA, 2013a).

The draft curriculum in the Arts refers back to these capabilities numerous times. For instance, the key “making and responding” arts learning processes articulated in the 2013 draft are described as:

intrinsically interconnected ... [enabling] students to develop knowledge, understanding and skills as art makers and as audiences, as well as skills in critical and creative thinking. They learn to generate and analyse ideas, make art works and express ideas, feelings and emotions through art form-specific skills and techniques (ACARA, 2013c).

The Arts curriculum framework outlines how students will engage in creating new works, individually and collaboratively, with the intention to develop capacities that are beyond arts-discipline specific skills and knowledge. In the process of “making”, for example, students will be expected to engage with “generating” new meaning, “applying new ideas” and solving problems (ACARA 2013c). While it could be assumed that specialist arts educators would feel competent addressing these creative capacities in their work (Alter, 2010; Moga, Burger, Hetland, & Winner, 2000), the profiling of creativity and creative thinking raises some interesting questions for teachers and teacher educators in and beyond arts education. How are educators generating creative capital to engage meaningfully with the creativity agenda in their learning designs and classroom pedagogy? What could arts practitioners have to offer teachers, of any area of curriculum specialisation and experience, working in these contexts of change? These are important questions that provide the impetus for the present study.

Of similar significance to this research is the publication by the Australian Institute for Teaching and School Leadership (AITSL) of the *Australian Professional Standards for Teachers*. According to AITSL (2013) these standards are designed to “inform the development of professional learning goals”, and the Graduate Teacher standards therefore have particular relevance for teacher education, as this disposition is regarded as a core domain by the institute. The emphasis in these standards on the ability of graduating teachers to develop and maintain standards of professional learning also presents an ideal opportunity for collaboration between teachers and artists through such programs as AiR. Furthermore, the collaborative nature of the AiR program offers an interesting and sustainable means to address the significant issue of the marginalisation of the arts within many teacher education programs. This marginalisation has been written about extensively and was prominent in the major review of visual arts education *First we see: The National Review of Visual Education*. (Davis, 2008) and of music education the *National Review of School Music Education* (Pascoe, Leong, McCallum, Mackinlay, Marsh, Smith, Church, & Winterton, 2005).

Our goal is to advance an understanding of the connections between arts education and creativity in this current context, by focussing on how teachers talk incidentally about creativity as they reflect on and assess the value of working with artists to facilitate student learning. We do this by analysing survey data from a 2011 Australia Council commissioned evaluation of the national AiR initiative (Hunter, 2011), an artist-teacher partnership program established to improve young people's access to quality arts education and contribute to teacher professional learning in both arts-specific and cross-curricular contexts.

It is important to note that the AiR national evaluation was commissioned by the government agency that delivered the program, the Australia Council. Neither the goals of the program nor the terms of reference of the evaluation stipulated 'creativity' or 'creative learning' as the intended focus. In this study, however, we have taken the opportunity to re-analyse the extensive data gathered for the evaluation to gain different insights into how arts education and aspects of the creativity agenda intersect. Do teachers employ discourses of creativity when talking about their experiences of an arts-based program? In what ways do they infer creative learning in articulating the student learning and teacher professional learning outcomes achieved?

In this article, we present the findings of an analysis of one specific subset of the evaluation data: that is, the open-ended survey responses by teachers on what they felt they and their students learnt from the experience of working in collaboration with artists. Our aims in this article are to: i) convey an understanding of what teachers perceived they learnt from the experience of collaborating with professional artists; ii) draw attention to how teachers used discourses of creativity to describe their own professional learning outcomes; and iii) discuss these findings in the light of what may constitute "creative capital" (Fisher, 2004, p. 14) and how that capital is reconceptualised for sustained professional learning outcomes (Fielding, et al., 2005; Hatcher, 2011).

