Application for a Grant

Identification

This page will be made available to selection committee members and external assessors.

Funding opportunity
Insight Development Grant

Grant type (Strategic Grants only)
Individual

Application title
Literacy learning in playful spaces: Using multimodal strategies to develop narrative with young learners

Applicant family name	Applicant given name	Initials
Laidlaw	Linda	

Org. code	Full name of applicant's organization and department
1480111	University of Alberta Elementary Education

Org. code	Full name of administrative organization and department
1480111	University of Alberta Elementary Education

Scholar type   Regular ⦿   New ○

If New, specify category   1 ○   2 ○   3 ○   4 ○

Research Field
43005

	Yes	No
Does your proposal require a multidisciplinary adjudication?	○	⦿
Does your proposal involve human beings as research subjects? If "Yes", consult the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* and submit your proposal to your organization's Research Ethics Board.	⦿	○
Does your proposal involve activity that requires a permit, licence, or approval under any federal statute; or physical interaction with the environment? If 'Yes', complete Appendices A and B.	○	⦿

	Year 1	Year 2	Total
Total funds requested from SSHRC (from page 6)	32,889	33,513	66,402

PROTECTED WHEN COMPLETED

Canada

Family name, Given name
Laidlaw, Linda

Participants

List names of your team members (co-applicants and collaborators) who will take part in the intellectual direction of the research. Do not include assistants, students or consultants.

Role
Co-applicant ⦿   Collaborator ◯

Family name	Given name	Initials
O'Mara	Joanne	A

Org. code	Full organization name
9661124	Deakin University

Department/Division name
Faculty of Education

Role
Co-applicant ◯   Collaborator ⦿

Family name	Given name	Initials
Makovichuk	Lee	A

Org. code	Full organization name
1480111	University of Alberta

Department/Division name
Child Study Centre

Role
Co-applicant ◯   Collaborator ◯

Family name	Given name	Initials

Org. code	Full organization name

Department/Division name

Role
Co-applicant ◯   Collaborator ◯

Family name	Given name	Initials

Org. code	Full organization name

Department/Division name

Role
Co-applicant ◯   Collaborator ◯

Family name	Given name	Initials

Org. code	Full organization name

Department/Division name

Personal information will be stored in the Personal Information Bank for the appropriate program.

Application WEB

Page 2   PROTECTED WHEN COMPLETED   Canadä

Research Activity

The information provided in this section refers to your research proposal.

Keywords

List keywords that best describe your proposed research or research activity. Separate keywords with a semicolon.

digital media; young learners; curriculum studies; innovation; theories of language and learning; complexity science; Reggio Emilia

Priority Areas - Priority area most relevant to your proposal.

Digital Media

Disciplines

Indicate and rank up to 5 disciplines that best correspond to your proposal.

Rank	Code	Discipline	If "Other", specify
1	61216	Early Childhood Education	
2	61246	Teaching Methods, Pedagogy	
3	61238	Reading and Writing	
4			
5			

Areas of Research

Indicate and rank up to 3 areas of research related to your proposal.

Rank	Code	Area
1	140	Education
2	111	Children
3	280	Literacy

Temporal Periods

If applicable, indicate up to 2 historical periods covered by your proposal.

From	To
Year BC AD _____ ○ ○ _____ ○ ○	Year BC AD _____ ○ ○ _____ ○ ○

Application WEB

PROTECTED WHEN COMPLETED

Canadä

Family name, Given name
Laidlaw, Linda

Research Activity (cont'd)

Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by or related to your proposal. Duplicate entries are not permitted.

Rank	Code	Region
1		
2		
3		

Countries

If applicable, indicate and rank up to 5 countries covered by or related to your proposal. Duplicate entries are not permitted.

Rank	Code	Country	Prov./ State
1			
2			
3			
4			
5			

Personal information will be stored in the Personal Information Bank for the appropriate program.

Application WEB

Page 4

PROTECTED WHEN COMPLETED

Canada

Family name, Given name

Laidlaw, Linda

Summary of Proposed Research

The summary of your research proposal should indicate clearly the problem or issue to be addressed, the potential contribution of the research both in terms of the advancement of knowledge and of the wider social benefit, etc.

In the discussion paper, Inspiring Action, Alberta Minister of Education Dave Hancock states, "...we know the world is changing, and that education must change with it to prepare students for a future none of us can predict." While Hancock refers to preparing for the future, we contend that children already exist within a constantly changing milieu of digital media and electronic technologies. Except, however, when it comes to experiences in classrooms, where practices tend to be firmly entrenched in the 20th century. As Luke (2007) suggests, most of the learning that children are doing in relation to digital media is "being done after three o'clock, by them and not us." As with any rapid innovation, education systems have not yet adapted to and embraced the changes that are increasingly a part of children's daily lives, although in the contexts of the project investigators in Alberta and Australia, there are indicators of increasing receptiveness to change and interest in new uses of digital media within education. The proposed research attempts to respond to this interest, focusing on the area of "new literacy" practices through developing and examining digital media experiences at the level of Kindergarten instruction. The initial two-year phase of the project is primarily interested in examining the possibilities for using touch screen (ipad) technologies with young learners when they are used as a means to facilitate the creation, modification and use of children's own multimodal texts. It is anticipated that future phases will follow Phase 1 teachers in a continued involvement with digital media in the classroom, as well as extending the project to additional Canadian and international classroom sites. The project will use theoretical frames from complexity thinking (Davis & Sumara, 2006), following from work addressing innovation and adaptive practices in healthcare, business, and digital technologies. As well, the project will bridge ideas from complexity with the renowned Italian Reggio Emilia preschool programmes, which offer innovative early childhood examples of how tools, media, children and teachers might come together in an approach that asks, of all its community members, "What kind of future can we construct together?" (Rinaldi, 2001, p. 45)

The proposed research has five general objectives. First, it aims to develop a new pedagogical approach for teaching narrative skills that combine digital technologies, drama, and children's literature to extend students' capacities of reading, creating, and interpreting narrative. Second, it will examine the digital media and "new literacy" skills and understandings that children bring to school. Third, it aims to investigate innovative approaches coming from early childhood education, through the preschool programs of Reggio Emilia, in concert with emerging theories of innovation within complexity science. Fourth, the project intends to develop a new model of working within classroom educational research, involving a master teacher as a collaborator and partner in the proposed project. Finally, through the proposed work of the project, we intend to develop, document and evaluate teaching and research practices emerging from the data of this research.

The proposed research is conceived as a two-year plan, involving three interconnected research activities: classroom implementation and observation, where the main activities of the project will occur; teacher dialogue meetings, which will be organized for teachers participating in the project, and Reggio Emilia Program inquiries.

