Athabasca University Master of Arts - Integrated Studies

ARTS INTEGRATION IN EDUCATION: A NECESSARY EVIL, OVERUSED BUZZWORD OR THE ULTIMATE SOLUTION?

By

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ABSTRACT

Arts education research from the last thirty years was thematically analyzed to find out if teaching in and through the arts does prepare today's students to be successful 21st century learners. Critical skills students will need for success in the 21st century workplace and global society are identified. Much of the research studied gave credence and support for the importance of learning through the arts however there is also some cautionary research results reported. What was discovered is that there is a need for more Arts Integration research, especially to create authentic assessment of the 21st century learner skills.

Arts Integration in Education: a necessary evil, overused buzzword or the ultimate solution?

I believe arts education in music, theater, dance and the visual arts is one of the most creative ways we have to find the gold that is buried just beneath the surface. They [children] have an enthusiasm for life, a spark of creativity, and vivid imaginations that need training ... training that prepares them to become confident young men and women.

(Richard W. Riley, U.S. Secretary of Education, March 2012)

As a teacher with fifteen years experience teaching Art and Drama, part of which was within an arts centered learning setting, I have often had to defend, to the broader professional teaching community the importance of what I taught. Even though I knew there was some research to support what I witnessed in my classroom, that students who were taught through the lens of the arts became more successful adults, there did not appear to be sufficient formal justification. I decided to pursue a thematic analysis of the existing research on arts integration and learning through the arts. I wanted to be able to prove my belief in the power and importance of teaching in and through the arts. My research question evolved to become: **What research or data is available to support the position that teaching in and through the arts does prepare today's students to be successful 21st century learners?**

For common understanding of terms used throughout this paper two operational definitions are provided. The first definition is that a successful 21st Century Learner is a student who uses educational technologies to apply knowledge to new situations, analyze information, collaborate, solve problems, and make decisions. Utilizing emerging technologies to provide expanded learning opportunities is critical to the success of future generations (B.C. Ministry of Education, 2010). The second definition is the answer to the question; What does a successful 21st century education look like? This is one,

which prepares students to be successful, contributing citizens in the context of today's global society. Success in the 21st century requires students to understand how to learn independently. It is necessary to develop strong critical thinking and interpersonal communication skills, both written and oral, in order to be successful in an increasingly fluid, interconnected, and complex world. Twenty-first century skills learned through an arts based curriculum will become increasingly more interdisciplinary, integrated, project-based and technology enhanced. Instruction should focus on the development and use of skills such as critical thinking and problem solving, written and oral communication, collaboration, creativity and innovation. Twenty-first century learning builds upon such past conceptions of learning as "core knowledge in subject areas" and recasts them for today's world and today's learners where a global perspective and collaboration are critical skills (McLeod, 2010).

Many educators and researchers believe that the best way to meet the needs of 21st century learners is to use all the emergent tools available to educators including teaching and learning through the arts. As demand for a new workforce to meet the challenges of a global knowledge economy rapidly increase, this author is not alone in the belief that few things in schools could be as important than both art education and art-infused education. The term arts used here, includes the disciplines of Music, Art, Dance and Drama. So just how does the existing research (from reputable Canadian, American, Great Britain and Australian sources) support this notion? Research from around the world, in arts education, typically examines two kinds of arts instruction. Discrete arts classes involving individual arts disciplines that are taught by school arts specialists; and integrated arts programs in which arts instruction is delivered integrated with instruction