The Creativity Agenda in Education

As McCarthy and Pittaway (in press) and others (Alter, 2010; O'Toole, 2012a & 2012b; Robinson 1999 & 2005) have identified, creativity has been a topic under educational research enquiry for the past 100 years. The word creativity itself defies singular definition, although identification and measurement of its characteristics are highly sought after in both empirical and highly theorised literature. Among the most influential approaches to the topic in education studies are: Guilford's (1950) research in cognitive psychology whereby creativity is defined as the divergent rather than convergent production of knowledge; Sternberg's (2012) investment theory that claims there are six resources of the creative individual (such as knowledge, intellectual abilities, styles of thinking, motivation, personality and environment); and Gardners' (1983) multiple intelligences theory that affords creativity a central role in an understanding of human development and diverse learning dispositions, styles and processes.

Yet, as Weilgosz and Imms (2007) note, with reference to Rhyammer and Brolin (1999), the issue of "nurturing creativity in schools, and the transferring of creativity across the curriculum in the form of creative pedagogies...are the weak links in creativity research and literature" (p. 55). In more recent years, this issue has gained greater attention with landmark publications in the field of "creative learning" (Sefton-Green, et al., 2011; Harris, in press) that propose a creativity agenda for education that goes beyond the development of individualised student capacities. More recent scholarly treatments consider socially-critical approaches to investigating how schools may foster creative environments for twenty-first century learning and how teachers may alter their pedagogical practice for optimal student

learning not just in the creative arts, but across the curriculum. Sefton-Green et al.'s (2011) attempt to make this clear in their definition of a scholarly field of "creative learning" that encompasses *teaching for creativity*, namely the "interventions, principles and practices that have as their object, making children and young people more creative" (pp. 1-2); and *teaching creatively* which has a focus on "structure and organisation of schools and classrooms, ...teaching materials and on interactions between teachers and students in order to change curriculum, pedagogy and assessment" (p. 2). While theirs is one among many frames of reference for what counts as creativity in schools, Sefton-Green et al.'s categories of creative learning allow for a relationship between the creativity agenda and the arts to be made distinct and examinable, not assumed. For instance, by applying Sefton-Green et al.'s definition, it can be argued that the Australian Curriculum's "creative thinking" core competency is a call to teachers to *teach for creativity* across the curriculum, while also making apparent the embedded opportunities for this to occur within the Arts curriculum.

It is our premise that the current educational reforms in Australia foreground a creativity agenda in word, but that it remains to be demonstrated, applied and evaluated in action. Our goal here is to contribute to an understanding of teachers' current discourses and inferences around teaching for creativity and teaching creatively, as evidenced in their feedback about a specific program of arts-based professional learning. In so doing we add to the already existing research and commentary related to the purposes and delivery of the new Arts Curriculum and its impact on teacher education (Lemon & Garvis, 2013; Nilson, Fetherston, McMurray, & Fetherston, 2013).

AiR Evaluation Background and Method Adopted for this Study

The AiR program was an initiative of the Commonwealth Government, supporting the principles of the *National Statement on Education and the Arts* released by the Cultural Ministers Council and Ministerial Council for Education, Employment, Training and Youth Affairs (2005). A commissioned evaluation of the first three years of the Australian AiR program (2008 – 2010) was conducted by one of the authors (Hunter, 2011). The evaluation's terms of reference were to capture the impact of the AiR program on student learning, teacher professional learning, and artist professional development; to showcase best practice examples of AiR residencies; and to identify areas for program improvement and growth. The evaluation was conducted via a mixed methods research design including:

- literature review
- desk analysis of available project acquittals and documentation
- meta-analysis of six major independent project-level and jurisdiction-level evaluation reports
- analysis of 94 electronic surveys completed by artists and educators
- analysis of five focus groups with students
- observation of professional learning days associated with jurisdiction-level programs
- semi-structured interviews and informal discussions with administrators, teachers, artists and arts education researchers.

This particular study focuses on re-analysing one set of data from this evaluation: the electronic survey which aimed to gather data on teachers' and artists' perceptions of the impact of the program on student learning and their own professional development. This survey was administered from November 2010 to February 2011. Ninety-four responses were received, with 34 of those responses being from participants identifying as teachers and 60 from artists contracted to the AiR program. At the time, a total of 95 AiR projects had

been completed in primary and secondary schools. The items on the survey were a mix of Likert scale and open-ended questions, devised with reference to the commissioning body's Terms of Reference and peer-reviewed by an arts educator and researcher. The survey was piloted with a consultant AiR participant teacher.