It is expected that the research will result in both academic and professional publications, including a digital book and multi-media demonstration examples aimed at teachers and parents.

Personal information will be stored in the Personal Information Bank for the appropriate program.

Application WEB

Page 5   PROTECTED WHEN COMPLETED   Canadä

DESCRIPTION OF ACTIVITY
Introduction
Contemporary students exist in a rapidly changing world that demands ever-increasing abilities to adapt to and utilize new technological tools and innovations (Carrington & Marsh, 2008; Knobel & Lankshear, 2010; Laidlaw, 2010; Lankshear & Knobel, 2003a; Mackey, 2003; Merchant, 2007). As recent Organization for Economic Cooperation and Development [OECD] (2010a) reports have suggested, developing innovative approaches to shift educational practice to better address 21st century challenges is important for effective social engagement, participatory democracy, equitable communities and sound economies. However, many schooling practices are still firmly entrenched in the 20th century. Even when "new technologies" are introduced into the spaces of classrooms, teachers may not shift pedagogical practice to fully exploit learning opportunities and the potentials offered through new cognitive tools, instead, working as Lankshear and Knobel (2003) suggest, with "old wine in new bottles" (p. 67). Technology can become 'schoolified' into electronic worksheets that provide merely new appearance, rather than shifting the nature of pedagogical activity and offering new opportunities for interaction and more complex engagements. Though providing perhaps a more engaging form of knowledge transmission, digital media may not be used to involve students in any significantly different manner. However, new technologies can offer increased accessibility for young children, as well as providing opportunities for students to create, modify and use their own multimodal texts in multiple ways, and to share in collective endeavours. As the PI and CI have observed informally, what children are frequently doing with digital and touch screen technologies as young learners outside of schooling environments (O'Mara, J. & Laidlaw, L., in preparation) demonstrates the potential and expanding possibilities that can emerge when children are offered tools and enabled to create and control their own digital texts. For example, we have witnessed very young children creating their own visual, audio and text-based narratives when using the *Storykit* application on an iphone. Such observations are consistent with several of O'Mara's previous studies (Beavis & O'Mara, 2006; O'Mara & Richards, 2011), which found that students prefer playing video games they have created themselves rather than commercially made products, and that as "producers" of digital texts, students extend and develop both traditional and new literacy skills. As Luke (2007) suggests, children need to be educated as "global cosmopolitan citizens" who are growing up processing multiple digital information sources at once, in their time outside of school, and as a result are developing abilities that may be less familiar to the adults around them (see Carr, 2010 for further examples of how technological tools are influencing cognitive capacity). Further, as Luke and Luke (2001) suggest, education systems have tended to "delay and sublimate the emergence of new educational paradigms" around new forms of textual and literacy practice, instead, focusing on "crises of print literacy" (p. 96) rather than embracing new technological approaches and challenges. There is relatively little research existing in the area of digital technologies and "new literacies" at the primary or early childhood level (see Burnett, 2009; Marsh, 2004), with some suggesting that early childhood teachers are particularly reluctant to embrace new textual practices and electronic technologies. Our proposed project aims to address this research gap, and to develop and test an approach to using technology that involves Kindergarten language and literacy curriculum areas that are common to a range of early childhood settings: developing narrative (e.g. storytelling) and dramatic play as a way of bridging the "old" with the "new" and challenging assumptions about what digital technology practices might look like in an early childhood environment.

Objectives of the Project
The proposed project aims to:
• develop a new pedagogical approach for teaching narrative skills that bring together digital technologies, drama processes, and children's literature to extend students' capacities of reading, creating, and interpreting narrative;

• examine skills and understandings, in relation to digital media and "new literacies" that young learners are bringing to school;

• investigate innovative approaches coming from early childhood education, such as those emerging from the preschool programs of Reggio Emilia, in concert with emerging theories of innovation within complexity science. These approaches will be adapted for the purpose of field-testing specific learning and teaching practices in relation to developing and enhancing children's narrative skills, using multimodal approaches (e.g. ipad/touch screen digital technologies; applied theatre and process drama work—see, eg. Davis, 2010; Neelands & Goode, 2000; Prendergast & Saxton, 2010) that will allow young students to produce, manipulate and develop new narrative forms;

• to develop a new model of working within classroom educational research, involving an experienced 'master teacher' as a collaborator and partner in the proposed project;

• to develop, document and evaluate teaching and research practices emerging from the data of this research.

Within this project we ask the following questions:

How might digital media enable young learners to work as active producers—rather than consumers—of narrative forms?

What requirements and conditions are necessary and conducive for the use of digital media as creative and experimental narrative forms for young learners?

What possibilities might emerge when young children are provided with literacy tools (e.g. touch screen devices; process drama forms) that extend their capabilities and provide access to new forms of representation?

Context

Although digital media is increasing as a social and educational phenomenon and is a growing focus and concern for Canada and other OECD countries (see, e.g. Luke, in press; Government of Alberta, 2009; Government of Alberta 2010) there is a dearth of research that addresses the development of pedagogical approaches to digital literacies in the area of early childhood or primary education. However, very young children are entering preschool, kindergarten and primary classrooms as experienced technology users within their home environments (Luke, 2004; Marsh, 2004; Merchant, 2007). The lack of research, particularly as it relates to offering pedagogical tools for teachers in 21st century classrooms, would suggest that developing and field-testing strategies for using digital media with young children will provide useful information for educators, teacher education, and parents of young children.

The proposed research addresses a new area of research interest for the PI, in the focus on digital technologies, though her prior projects offer theoretical and contextual background that underlie the proposed study. *Reinventing Curriculum: A Complex Perspective on Literacy and Writing* (Laidlaw, 2005) examines the complex relationships among children's language and literacy practices in their homes, learning and teaching experiences in schools, and children's experiences of the technology of print through books and writing (see also Laidlaw, 2003; Laidlaw, 2001). Laidlaw's more recent SSHRC funded research, in examining the experiences of children with diverse cultural identities and family compositions, highlighted that while diversity is often stereotyped or resisted in school settings, it can also compel creative action and new possibilities for both teachers and learners (Laidlaw, 2010; Laidlaw, 2006), and that digital media can provide new opportunities for children who are socioculturally diverse. O'Mara brings to the project a strong Australian national reputation in the field of educational research, as well as a growing international reputation in the area of digital literacy as a result of her Australian Research Council funded projects (see, e.g. O'Mara, 2008; Beavis & O'Mara,

