TRANSFER OR TRANSFORMATION?
The impact of the arts on learning

Presented by Stephanie Perrin, Head of the Walnut Hill School, at the Harvard Graduate School of Education as part of the John Landrum Bryant Lecture Series, December 6, 2000.

Prologue

I am not a researcher or theorist. I am a practitioner and observer and my purpose here today is to share some stories, observations, and speculations, and raise questions we can consider together.

First, some terms: the American Heritage Dictionary defines transfer as “to cause to pass from one place, person, or thing, to another; from the Latin trans, across, beyond, through.” Transformation is defined as “to change markedly the appearance or form of; to change the nature or condition of; a marked change in appearance or character usually for the better; from Latin, trans, beyond, and forma, form.”

So transfer is about moving an entity, presumably without altering its form, from one place to another. Transformation, on the other hand, refers to a marked change in the entity itself. In transfer the entity moves; in transformation the entity is changed, the movement is from within. Interestingly, these definitions are 15 words apart in the dictionary, not far to go to get from a static to a changing form. These definitions are useful to keep in mind as we discuss what we mean by transfer or transformation.

Introduction

At Walnut Hill we have long argued that our educational program, based on the study of arts, academics, and community life, educates its students more broadly then many schools and therefore provides them with increased options in life. We have further argued that the intensive study of the arts has a salutary effect on all aspects of a student’s work, encouraging widely applicable habits and attitudes such as a sense of discipline and ownership of one’s work. In sum, participation in the Walnut Hill program enhances all performance.

In the world of arts education the argument most frequently used to make the case for including arts in the curriculum is that the study of the arts has a positive effect on academic achievement. The celebrated “Mozart Effect” is the most widely cited study, suggesting that listening to Mozart raises student test scores. As it turns out, the benefit
is slight and not long lasting. However, it makes an appealing sound bite as an argument for the arts as handmaiden to academic achievement.

So for those who believe in the arts as a means of improving academic skills, the headline “Arts lack academic influence, study says” (Boston Globe, September 20, 2000) came as quite a shock.

Here was a new soundbite. The headline, one of many across the country, referred to the publication of *The Arts in Education: Evaluating the Evidence for a Causal Link*, by Ellen Winner and Lois Hetland, a meta-analysis of a number of widely cited studies purporting to establish a link between the arts and academic achievement. The conclusion was that the arts have no effect on academic achievement. My first reaction to this assertion was, “And cigarette smoking does not cause cancer.”

The questions the study examined were: “Do the arts promote learning in non-academic domains as measured by quantitative data? Are claims for the value of arts in education rooted in empirical evidence or unsupported advocacy? Is correlation causality?”

What Winner and Hetland found was that there appears to be no statistically significant evidence of transfer from one domain to another. Habits of discipline developed in the study of music do not lead to, or cause, higher scores in math, at least by these measures. Students do not appear to travel from class to class with a backpack full of skills which they transfer from one discipline to another. There seems to be no magical or measurable “transfer” effect. For those who have hung their hats on getting the arts into schools by making the transfer argument, this report was not well received.

The “truth” of this study is statistical, based on quantitative data. It is a truth and must be acknowledged as such, but, as the researchers themselves point out, it is not the whole story. Indeed, they contend that what these findings mean is that the real challenge is to make an argument for the *intrinsic* value of arts as part of the core curriculum.

Winner and Hetland also suggest three areas for further research: that instruction in the arts integrated with academic instruction might result in improved academic improvement; that arts in the schools might change the culture of schools in ways that support an increase in motivation and more positive attitudes among students; and finally that many studies are focused too narrowly on quantitative outcomes, and more qualitative research is required, such as the Portraiture method developed by Jessica Davis and Sara Lawrence Lightfoot here at H.G.S.E.
Of course if one wants support for the value of arts in schools, there are other studies that do support the idea that arts in the schools have a positive impact on the cognitive, personal and social development of students. Some appear in Champions of Change, a compendium of studies put out by the Arts Education Partnership and President’s Commission on Arts and Humanities. Interestingly several of these studies indicate that involvement in the arts has the most significant impact on low income students, helping to “level the playing field” (James Catterall). Much of what these studies assert we have observed at Walnut Hill: that the study of the arts engages multiple skills and abilities; that the act of creation in the arts draws on personal experience - the self - to produce results and thereby increases the investment of students in the process of learning as opposed to the outcome; and that the study of the arts develops a capacity for self-directed learning.