While the 2011 evaluation process involved taking a randomised stratified sample of respondents' answers to six open-ended questions, this study extends the initial analysis by drawing on a subset of the survey data as a basis for further investigation. Here, we isolate the responses of all 34 identified teacher-respondents to examine their perceptions of the impacts on and changes in student learning and on their own professional learning as a result of the program. All survey responses were anonymous, pseudonyms have been employed for the purposes of this publication, and the evaluating commissioning body has consented to the use of this data for this research.

Given this re-analysis, it is important to note that the original purpose of the survey was to evaluate the first phase of a new program. Therefore, we are cautious and realistic about the nature and rigour of these data as an evidence-base for determining impact. As Hunter (2011) notes in the evaluation report, many impacts – whether intended or unintended, and whether positively or negatively inflected – may not become apparent to participants for some time. Therefore, a limitation of this study is that it uses short-term teacher *self-perceptions* of impact when it comes to teacher professional learning. It is also important to reiterate that these are not teachers' responses to explicit questions about creativity. This is a characteristic of this study that makes it distinct from other studies and evaluation findings on teachers' perceptions of professional learning where teachers have responded to targeted topic questions (for example, Galton, 2008; Fautley & Hatcher, 2008).

Our analysis began with a preliminary search through all available program evaluation data to gain a background understanding of how participant teachers and artists worked together in AiR projects, and how teachers communicated the impact of the program on their own learning. This process was followed by a search for the ways in which teachers used the terms “create”, “creating”, “creative” and “creativity” in their responses concerning the program's impact on their professional learning. A secondary process of inductive coding (Braun & Clarke, 2006; Hatch, 2002; Miles & Huberman, 1994; Sarantakos, 2005; Silverman, 2011) was implemented to understand how these terms were iterated and applied in context. A third coding process was used to identify teachers' inferences to creative learning. These inferences were derived from the authors' interpretation of literature on the practices, dispositions and skills of *teaching for creativity* and *teaching creatively*, from the Australian Curriculum definition of the general capability of critical and creative thinking, and from implications made by teachers themselves. Patterns of meaning evolved through the development of complex and detailed matrices as specific relationships between the comments of teacher respondents were identified (Averill, 2002; Miles & Huberman, 1994). These matrices were further analysed with specific reference to Fisher's (2004) concept of 'creative capital' and further critiqued in light of Hatcher's (2011) theorisation of critical, creative learning in teacher professional development.

Findings

We begin by summarizing the nature of the professional learning strategies adopted by schools and teachers in the Australian AiR program. Then we turn to identifying teachers' comments about their learning as a result of their involvement in the program. Lastly, we outline the direct and inferred use of terms and descriptors related to creativity.

In What Ways did Teachers Engage in Professional Learning in the AiR Program?

Teachers were engaged in professional learning experiences in the national AiR program in different ways. In some projects, they worked closely and collaboratively with artists as colleague professionals, sharing knowledge and skills in the process of co-devising and co-facilitating arts-centred learning with students. In other projects, teachers mostly observed or acted as aides to artists. In some schools, teachers and principals who otherwise had little connection to the day-to-day workings of the AiR project, attended professional learning workshops delivered by the resident artists.

In five of the States and Territories, teachers and principals involved in AiR projects were required to participate in organised induction activities by State government departments. In these sessions, artists, teachers, project coordinators and principals shared non-school contact time to vision, plan, budget for, and, in some cases, structure the evaluation of their projects. In some States, the induction days were observed to be a mixture of project skills development and activities designed to enhance collaborative thinking and planning. These events were also designed to offer benefits in terms of project participants getting to know each other and identifying themselves as part of a wider professional community of educators and artists. In the case of one AiR project that was embedded within a larger regional initiative supporting arts and education, teachers also attended professional learning days with their State's education curriculum advisors to learn how to embed and assess their AiR projects within that State's then current curriculum.