2008; Beavis & O'Mara, 2007; O'Mara & Lees, 2011; O'Mara & Richards, 2011). O'Mara is also gaining reputation in the area of educational innovation, as a co-author of a funded project, *The connections between learning spaces and learning outcomes: people and learning places?* (Blackmore, Bateman, O'Mara & Loughlin, 2010). Of additional significance to the proposed project, O'Mara's current research investigates more equitable approaches to educational research with teachers as collaborators (O'Mara & Gutierrez, 2010). The collaborator in our proposed project, Makovichuk, as a master teacher with extensive experience in innovative early childhood education settings and as an emerging graduate level researcher, will ensure that the project addresses the pedagogical and professional concerns of the early childhood education audience. As well, her interest and study in the area of the Italian Reggio Emilia early childhood programs, widely emulated as a model for North American early childhood and elementary school settings, will be valuable to the proposed work. Reggio Emilia programs, and the methods and systems of organization emerging from them, have become interesting to both North American and Australian early childhood and elementary school teaching and learning (Edwards, Gandini & Forman, 1998; Fleet, Patterson & Robertson, 2006; Project Zero & Reggio Children, 2001; Rinaldi, 2005; Wien, 2008;). We suggest that part of this engagement is that the pedagogical examples offered by Reggio Emilia early childhood classrooms provide a counter model to the linear 20th century models of schooling (often still being followed), in positioning curriculum as emergent and responsive, and created with aesthetic, social and emotional needs of children in mind. While 'Reggio' and 'technology' are not terms frequently mentioned together, Reggio programming is very much 'tool' oriented in relation to use of resources for educational programming and documentation (e.g. digital photography is frequently used by children and teachers, see Clark, 2005) and within our project we believe it will be valuable to examine how ideas, beliefs about, and uses of technologies in Reggio Emilia early childhood centres might inform the use of digital tools for our proposed work, providing an approach that moves beyond the merely instrumental (i.e. children need to learn computer skills to get jobs). As well, Reggio Emilia programs provide what we view as a solid and visible illustration of complexity thinking, the theoretical approach that supports our proposed project. Complexity science is an emerging domain within educational theory and research (see, e.g., Davis, Sumara & Luce-Kapler, 2008; Davis & Sumara, 2006; Davis & Sumara, 1999; Doll, 1993; Osberg, 2010; Osberg, 2009; Phelps & Hase, 2003; Upitis, 2004) offering challenges to linear, reductive, and mechanistic frames for understanding systems and other phenomena. Complexity suggests that human and cultural systems, such as those of schools and classrooms, might be better understood as adaptive, emergent, dynamic and self-organizing, coming from earlier work across diverse fields of study and arising from empirical science within the "hard science" branch of complexity that follows mathematics and physics (see Capra, 1996; Cohen & Stewart, 1994; Johnson, 2002, 2006; Kauffman, 1995; Stewart, 1998). Following Davis and Sumara (2010) we view our approach as consistent with the holistic "soft" branch of complexity science, more typical of the domain as it has been taken up by health professionals, philosophers, psychologists and educators. Complexity theory has been used to develop new practices and support innovation in healthcare and technology development (see, e.g. Singhal, A., Buscell, P. & Lindberg, C., 2010; Johnson, 2010). Indeed, the development of digital networks and technologies has been frequently interpreted as presenting examples of complexity thinking (see, e.g., Rheingold, 2000; Johnson, 2010; Johnson, 1997). We see complexity science as offering useful metaphors and "new language" (Rorty, 1999) for thinking about learning and teaching, and providing concepts and structures that contrast with more linear and mechanist approaches.

Methodology

We anticipate that this two-year project will develop into a larger, long term international digital pedagogy project and many aspects of the proposed research are intended to pilot methods that will be developed for a larger eventual investigation. The project uses a mixed methods approach that will involve three main research activities: classroom implementation and observation; teacher dialogue meetings; and Reggio Emilia Program inquiries. The CI, Joanne O'Mara will be conducting a parallel project in Melbourne, Australia and the results of the Australian project will be linked to the proposed study and provide opportunities for comparative study.

Potential classroom research sites have begun to be identified, through the Child Study Centre, the University of Alberta laboratory school in Edmonton, Alberta, and an additional research site is being sought out to include a balance in socioeconomic background and diversity, to include a total of two classrooms of young children in the Canadian sites, and three teachers, including Makovichuk, who will work within the role of 'lead teacher' to develop and demonstrate strategies.

1. Classroom Implementation and Observation: Working in collaboration with the early childhood teachers involved in the project, the primary focus of the project will be the development of a series of classroom based narrative projects with young learners using ipad technologies. Specifically, we plan to involve students in the creation of narratives through story telling and dramatic play, and using video and still photography images, students will use the video tagging Vidi software (developed by the CI in collaboration with Australian technical support) using ipads to reflect on and further develop their narrative work. As some kindergarten students will not yet write independently, audio recording and drawing applications will also be used to document their ideas. Additionally, we plan to provide students with opportunities to work with a variety of ipad/touch screen programs (e.g. *Storykit*) that will allow them to create additional types of texts within classroom learning centres (a typical program structure in early childhood classrooms). However, we are aware that child-friendly software and "apps" are emerging rapidly and changing just as quickly, and anticipate that the selected programs may evolve as our study progresses. This classroom work will begin in October, 2011 to provide time for planning with the teachers and adequate time for parents to be informed and consent be acquired for all participants. Site visits by the researchers will initially occur several times a week as we initiate the project, in Year 1 and then shift to visits every two weeks to observe and adapt teaching strategies as needed and based on children's emerging interests and skills and their teachers' proficiencies with the technologies. In Year 2, we will continue observing and developing strategies for the first half of the year, and in the second half of the year will focus on the creation of demonstration lessons to be shared with the wider early childhood education and professional teaching communities.

2. Teacher Dialogue Meetings: Regular dialogue meetings will be organized for the teachers participating in the project. These monthly meetings will begin in August, 2011, during Year 1 of the project and continuing throughout Year 2. The main purpose of the meetings will be to create conditions where teachers will be able to discuss, analyze, and interpret the classroom strategies related to the work with digital media and narrative, as well as offering new pedagogical strategies and approaches for consideration. Such interpretations will be elicited and supported in ways that are consistent research methods which invite participants to engage with materials (e.g. discussion papers, use of literary sources such as picture books, articles and information and media texts) while juxtaposing these with participants' accounts and representations of past and current experience (see, e.g., Laidlaw & Sumara, 2000; Richardson, 1997; Richardson & St. Pierre, 2005). In the final six months of the study, the emphasis within these seminars will shift toward more formal representations of emergent insights, aimed at communication with the professional teaching and early childhood education communities. In collaboration with participants, strategies will be developed for creating documents, presentations, or other representations to be shared in selected public contexts (e.g., articles for a professional teachers'

magazines, presentations at regional conferences, the creation of a website and digital downloads of demonstration lessons).

