

Thinking about Practice in Integrated Children's Services: Considering Transdisciplinarity

Andrea Nolan, 1 Jennifer Cartmel, 2 and Kym Macfarlane 2

- 1 School of Education, Victoria University, Melbourne, Australia
- 2 School of Human Services and Social Work, Griffith University, Queensland, Australia

Integrated service delivery in the early childhood education and care sector is burgeoning as a direct result of government agendas in Australia that privilege services for young children and families, especially those considered most vulnerable and at risk. In many cases this means reviewing and revising current practice to work more collaboratively with other professionals. This paper reports the findings of one aspect of a larger Australian study entitled: 'Developing and sustaining pedagogical leadership in early childhood education and care professionals'. The focus of this paper is the understandings and practices of professionals in both Queensland and Victoria working in integrated Children's Services across the education, care, community and health sectors. The notion of transdisciplinary practice is also explored as a way to sustain practice. Qualitative data collection methods, including the 'Circles of Change' process, the 'Significant Change' method and semi-structured interviews were used. The findings indicate concerns around professional identity, feeling valued, role confusion and the boundaries imposed by funding regulations. Working in a transdisciplinary way was generally considered a useful way to move practice forward in these settings, although the ramifications for leadership that this approach brings requires further consideration.

■ Keywords: integrated children's services, transdisciplinary practice

Introduction

Current policy in early education and care (ECEC) in Australia is moving towards an integrated approach to service delivery where the health, education and community service sectors are expected to work together to improve the quality of services and therefore outcomes for children and families. The National Early Childhood Development Strategy: Investing in the Early Years (Council of Australian Governments [COAG], 2009a) emphasises early years interventions that reach beyond educational contexts and into the domains of health, childcare and protection, as well as family and housing support. The aim is to provide holistic support to families in recognition of their primary role of facilitating positive formative experiences for their children. This strategy is linked to the National Partnership on Indigenous Early Childhood Development (2009b) to improve Indigenous early childhood services via children and family centres to deliver services of early learning, child care and parent and family support to Indigenous children and their families. It also links to the National Framework for Protecting Australia's Children 2009–2020 (COAG, 2009c) which is using a proactive perspective to promote the safety and wellbeing of children.

As the Early Childhood Development: Workforce: Productivity Commission Research Report (Commonwealth of Australia, 2011) notes, the 'lowering of cross-sectoral boundaries and the growth of cross-sectoral delivery and integrated service delivery models' is occurring across Australia (p. 5), which means that professionals from different disciplines are required to work together in perhaps new and different ways. However, in reality, silos of practice exist (Press & Woodrow, 2005), which act to restrict the opportunities for knowledge exchange meaning that new ideas and approaches in particular sectors are often misunderstood in others. This situation increases protectiveness of individual knowledge bases and fosters suspicion about whether decisions about particular practice approaches are evidencebased (Cheeseman, 2007). For early childhood teachers, who have long made claim to the early years' knowledge base, this current policy climate is creating significant tension. Researchers such as Cheeseman (2007), Fenech,

ADDRESS FOR CORRESPONDENCE: Assoc. Professor Andrea Nolan, School of Education, Victoria University, St Albans Campus, PO Box 14428, Victoria 8001, Australia.

Email: andrea.nolan@vu.edu.au

Sumsion & Shepherd (2010), Macfarlane, Cartmel & Nolan (2010) and Moss (2006, 2010) highlight the problematic nature of current policy reform in relation to its contribution to the professional identity of early years teachers and other early years professionals, and the possible marginalisation of the ECEC knowledge base.

As has been found in other studies, which focus on policy-led changes in practice (Edwards, 2011), much of the associated learning has been found 'on or beyond the boundaries of established organisational structures' (p. 20). To act upon this notion requires moving outside of established practices and having an open and flexible response (Edwards, Daniels, Gallagher, Leadbetter & Warmington, 2009; Macfarlane, 2006; Macfarlane, Nolan & Cartmel, 2009). It also calls for effective leadership to create the scaffolds on which new ways of working can be created. However, as has been identified elsewhere (Aubrey, 2007; Macfarlane, Cartmel & Nolan, 2011), there are impediments to effective collaboration, some of which are raised in the study reported in this paper.

