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## **ASSESSING THE VALUE OF THE ARTS: LOOKING BEYOND TRADITIONAL ACHIEVEMENT MEASURES**

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### ***ABSTRACT***

*Courses in the arts develop skills specific to the discipline. Research also suggests that the arts contribute to enhanced attentiveness, engagement in school, communication skills, and critical and divergent thinking. Other studies point out benefits for at-risk students in reducing negative outcomes such as dropout and crime rates. Studies report a correlational relationship between arts education and reading achievement, but a causal link has not been established. Thus, there is evidence of benefits of the arts that can support students' success in school, but more high quality causal studies are needed.*

### **BACKGROUND**

Approaches and opinions vary on the value of the arts in education and how their value can be measured. While some believe the arts are less essential than core subjects and therefore should receive fewer resources, arts supporters view the arts as essential to success in school and in life and believe they should receive more resources. Beyond the general benefits to all students, supporters also argue that the arts provide a way to engage youth who are not being reached through traditional schooling (Kennedy Center Alliance for Arts Education Network [KCAAEN] 2007). Benefits cited include the inherent value of increasing skills in various artistic disciplines; the value of classes such as drama in developing speaking skills and understanding story construction; the value of integrating the arts into core academic subjects to help students learn (especially those who need more kinesthetic forms of learning); the development of life skills, attitudes, and behaviors the arts build that can transfer to other academic areas; and the impact of the arts on achievement in various subjects. Finally, some point to the value of the arts in engaging students in school and preventing negative outcomes such as dropping out or delinquency.

Sound research on the value of arts education could be extremely helpful in these debates, but much of the literature utilizes weak evaluation designs. It can be difficult to separate the impact

of the arts on student success in school from other influences occurring simultaneously, but it is not impossible.

The purpose of this document is two-fold: to provide an overview of the research on positive impacts of the arts that appear in the research literature, and to inform discussions of ways art programs within Wake County Public School System (WCPSS) might be evaluated. In this annotated bibliography, articles are highlighted that speak to the merits of arts education. Studies utilizing stronger research designs are emphasized rather than theory, opinion, or philosophy pieces. Most are more quantitative in design, but some qualitative, descriptive, or evaluative studies are included. Studies span the K-12 spectrum.

It should be noted that our focus here is not on measuring the attainment of skills specifically in the arts curriculum, but of more general benefits that might directly or indirectly impact achievement or performance in other subjects. State standards do exist for curriculum within the arts, and performance and multiple choice assessments can be used to measure students' success in acquiring them. WCPSS staff is currently developing such assessments.

### ANNOTATED BIBLIOGRAPHY

**Berghoff, B., Cousin, P.T., & Martens, P. (1998). Multiple sign systems. *The Reading Teacher* 51(6), 520-523.**

This summary of research explains how popular education programs, such as Harvard University's *Project Zero*, are incorporating arts and music into education in an effort to increase the cognitive levels at which students process information. According to the authors, arts provide students with **enhanced communication skills**. The aesthetic education provided by arts programs allows students to encode and express information in multiple ways, and having multiple ways to express this information leads to a student with higher **engagement, motivation, and confidence**.

**Burton, J.M., Horowitz, R., & Abeles, H. (2000). Learning in and through the arts: the question of transfer. *Studies in Art Education* 41(3), 228-257.**

This study begins with a warning against studies which aim to produce a direct causal relationship between arts education and student achievement in reading, mathematics, and other core academic areas. Instead, the authors argue, the more likely scenario is that arts education involves many of the same underlying abilities as other subjects, such as **critical thinking, creativity, and divergent thinking**. The model should be, then, that the arts and other subjects overlap in many key cognitive areas and that education in any field which shares core abilities with another will exhibit some transfer effect.

For the study, the authors first visited a diverse selection of elementary and middle schools where arts education was provided, and, after meetings with arts faculty, came up with a list of potential indicators of transfer from arts education. In addition, the authors composed a list of

teaching characteristics that could potentially lead to transfer. Afterward, a sample of over 2,400 students was selected to be measured on the amount of arts education received, along with many aspects from the list of potential indicators of transfer. In the study, the students identified as having a high level of previous arts education scored significantly higher than the low-arts group on measures of **creativity, fluency, elaboration, originality**, and multiple indicators of **self-concept**. Teacher ratings of students also reflected this, with the high-arts group scoring higher on measures of **expression, creativity, risk-taking, and cooperative learning**. This study establishes a relationship between these characteristics and arts education, but the relationship may or may not be causal. Since no pre-assessment was available, it may also be that students with the characteristics in question were more likely to participate in arts classes than other students.

