

WHAT WORKS?

Research into Practice

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Research Monograph # 33

Can the arts help engage *all* students in learning?

Engaging Students Through the Arts

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Research Tells Us

- The arts teach us how to make judgments in the absence of rules; they also teach us that goals are best held with flexibility and that some activities are self-justifying.
- 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.
- Canadian research affirms 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.

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Student engagement is central to learning. Those students who are fully engaged are ready to learn in every way – physically, socially, emotionally and intellectually. The arts play a vital role in ensuring that students remain engaged by encouraging them to learn in physical and embodied ways, by inviting them to collaborate with peers, by requiring them to respond emotionally and by calling upon their cognitive capacities as they learn in, through and about the arts.

Integrating arts in the classroom can help to engage all students and improve the quality of their lives in school and beyond.

Intrinsic Benefits

Scholars and philosophers argue that the arts are central to our humanity. Ellen Dissanayake, a bioevolutionary scholar, believes the arts serve a similar function to language in the development and the survival of the human species.¹ She points to the importance of artistic rituals in shaping our social worlds. Dissanayake claims the arts evolved to make socially significant experiences memorable and pleasurable (that's why we dance at weddings) and to make otherwise unbearable experiences bearable (that's why we sing at funerals).

American philosopher Elliott Eisner argues about the role of the arts as a means of teaching students to savour ambiguity, tolerate differences and learn about nuance. The arts allow us to experience the joy of creation and to learn

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non-verbal ways of expressing thoughts, knowledge and feelings.² The arts teach us how to make judgments in the absence of rules; they also teach us that goals are best held with flexibility and that some activities are self-justifying.³ These are the primary reasons that the arts have a place in our lives and in our schools.

Arts for Arts' Sake?

The arts add enjoyment to the day and make students more alert to other kinds of learning. Classroom teachers become the best advocates for an engaging education, rich in the arts, when they bring the arts to their students.

Bonus Benefits

There are other benefits associated with the arts. These are “bonus benefits” – benefits in addition to the intrinsic values of the arts. The most obvious bonus benefits are those associated with intellectual achievement in other subjects. Higher achievement in other subject areas is often used to justify arts programs. The very popular “Mozart effect” – the claim that listening to Mozart increases spatial abilities – gained traction not because of the intrinsic joy that comes with listening to Mozart, but because the public was enchanted with the idea that listening to Mozart would increase intellectual prowess in other areas. The attractiveness of this notion was so great that some government officials – including the governor of the state of Georgia – created programs to provide Mozart CDs for newborns, in order to give them an intellectual head start!⁴ In fact, the so-called Mozart effect has a very small and limited reach: it dissipates after a short time and only applies to rather constrained tasks.⁵

Other researchers have demonstrated that intellectual benefits of the arts include the development of general thinking skills and problem-solving abilities.⁶ Arts experiences are even said to help develop a more complex neural network in the brain.⁷ Researchers also claim that there are links between arts studies and school achievement in mathematics and language.⁸ For example, American high school students who had four or more years of fine arts courses scored higher on both verbal and mathematics measures.⁶

But the link between arts education and academic achievement in other areas does not, of itself, justify the place of arts in schools. The arts as handmaidens won't do any more than it would do for a mathematics educator to suggest that more time should be devoted to mathematics because it will increase music scores.⁹ The arts are important because all subjects are important.

TIPS FOR DAILY CLASSROOM PRACTICE

Engage students in the arts on a daily basis. You could ...

- set up a listening station in the classroom
- encourage students to share the music they like to hear
- have materials on hand for sketching and drawing

Use the arts to provide a natural way for students to be physically engaged in their learning. Have students ...

- move and chant as they learn their times tables
- act out a story line of a book shared in class
- compose soundscapes using found instruments and body percussion
- create a choreography to illustrate evolutionary concepts in science

Teach other subjects using arts-infused methods. Try to ...