However, unlike some of my colleagues, I think Winner and Hetland have done us all a great favor because it means that we who do believe that the arts have a positive effect on all learning must make an argument for the intrinsic value of the arts in schools, an argument we should have been making all along. Math is not required to improve English scores to justify its inclusion in the curriculum, and neither should the arts. Making the case for the intrinsic value of the arts in schools is a necessary task, although it doesn’t make an easy sound bite.

**The Question**

I believe the question we must explore is: Are schools where the arts are taught to mastery as part of the core curriculum better learning environments for all children than those which do not include the arts? And, of course, how are they better? (I think it is important at this point to define what I mean by “arts in the schools.” I mean the arts taught to mastery against a high standard, just as with any other “academic” discipline. I am not talking about arts integration or “infusion” into the academic curriculum to enhance learning in other domains.)

I would argue that schools where the arts are part of the core curriculum are better learning environments not because of a simple transfer effect, but because the way in which students learn, what is asked of them in the intensive, disciplined-based study of any of the arts, calls on multiple intelligences, increases access for all students, and creates a school culture that is transformative of the entire learning experience because it changes the student. Students going from class to studio to dorm in such a school have more skills and more aspects of the self developed and available to them than students who are not in such a school. Students who are products of such schools are capable of understanding everything they encounter at a more complex level than many of their
peers. In terms of cognitive development I am using the term "better" in the sense that understanding that is more complex and flexible is “better,” more useful, than that which is simpler in structure.

In talking about what we see at Walnut Hill to justify the claim that it is a “better” learning environment than one which does not include the arts, I want to comment on two general areas. One is the influence of the program, which includes both the serious study of arts and academics, on the cognitive development of students; the other is the culture of the school.

With regard to cognitive development, more modes of learning are routinely utilized in a school such as Walnut Hill than in a more traditional school setting. Learning in the arts engages kinesthetic and intuitive skills, and requires the on-going creation and public presentation of one’s own work. And combining arts and academic study in the same setting offers broader access to meaning by engaging ways of thinking and representation consistent with a very broad spectrum of intelligence.

Schools with arts at the core are characterized by a school culture that supports motivation, engagement, and positive identification with the culture at large. Furthermore, because the arts are in many ways an international language, the “community” in question often includes other cultures and countries. Developing a sense of a global community is particularly salient in the technology-based, internet-connected world in which we all live.

**Cognitive Development**

For some time now, and from this very place, educational theorists and researchers such as Howard Gardner have argued that there are many modes of learning in addition to the rational, cognitive mode that has been the primary focus of schools in America for the last 100 years.

This “rational” approach to the questions of what is important to know and how people learn is characterized by a focus on separate disciplines and on teaching skills specific to each discipline. There is a tendency to assert there is a “right” way to do things and that the primary focus of teaching is the passing along of a body of knowledge. Learning is often compartmentalized and an intellectual grasp of information is valued as the highest form of understanding. In this kind of school culture you might say that “Who you are is what you know.” There is little emphasis, at the high school level, on the commonalties and connections among domains.
Other kinds of knowing or intelligences, variously referred to as emotional, intuitive, and/or kinesthetic, have been relegated to institutions other than schools. This traditional model of schooling worked well when the knowledge base of the culture took about 75 years to significantly alter. Now, with Sony changing its product line every ninety days, the notion of a single canon is outdated and the emphasis must be on teaching students to sort, evaluate and utilize the overwhelming amount of information to which they have access.

However, for all the research and theoretical work done in the last half century, schools, especially high schools, are very resistant to modifying this model. There has been much curricular change in the lower grades, but high schools are among the most conservative institutions in the culture. Today’s high schools are places that we who graduated in the late fifties would pretty much recognize.

In thinking about why schools with arts as part of the core curriculum are better learning environments, I want to comment on three “intelligences” that I think are consistently developed in such schools: kinesthetic, emotional, and what I call the aesthetic impulse.

Kinesthetic or body knowledge, meaning the development of the body as a way of knowing and as a form of expression, is characteristic of learning in the arts. Some people, like Wayne Gretsky or Maria Callas, could be called physical geniuses. Clearly the study of the arts calls upon students to learn to know and use their bodies intelligently and purposefully. This is often a difficult and sometimes a humiliating process, but the body is an active player, an integrated part of the learning process. There is less of a mind/body split than in regular school, where the main purpose of the adolescent body seems to be to betray its owner on a regular basis.