3. Reggio Emilia Program inquiries:

As mentioned earlier, the Reggio Emilia preschool programs offer innovative models of early childhood pedagogy. We plan to visit the Reggio Emilia preschool sites in order to research further possibilities for developing and extending complex ways of working with children using technologies, language and arts-based media (see Edwards, Gandini & Forman, 1998, for examples of the 'hundred languages of children'. An exhibit of this work is presented as a "narrative of the possible," Reggio Children, 2008). While Reggio Emilia study visits are regularly offered and the Canadian PI and Collaborator would be able to join one of the groups, we are also beginning inquiries in order to arrange a visit to focus on digital and other technologies within their programming. The Canadian PI and Collaborator will be attending a Calgary conference in April 2011, where the pedagogista and director of Reggio Preschools and the U.S. Liason for Reggio Children will be attending and it is expected we will be able to confirm arrangements at that time. It is anticipated that the Reggio visit will occur in Year 1 of the project, although scheduling will be dependent on the Reggio Emilia program preferences, and optimally occur during a school break for the research collaborator.

Data Collection and Interpretation: Data collected will include: field-notes, transcripts and microanalyses of video data of individual classroom/educational context visits; products from the digital projects in the classroom (e.g. student-created products, classroom artifacts); field-notes, transcripts and participant created projects from the teacher dialogue sessions; pedagogical analyses gathered over the two year period; and field-notes and responses to Reggio Emilia program inquiries and visit. Following methods described by qualitative researchers (Denzin & Lincoln, 2005; Lather, 2007; Richardson, 1997, 2005; van Manen, 1990), the proposed research aims to collect a variety of representations of classroom experiences and pedagogical events, including teacher participants' pedagogical practices and interpretations of their teaching and learning structures, and then to subject these data to pedagogical and conceptual analysis. As Lather and Smithies (1997) suggest, our own complicity and positioning as researchers involved in this project must also be subject to scrutiny and be open to response from research participants (see also, Davis & Sumara, 1999).

We envision this project as working in a recursive and interconnected manner, and working in micro- and macro-directions, moving back and forth between the particular pedagogical experiences and perspectives of the educators and investigators, the classroom experiences that will emerge within and across the two Canadian classroom sites, and the Australian parallel project, as well as looking further beyond, at the ideological realm of discourse and cultural knowledge around digital media, language and literacy teaching, and learning and schooling practices. As Davis and Sumara (2006) suggest, gaining an understanding of teaching and learning experiences within social systems such as schools requires "considering all-at-once, the many layers of dynamic nested activity that are constantly at play" (p. 28), and the knowledge that such "organizational/organismic layers" may not be neatly separate. Following the work of researchers such as van Manen (1990), Carson and Sumara (1997) and Kemmis and McTaggart (2005) we recognize the process of our involvements at the research sites and with the educators, as well as the outcomes of these involvements, as constituting the research effort. Strategies will be developed for creating documents, presentations, and other representations to be shared in selected public and international contexts (e.g., articles for professional teachers' magazines, presentations at regional conferences, online public access resources). We plan to experiment with a variety of digital tools and plan to use wikis, blogs, podcasts and Skype for information sharing and communication within the research team and with the teacher participants.

REFERENCES

Beavis, C., Apperley,T., Bradford, C., O'Mara, J. & Walsh, C. (2009). Literacy in the digital age: Learning from computer games. *English in Education 43* (2): 162–175.

Beavis, C. and O'Mara, J. (2006). Preparing English teachers for a changing world. In B. Doecke (Ed.), *'Only connect...' English teaching, schooling and community* (pp. 349-355). Australia: AATE.

Beavis, C., O'Mara, J. (2010). Computer games: Pushing at the boundaries of literacy. *Australian Journal of Language and Literacy 33* (1): 65-76.

Beavis, C., O'Mara, J. (2011). Why computer games and literacy? In Beavis, C., O'Mara, J. & McNeice, L. (Eds). *Literacy Learning and Computer Games*. Adelaide: Australian Association for the Teaching of English/ Wakefield Press.

Blackmore, J., Bateman, D., O'Mara, J. & Loughlin, J. (2010). The connections between learning spaces and learning outcomes: People and learning places? Unpublished project report. Melbourne, Centre for Research in Educational Futures and Innovation, Deakin University.

Burnett, C. (2009). Research into literacy and technology in primary classrooms: an exploration of understandings and generated by recent studies. *Journal of Research in Reading 32*(1): 22-37. doi: 10.1111/j.1467-9817.2008.01379.x

Capra, F. (1996). *The web of life: A new scientific understanding of living systems*. New York: Anchor Books.

Carson, T. & Sumara, D. (Eds.) (1997). *Action research as a living practice*. New York: Peter Lang.

Carr, N. (2010). *What the Internet is doing to our brains: The shallows*. New York: W.W. Norton.

Carrington, V. & Marsh, J. (2008). Forms of literacy. Document commissioned by the Beyond Current Horizons Project: Technology, Children, Schools and Families (pp. 1-20). Available online: http://www.beyondcurrenthorizons.org.uk/forms-of-literacy/

Clark, A. (2005). In Clark, A., Kjørholt & Moss, P. (Eds.). *Beyond listening: Children's perspectives on early childhood services*. Bristol, UK: Policy Press.

Cohen, J. & Stewart, I. (1994). *The collapse of chaos: Discovering simplicity in a complex world*. New York: Penguin.

Davis, B. & Sumara, D. (2010). 'If things were simple...': complexity in education. *Journal of Evaluation in Clinical Practice* 16: 856 – 860. Doi: 10.1111/j.1365-2753.2010.01499.x

Davis, B. & Sumara, D. (2006). *Complexity and education*. Mahwah, NJ: Lawrence Erlbaum.

Davis, B. & Sumara, D. (1999). From complexity to complicity: Reading complexity theory as a moral and ethical imperative. *JCT: Journal of Curriculum Theorizing 15* (2), 19-38.

Davis, B., Sumara, D. & Luce-Kapler, R. (2008) *Engaging minds: Changing teaching in complex times, 2nd Ed.* New York: Routledge.

Davis, D. (2010). *Gavin Bolton: The essential writings*. Staffordshire, UK :Trentham Books.

Edwards, C., Gandini, L. & Forman, G. (Eds.). (1998). *The hundred languages of children: The Reggio Emilia approach, advanced reflections, 2nd Ed.* Norwood, NJ: Ablex.

Denzin, N. & Lincoln, Y. (Eds.). (2005). *The SAGE handbook of qualitative research 3rd edition*. Thousand Oaks, CA: Sage Publications.

Doll, Jr. W. (1993). *A post-modern perspective on curriculum*. New York: Teachers College Press.

Fleet, A., Patterson, C. & Robertson, J. (Eds.). (2006). *Insights: Behind early childhood pedagogical documentation*. Australia: Pademelon Press.