in another academic subject (Stevenson, 2006). Integrated instruction is often co-taught by a classroom teacher and an artist in residence who work together to help students make "authentic connections" between their disciplines (Consortium of National Arts Education Associations, 2002). While the term 'arts integration', is often referred to as; arts infusion, teaching through the arts, Learning Through The Arts, (LTTA) or arts centered learning, arts integration is not as well known or practiced in many schools (Robinson, 2008). Arts integration is really about an interdisciplinary education that uses the tools or lens of the 'arts', which in turn requires higher-level thinking and critical inquiry skills. Today's invested and interested stakeholders and educators have discovered that teaching today's 21st century learners requires an interdisciplinary approach that includes connecting the arts with core subjects; math, science, humanities and including the infusion of technology. Many educators and researchers have argued for a long time that using the lens of the arts teaches necessary 21st century skills to today's students. Deeper, more authentic learning in and through the arts delivers the skills and knowledge students will need to succeed in a world that is changing at an unprecedented pace. Much of the research culled for this thematic content analysis supports this widely held belief, that learning through the arts improves student learning (Bamford 2006, Catterall 2002, Csikszentmihalyi 1997, Davis 2008, Deasy 2002, Eisner 2001 2004, Fessler 2011, Fowler 1996, Greene 1995, Gullatt 2008, Hunter 2005, Ingram & Riedel 2003, Lampert 2006, McKinney, Corbett, Wilson & Noblit 2001, Murfee 1995, Norman 2008, Oreck 2002, Robinson 2008, Ruppert 2006, Smithrim & Upitis 2005, Stevenson 2006, Wotton 2008), but there is some research that questions the validity of these claims (Moga , Burger, Hetland & Winner 2000, Winner & Cooper 2000, Winner

and Hetland 2000).

The research that informed this paper has been studied, sorted and analyzed to determine what themes exist within the research. I looked at much of the current and relevant research, opposing and supportive from the last two decades, generated in Canada, The United States, Great Britain and Australia. The emergent themes were generated in the same way that grounded theory generates questions. I highlighted common words; phrases and color-coded the common themes that emerged in the research data. I then took all the highlighted words and phrases and dropped them into the Wordle search engine to generate a word cloud, that then sorted the words into the most often used. These ones were then displayed in the largest font. In this way three main themes were discovered. By including my first hand experience with teaching in and through the arts at five different schools, including one arts centered learning school and one school focused mainly on Physical Education and not the arts, I was able to interpret these research findings from different viewpoints. It is my opinion that the students who have learned their core subjects in and through the arts are better prepared for the 21st century workplace. I was not surprised that most of the research studies support my belief system, but I was intrigued and surprised by the holes I discovered in the research studies I read.

From all the research examined, three overarching themes emerged. One, that teaching through the arts improves students thinking; critical thinking, improved general thinking skills, higher order thinking, divergent thinking, and creative thinking. The second theme, threaded throughout the research, was one that highlighted the intrinsic values; learning through the arts is motivating, develops empathy, tolerance,

collaboration, strong identity, improved self-concept, and improved self-esteem. The third theme that became evident is that students who were exposed to music, specifically Mozart, as in the 'Mozart Effect', demonstrated improved spatial temporal reasoning and improved spatial processing abilities, which in turn resulted in improved academic test scores especially in math (CCCL-CCA.ca, 2012).

The relationship between exposure to the arts and student achievement within the academic disciplines such as mathematics, english/language arts, science, and social studies has, in some circles until recently, received mixed reviews (Winner & Hetland, 2000, Gullatt, 2007). The research related to this topic has often been theoretical in nature with little empirical support. The first set of studies that illustrate theme one, the importance of improved thinking skills, which includes the following: teaching core (math, science and humanities) concepts in and through the arts, that use both interdisciplinary and integrative lessons. This encourages and enables higher thinking skills in students' acquisition of new knowledge. Most of the studies reviewed provided strong evidence that arts education helps students develop cognitive and social capacities that are important to success in school, life, and work (Stevenson, 2006). These capacities include critical thinking, problem solving, spatial temporal reasoning, empathy, tolerance, and collaboration (Catterall, 2002). Researchers have found that the more arts integration students receive, the greater their test score gains (Ingram & Riedel, 2003). The often-overused standardized tests are not designed to capture the sophisticated thinking skills that the arts foster (e.g., higher-order thinking and creative thinking) and in my experience do not measure accurately the cognitive growth that occurs in arts learning (McKinney et al., 2001). When students engage in creating works