Also the performance requirements of the arts, the necessity of publicly and often physically representing what is known, supports a deeper and more complex understanding of the body, as well as a capacity for taking risks. In performance there is nowhere to hide. The performer can’t send someone else to dance his solo or speak his part. His legs, his voice, are out there for all to see.

The process of constant representation of what one knows to an audience, which then provides feedback, which is in turn used to inform and refine further representation, is an interesting learning cycle in itself and one that underscores both the active and interactive aspects of learning in the arts.
Another mode of knowing is emotional intelligence, or what Daniel Goleman termed “EQ,” meaning the development of both interpersonal and intrapersonal knowledge of one’s own feelings and emotional states and those of others, and the capacity to utilize these understandings productively. The development of this mode of understanding is what makes it possible for people to live communally. It is what makes a great actor, and also a great manager of a coffee shop or leader of a nation. Without this capability, intellectual intelligence can be ineffective or sometimes downright dangerous. Robert Oppenheimer and the team who worked with him on the Trinity project to develop the atom bomb were once described by the experimental physicist Luis Alvarez as a group of “very bright guys with no common sense.”

James Catterall points out in a study in Champions of Change that acting training helps students develop empathy and value differences as opposed to being afraid of them. Students who studied acting were found to be on the whole more empathic and less likely to stereotype others than students who had not had such training. People with a high EQ generally place a high value on respect for the individual and individual expression and seek relatedness, not distance.

At Walnut Hill, living consciously in the community is an important “teacher” in this area. Working successfully with diversity issues depends on this mode. History has demonstrated again and again that intellectual knowledge of the injustice of racism does not change the feelings of people; direct and on-going experience with those who are perceived as different does. At a boarding school, community is naturally a significant aspect of life. However, I have observed that students in schools where the arts are part of the core curriculum often describe themselves as part of a special community even if they do not live at the school.

Goethe said, “If you want to understand the world, you must go into yourself. If you want to understand yourself, you must go into the world.” The arts ask you to do both: go into and know the self, and use that knowledge to go into the world; reflection, creating, communicating, reflection, and so on.

The final mode I want to discuss is what I call aesthetic knowing. This is admittedly a very squishy notion, one I am hard pressed to define precisely. It is something I observe constantly and know to be at work but cannot measure directly. It has many dimensions. It is what I (and Howard Gardner) call the impulse toward the good, the true, and the beautiful; the spiritual impulse; the desire to say what cannot be said any other way; the act of knowing the world through metaphor; the drive to go beyond technique to the meaning of the work, and finally to a performance or exhibition that is uniquely that of an individual or group.
I have come to believe that this is one of the greatest intrinsic values of the study of the arts. Work in the arts transforms the imaginative, idealistic, essentially spiritual impulse that is one of the most salient characteristics of all adolescents into work in the world by providing form and vocabulary for the orderly expression of that impulse for others to experience. Sometimes, as in the case of a performance, it is only for a few moments. Other times, as in buildings and paintings, it resonates through the centuries.

This impulse, this feeling of transformation and transcendence, was once described to me by a student as the feeling you get when you are in a chorus or orchestra and the opening notes pour forth. Last week in the Boston Globe I saw it given the term “elevation.” The religious community has many terms including grace and beatitude, but the secular world has a hard time naming this state or process. Perhaps Mihaly Csikszentmihalyi comes closest when he describes what he calls “flow”, the process of merging the self into a larger experience.

Because of this impulse toward a deeper understanding, one of the things that characterizes young artists is a resistance to premature closure. The serious study of the arts involves students in a never-ending process that is reinforced by the experience itself, the “flow,” not the search for the "answer" or a performance. It is a common misunderstanding that the arts are all about a final product but in fact the experience of creating, refining, and exploring is what is reinforcing. The performance is only a part of the whole, giving more information to the creator which in turn informs his continuing work.

Another way to picture this is as a process that begins with imagination and leads to the creation of something which then must be effectively communicated so that information can flow back to the creator and the learning can go on.

At Walnut Hill, as at every good school, all teaching has the goal of leading students to deeper and more complex levels of understanding, beyond disciplines into the connections and commonalities that characterize all domains. It is at this synthetic level of knowing that new ideas are formed and the imagination has full rein. It is where the meaning of ideas is considered, and the big questions are asked. Einstein said “Imagination is more important than knowledge,” because it is from the imagination, expressed in an orderly fashion, that new ideas emerge. Those new ideas are what propel people and nations to grow and change; in other words, to be alive. This is the level where students cease to be students and become independent learners. A teacher at Walnut Hill once remarked to his students, “I can teach you, but I can’t learn you.”
And as Mary Catherine Bateson said in her book *Full Circles, Overlapping Lives*, in this kind of school culture “Who you are is what you are willing to learn.”