What did Teachers Say about Their Own Learning?

When asked to define the impact of the AiR experience on their professional learning, the respondents indicated that they benefited most from the development of new skills and knowledge in the arts, new pedagogical skills, and from new understandings of their relationships with students, artists and the community.

Arts skills and knowledge

The benefits of the AiR program for teacher professional learning were consistently evident in these data both through teachers' descriptions of their own skill development and in more general comments about the impacts of projects on school life. References to teachers' personal artistic skill development were numerous. For example, individual respondents indicated that they believed that they were now more competent in "filming and editing" (Fiona), "juggling" (Mary), "physical theatre skills" (Timothy), "working with paint" (Veronica), "how to develop a drumming piece" (Nina), "improvising productions" (Daniella) and "the processes of design and techniques of printing a lino print" (Jack).

Furthermore, 40% of respondents stated they experienced a growth in confidence in working with the arts over the life of the project. Daniella stated, "I have learnt more practical skills that I can now use to enhance my programming. I can add to my students' experiences in the arts by introducing technology aspects that I could not have done previously". Further, David said, "I have gained valuable teaching tools in regards to The Arts. It has given me the confidence to continue a program in Dance as an alternate lunch time activity as well as in my classroom."

There were a number of examples of teachers directly transferring their new skills into their classroom teaching. Some teachers indicated they had replicated the AiR project in other classes using their newfound skills and confidence. One primary teacher said: “I now have a broader understanding of the options available to students within performing arts. I have also a new collection of workshop techniques and improvisation activities. My confidence in teaching drama ... has increased as I now have an improved knowledge and understanding of how to engage students within this area” (Jessica). Those who had previously worked with artists highlighted the additional resources that the AiR program provided to enable more worthwhile learning opportunities: “The value of an AiR in our school has been outstanding...What we were trying to do without funding and relying on contributions from teachers and artists, has been so much more rewarding with adequate resources and funding for more time” (James).

Some teachers commented on their intention to pursue future collaborations with artists or arts-related organisations as a result of their AiR experiences. This was further corroborated in other evaluation data from the survey that indicated that 96% of all survey respondents would seek to engage in artist in residence projects in the future.

Pedagogical Skills

The development of general pedagogical skills was mentioned such as: “improved understanding of how to engage students” (Anita). Other respondents commented more specifically on arts related pedagogy: “techniques and tools that can be used and the effect given” (Lewis), and “pedagogical skills in teaching art techniques” (Tina). Particular strategies learned from the artist-in-residence, such as ways of teaching practical skills (Fiona), and workshop techniques and improvisation activities (Anita) were also described. Some respondents made specific reference to integration across the arts, including Belinda who commented “I believe I will notice a change in my work environment when I start integrating some more technology into the dance course”.

Roberta reported that the skills she learned from artists would be used not just in her teaching about the arts, but in her further work “to extend children’s thinking” (Roberta). Her reflection echoes those made by teachers in Nilson et al.’s (2013) research that examined the role of the arts in the development of children’s critical thinking.

Building Relationships

When asked in one of the open-ended survey questions what they felt they learnt from their AiR projects, 38% of teachers’ comments referred to changes in relationships. Teachers indicated that relationships with students in their teaching and learning environment tended to improve because projects encouraged a different way of relating. Some teachers felt they had a common project to work on with students and therefore appreciated the opportunity to see their students in a different light. Anne commented that a benefit was “to look at students with new ‘NON teacher’ eyes”.

It appeared that impactful teacher professional learning occurred when a mentoring relationship was explicit – either between the artist and teacher themselves or with third party mentors or critical friends to the project. One teacher described the mentoring situation as a one of adding “depth and breadth to the program ... both the artist-in-residence and the mentors were part of a valuable partnership”. This respondent also illustrated how collaborations developed at a broader level: “artist 'hubs' were especially successful as we

were in a position to share ideas, negotiate outcomes, facilitate discussions and make connections with a variety of art organisations on a local and national level” (Lisa).