of arts, their process is also purposeful because it culminates in a product or performance that will enable them to share a meaning with others (Wootton, 2005; Stevenson & Deasy, 2005). Learning in and through Arts is associated with the development of a strong identity and improved self-concept and self-efficacy (Catterall, 2002). This theme of improved student sense of self was found consistently in much of the research projects read and analyzed. These research studies overwhelmingly support my own observations, that student learning is much more authentic when taught through the lens of the arts. This coupled with how student behavior and attendance is improved and how much more they love to come to school supports the importance of learning through the arts. If the research supports this then why have 'back to basics' movements, which minimize or even eliminate the arts, have thrived both in Canada and the United States?

Over the past century, the arts have enjoyed prominence during times of progressive reforms, but regarded as an extra during the "back-to-basics" movements (Oreck, 2002). Between 1950 and 1980, arts education, under the mantle of aesthetic education, was justified by aesthetic or intrinsic ends and not, for example, to enhance self-esteem or improve reading skills (Robinson, 2008 quoting Reimer, 1970). To conduct research on the non-arts effects of arts education was "out of vogue at best, out of touch at worst" (Cutietta, Hamann, & Walker, 1995, p. 5). In the mid-1970s, Eisner (1974) called for the evaluation of arts programs. As a result, a growing body of evidence suggests that arts education positively affects aspects of living and learning beyond the intrinsic values of the arts themselves. Reported benefits of the arts include the development of the imagination (Greene, 1995), greater motivation to learn (Csikszentmihalyi, 1997), increased student creativity, lower dropout rates, and increased

social skills (Catterall, 1998). Researchers including; Catterall 2002, Deasy 2002, Fowler 1996, Greene 1995, Hetland 2000, Murfee 1995, and Robinson 2008, also reported that students involved in the arts exhibit higher academic achievement than their peers who are not involved in the arts.

However because much of this research is correlational in nature, Winner and Cooper in their study *"Mute Those Claims"* caution researchers and others not to go beyond the evidence to make causal claims about the arts and academic achievement (Winner & Cooper 2000). The purpose of their study was to quantify existing research results during the 1950's to 1998. Winner and Cooper wanted to test claims, that studying the arts results in improved academic achievement. "*Three of the meta-analyses examined studies that had a correlational research design and two examined studies with an experimental design. The researchers found evidence for a positive relationship between arts education and academic achievement, but do not find evidence that arts education causes increases in verbal and mathematics achievement* (Winner and Cooper, 2000, p.12)." Winner and Cooper mention another concern that is associated with the research on the benefits of arts and academic achievement. They caution that by suggesting that the arts might serve as handmaidens to other subjects, a danger exists that the arts will not be valued for their distinct contributions to education (Winner & Hetland, 2000,p.49).

Although arts educators have tried to strengthen the position of the arts by claiming that the arts enhance learning in other subjects, Winner and Cooper (2000) argue that it is foolhardy to expect the arts to be as skilled in teaching of those subjects themselves. They further argue that "advocates should refrain from making utilitarian arguments in

favor of the arts [because] as soon as we justify arts by their power to affect learning in an academic area, we make the arts vulnerable" (2000, p. 66–67). Justification for the arts comes from the important and unique contributions that arise from arts education. For example, Eisner (1994, 2002) and Greene (1995) note the importance of the arts for experiencing the joy of creating, developing attention to detail, and learning ways to express thoughts, knowledge, and feelings beyond words. Students who are highly exposed to the fine arts are capable of seeing multiple perspectives, and it is this ability to think broadly and not narrowly that is "closely aligned with critical thinking competencies and dispositions as they are described in many of the construct models" (Robinson, 2008, p. 216). As a teacher with the Calgary Board of Education I know that Alberta Education mandates that the course offerings of Art, Dance and Drama should be taught for a minimum 75 hours during the school year. Principals have been able to justify less classroom hours for the arts when the arts are 'integrated' into the core classes. I have not ever experienced 75 classroom hours to deliver my Visual Art lessons, or Drama units during the option blocks offered to students. This demonstrates how vulnerable the arts are in spite of the research that continues to demonstrate the value of teaching and learning through the arts.