Gaffield, C. (2009). Accelerating social innovation: Smart ideas for Canada. Speech presented at the Public Policy Forum Conference. November 10, 2009.Toronto, ON.

Government of Alberta. (2010). Inspiring action: Discussion paper. Edmonton, Alberta: Government of Alberta, Education.

Government of Alberta. (2009). Living literacy: A literacy framework for Alberta's next generation economy. Edmonton, Alberta: Alberta Advanced Education and Technology. Available online: http://aet.alberta.ca/community.aspx

Johnson, S. (2010). *Where good ideas come from: The natural history of innovation*. New York: Riverhead Books.

Johnson, S. (2006). *Everything bad is good for you: How today's popular culture is actually making us smarter*. New York: Riverhead books.

Johnson, S. (1997). *Interface culture: How new technology changes the way we create and communicate*. New York: Basic Books.

Kauffman, S. (1995). *At home in the universe: the search for the laws of self-organization and complexity*. New York: Oxford University Press.

Kemmis, S. and McTaggart, R. (2005). Participatory action research: Communicative action and the public sphere, pp. 559 - 603. In Denzin, N. & Lincoln, Y. *The SAGE handbook of qualitative research 3rd edition*. Thousand Oaks, CA: Sage Publications.

Knobel, M. & Lankshear, C. Eds. (2010). DIY media: Creating, sharing and learning with new technologies. New York: Peter Lang.

Laidlaw, L. (2010). New families, new texts: An exploration of viewing, text, and schooling from the perspective of being an "other kind of family." *Language and Literacy: A Canadian Educational E-Journal 12* (1): 76-96. Available: http://ejournals.library.ualberta.ca/index.php/langandlit/issue/view/586

Laidlaw, L. (2006). Learning to "do family" differently: Towards more complex notions of family, culture, and schooling. *Journal of the Canadian Association for Curriculum Studies 4* (2), 41-54. Available: http://www.csse.ca/CACS/JCACS/V4N2/PDFContent/3._laidlaw_4.2_jcacs_formatted.pdf

Laidlaw, L. (2005). *Reinventing curriculum: A complex perspective on literacy and writing*. Mahwah, NJ: Lawrence Erlbaum.

Laidlaw, L. (2003). *Transforming text: Literacy in a context of complexity*. Paper presented at the International Federation of Teachers of English, Melbourne, Australia, July 2003.

Laidlaw, L. (2001). Commonplace books, commonplace practices: Uncovering the bones of complex pedagogy. In J. Hoffman, D. Schallert, C. Fairbanks, J. Worthy & B. Maloch (Eds.), *50th Yearbook of the National Reading Conference*. Oak Creek, WI: National Reading Conference.

Laidlaw, L., O'Mara, J. & Makovichuk, L. (in preparation). With rest…and time…and a little hope: Developing Kindergarten narratives using drama.

Laidlaw, L. & Sumara, D.J. (2000). Transforming pedagogical time. *JCT: Journal of Curriculum Theorizing 16* (1): 9-22.

Lankshear, C., & Knobel, M. (2003a). *New literacies: Changing knowledge and classroom learning*. Philadelphia, PA: Open University Press.

Lankshear, C., & Knobel, M. (2003b). New technologies in early childhood literacy research: A review of research. *Journal of Early Childhood Literacy 3*, 59-82. doi:10.1177/14687984030031003

Lather, P. (2007). *Getting lost: Feminist efforts toward a double(d) science*. Albany, NY: SUNY.

Lather, P. & Smithies, C. (1997). *Troubling the angels: Women living with HIV/AIDS*. Boulder, CO: HarperCollins.

Luke, A. (in press). Will the Australian curriculum up the intellectual ante in P\primary classrooms? *Curriculum Perspectives 5* (10).

Luke, A. (2007). New educscape. Webcast presented in Webcasts for Educators, Curriculum Services Canada. Available: http://www.curriculum.org/secretariat/may31.shtml

Luke, A. & Luke, C. (2001). Adolescence lost/childhood regained: On early intervention and the emergence of the techno-subject. *Journal of Early Childhood Literacy 1* (91): 91-120. doi: 10.1177/14687984010011005

Mackey, M. (2003). *Literacies across media: Playing the text.* Routledge Falmer.

Marsh, J. (2004). The techno-literacy practices of young children. *Journal of Early Childhood Research, 2* (1): 51-66.

Merchant, G. (2007, November). Writing the future in the digital age. *Literacy, UKLA 41* (3): 118-128.

Neelands, J. & Goode, T. (2000). *Structuring drama work.* Cambridge, UK: Cambridge University Press.

O'Mara, J. (2008). Reading and writing ourselves into the twenty-first century. In M. Anderson, J. Hughes & J. Manuel (Eds). *Drama and English teaching: Imagination, action, and engagement.* Oxford University Press, Australia.

O'Mara, J. & Gutierrez, A. (2010). Classroom teachers as co-researchers: The affordances and challenges of collaboration. *Australian Journal of Language and Literacy 33* (1): 41-53.

O'Mara, J. & Laidlaw, L. (in preparation). "Look at what I can do, Mummy!": Home observations of ipad, iphone and touch screen experiences as literacy learning.

O'Mara, J.& Lees, B. (2011). Transcending the Fourth Wall: Invitation From an Avatar. In Beavis, C., O'Mara, J. & McNeice, L. (Eds). *Literacy Learning and Computer Games.* Adelaide: Australian Association for the Teaching of English/Wakefield Press.

O'Mara, J. & Laidlaw, L. (September 2004). Editorial: Textual diversity in changing times. *English Teaching: Practice and Critique 2* (2): 1-5. Available: http://education.waikato.ac.nz/journal/english_journal/uploads/files/2003v2n2ed.pdf

O'Mara, J. & Laidlaw, L. (2004). Two continents, two stories: Drama and writerly texts. Paper presented at the International Drama Education Association (IDEA) 2004 Congress, Ottawa, ON, July 2004.

O'Mara, J. & Richards, J. (2011). A Blank Slate of Potential: Using Gamemaker to Create Computer Games. In Beavis, C., O'Mara, J. & McNeice, L. (Eds). *Literacy Learning and Computer Games.* Adelaide: Australian Association for the Teaching of English/ Wakefield Press.

Organization for Economic Cooperation and Development. (2010a). Innovative learning environments. Directorate for Education, Centre for Educational Research and Innovation (CERI). Available: http://www.oecd.org/document/19/0,3343,en_2649_35845581_40787603_1_1_1_1,00.html

Organization for Economic Cooperation and Development. (2010b). OECD Ministerial Meeting: Investing in human and social capital: New challenges. Chair's Summary. Paris, 4-5 November, 2010.

Osberg, D. & Biesta, G. Eds. (2010). *Complexity theory and the politics of education.* Rotterdam: SensePublishers.