Other specific references to collaboration were made by teachers who indicated that they had pursued a wider community of practice with people in the arts industry, either within the AiR project or as a result of it. One teacher indicated that the program had resulted in the “broadening of networks within the arts industry” (Timothy). One comment about future partnerships illustrated the kind of collaborative activity that the teacher had in mind. Lewis commented that, following the success of the AiR project, “funding for a ... program for visual arts has been submitted for the fourteen schools in our learning community.”

How did Teachers use Discourses of Creativity and Make Inferences to the Hallmarks of Creative Learning to Articulate their Experiences?

Using a ‘creat’ search term on all teachers’ open-ended survey responses revealed that respondents made only limited direct references to the terms ‘creativity’ or ‘creation’ in commenting on their own learning experiences in the program. The analysis of the AiR survey data revealed that respondents rarely employed the term ‘creativity’. However, some respondents referred indirectly to the hallmarks of creative learning through descriptors that may be interpreted as components of “teaching creatively” or “teaching for creativity.” These descriptors included comments about having “gained a wider perspective” (Mandy), and of how the arts can be used to teach for inclusiveness with students with disabilities, for example. In addition, Belinda referred to the benefit of “integrating” media arts and dance, foregrounding the kinds of cross-disciplinary opportunities for “teaching for creativity” that arts-based projects “such as these” can provide.

Respondents also referred to how they had developed their own creativity alongside their students. With reference to a dance residency, Jane described the “hive of activity *created* in the Studio” (emphasis added). Alison referred to the benefits “of a workshop series which incorporated many schools in *creative* collaboration” (emphasis added). Here, Jane and Alison describe opportunities in which both teachers and students were involved in interactive experiential learning involving collaboration with others. Phan described creativity in terms of stimulus: that the AiR project became a creative stimulus for her as a teacher planning further activities. Similarly, Fiona referred to a creative pedagogical process of generating new ideas when she described how she saw a “creative writing tool [being used] as a stimulus for generating dance”. Furthermore, Jane referred to the “use of dance and film to *create* a narrative”, thereby valuing an interactive negotiation across arts domains of writing and dance.

Rachel made a particularly interesting response suggesting that her students achieved skills of independent learning through the process of creating something of their own in their AiR project. She wrote that “students were able to see that it is possible for them to work towards and achieve a major performance rather than relying on teaching staff to create the work to be performed”.

Discussion: Applying Creative Capital to Teach Creatively

As with student learning, it is difficult to rigorously evaluate the impact of AiR projects on teacher professional learning, as some impacts cannot be gauged in the short term. Other studies have shown that there are beneficial outcomes for teachers from their participation in programs where they have been required to work alongside artists and reflect

on the project's outcomes. For example Nilson, Fetherston and McMurray (2013) reported on the capacity for teachers to identify and respond to children's increased capacity for creative problem-solving as they worked with artists-in-residence. There is further longitudinal research needed to identify teachers' professional learning gains and measure, in a valid and robust way, the changes in the learning environment and student achievement and development. However, in our case the teachers' survey comments allowed us to gain an insight into the value of the experience for teachers with regards to their professional growth.

Firstly, the AiR program was perceived to have a positive impact on teachers' level of access to professional learning with the added benefits of being intensive (one-on-one), relevant (situated in the teachers' own working environment), and useful (projects and skills that could be reproduced in other contexts). School-based one-on-one professional learning opportunities are generally minimal in Australia and, in the case of professional learning in the arts and/or in regional and remote areas, they are distinctly rare. For the most part, it appeared to the researchers that the quality of the teacher learning experience was purposeful and authentic. When teachers were working directly with artists in the classroom, they were able to experience, first-hand, the application of arts skills and knowledge in their authentic teaching environment. They also experienced, first-hand, the impact of arts participation on students whose learning dispositions, needs and general achievement levels they already knew. In addition, some teachers indicated that because they had the opportunity to work alongside the artists, they experienced some of the same positive benefits of arts participation as their students: "I learnt how to juggle many projects at once and learnt some really helpful organisational skills. I actually learnt how to juggle – literally as well! It was fun" (Mary). These outcomes reflect several of the points made by Burrige & Carpenter (2013) who note that change in teacher practice occurs when there is a focus on pedagogy and student learning, and teachers engage in discussion and reflection with project partners while immersing themselves in a program with students in their school setting.