**Deasy, R. J. (Ed.). (2002). *Critical links: Learning in the arts and student academic and social development*. Washington, DC: Arts Education Partnership. Retrieved January 24, 2011 from: <http://www.aep-arts.org>.**

This compendium provides very helpful summaries of a number of published and unpublished research studies supporting the relationship of drama, music, dance, and multiple-arts experiences to both social and academic outcomes. Included are a number of experimental and quasi-experimental studies. A number of these studies establish a relationship between arts involvement and achievement. A limited number of studies support causal links, but more research is needed to confirm the findings. A brief summary of findings in the areas of dance, drama, music, and multiple art areas is included here, along with one or two illustrative studies in each area.

## **Dance**

The most consistent finding of studies related to dance is that dance is effective in developing three aspects of **creative thinking: fluency, originality, and abstractness**.

- Minton (2000) studied 286 high school students enrolled in dance (experimental group) and non-dance (untreated comparison group) courses. Dance classes lasted five to eight hours a week for a semester. Controls attended classes in business accounting, English, health, interpersonal communications, and psychology. Pre- and post-tests with the Torrance Test of Creative Thinking (TTCT) revealed significant differences for **elaboration** (detail identification), **originality** (novelty of ideas), and **abstractness of titles** (imaginative titling) favoring those with higher levels of dance experience. The fact that those in dance actually scored lower on all pretests than the control students suggests that dancers were not more creative naturally. Thus, this study suggests a possible relationship between dancing and improved ability to consider multiple perspectives and think creatively.
- In 1998-1999, the impact of a Basic Reading through Dance (BRD) program implemented with first graders in three Chicago public elementary schools was examined. The goal was to improve reading ability through dance. Over 20 sessions, students were taught to physically represent sounds by making shapes with their bodies to represent letters and letter combinations. Nine schools served as control schools. Gain scores for the 174 BRD and 198

control children were compared over three months on the Read America’s Phono-Graphix Test. While both groups improved significantly in reading, those in the BRD group improved significantly more than those in the control group on all measures assessed by the **reading test**. Students in BRD improved more in their **ability to relate written consonants and vowels to their sounds, and to segment phonemes from spoken words**, including nonsense words, compared to the control children.

## Drama

Studies suggest the strength of drama lies in the area of **narrative understanding**. Research shows consistent positive associations between dramatic enactment and **reading comprehension, oral story understanding, and written story understanding**. Benefits for younger children relate primarily to story understanding, while studies with older children show impacts of drama on reading skills, **persuasive writing ability, narrative writing skills, and children’s self- conceptions as learners and readers**. Fewer research studies address potential social benefits, but one study found enhanced **social development** among special education children; another found that drama activities for kindergartners led to the development of “**social perspectivism**,”—the ability to comprehend the various social relations inherent in a situation involving a cluster of individuals. **Enhanced self-confidence and self-image** among at-risk secondary students and lasting attention to moral dilemmas also have some support.

- DuPont (1992) studied fifth graders who were identified for remedial reading based on standardized achievement scores. Each group had 17 students. Groups One and Two received a structured remedial reading program for six weeks using six children’s stories. Group One used creative drama to support story comprehension. Group Two used non-remedial methods to support story comprehension—vocabulary exercises and teacher-led discussions. Group Three was the control group and continued the ongoing remedial program. The study used the MAT6 for pre- and post-study assessments of reading comprehension and a weekly criterion-referenced test to assess story comprehension. This study found that the students engaging in the literature-based “creative drama” showed significantly greater gains in **story comprehension** than students in the discussion-based program and the control group.
- Page (1983) studied whether story understanding would be enhanced through dramatizing stories versus listening to adults reading stories. In this two-stage experimental study, both groups were exposed to the treatment and control conditions—listening to a story read by a teacher and listening to an audiotape of the same story before engaging in a dramatic enactment of the story. Several assessments were used to measure impact. One key finding was that children were more **engaged** during dramatizations than when just listening. Secondly, several key ingredients of story understanding were better conveyed through drama: main idea, character identification, and character motivation (essential elements of **comprehension**). Both modes were effective in promoting recall of story sequence, story details, and story vocabulary. Drama had more positive effects on the younger (grade one) students than the older students (grades two and three). Story understanding effects were greatest for first-graders reading below grade level. The author draws a reasonable inference that drama in this study was more beneficial for less developed readers than for more

developed readers. This study offers grounded evidence that using drama in the classroom can enhance some aspects of children's **story understanding**.