Osberg, D. (2009). "Enlarging the space of the possible" around what it means to educate and be educated. *Complicity: An International Journal of Complexity and Education 6* (1): iii-x.

Phelps, R. & Hase, S. (2003). Complexity and action research: Exploring the theoretical and methodological connections. *Educational Action Research 10* (3): 507-523.

Prendergast, M. & Saxton, J. (2010). *Applied theatre: International case studies and challenges for practice.* Chicago: University of Chicago Press.

Project Zero & Reggio Children. (2001). *Making learning visible: Children as individual and group learners.* Reggio Emilia, Italy: Reggio Children.

Reggio Children. (2008). Reggio children: The hundred languages of children. An exhibit by the Municipal Infant-Toddler Centres and Preschools of Reggio Emilia. Available: http://zerosei.comune.re.it/inter/100exhibit.htm

Reingold, H. (2000). *Tools for thought: The history and future of mind-expanding technology.* Cambridge, MA: MIT Press.

Rinaldi, C. (2001). Infant-toddler centers and preschools as places of culture. In Project Zero & Reggio Children. *Making learning visible: Children as individual and group learners.* Reggio Emilia, Italy: Reggio Children.

Rorty, R. (1999). Philosophy and social hope. New York: Penguin Books.

Richardson, L. & St. Pierre, E. (2005). Writing: A Method of Inquiry. In Denzin, N. & Lincoln, Y. (Eds.). *The SAGE handbook of qualitative research 3rd edition.* Thousand Oaks, CA: Sage Publications.

Richardson, L. (1997). *Fields of play: Constructing an academic life.* New Brunswick, NJ: Rutgers University Press.

Rinaldi, C. (2005). *In dialogue with Reggio Emilia.* London: Routledge.

Singhal, A., Buscell, P. & Lindberg, C. (2010). *Inviting everyone: Healing healthcare through positive deviance.* Bordentown, NJ: PlexusPress.

Stewart, I. (1998). *Life's other secret: The new mathematics of the living world.* New York: John Wiley & Sons.

Upitis, R. (2004). School architecture and complexity. *Complicity: An International Journal of Complexity and Education 1* (1): 19 – 38. Retrieved November 5 from http://ejournals.library.ualberta.ca/index.php/complicity/issue/view/559

van Manen, M. (1990). *Researching lived experience.* London, ON: The Althouse Press.

Wien, C.A. (Ed.). (2008). *Emergent curriculum in the primary classroom: Interpreting the Reggio Emilia approach in schools.* New York: Teachers College Press.

RESEARCH TEAM AND STUDENT TRAINING
A. Description of the Research Team

The PI and CI, Linda Laidlaw and Joanne O'Mara, have developed their research programs around questions of learning and teaching, with particular emphases on processes and practices of language, literacy, and literary experience. Laidlaw's work has been situated in the field of early literacy education, and has been primarily concerned with examining relationships between home, school and identity and their effects on literacy development and on the emergence of children's senses of personal, social, and cultural understanding. For Laidlaw, investigation of digital media in relation to literacy experiences is a new area of study, and as O'Mara's ongoing program of studies has involved extensive research in digital media and computers in schools (see for example Beavis, Apperley, Bradford, O'Mara & Walsh, 2009; Beavis & O'Mara, 2011; Beavis & O'Mara, 2010; Beavis, O'Mara & McNeice, forthcoming 2011; O'Mara & Lees, 2011; O'Mara, & Richards, 2011; O'Mara, 2008), she will contribute valuable expertise to the team. Additionally, in her Australian projects, O'Mara has been working with a technical collaborator to develop an innovative video tagging software (Vidi) that can be used for both student work (e.g. as one method of developing textual narrative) and for data analysis within the larger research project. O'Mara has applied for a parallel development project in Australia (*Literacy Learning in Playful Spaces: Developing Narrative Skills in 21st Century Learners*), as an Australian Research Council Discovery project. Laidlaw and O'Mara have worked together in a number of endeavours over the past eight years, in the areas of their shared literacy interests in drama education, literacy texts and diversity, for example, co-editing a volume of the well-regarded international English teaching journal, *English Teaching: Practice and Critique* (O'Mara & Laidlaw, September 2004), and a project using Canadian and Australian children's literature to address diversity through drama in teacher education (O'Mara & Laidlaw, 2004). Their latest collaborative project, which included the third member of the team, Lee Makovichuk (see Laidlaw, O'Mara & Makovichuk, in preparation), took place in October/November 2010 when O'Mara was a visiting scholar at the University of Alberta, and used innovative methods in drama education to explore early literacy texts. This work is expected to result in additional published articles and presentations for all members of the team. Laidlaw will travel to Australia in March 2011, and will spend time as a visiting scholar at Deakin University, in preparation for the proposed project. The collaborator within this project, Makovichuk, is a lead teacher within the University of Alberta Child Study Centre laboratory school, and she will contribute expertise in the area of early childhood education and pedagogical documentation, as emerging scholar. Makovichuk is also involved in an ongoing research partnership with Laidlaw (*Changing Learning: A Study of Innovation and Learning Practices*) which we expect to provide background for the proposed research and pilot teaching and learning strategies.

Laidlaw, O'Mara and Makovichuk will share in the responsibility for shaping the intellectual framework of the proposed research. All interpretations, preparation of reports, and communication of results to the academic, professional, and other communities will be co-directed by team members. Major administrative decisions required during the proposed project will also be shared. Other shared responsibilities will be the investigation and development of the various pedagogical approaches, planning and development of data collection and the continued interpretation and analysis of insights emerging from these. The team will share responsibilities for communicating the results of this research to academic and professional research communities. They will also share responsibility for presenting results to practicing teachers, to curriculum developers, parent groups, and to provincial and national bodies concerned with teaching and learning. Laidlaw will take primary responsibility for working with graduate research assistants and in coordinating administrative aspects of the project, including communications with the school and participant/parent groups and will take a lead role in creating

published research findings rising from the project in the areas of early literacy and curriculum. Laidlaw will devote 80% of her research time on the proposed project.

O'Mara will take primary responsibility for developing and overseeing the specific digital and electronic media that will be used within the project. As well, she will take responsibility for gathering and communicating relevant findings from her mirrored project in Australia. Finally, O'Mara will take primary responsibility for creating published research findings within the area of digital technologies and drama education. O'Mara will devote 50% of her research time on the proposed project.

Makovichuk will coordinate and assist with the work of the project taking place in the Child Study Centre classrooms. As a lead teacher within the CSC she will coordinate communication with parents/guardians of children participating in the project. Makovichuk will take primary responsibility for creating published research findings within the professional teaching community and in the area of early childhood education. As Makovichuk is also a full time teacher, she will devote 15% of her time to the project. The PI intends to seek release time to offset this work through additional funding opportunities (e.g. University of Alberta grants; research professional account funds).