The dynamic of having artists share in the learning space gave some teachers the opportunity to relate differently to their students and to value them in different ways. As many AiR projects prioritised students' self-expression, teachers noted that they were able to gain insight into students' personal and emotional lives – insights that were otherwise unavailable to them in regular classroom relationships and activity. As one AiR project acquittal report indicated, the project "increased the teachers' repertoire of different coaching/teaching styles that encourage intrinsic experiential learning which can be more collaborative, creative, non-competitive, and inclusive than some traditionally-used approaches" (Hunter 2011).

In their survey responses, it appears that teachers elaborated on three main themes with respect to their own learning: the development of arts skills, the development of pedagogical skills, and the opportunities for collaboration – both with students and with artists. It is interesting to consider these aspects of teacher learning in light of Fisher's definition of "creative capital" (2004, p. 14). Creative capital, Fisher suggests, "is the sum of resources needed to tackle a task and include the creative self, the creative environment, and the creative partnerships." (p. 14). These data suggest that respondents may not have been familiar with working with artists – that they were not used to bringing the "sum of [diverse] resources" (of self, environment and partnership) to bear in the teaching and learning context. Applying Fisher's definition, a growth in teachers' creative capital appears to have been attained in the program, evidenced by their self-perceived improvement in levels of arts skill ("creative self"), comments on their new pedagogical skills ("creative environment"), and their awareness of new relational opportunities in the act of collaboration with artists and students ("creative partnerships"). Partnership and collaboration, the third of Fisher's three components of creative capital, was mentioned both broadly and specifically by respondents

as a key benefit of participation in the AiR project. It appears that the benefits of experiential group learning (teacher alongside artist alongside students) that the program instigated, was one of the positive new professional learning discoveries for teachers.

Creative Pedagogies for Professional Learning

The concept of creative capital offers one useful frame for interpreting the outcomes of the AiR program for teachers, however Hatcher's (2011) critique of the pedagogy of professional learning in the context of current education policy offers an extended and potentially more salient perspective. For while a 'capital'-based analysis captures the increase in teachers' skills and knowledge, a deeper investigation could better reveal *how* these new understandings were generated and applied in the artist-teacher partnership. Given that teachers commented most frequently on their new arts skills gained, what then made the AiR program so distinct from a conventional shorter-term skills training workshop, for example?

Hatcher argues that "professional learning for creativity is not reducible to the transfer and acquisition of pre-programmed knowledge" (p. 404). Researchers associated with the UK Creative Partnerships program (which was in some aspects similar to the Australian AiR initiative) found that for significant and effective professional learning to occur, teachers needed to not only apply the skills shared by the artist, but to "understand the underlying principles [of the work of the artists] in order that the teacher can generate their own subsequent creative teaching and learning" (Hatcher, 2011, p. 405). Drawing on the work of Thomson, Jones, and Hall (2009), Hatcher makes the case that this entails not just replication of practical experience, but opportunities for "rich intellectual work" in "reconceptualising" the artists' processes involved to make "new pedagogical sense" (p. 405).

While there are inferences of this kind of application of creative capital in the teachers' responses, such comments do not appear frequently enough to be significant. This is consistent with findings of Imms, Jeanneret, and Stevens-Ballenger (2011) in an independent evaluation of school and arts industry partnerships in Victoria. Imms et al. observed that students, teachers and arts professionals had very little vocabulary to talk confidently about creative skills or creativity with regards to their partnership programs.

Identifying evidence of an increase in teacher creative capital through teacher self-perception of increased levels of skills and disciplinary arts knowledge is valuable and important. However, further investigation is needed to reveal to what extent such capital was reconceptualised to make "new sense" for teachers in their ongoing practice, particularly in the light of the hallmark practices of *teaching for creativity* and *teaching creatively* (Sefton-Green et al., 2011, pp. 1-2). Drawing on Young (2008), Hatcher suggests that, "critical creative learning entails problem-making as well as problem-taking, ...[such that] creative cognitive processes [are] informed by conceptualised knowledge" (412). In the context of teacher professional learning, did opportunities and platforms for these reconceptualisations occur in the AiR program? That is, did the program offer opportunities for the skills of arts practice to be converted into 'new pedagogical sense' when it comes to creative learning and the broader creativity agenda?