Another study found that fine arts students performed considerably higher than non-arts students on "truth seeking, critical thinking maturity, and open-mindedness—suggesting that visual arts curriculum and instruction may significantly enhance the critical thinking disposition" (Lampert, 2006, p. 223-224). These studies support the idea that 'Learning Through The Arts' programs have had much success with empowering students' critical and creative thinking. Another more recent study commissioned by the

Royal Conservatory of Music Canada, on the effects of LTTA in the schools suggests that infusing areas of the curriculum with the arts enhances student learning and engagement (Norman, 2008). Participation in arts activities also had a positive effect on achievement in other subject areas. The arts are a powerful way of learning, and this three-year study not only raises awareness of the arts, but also provides meaningful Canadian data and research results that speak to what many of us already know. Not to ignore the warnings from Winner and Cooper, but since their work in 2000, more research has been conducted that supports the wide held belief of the importance of LTTA and subsequent improved student thinking (Norman, 2008). All these research studies support the first theme, that of students improved overall thinking skills, when taught through the arts.

Much of the existing research shows that the arts offer intrinsic benefits related to student experience and expression and bonus benefits related to intellectual achievement, including the development of general thinking skills and problem-solving abilities (Bamford 2006, Catterall 2002, Csikszentmihalyi 1997, Davis 2008, Deasy 2002, Eisner 2001, Fessler 2011, Greene 1995, Gullatt 2008, Hetland 2000, Hunter 2005, Ingram & Riedel 2003, Lampert 2006, McKinney et al 2001, Moga et al 2000, Murfee 1995, Robinson 2008, Stevenson 2006, Winner & Cooper 2000). The Canadian research done by Fowler confirms that spending time in the arts does not come at the expense of achievement in other subjects, but improves estimation and computation skills and enhances student engagement in school learning overall (Fowler, 1996). In 2002 these findings were supported by the research of Katharine Smithrim and Rena Upitis that evaluated the effects of the Canadian LTTA program. Their final report to the Royal

Conservatory of Music stated that the grade 6 LTTA students scored significantly higher on mathematical tests of computation and estimation than students in the two types of control schools, equivalent to a difference of 11 percentile points in raw scores (Upitis & Smithrim 2002). Their research was an important opportunity to determine the range of ways in which the arts affect students, teachers, parents, artists and administrators. This study was the first of its scope to be conducted in Canada. It remains the largest study of its type carried out to date. These researchers found that after three years, the LTTA students scored significantly higher than students in the control schools on tests of estimation and computation. Another important finding was that there were no significant differences between the LTTA students and the control group. That is, involvement in the arts for the students in the LTTA schools did not come at the expense of achievement in mathematics and language. Their analysis provided strong indications that involvement in the arts went hand-in-hand with engagement in learning at school. In interviews and on surveys, LTTA students, teachers, parents, and administrators talked about how the arts engaged children in learning, referring to the cognitive, physical, emotional, and social benefits of learning in and through the arts. Here again is the research to support the fact that intrinsic values do occur when students are taught through the arts (Smithrim & Upitis, 2005). Although this recent study of Smithrim and Upitis does add considerably to the growing amount of research, providing both correlational and causal evidence of the association between arts and achievement in other subjects, any study of this type and scope needs to be replicated in a variety of situations to draw any further conclusions. This is a direction and a hole in the research done so far that this author is interested in perusing, for a follow up research study.