B. Description of Proposed Student Training Strategies (Graduate Research Assistants)

A doctoral student who has been involved in one of Laidlaw's previous projects who has considerable expertise in digital literacies, and is also an experienced primary teacher, has expressed interest in the proposed work, should the proposal be funded. She is developing her dissertation in the area of digital literacies and interactive technologies and her dissertation work will benefit from involvement in this project. The doctoral student will take a lead role in the work with the Master's student GRA. It is anticipated that the master's student will initially work in an apprenticeship role, with responsibilities developing as he or she gains familiarity with the project and with research approaches. We anticipate that the Master's student may be a student who is interested in continuing into doctoral work and/or someone who may have an interest in the research environment of the CSC (the program has employed a number of GRAs this year and it is anticipated that one of those students may apply to work within our project, if funded).

It is expected that both students will have graduate studies interests located in the area of digital media; multimodal literacies; narrative structures; early childhood education; and innovative learning environments. Additionally, it is expected that both GRAs will have professional teaching experience. The PI and CI have provided ongoing mentorship and training to graduate student research assistants through previous projects in Canada and Australia and we anticipate that this project will provide additional opportunities for the GRAs to gain from the collective expertise of the investigators and collaborator at an academic, international and professional level.

As detailed in the proposal, a range of research methods will be undertaken in this project. By participating in the research, the GRAs will be able to develop many of the academic and technical competencies necessary to function as effective researchers. The GRAs will also be involved in ongoing discussion of the theoretical frameworks being used to structure the study and to interpret results, providing them with the opportunity to broaden understandings of particular areas of scholarly inquiry, including theories of language and literacy and 'new literacies' (including digital media), and research in curriculum. In more specific terms, the GRA will be trained in a range of research skills associated with the different stages and elements of the proposed research, including assisting with pedagogical analyses, planning and implementing data collection within classroom contexts and analysis of data, the preparation of academic and professional papers, workshops and presentations for academic and professional audiences, and the development of web and multi-media based forms of reporting. As in our other research studies it is anticipated that both GRAs will work as collaborative members of the team and will be provided with additional responsibilities and training as they gain experience with the project.

Family name, Given name
Laidlaw, Linda

Funds Requested from SSHRC

For each budget year, estimate as accurately as possible the research costs that you are asking SSHRC to fund through a grant. For each Personnel costs category, enter the number of individuals to be hired and specify the total amount required. For each of the other categories, enter the total amount required.

	Year 1		Year 2	
Personnel costs	No.	Amount	No.	Amount
Student salaries and benefits/Stipends				
Undergraduate				
Masters	1	7,990	1	8,293
Doctorate	1	12,543	1	13,020
Non-student salaries and benefits/Stipends				
Postdoctoral				
Other	1	1,000	1	1,000
Travel and subsistence costs	Year 1		Year 2	
Applicant/Team member(s)				
Canadian travel	0		2,000	
Foreign travel	4,860		6,000	
Students				
Canadian travel				
Foreign travel				
Other expenses				
Professional/Technical services	1,000		1,500	
Supplies	500		500	
Non-disposable equipment				
Computer hardware	1,200		0	
Other	2,596		0	
Other expenses (specify)				
Teacher substitute costs	1,200		1,200	
	0		0	
Total	32,889		33,513	

Application WEB

PROTECTED WHEN COMPLETED

Canadä

BUDGET JUSTIFICATION
Personnel Costs
Doctoral Student
Budgeted: One 6 hour a week doctoral assistant for each of the two years.
Rationale: Each of the methods used as well as the ongoing communication with the CI, requires considerable human resources. A student who has been involved in one of Laidlaw's previous projects and who has considerable expertise in digital literacies as well as being an experienced primary teacher has expressed interest in the proposed work. She is developing her dissertation in the area of digital literacies and interactive technologies and will benefit from involvement in this project. The doctoral student will provide assistance with technology considerations for data collection, data analysis and interpretation, and will also be involved in preparation of and communication of the products and results of the proposed study.
Total: Year 1 ($3981.80/term/6 hour GRA plus 5% cost of living increase x 3 = $12 543), Year 2 ($3981.80/term/6 hour GRA plus 9% cost of living increase x 3 = $13 020) = $25 563.16 for U of A TAB B Trust-Funded Appointments) =   **25 563**
Master's Student
Budgeted: One 6 hour a week master's student graduate assistant for fall/winter terms both years.
Rationale: Due to the many hours of classroom observation and strategy implementation within the project, student data gathering will require additional and consistent support. A Master's student with professional teaching background will be sought for this position, as well as a student who may be interested in continuing in graduate work.
Total: Year 1 ($3804.70/term/6 hour GRA plus 5% cost of living increase x 2 = 7990, Year 2 ($3804.70/term/6 hour GRA plus 9% cost of living increase x 2) = $8293) =   **16 283**
Note: We have received confirmation of funding, for pilot work related to the proposed study, to employ an undergraduate student for Summer, 2011, as well as SAS funding which will provide partial funding over the summer for a doctoral student to be involved in pilot work.
Non-student Salaries and Benefits
Budgeted: Clerical assistance for each of the two years for transcription and general clerical support.
Rationale: Transcription of the classroom data and teacher dialogue meetings will be required, as it is expected that there will be several hundred hours of audio-tape over the duration of the project. As well some general clerical support to assist in communications (e.g. email and mail contacts with participants) and assistance with duplication of media will be required. The PI's university is able to provide some assistance as is the CI's university, but cannot provide the amount of clerical assistance required to support the proposed project.
Total: Amount to top up contributions = $1000 per year x 2 =   **2 000**
Travel and Subsistence Costs
Research travel and subsistence costs
Funds are budgeted to cover some of the expenses that will be incurred during research travel to the Reggio Emilia preschool program site, in Reggio Emilia, Italy, in order to defray costs of airfare, accommodations, and meals, for the PI and collaborator, In order to save on costs the two Canadian members of the team will travel. Top up of expenses will be sought through the PI's professional expense account. Year 1: ($1500 per flight; hotel x 5 nights/trip @ $120/night; per diem x 5 days @ $66/day; local transportation @ $30 x 5 = $2430 per trip)
Principal investigator: **2 430**
Collaborator: **2 430**
Assistance to attend academic conferences (applicants and collaborator)
Budgeted funds will be used to help defray costs of airfare, hotels, meals, and registrations required for

attendance at regional, national, and international conferences. Travel requests are made for one international (e.g. NAEYC) for the team and one national (CSSE) conference in year two for the Canadian team members. The CI's partner institution has agreed to provide funds to offset travel costs from Australia to North America. When the team meets at NAEYC, they will also use this opportunity to engage in a meeting to consolidate the project, so as not to incur additional costs.