Peter Senge, organizational development and learning theorist at MIT, writes about the importance in the business world of what he calls aesthetic knowledge, meaning the ability to see holistically and imaginatively. He says that such knowledge is essential to a true understanding of anything; “You can’t really know a system in any profound way until you can see it aesthetically.” Thinkers like Senge and Jerry Saltzman at the Harvard Business School are producing interesting work on the power of arts to help develop in students capabilities such as creative and holistic thinking. These capabilities will prepare them to be citizens of the new millennium in which understanding the cycle of generation, creation, and communication will be much more important than possessing a common knowledge base.

Indeed, familiarity with these and other modes developed in the study of the arts - kinesthetic, musical, spatial, interpersonal and aesthetic - as well as the non-verbal symbol systems learned particularly in music and visual arts, gives young artists a great advantage in a technologically based culture where the major means of communication, the internet, uses sound and image as major components of that communication. An artist’s capacity to “read” in many systems gives him or her an advantage in such a world.

**Culture of the School**

In addition to offering a program that supports learning through many modes, the culture and values of schools where arts are part of the core curriculum is transformative. Several examples come to mind.

One of the central tasks of adolescence is identity formation. Being an artist, a serious artist doing real work judged to a high standard, gives young people a solid sense of identity that is enough of the culture and enough outside the culture to satisfy the desire of all adolescents to be both embedded in the culture and challenging it at the same time. This characteristically adolescent tension, which is always maddening to adults, was something I experienced with my own 16 year old son who, in the course of a heated argument about the use of my car, shouted: “Get the hell out of my life! Do you have $5.00 for gas?” He took the money and, for the moment, opted for dependence.

This tension between independence and dependence is held in balance in a school like Walnut Hill. Because students identify themselves (correctly) as artists, they feel themselves to be individual, unique, and separate from common culture. On the other
hand, and for exactly the same reason, because they are artists, they feel deeply connected to what Cornel West calls the “greater narrative,” in this case of all other artists. This is seen rather poignantly when young musicians speak of the fact that their teacher’s teacher was taught by someone who’s teacher’s teacher was taught by Liszt. It is almost as if the hands of Liszt still travel, alive, through all the hands that follow.

Finally, with regard to identity formation, because Walnut Hill combines arts and academic training in the same community, there is a unity of purpose and sense of self that is not so readily experienced when school is where academics happen, while the arts happen on the weekends and after school. Students in an environment like Walnut Hill experience themselves as “seen” for who they are by all the adults they encounter, as well as by their peers. That singularity is supportive of a more integrated view of the self, in all its complexity, something for which all adolescents strive.

The peer group in schools where the arts are central tend to be motivated, self directed, and focused on questions of meaning. Students in these schools are, surprisingly, not competitive (that will come later) because their relationships with each other are primary at this stage in life, much more important in the long run than who gets the part or plays well today. There is ample evidence that in adolescence peers have a huge influence on each other in terms of the values they espouse and follow, perhaps even greater than parents. The shared values in these schools – respect for individuals, a sense of responsibility, the importance of hard work, and owning one’s own work - contribute to a positive culture for all students. Again, research reported in Champions of Change suggests that after-school arts programs are more successful in terms of positive changes in attitudes and behavior than those based on sports or other activities because of the peer group of these arts based activities is more positive.

As noted earlier, the arts are international in form and vocabulary. Because the peer group to which students have reference is international, their understanding of the world is far more cosmopolitan than that of many of their peers. One of the most common sights at Walnut Hill, for example, is a quartet made up of students who come from three or four countries, speak several different languages, and range in age from 13 to 18. In order to make music that moves beyond technical proficiency they are required to communicate about what they want, what the music means, and how they are going to get to a performance that is unique to them.

At a recent master class at Walnut Hill cellist Yo Yo Ma remarked to a group, “That was technically perfect, but you must talk with one another about what you want or it will have no meaning. That is most important.” This kind of complex conversation, focused around common values and vocabulary (albeit made harder by language differences),
ultimately promotes deeper understanding of each other as well as a richer and more complex cognitive understanding of music-making.