There is other recent research in arts education that suggests that the boundary between intrinsic and instrumental effects of arts education is illusory and the effects of arts education should be conceived in a more holistic way (Stevenson, 2006). This new research indicates that the arts, where they are robustly present and stand on there own in the curriculum, can transform the contexts and conditions in classrooms and open new possibilities for teaching and learning (Stevenson & Deasy, 2005). A comprehensive education, which would include each of the arts disciplines (drama, dance, music, visual arts, literary arts) develops the skills and abilities of all children K to 12. This research study suggests that in order for diverse learners to develop fully as responsible citizens of the world, experiences in the arts open up possibilities for creative and critical thinking, flexibility, self-knowledge, self-confidence, risk-taking, and open-mindedness. Much of the research and writing, about the value of including the arts, over the last two decades including James Catterall, Elliot Eisner, Katherine Smithrim, Rena Upitis, among others, have shown us that the arts engage students actively in their own learning, promote cultural awareness, enhance interpersonal skills and co-operative teamwork (Catterall 2002, Eisner 2004, Smithrim 2005, Upitis 2005). These intrinsic values are a strong theme visible from the research of (Bamford 2006, Catterall 1999, 2002, 2009, Davis 2008, Deasy 2002, Eisner 1998, 2001, 2004, Greene 1995, Hetland 2000, Hunter 2005, Lampert 2006, Murfee 1995, Robinson 2008).

The third theme that emerged from this thematic analysis is supported by much of the research available on the interconnectedness between music and math and student academic achievement. General exposure to the arts is often credited with having added educational or intellectual benefits that extend beyond the artistic experience itself.

There is research that claims that listening to classical music makes children more intelligent, that studying music helps students learn mathematics, and that studying drama helps students learn to read (Knox, 1993). In the October 14, 1993 issue of *Nature* magazine, UC Irvine researchers Frances Rauscher, Gordon Shaw, and Katherine Ky published a short, one-page article entitled *"Music and spatial task performance,"* which detailed their research showing a statistically significant rise in scores from those students who had listened to the Mozart sonata (Hetland, 2000). Subsequent studies have concluded that that just listening to classical music can help test scores. Ultimately the research continues to show that music appreciation and, "the arts have shown links to student motivation and engagement in school, attitudes that contribute to academic achievement (Catterall, Chapleau, Iwanaga, 2006, p.4)". The prior research on Mozart and learning was labeled the 'Mozart Effect' and quickly became something of a scientific legend, thanks to the theory's wide dissemination in the media. Media reports that "listening to Mozart makes you smarter" (Hetland, 2006) fuelled a popular belief that listening to classical music could boost a child's IQ. Research studies have also showed connections between arts education and student performance on standardized tests of literacy and mathematics (Ruppert, 2006). This correlation has been replicated in several large-scale evaluations of arts education programs (Ingram & Riedel, 2003; McKinney et al., 2001). In fact, many researchers found that the more arts integration students received, including music instruction, the greater their test score gains (Ingram & Riedel, 2003). There does seem to be a consensus amongst these researchers in Canada and the United States as to the importance of learning through music instruction.

In a recent Australian research study, Mary Hunter conducted six education and

the arts research projects in 2005. The ultimate goal was to develop Australian evidence based on the impact of arts participation on students' learning and development. What she found was that:

the research findings demonstrate that arts participation can positively impact students' development, particularly if professional support is provided for teachers and collaborative partnerships are established between students, teachers, artists, families and communities. There is evidence in the research reports to indicate that arts participation, to varying degrees, positively impacts on students': social and personal development, attitude to learning, literacy, numeracy, arts knowledge and skills, generic competencies (writing, communicating, problem-solving, planning, organizing, perseverance, and enjoyment and value of the arts (Hunter, 2005,p.4).

In her recommendations she too suggests the need for further research, based on emerging themes and issues within the work. "Further evidence, gathered over time, is needed to create a base for the benefits of learning and through the arts for students and young people" (Hunter, 2005, p. 40). Here is another hole in the existing research that needs to be filled. Although similar evaluative research studies have found evidence of this positive correlation between arts education and student achievement, others have found only that test scores in schools with arts-centered curricula hold their ground as compared with schools without such arts instruction. Researchers have drawn two interesting conclusions in regard to this latter finding: firstly, that although increased instructional time is spent on the arts, it does not detract from performance in other academic subjects (McKinney et al., 2001). Secondly, that standardized tests are not designed to capture the sophisticated thinking skills that the arts foster (e.g., higher-order thinking and creative thinking) and probably do not measure accurately the cognitive growth that occurs in arts learning (McKinney et al., 2001). This begs the question how to authentically assess the learning that does occur when more class time is spent on the arts? This again appears to be an area where more research studies are needed. "Without