Transdisciplinary practice

It is useful to begin by defining what is meant by the term 'transdisciplinary practice'. To do this at a simple level is to state that taking a transdisciplinary approach would be to focus on an issue both within and beyond discipline boundaries allowing for new perspectives to be developed across the disciplines. As Marinova and McGrath (2004, n.p.) explain, transdisciplinarity 'involves what is between the disciplines, across the disciplines and beyond the disciplines' and has evolved from the earlier research fields of multidisciplinarity (drawing on the understandings and knowledge of a number of disciplines) and interdisciplinarity (applying the foundations of knowledge from one disciple within another discipline). Transdisciplinarity is concerned with the dynamics of the simultaneous action of layers of reality (Nicolescu, 2008). 'The goal of transdisciplinarity is the holistic understanding of the world and the unity of knowledge that is required for this understanding' (Marinova & McGrath, 2004, n.p). Gherardi and Nicolini (2002) conceptualise this as 'a constellation of interconnected practices' where practice is seen as 'brokering' knowledge-bases enough to undertake the task successfully in the new environment (p. 434). Negotiation is called into play as expertise and priorities are not necessarily known by all professionals involved. Such practice could be viewed as a stepping outside of the boundary into a new space of inquiry. Edwards (2011) views these new spaces as neutral, where respectful exchanges of information take place and where trust can be built. These are 'places at the boundaries of established practices where local expertise could be made explicit so that it might be drawn on later' (Edwards, 2011, p. 24).

Drawing on multiple perspectives and strategies that are informed by evidence bases in all and not just some of the disciplines involved is a feature of working in a transdisciplinary way. The tacit knowledge and theoretical frameworks of practitioners and professionals are respected and valued for contributing to evidence-based frameworks, which are underpinned by a strong sense of justice (Noble, Macfarlane & Cartmel, 2005; Osmond & O'Connor, 2004). Creating an environment that embraces transdisciplinary practice is difficult to achieve (McWilliam, Hearn & Haseman, 2008). What is required is a shared investment to build the capacity of service delivery. What works against this investment is the concept that knowledge should be kept apart from other disciplines to be able to do its best work, thereby reinforcing the notion of silos of practice. This sentiment is connected to notions of 'disciplinarisation' and 'paradigmatic self-identity' (McWilliam & Lee, 2006). These terms refer to the fact that individuals find their identity within their own discipline and can find it difficult to see themselves outside of that space. Professionals need to challenge this notion by seeking to work within and against their own understandings and practice (Lather, 1996). An example is the integrated service model which forms the basis for Queensland's state-funded Early Years Centres. This model focuses on providing prevention and early intervention for children and their families by providing early childhood education and care, family support and health services under one service umbrella. This model draws on international research which understands that multidisciplinary teams produce the most effective and efficient service in a holistic way rather than isolated approaches based on professional disciplines.

The research project

The project reported in this paper was part of a larger study based in Queensland and Victoria, Australia, entitled 'Developing and sustaining pedagogical leadership in early childhood education and care professionals', funded by the Australian Learning and Teaching Council. The sub-study focused on engaging professionals working across the Children's Services sector (education, care, allied health services, service managers, and government officials) in both Queensland and Victoria, to think critically about working within inter-professional teams in integrated settings and the ramifications this has for practice. As this was a research study, ethical approval was applied for and granted by both participating institutions - Griffith University and Victoria University. The notion of taking a transdisciplinary approach in one's work was introduced by the research team, although some participants already considered that they were involved in transdisciplinary practice, as a way to cross occupational and organisational boundaries, which prompted further reflection on practice. The research questions were:

- How is practice being enacted in integrated Children's Service settings?
- What is the understanding around the notion of transdisciplinary practice?
- How does this notion fit with working in integrated services?