## Music

Research in the area of music cites correlations to **reading achievement** at the elementary (various reading achievement measures) and high school level (based on verbal SAT scores). The number of experimental studies is too limited to establish a causal link, but does suggest that further research should focus on this possibility. Other studies point to a consistent relationship between making and/or listening to music and **spatial temporal reasoning** (the ability to visualize spatial patterns and mentally manipulate them over a time-ordered sequence of steps or transformations).

- Hetland (2000) completed a meta-analysis of fifteen studies of music instruction versus control groups which also had sufficient data to calculate effect sizes. He found consistent causal effects on measures of spatial-temporal reasoning. According to the author, “active music instruction lasting two years or less leads to dramatic improvements” in **spatial-temporal reasoning**. Moderate mean effect sizes were found.
- Hetland also provided a useful review of available literature on the “Mozart effect,” that is, the effect of listening to music on spatial-temporal reasoning. The meta-analysis supplies confirmatory evidence that the so-called Mozart effect is robust and consistent across this set of studies. Music listening appears to enhance spatial-temporal reasoning skills defined as mental rotation or spatial visualization in the absence of a physical model. For example, in one study, “active music instruction lasting two years or less led to dramatic improvements” in spatial-temporal reasoning.

## Multi-Arts

A number of studies compare outcomes for students enrolled in a variety of arts programs across disciplines with those who are not. A correlation has been established in several of these studies between **academic achievement** and the arts, but causal relationships have not been conclusively demonstrated. Some studies examined large data sets with SAT scores while others used different achievement tests. Other studies explored variables related to academic outcomes but not directly to achievement. These suggest a correlational relationship between participation in the arts and **self-regulatory skills** that can help students in all academic pursuits. These studies suggest one value of the arts resides in developing behaviors and attitudes that support acquiring knowledge in other areas. Since students who elect to enroll in arts classes may vary in important ways from those who do not, we cannot assume that participation in the arts *causes* higher achievement or self-regulatory skills but only that the two are *related*.

- Baum and Owen (1997) studied students in grades 4-6 who participated in a talent development program and in regular classroom instruction with arts integration. Students were taught the same academic content in two formats—a traditional format without the arts, and a format in which the arts were integrated into the instruction. Observers documented the use of several self-regulatory skills (such as paying attention, persevering, problem-solving, and cooperating). Students were also given a content-based quiz after each lesson.

Significantly more self-regulatory behaviors were seen in the lessons in which the arts were integrated into the curriculum than in lessons with straight academic instruction, as shown by correlated *t* tests,  $p < .001$ . However, content learning did not vary significantly for the two conditions.

- Two other groups of students were followed over three years—one group was involved in arts instruction through the Young Talent Academic Group and another group was not enrolled (the control condition). The primary difference found was that the Young Talent *at-risk* students showed marked improvement in the third year. The extent of teacher training in arts-curriculum integration predicted reading scores for the at-risk students (with a correlation of .44). It is not clear why the at-risk group gained more in reading, because the art programs were not identical and because it was not known whether at-risk students initially had fewer skills in this area.

Thus, this compendium provides a valuable resource in terms of numerous correlational and some causal studies of the effects of the arts. In addition, it points to valuable areas for future research and possible methods to use in these endeavors.

**Eisner, E. W. (1998). Does experience in the arts boost academic achievement? *Art Education* 51(1), 7-15.**

This article cautions that teachers of the arts may often be asked to go too far in their claims of the effect of arts instruction on academic achievement. The author argues that arts should be taught for their **inherent benefits**, rather than purely for the benefit of other subjects. A ten-year survey of articles in ten selected refereed arts education journals was conducted, with the author focusing on articles that describe studies attempting to link arts education to academic achievement.

The studies described all fall short of being convincing to the author, for various reasons of insufficient rigor, transparency, or outcome. The author proposes that arts educators should strive to attain the following aims—**a willingness to imagine possibilities, a desire to explore ambiguity, and the ability to recognize and accept...multiple perspectives and resolutions.**

**Hamblen, K. (1997). Theories and research that support art instruction for instrumental outcomes. *Arts Education Policy Review* 98(3), 27-33.**

This article attempts to determine the theoretical bases for research claims that arts education leads to positive outcomes in other, non-art subjects. The authors discuss the implications of the claims made regarding arts' positive influence on other **subject learning**, realizing the political benefit of such claims for arts education and understanding that these claims may undermine the teaching of art for art's sake.