knowing what is learned in art class [and how it is learned], we cannot possibly guess at what might transfer outside of the arts" (Winner, 2006, p. 8–9). It does appear to be important to examine the manner in which the fine arts are delivered in today's schools and how it is linked to meaningful arts delivery. Also what has arisen from my readings and research is an undeniable need to find a way to gather additional data and research to fill in the blanks of what has come before. What might this research study look like? The more the research answers this author's question the more questions emerge!

The bulk of the research analyzed here appears to validate teaching of the arts for their own sake. What seems to be abundantly clear is that in all of the research data culled from the fine arts literature, past and current, there is undeniable recognition that the arts make a positive difference to students and their education. Therefore, it is increasingly important for us as educators to sustain and grow a healthy fine arts approach to education with this research in mind. While much research supports the benefits of integrating the arts into education, there is not enough quantitative research to document these claims. Further research into this area is therefore needed. While there are many cases of successful design and implementation of arts education programs, they often fail to convey their theoretical assumptions or fail to adequately document their outcomes. "There are therefore few best-practice case studies, which can be used to support advocacy processes. This lack of a readily accessible body of information is deemed a major setback for improving practice, influencing policy making, and integrating the arts into educational systems" (UNESCO, 2006). Is it because of the lack of appropriate research to support these claims that we as arts educators must continually justify our very existence?

The analysis and review of two decades of research and studies that has been undertaken confirms that there is a noticeable consistency of the value of arts in education. James Catterall sums it up well when he says,

the accumulated research of skilled scholars carrying out their work in a range of established methods is unambiguous: the arts contribute in many ways to academic achievement, student engagement, motivation, and social skills. Notions that the arts are frivolous add-ons to a serious curriculum couldn't be farther from the truth. While education in the arts is no magic bullet for what ails many schools, the arts warrant a place in the curriculum because of their intimate ties to most everything we want for our children and schools (2002, p.4).

While there is some support for the intrinsic value of developing visual and cultural literacy by teaching and learning through the arts; there is still more emphasis placed on standardized testing and academic achievement separate from the arts. Again what is emerging from the existing research is the need for more authentic assessment, which takes into account the arts learning. While assessment of the value of the arts does not fit into the three themes that have been identified here, there is a link to each of the themes to the use of and need for authentic assessment of the results to support all three themes. What might this look like? Researchers in Arts Education must look, think, and observe both from an artistic and pedagogical perspective. The research project that this author would now like to create and participate in would attempt to find a way to do this. What this thematic analysis of the existing research has illustrated is that there is a demand and need, for a universal and broad based education, of good quality, essential to meet the needs of our 21st century learners. This type of education, however, will only be authentic if, through arts education, it promotes the creativity, initiative, critical thinking skills and critical reflection all the higher order thinking skills which are necessary for success in life in this new century. Ultimately, the current research in arts education

provides evidence that ensuring the arts, both distinctly and integrated, is brought into the core school curriculum can create powerful conditions for teaching and learning by building a foundation for improved student learning and performance. What is now also impossible to ignore is the need for more research to support the research and initiatives already begun and to find a way to authentically assess these 21st century skills learned through the arts.

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Our society is committing cultural genocide. When the economy tightens and school budgets shrink, programs in music and the other arts are most often the first to be cut back or even totally eliminated from the curriculum. This deprives children of a unique opportunity to develop their creativity, learn self-discipline and teamwork, and increase their sense of self-worth. It strikes me as being supremely ironic that today; we still have to try to make the case that music is indispensable if the term 'educated' is to mean anything.

Michael Greene, President, National Academy of Recording Arts & Sciences

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