Methodology

The states of Queenland and Victoria were chosen as the location of the study due to the researchers' interest and previous work in this area. Participants in the study included early childhood educators, allied health workers, service managers, Children's Services government department representatives and representatives from non-government organisations. Agencies represented metropolitan and regional areas. As has been already noted, data were collected as part of a larger study. For the sub-study, qualitative data collection methods were used including:

- the 'Circles of Change' process (Noble et al., 2005), which provides a framework for critically reflecting on practice that encompasses deconstructing, confronting, theorising and thinking otherwise (other ways of thinking) about practice in a democratic environment. The Circles of Change process begins with participants describing their own experiences regarding the topic under investigation. They then move to an examination of the issues, drawing on a range of discourses and theoretical understandings. The process concludes with participants challenging themselves to think outside the dominant discourse.
- the use of the 'Significant Change' method (Davies & Dart, 2005), which is a participatory monitoring and evaluation technique that identifies changes in participants' perceptions and thoughts. Participants' perceptions are identified and analysed for changes in thinking / practice, with the most significant changes fed back to the participants for their review and modification; and
- semi-structured interviews.

The interviews were carried out with managers of integrated children's centres in Queensland (n = 3). The Circles of Change process was conducted during a two-day Round Table, held simultaneously in both Victoria and Queensland involving participants from integrated services both at the practice and management level. Participants included early childhood educators, allied health professionals, service managers and government representatives, with the total number of participants across the two sites being 40 (with Queensland hosting double the number of participants than Victoria). The Significant Change method involved members of a Reference Group (n = 12) specifically assembled for the project, which comprised key stakeholders representing all sectors of children's services, drawn from both states. Reference Group members were asked initially to record their definition of transdisciplinary practice and then, after reading documents related to working in a transdisciplinary way (supplied by the Project Team), were asked to reflect on their understandings from a more informed stance.

The data were analysed using a prepositional / content analysis approach, as a way to identify themes within the data. A content analysis (Miles & Huberman, 1994) was carried out on the datasets utilising Henri's thematic unit

of analysis to allow the meaning to be extracted from the text without the constraint of word, sentence or paragraph limitation (Herrington & Oliver, 1999). Therefore, in coding the datasets, the 'unit of meaning' could vary from a single word to a sentence or paragraph to a theme. The coding was not predetermined but instead evolving during the analysis stage. What is presented in this report are the codes where the richest data was available and these were then aligned with the research questions.

Findings

In this section the findings are organised under three headings informed by the research questions, which examine current practice in integrated settings, understandings about transdisciplinarity, and implications of transdisciplinary practice in Children's Services. The data from both states are presented in a combined form as the significance of the Queensland and Victorian states lies in the larger study and will be reported in another paper.

Practice in integrated settings

Current practice for some professionals working in integrated settings was seen as hierarchical with some professions deemed as more 'prestigious' than others. Differing value systems and principles were in operation with boundaries imposed across sectors also arising due to funding regulations. However, as one Reference Group member pointed out, 'boundaries between sectors and disciplines are not as clearly defined as previously due to global and a more complex society'. For one early childhood intervention worker there were feelings of vulnerability as she was working with other early childhood professionals but outside of her team, which raised difficulties for her. There appeared to be some confusion about roles, but generally there was a feeling that everyone 'has a role to play' and there was a sense of 'working together rather than doing to the child'. This translated into comments about taking on other roles, which led to increased respect for other professionals and in the process becoming a 'broader provider'.

Taking a strength-based, holistic approach was seen as important when working in these integrated settings. The use of language was also raised as an issue as there were times when misunderstandings arose due to the fact that language used in one sector has different meanings in other sectors. Comments about leadership were also raised both in the Circles of Change and interview data. For example, it was thought that there needed to be set expectations, along with a clear approach to managing the service co-ordination role and 'getting the organisational balance right'.