Total: ($2 000 for 3 investigators for one international conference and $1000 for 2 investigators for one national conference = $6 000 + $2000) =   **8 000**

Other Expenses

Professional/Technical Services

Budgeted: Technology support for digital devices and technologies.

Rationale: While the CI will be providing technological expertise, her location may create challenges should we encounter difficulties with the ipads or software. As well, funds are required in order to develop a website for communication of research examples and results and to facilitate the production of digital products, so that a larger amount is requested for Year 2.

Total: ($1000 in Year 1; $1500 in Year 2 of the project) =   **2 500**

Supplies for Classroom Data Collection and Analysis

Budgeted: supplies and materials to support collection and analysis of classroom data

Rationale: To support the classroom work, described in the proposal, a variety of text materials (curriculum materials, books), writing materials, presentation materials, data storage (thumb drives, CDs) and photocopying will be required.

Total: ($500 per year x 2 years) =   **1 000**

Non-disposable Equipment - Computer Hardware

Budgeted: one laptop computer

Rationale: It is expected that a considerable amount of data gathering will occur in the school locations, and prior experience also tells us that digital video and photographic data will require additional storage space. The applicants will make use of their own laptop computers to facilitate the collection of field notes and to ensure access to electronic communications. A laptop is budgeted for shared use by the graduate research assistants and the research collaborator in the school, who has some PC computer access but does not have a Mac computer, which is required to operate as the server for the ipads, using the Vidi software.

Total: (13 inch Macbook Pro in Year 1) =   **1 200**

Non-disposable Equipment – Other

Budgeted: 4 ipads for classroom use in the research sites

Rationale: Use of ipad/touch screen technologies are central to our project The ipads will be used to create and capture images, audio and texts that will be a part of the data of the project, and additionally, through the Australian video tagging software (Vidi), will also be used for data analysis within the research team.

Total: (ipad 32GB @ $649 x 4) =   **2 596**

Teacher Release Time/Substitute costs

Budgeted: Substitute teaching coverage

Rationale: Involvement in the research will entail significant unpaid time commitments on the part of the two teachers, and to ensure that participation will not overburden research participants, providing several days of substitute coverage will help to offset the time required by the project. Substitute costs will be used to allow time for meeting, planning, and pedagogical analysis.

3 days each year @ $200/day substitute costs   =$600 x 2 participants

Total: ($1200 in Year 1; $1200 in Year 2) =   **2 400**

TOTAL   **66 402**

Family name, Given name
Laidlaw, Linda

Funds from Other Sources
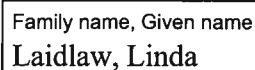
You must include all other sources of funding for the proposed research. Indicate whether these funds have been confirmed or not. Where applicable, include (a) the partners' material contributions (e.g. cash and in-kind), and (b) funds you have requested from other sources for proposed research related to this application.

Full organization name Contribution type	Confirmed	Year 1	Year 2	
Roger Smith Undergraduate Student Research Award In Kind	☒	5,000	0	
Support for Advancement of Scholarship Cash	☒	3,000	0	
	☐			
	☐			
	☐			
	☐			
	☐			
	☐			
	☐			
Total funds from other sources		8,000	0	

PROTECTED WHEN COMPLETED

Application WEB

Canada

Family name, Given name
Laidlaw, Linda

Intended Outcomes of Proposed Activities

Elaborate on the potential benefits and/or outcomes of your proposed research and/or related activities.

Scholarly Benefits

Indicate and rank up to 3 scholarly benefits relevant to your proposal.

Rank	Benefit	If "Other", specify
1	Enhanced curriculum	
2	Enhanced research collaboration	
3	Knowledge creation/intellectual outcomes	

Social Benefits

Indicate and rank up to 3 social benefits relevant to your proposal.

Rank	Benefit	If "Other", specify
1	Technological outcomes	
2	Enhanced professional practice	
3	Training and skill development	

Audiences

Indicate and rank up to 5 potential target audiences relevant to your proposal.

Rank	Audience	If "Other", specify
1	Practitioners/professional associations	
2	Academic sector/peers, including scholarly associations	
3	Students	
4	Professional and/or scholarly associations	
5	(Other) - Specify	Parents of young children

Personal information will be stored in the Personal Information Bank for the appropriate program.

PROTECTED WHEN COMPLETED

Application WEB

Canadä

Family name, Given name

Laidlaw, Linda

Expected Outcomes Summary

Describe the potential benefits/outcomes (e.g., evolution, effects, potential learning, implications) that could emerge from the proposed research and/or other partnership activities.

The intended outcomes of the proposed activities are as follows:
- the development of a framework for using digital media and multimodal approaches in early childhood education and elementary school settings;
- the development of enhanced curriculum materials, through the products and texts of the project;
- the development of new research methods which more fully exploit the opportunities provided by digital texts and media;
- the exploration and development of new methods of working with teachers as research collaborators within their professional areas of expertise;
- to communicate results from this project to the professional teaching community and the educational, early childhood and literacy studies research communities. This will occur through presentations at national and international conferences, the submission of papers to national and international refereed and professional journals, and reports to Ministries of Education, Education departments and professional teaching organizations.
- the use of digital and online forms and formats to enhance and provide better access to audiences with an interest in this work. For example, while we intend to submit scholarly articles to well-regarded online literacy journals (e.g. Language Arts, English Education, Language and Literacy), we also intend to create several digital products that can be accessed directly or downloaded online, such as a digital book for teachers, and a downloadable demo of exemplary classroom practices and case examples;
- to share methodological expertise and tools developed through the project with the wider research community. The software (Vidi), which is currently developed to testing phase for use in this project, will be freely released to interested researchers through an Internet download;
- to develop and enhance an international partnership for the purpose of sharing research approaches to investigating digital pedagogies in Australia and Canada;
- to share collected data and insights gained through the mirrored Australian and Canadian research projects;
- to use the information, results and insights arising from this project to develop a larger, interconnected digital pedagogies project, involving multiple sites and seeking additional international partnerships.
Finally, the results of this research have the potential to contribute to priorities for addressing 21st Century pedagogical approaches for provincial education systems (see for example, Government of Alberta, 2009; Government of Alberta, 2010) as well as addressing SSHRC priorities (Gaffield, 2010): "In order to maximize creative and technological capacity through Canada's education sector, it is necessary to understand the ways in which new technologies can be most effectively utilized to promote learning; to identify the factors conducive to the creation of innovative learning environments; and the acceptance, adoption and adaption of these frontier technologies as a standard part of regular classroom practice."

PROTECTED WHEN COMPLETED

Application WEB

Canadä