Data from the broader AiR program evaluation (Hunter, 2011) suggest that it has potential in its partnership design to leverage the kind of extended opportunities for teacher-artist connection and reflection to support the "rich intellectual work" that Hatcher refers to. There was evidence of this potential in some States that chose to augment the individual AiR projects with group meetings of other teacher and artist participants in that State - beyond the initial induction meetings. In Tasmania, for instance, an early induction program delivered

by Arts Tasmania was augmented by regular artist/teacher hub meetings that were open to the wider Tasmanian arts and education communities, and functioned as a platform for participant discussion, reflection, problem-solving and, in some cases, problem finding. In addition to this, Tasmanian artist participants were also allocated mentors with no direct involvement in their project to foster broader connection and reflection relevant to individuals' longer term professional pathways and action. This mentoring dimension appeared to have a significantly positive impact on the way in which teachers felt valued within these projects.

I was particularly impressed with the fact that the program recognised that teachers also make good mentors. The mentoring role added depth and breadth to the program and both the AiR and the mentors were part of a valuable partnership...the 'hubs' were especially successful as we were in a position to share ideas, negotiate outcomes, facilitate discussions and make connections (Lisa).

While further research is required to determine whether such structural opportunities met their intended aims, it is important to note the ways in which the AiR program did offer opportunities beyond skills-acquisition to ensure the experience was meaningful and relevant to more sustained professional learning outcomes, particularly around creating and transforming creative partnership capital into new sense for participants.

Conclusion

Without a universally accepted definition or metric for creativity, discussion of creative learning may seem little more than semantic play at present. Yet, teachers' choices in the vocabulary and discourses they use to describe their own learning experiences, enables researchers to start to gain insight into what is presently perceived and valued. Such a study, while limited, has enabled us to identify gaps and opportunities when it comes to the intersection of professional learning in the arts and Australian education's creativity agenda.

When assessing the impact of the AiR program on their professional development, teachers emphasised the benefits of learning hands-on arts skills. They also commented on new pedagogical skills and discoveries about new kinds of learning relationships they experienced in the three-way artist-teacher-student learning dynamic. By analysing teachers' descriptions of these and other impacts, it appears that arts-based programs like AiR provide opportunities for teachers to acquire creative capital. However, the development of skills and understandings in *teaching for creativity* and *teaching creatively* (processes that include but reach beyond ACARA's definition of "creative thinking") are not necessarily a natural consequence. The AiR program, in its principle of partnership and collaboration does demonstrate potential in this regard, as evidenced in structural opportunities that some States like Tasmania provided for extended teacher connection with wider communities of practice.

Our study suggests that, in the Australian context, further investigation into the ways teachers perceive and employ creativity in teaching and learning is warranted, particularly as a basis for determining and delivering relevant professional learning opportunities as the new Australian curriculum is rolled out. The AiR program illustrates the self-perceived teacher professional learning benefits of collaborative engagements with artists and students in school contexts. Analysed in the light of findings internationally, the program also reveals State-based opportunities for professional learning that have gone explicitly beyond the acquisition of skills to the building of teacher capacity for wider creative partnership noted in the third of Fisher's (2004) elements of creative capital, and for the rich intellectual work of critical creative learning as described by Hatcher (2011). This signals a model for

professional learning that, more broadly applied around the country, could better prepare and support teachers to deliver new curriculum outcomes and engage meaningfully with Australian education's creativity agenda. The need to replicate the kind of authentic learning articulated by the teachers in our study has been identified in research with pre-service teachers (Russell-Bowie, 2012), and through programs such as AiR offers teachers sustainable opportunities for professional learning and engagement. We suggest that working and reflecting with artists in ways similar to those in the AiR program may be of benefit in teacher pre-service as well as in-service education.

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