- encourage students to “show what they know” through tableaux, monologues or choreographed movement routines
- find natural connections between an art form and a non-arts subject and use one to inform the other (e.g., teach geometry through sculpture, teach history through the enactment of historical events, or teach elapsed time through movement sequences)

Canadian Research on an Integrated Arts Program

The Royal Conservatory's Learning Through The Arts (LTTA) program infuses the teaching of core school subjects – language, mathematics, and science – with the arts. Artists work directly with teachers to develop units of study that meet the provincial curriculum guidelines. For example, a dancer might work with a teacher to develop a unit on geometry as interpreted through the discipline of modern dance.

Nearly a decade ago, I was invited, along with my colleague Katharine Smithrim, to evaluate the effects of the LTTA program.¹⁰ At the time, the LTTA program was offered at six Canadian sites; it has since expanded across Canada. We were eager to undertake this research, for we realized it 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.

Our research involved close to 7,000 students in Grades 1 through 6. Some students were from LTTA schools. Other students (the control group) were either from schools with other school-wide initiatives (such as a focus on technology) or schools with no special programs in place. After three years, the LTTA students scored significantly higher than students in the control schools on tests of estimation and computation, equivalent to a difference of 11 percentile points. Since there were no baseline differences in mathematics achievement or in socio-economic status for students in the different types of schools, we can conclude that gains in test scores occurred as a result of taking part in the LTTA program. And because there was no interaction effect between socio-economic factors – such as mother's education level or household income and school type – it can also be concluded that the benefits of the LTTA program occurred for children of all socioeconomic classes. This is an important finding, indeed. Further, although, there was a program effect for computation and estimation, for most of our eight measures of mathematics and language achievement, there were no significant differences between the LTTA students and the control group. That is, involvement in

No downside!

Teachers should feel confident that devoting time to the arts will not come at an unjustifiable cost – such as decreases in numeracy or literacy scores. Even those teachers who are unfamiliar or uncomfortable with arts teaching can provide arts experiences to their students with volunteer support.

TIPS FOR SUSTAINED ARTS PROGRAMMING

Create opportunities to learn arts skills. Have students ...

- learn painting and drawing techniques (perhaps with a volunteer or resident artist)
- sing or learn to play musical instruments
- learn a type of dance form

Enlist the help of parents and others to bring arts experiences to their students. Begin by ...

- creating a roster of parent skills and strengths in the arts
- learning about arts in the community
- applying to arts councils to support specific projects in the arts

Become an arts advocate. Begin by ...

- supporting arts in the classroom
- providing evidence to parents and administrators about the value of the arts, using research and classroom examples

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the arts for the students in the LTTA schools did not come at the expense of achievement in mathematics and language. This echoes a study undertaken in Swiss and Austrian schools, in which time was taken away from mathematics and language studies to give students more time for music. At the end of three years, students were as good in math and better in language than their peers who had less music time at school.¹¹

From our interviews with teachers, students, administrators, artists and parents, it became clear that the participants believed that involvement in the arts contributed to engagement in learning. Countless comments were made about how the arts motivated children: the emotional, physical, cognitive and social benefits of learning through the arts were highlighted. Of these various benefits, we were most struck by the constant reference made to the importance of physical movement – of using the body to sing, play and dance. As one teacher put it, “The dramatics – being able to act out the life cycles of the frog and butterfly – the children really learned those lessons – experiencing it physically made the difference.”

By the end of the three-year period, over 90 per cent of the LTTA teachers reported that they had come to appreciate how students could learn about non-arts subjects through arts-infused instruction. Principals of LTTA schools were likely to personally consider the arts as “very important” by the end of the study – not a sentiment that they necessarily expressed at the beginning.

In Sum

There are both measurable and ephemeral benefits to engaging students through the arts. Often the students themselves have the most eloquent ways of expressing how the arts contribute to their experiences at school. One Grade 6 boy in the LTTA study said, “Music brightens up the mind. When you learn something new, you feel good and that makes you feel good in other subjects like math.”

Music – like the other arts – does indeed brighten up the mind. And the arts brighten up other parts of our existence as well – the emotional, physical, social and even spiritual aspects of our learning and our humanity. Both students and adults involved in the arts recognize that the arts have this power and that arts education therefore deserves a central place in schooling.

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