The authors describe two of the leading theories behind the relationship between arts education and success in other areas: **transfer** (see Burton, Horowitz & Abeles, 2000) and the benefit of visual cognition. The theory of visual cognition suggests that using mental images strengthens a person's overall **mental acuity** by engaging in qualitative, connotative thought.

In summary, the authors state that there is evidence to suggest that arts education can be beneficial to other subject areas, primarily through the associated increase in **creative behaviors and critical thinking skills**.

**Institute for Community Development and the Arts (2010).** *Arts programs for at-risk youth: How U.S. communities are using the arts to rescue their youth and deter crime*. Retrieved January 11, 2011 from [http://www.artsusa.org/information\\_services/research/institute\\_community\\_development/default.asp](http://www.artsusa.org/information_services/research/institute_community_development/default.asp).

The Institute for Community Development and the Arts, which promotes funding for the arts, created a pamphlet which summarizes results of a number of community arts programs. While details of the research designs were not available, this citation represents areas for future research within public education and community collaborations.

Community organizations that work with youth and schools report positive outcomes of arts programs on students. The Arts Apprenticeship Training Program, located in a poor neighborhood in Pittsburgh, provided participants with an opportunity to work with professional artists in ceramics, music, and photography, as well as providing counseling and college outreach. Results found 80% of participants went on to college (compared with 20% of non-participating youth in the community). A program called STARS provided classes in dance, poetry, creative writing, and vocal arts along with tutorials in math, reading, and computers. The cost per student was \$850 a year, much lower than juvenile boot camps (as much as \$28,000 a year). Over three years, the juvenile crime rate in the community dropped 27%. Repeat criminal behavior for youth aged 11 and 12 dropped 64%.

The YouthARTS Development Project for at-risk youth (located in three urban cities) reportedly included rigorous evaluation and found decreased involvement in delinquent behavior, as well as improved academic achievement and improved attitudes towards themselves and their future. More specifically, improved **communication skills** with adults and peers were found, including more effective ways to **cooperate** and to **express anger**. Participants also displayed an improved **ability to persevere** to finish tasks. Participants were **less** likely than non-participating peers to engage in **delinquent behavior** and showed **more positive attitudes towards school** plus more **positive self-esteem** and **feelings of self-efficacy**. Finally, **court referrals were fewer** for participants than non-participants and offenses were milder in nature.

**Johnson, C. & Memmott, J. (2006).** Examination of relationships between participation in school music programs of differing quality and standardized test results. *Journal of Research in Music Education* 54(4), 293-307.

This study compared achievement scores of students in various regions of the country who had taken music education classes of varying quality. Large samples were used (over 1,000 elementary students and over 3,000 middle school students). School districts were identified in five regions of the country; then administrators were asked to identify elementary and middle schools within their districts that had both high-quality and low-quality music education programs. Schools were matched for socioeconomic status (SES). Then math and English test scores were compared for students who took high-quality music, low-quality music, and no

music. Initial findings suggest that, at the **elementary** level, students in high-quality music classes **scored significantly higher in both language and math** than students in low-quality music classes. **In middle school, English scores were significantly higher** for the high-quality music class students than both low-quality music class students and those who took no music courses. In all cases, effect sizes were small.

The primary drawback of the study was that no indication was given as to the overall performance levels of the schools or students involved, rendering it difficult to fully trust the validity of comparisons across schools. In addition, there was no discussion of possible selection bias at the middle school level, in which higher-achieving students may tend to select music courses more than lower-achieving students.

**Kinney, D. & Forsythe, J. (2005). The effects of the arts IMPACT curriculum upon student performance on the Ohio fourth grade proficiency test. *Bulletin of the Council for Research in Music Education*, 164, 35.48.**

This study in Columbus, Ohio, compared fourth-grade proficiency test scores for students who were involved in a year-long arts education program with students at two schools that were comparable in SES, school size, and racial diversity. In this arts program, students received weekly instruction in various visual and performing arts, with visits from content area experts and performers. One interesting aspect of this study design is that students were not assigned to the school in question, but rather had to apply and be selected through a random lottery. As such, there may be an issue of selection bias, as parents of the students receiving the extra arts education may constitute an academically different population than those attending traditional schools.