Understandings of the notion of transdisciplinary practice

Various definitions of the term 'transdisciplinary practice' were reflected across all datasets; however, most definitions

did include the sharing of common frameworks and unified goals. These were seen as moves to a more holistic approach to practice, with all involved working towards 'best outcomes for the common good or specified practice'. The perception that to work in a transdisciplinary way required one to move outside of one's practice was well represented within the data. As one participant clarified:

Transdisciplinary practice is a way of thinking. It is about using reflective and generative dialogue to listen and talk with others that have common ground/goals/vision/purpose. It is a way of listening to oneself and to others in order to hear multiple perspectives and then go beyond multiple perspectives to where the group can see what MUST be done and then take action. (Manager of an Integrated Children's Service)

Participants reported that for some services a cultural shift and a change in mindsets would be required. 'When you think there is only one way then it is never going to work' (Manager of an Integrated Children's Service). The Circles of Change data reflected the view that working in a way that was perceived as different to current practice could raise fears of what change can bring. For example, it might lead to more work, more responsibility and a fear of loss of professional identity. This fear factor was described by one participant as follows: 'Professionals know what transdisciplinary practice means but can feel under threat in regards to control.' The aspect of control is an interesting one, which was noted in all datasets as pertaining to entrenched ideas that dictate practice. It was felt that in order to challenge the 'taken-for-granted practices', a willingness to 'de-comfort ourselves' and 'feeling comfortable with uncertainty' was needed. This was noted as requiring courage and confidence. Transdisciplinarity was seen to require professionals to be open, honest and willing to listen to and accept the contributions of others, thereby respecting others whilst also being respected for one's own professional knowledge regardless of qualification. This sharing of the knowledge base was deemed as critical to the process.

A point of interest to us, as researchers, was how a number of participants saw working in a transdisciplinary way as a continuum where 'everyone is at different places on the scale'. This notion of transdisciplinary practice being an evolving process was also echoed in the Circles of Change data where participants stated that there were different levels or stages to consider. The following quotation, taken from one of the interviews with a Manager of an Integrated Children's Service, is representative of this opinion:

Transdisciplinarity is probably a step further down the line, where you are thinking outside of your paradigm. You're not confined to just your disciplinary or professional limitations. I think you're actually moved out of that and can incorporate the bigger picture. That is not to say that you are stepping into someone else's speciality, but you are actually aware and you are actually joining up that knowledge base. And that knowledge base transpires back into practice. Integrated

practice is the start of a journey. Transdisciplinarity, I think, is much further down the road.

Transdisciplinary practice and work in integrated services

The participants saw strong synergies with transdisciplinarity and working in integrated settings, with one interview participant stating: 'It [transdisciplinarity] is not an addon anymore. I think it is an imperative ... It is not why should we be doing it, it is why aren't we doing it?' A Reference Group member suggested: 'We also know that working in isolation is detrimental to progress.' There was general agreement amongst all participants that one way of moving practice forward is to take a holistic approach to the service / child so that the professional looks at the priority of the child and family not just the area / role they work in. This was aligned with applying a social justice framework and a strength based approach with a broadening of the knowledge base in an effort to appreciate other knowledge bases.

Discussion

By asking these three questions of the larger dataset some interesting findings have emerged that require further consideration. It is apparent that working in a transdisciplinary way was seen as a way forward by the participants of this study. However, there is a need for a common understanding of what working in a transdisciplinary way means and how this could be enacted. Whilst there was no consistent definition, the data did show that by devoting time to read, discuss and reflect on the notion, changes in thinking could occur. Working in a transdisciplinary way was positioned as creating a 'space of inquiry' where there is genuine respect across the disciplines accompanied by a willingness to 'decomfort' oneself and learn from others whilst also being valued for what you bring. Edwards (2011) considers this as working 'at the boundary sites of intersecting practices' (p. 30).

On a more personal level, transdisciplinary practice calls for a rethinking of practice through critical reflection processes as professionals need to approach this space of inquiry from a solid base rooted in their own profession. Being open minded to question what has been taken for granted and being open to new ideas (Whitton, Sinclair, Barker, Nanlohy & Mosworthy, 2009) are considered essential characteristics for reflecting critically on practice. As one Manager of an Integrated Children's Service so eloquently stated: 'You come to the table knowing and you leave considering.' This links to self-awareness of one's behaviours, skills, abilities, knowledge, values, personality, emotions, drives, strengths and weaknesses, which all come under personal scrutiny. As Anning, Cottrell, Frost, Green and Robinson (2006) suggest, one of the difficulties embedding transdisciplinary work may be to do with a basic issue of professional claims to

an evidence-based knowledge, for example medical versus social models.