In schools where the study of the arts is a part of the core curriculum, students and teachers tend to have strong relationships based mutual respect and fueled by the students’ desire to learn what the teacher knows. Artist-teachers are seen as mentors, coaches, and facilitators of the work students are doing. Teachers are positive role models and students tend not to be cynical and disconnected from them but often openly admire and even speak of loving them (and hating them too at times). They wish to emulate their teachers and look forward to being as proficient as they are. I often think of Walnut Hill school culture as an irony-free zone, something much needed in this society where adolescents often seem terminally cynical and terrified of exposing themselves to adults. In arts training, such exposure is a requirement of the teaching relationship. Needless to say, teachers in this intense environment must be well boundaried.

Schools where arts and academics coexist are also richer learning environments for adults because having colleagues in both the arts and academic spheres gives each teacher access to a broader spectrum of cultures and backgrounds than would exist in a more typical high school. This mix of dedicated adults is one of the things that makes Walnut Hill an interesting and lively place to work.

Finally, another characteristic of the study of the arts is that it is never “finished” nor is it confined to the school walls. You don’t “do” the violin the way students say they have “done” chemistry when they pass the final exam. The culture of the school assumes that learning is a life-long activity that is connected to the world, not something that happens only in school. Work in the arts, since it is connected to the world and is driven by the students’ own motivation, is by definition extra-institutional, blurring the distinction students feel between school (not exciting) and life (generally more exciting).

None of what I have described happens if students dabble in the arts, or if the arts are used only to enrich other domains. It does happen when students are committed to real achievement in the arts, to making mistakes, to making fools of themselves in public, to practicing for hours and years, to knowing themselves as an instrument and interpreter of unique vision, and to communicating with others in an orderly and meaningful manner. It does happen when they commit wholeheartedly to their best possible work and to a high and ultimately internalized standard. Such study is not for the fainthearted and I am always amused by those who think artists are wimps or “don’t live in the real world.” These young people are brave in every sense of the word, and
they live in a world that is much more real and concrete in terms of consequences than most of their peers.

**Conclusion**

These are some of reasons I feel that schools where the arts are an integral part of the core curriculum create a culture and engage students in ways that are transformative of the entire learning experience; indeed, of the student. A teacher at Walnut Hill once said that the motion of education should mirror the motion of life. In schools like Walnut Hill, the motion of education does more accurately mirror the full complexity of life because it is a bigger, more faceted mirror.

It may be that schools combining the serious study of arts and academics will not lead to statistically significant improvements in academic achievement as measured by tests. What I have observed is that such a program does result in young people who are more fully developed socially, personally, and psychologically than many of their peers. It produces young people who are braver, more self-aware, more willing to take risks, and more open to difference that those who have not had the benefit of such a program. In a word it creates “better” people in the sense of being more complex, richer, and more adaptable in their skills and understanding.

I like to think that schools like Walnut Hill are in the business of developing young people who, no matter what path they take, will have the tools to succeed. Our goal is to develop young people who think like artists - creatively, imaginatively, and flexibly; who work like artists - hard, persistently, and consistently; and who have the values of artists, meaning that work matters, that striving for the best matters, that they matter, that they can have an influence on their world and want to.

How do we test for this transformative and inclusive learning? One method is that of portraiture as described earlier. Another is to ask students what happened to them in the course of their education. Following is a quote from a young violinist, off to Rice University, written in response to a questionnaire all seniors fill out. Here is a (self) portrait of a young artist about how he was transformed in his five years at Walnut Hill.

“I have learned about math, science, music, English, French, religion. I have learned about hope and hate and love and distance. I have learned about time and compassion, and wisdom and secrets. I have learned what tomorrow could be, and what yesterday was. I have learned how to cry and smile at the same time. I have learned about life and the possibilities it holds. I have learned how to look a person in the eye and tell them I need them, that I love them. I have learned how to wander and not know the answer. I have learned how to pray. I have learned how to be
sick without my mother. I have learned strength. Thank you. It is more difficult to say goodbye than I think anyone can understand. I write this through many tears.

A triumph in the Sky
I depart
My ghost world follows me
I hear their voices, like distant cries
The hims and the hers
Laughing at what will come
Knowing it will always be too soon
I wander through empty streets and I see it
My haven, my safeplace, my school
It shines within its aftermath
The magical dusting which settles only after time has healed the wounds.”

Jeremy Preston,
Walnut Hill, 1999