Working in integrated settings relies heavily on relationship building, which necessitates facilitation by effective leadership. There needs to be a mediation of interpretations and an aligning of responses (Edwards, 2011). There is a very real risk that the important knowledge base that underpins work in the ECEC sector could well be marginalized in favour of other highly medicalised approaches such as those in medicine and associated therapies (Cheeseman, 2007). Macfarlane et al. (2010) argue that this possible marginalisation of the knowledge base will become increasingly problematic, as it will limit the possibility of early years teachers and other early years educators being identified as leaders in such contexts.

From the data it is clear that the notion of leadership and how this is enacted within these integrated early childhood settings requires greater attention. This has also been noted in the Productivity Commission Research Report (2011) which views the emergence of integrated services as providing opportunities for improved service delivery 'but may require additional leadership and cross-disciplinary professional development for staff for them to be effective' (p. 22). Anning et al. (2006) identified four types of dilemmas that multi-agency teams working in early years services are faced with: (i) structural, (ii) inter-professional - related to professional identity, (iii) procedural - aligned with political understandings, and (iv) ideological - linked to communities of practice. If there is anxiety and uncertainty about roles, issues related to hierarchy, equitable working relationships and cultural views of working relationships between differing professional sectors, the situation can become untenable. This means that it is likely that early years leadership will be the domain of professionals whose knowledge bases are more powerful and also more focused on the notions of intervention and prevention (Macfarlane et al., 2009).

Transdisciplinary practice in the early childhood education and care sector as a way of working in integrated Children's Services requires pedagogical leadership that draws democratically on the contributions from all stakeholders – students, practitioners and professionals. Stakeholders at all levels of the early childhood education and care sector can contribute to the leadership efficacy to building bridges that connect the silos of practice. Building capacity for leadership will create the scaffolds on which transdisciplinary practices can be created, however, a number of challenges to effective collaboration are still evident (Aubrey, 2007).

Conclusions

The findings of this study strengthen our belief that a strategy such as transdisciplinary practice should be given serious consideration in relation to the inter-professional practice that is currently occurring in the early childhood field in Australia, where purpose-built centres are now housing

professionals from different children's services sectors. As co-location of staff does not necessarily equate to a sharing of practice across disciplines, specific strategies to sustain and enhance practice are called for. The best way forward is viewed as one of collaboration which calls for a rethinking of practice (Anning et al., 2006).

Transdisciplinarity may present opportunities for maintaining and renewing energy in the early childhood education and care sector by creating possibilities for early years professionals to lead the process of advocacy for the early years' knowledge base in integrated practice settings. It is transdisciplinarity as a strategy of practice that could enable all practitioners and professionals to engage in rich and exciting inter-professional practice.

References

- Anning, A., Cottrell, D., Frost, N., Green, J., & Robinson, M. (2006). *Multi-professional teamwork for integrated children's services*. Buckingham: Open University.
- Aubrey, C. (2007). Leading and managing in the early years. London: Sage.
- Australian Government Productivity Commission (2011). Early childhood development workforce: Productivity Commission research report. Canberra: Commonwealth of Australia.
- Cheeseman, S. (2007). Pedagogical silences in early childhood social policy. Contemporary Issues in Early Childhood, 8(7), 244–54.
- Council of Australian Governments (2009a). *Investing in the early years: A national early childhood development strategy.* Canberra: Commonwealth of Australia.
- Council of Australian Governments (2009b). Closing the gap: National partnership agreement on indigenous early childhood development. Canberra: Commonwealth of Australia.
- Council of Australian Governments (2009c). *Investing in the early years: A national framework for protecting Australia's children.* Canberra: Commonwealth of Australia.
- Davies, R., & Dart, J. (2005). The 'most significant change' (MSC) technique: A guide to its use. Retrieved from http://mande.co.uk/docs/MSCGuide.pdf.
- Edwards, A. (2011). Learning how to know who: professional learning for expansive practice between organizations. In S. Ludvigsen, A. Lund, I. Rasmussen, & R. Säljö (Eds.), *Learning across sites: New tools, infrastructures and practices* (pp. 17–32). Oxford: Routledge.
- Edwards, A., Daniels, H., Gallagher, T., Leadbetter, J., & Warmington, P. (2009). *Improving inter-professional collaborations: Multi-agency working for children's wellbeing.* London: Routledge.
- Fenech, M., Sumsion, J., & Shepherd, W. (2010). Promoting early childhood teacher professionalism in the Australian context. Contemporary Issues in Early Childhood, 11(1), 89– 105
- Gherardi, S., & Nicolini, D. (2002). Learning in a constellation of interconnected practices: canon or dissonance? *Journal of Management Studies*, 39(4), 419–36.

- Herrington, J., & Oliver, R. (1999). Using situated learning and multimedia to investigate higher-order thinking. *Journal of Educational Multimedia and Hypermedia*, 8(4), 401–21.
- Lather, P. (1996). Methodology as subversive repetition: Practices toward a feminist double science, paper presented at the American Educational Research Association Conference, New York City, 8–12 April.
- Macfarlane, K. (2006). An analysis of parental engagement in contemporary Queensland schooling, unpublished doctoral dissertation, Queensland University of Technology, Brisbane.
- Macfarlane, K., Cartmel, J., & Nolan, A. (2010). *Transdisciplinary practices in action: Rethinking the way forward.* Symposium at the Early Childhood Australia Biennial Conference 'Garla Bauondi': Fuelling the fire. Adelaide, South Australia, 29 September 2 October 2010.
- Macfarlane, K., Cartmel, J., & Nolan, A. (2011). Developing and sustaining pedagogical leadership in early childhood education and care professionals: Final report. Australian Learning & Teaching Council Leadership for Excellence.
- Macfarlane, K., Nolan, A., & Cartmel, J. (2009). *Transdisci*plinary practice: The path to renewable energy in early childhood education and care in Australia. Paper presented at the nineteenth European Conference on the Quality of Early Childhood Education, Strasbourg, France, 26–29 August, 2009.
- Marinova, D., & McGrath, N. (2004). A transdisciplinary approach to teaching and learning sustainability: A ped-

- agogy for life. Retrieved from http://otl.curtin.edu.au/tlf/tlf2004/marinova.html.
- McWilliam, E., & Lee, A. (2006). The problem of 'the problem with educational research'. *Australian Educational Researcher*, 33(2), 43–60.
- McWilliam, E., Hearn, G., & Haseman, B. (2008). Transdisciplinarity for creative futures: what barriers and opportunities? *Innovations in Education and Teaching International*, 45(3), 247–253.
- Miles, M.B., & Huberman, A.M. (1994). *An expanded source-book: Qualitative data analysis*, 2nd ed. Thousand Oaks, CA: Sage Publications.
- Nicolescu, B. (2008). *Transdisciplinarity: Theory and practice*. New York: Hampton Press.
- Osmond, J., & O'Connor, I. (2004). Formalising the unformalised: Practitioners' communication of knowledge in practice. *British Journal of Social Work*, 34, 677–692.
- Noble, K., Macfarlane, K., & Cartmel, J. (2005). Circles of change: Challenging orthodoxy in practitioner supervision. Frenchs Forest, NSW: Pearson.
- Press, F., & Woodrow, C. (2005). Commodification, corporatisation and children's spaces. *Australian Journal of Education*, 49(3), 278–291.
- Whitton, D., Sinclair, C., Barker, K., Nanlohy, P., & Mosworthy, M. (2009). *Learning for teaching: Teaching for learning*. Southbank, Melbourne: Thomson Social Science Press.