In this study, students at the experimental school scored significantly higher than the control schools on **math, science, and citizenship** tests, and no difference was found on tests of reading and writing. The authors conclude that the enhanced arts education had a positive or neutral effect on student proficiency. Low-income students appeared to benefit somewhat more than higher-income students. It also suggests that students who show interest in arts education may also have higher test scores, making no assumptions about the direction of the relationship. The inclusion of third-grade test scores as a matching variable would have strengthened the design of this study.

**The Arts Education Partnership. (n.d.) *Making a case for the arts: How and why the arts are critical to student achievement and better schools*. Retrieved January 23, 2011 from [www.aep-arts.org](http://www.aep-arts.org)**

This document summarizes the results of 10 case studies of schools (based on a larger publication called *Third Space: When Learning Matters* (2005) and *Critical Evidence: How the Arts Benefit Student Achievement* (2006); also available at [www.aep-arts.org](http://www.aep-arts.org)). This qualitative study points to benefits beyond student achievement from integrating the arts more fully in schools. Within these successful high poverty schools, the author found that all schools utilized the arts in creating new learning environments (communities of learning) which opened new possibilities for teaching and learning and built a sense of community within and around the

school. The “third space” metaphor describes the supportive relationships that developed among students, teachers, and the school community through involvement in creating, performing, or responding to works of art. The study documents multiple benefits for students, teachers, and school communities after these changes. It may be possible to develop further support for some of these benefits through more quantitative and/or qualitative studies.

### Student Outcomes

The report concluded that the arts directly contributed to the development of students’ **intellectual and personal capacities**. For students who had often been frustrated or failed in school, the experience of success in the arts taught them that learning matters, and they became **more willing to do the hard work of learning**. In addition, students built a sense that they could be **agents of their own learning**, and make a positive change in their own lives and in their surroundings. The arts improved their sense of **self-efficacy and self-esteem**. **Improved student behavior and attendance rates** were attributed to the schools’ arts programs. Students themselves reported that the arts kept them engaged in school. Teachers and district officials credited their schools’ arts programs for **improved scores of students on standardized tests**, including improvement in reading and mathematics.

### Benefits for Teachers

**Teachers reported increased satisfaction and renewal** once the arts became part of the culture of the schools. They **enjoyed teaching more**, primarily because of the **responsiveness of their students** and the **new level of collaboration with other teachers** in the school. **Teacher turnover decreased** in eight of the 10 schools. Teachers reported they became **more effective** as they learned through art how to help students move forward.

### Building Community

All of the schools involved artists and arts organizations from the community who partnered with teachers and students in programs. Students developed a deeper **understanding and appreciation of their local communities, as well as social skills such as** tolerance and the ability to grapple with moral dilemmas. It helped **students to avoid or change negative perceptions of others**. Parents, teachers and administrators reported that arts programs were a successful way to **offer parents helpful, relevant and rewarding experiences** (for themselves and their children).

**Mason, C., Steedly, K., & Thormann, M. (2008). Impact of arts integration on voice, choice, and access. *Teacher Education and Special Education, 31(1)*, 36-46.**

In this qualitative study, focus groups and one-on-one interviews were conducted with teachers and artists-in-residence who participated in an arts integration curriculum for special education students over a two-year span. Qualitative analysis techniques were applied to transcripts of the interviews and three broad common themes emerged: **voice, choice, and access**. *Voice* reflects the concept that the special education students were able, through arts integration, to **express themselves both academically and socially** in ways that were not possible before. *Choice*

describes the ability of the students to **decide** for themselves which aspects of the curriculum were most appealing to them. *Access* applies to the **leveling of the playing field** that arts integration allowed between special education and traditional education students. While not an experimental design, this qualitative study appeared to be well conducted and provides themes that can be studied more quantitatively in future studies.

**Nelson, C. A. (January, 2001). *The arts and education reform: Lessons from a 4-year pilot of the A+ schools program*. Retrieved February 8, 2011 from <http://aplus-schools.ncdcr.gov/research.html>**

This report summarizes the findings of a 4-year evaluation of a comprehensive school reform called A+ involving 25 North Carolina schools. A+ was developed by the Thomas S. Kenan Institute for the Arts at the University of North Carolina Chapel Hill. A+ argues against the dichotomy that the value of the arts should be viewed only in terms of building creativity or only in terms of impacting student achievement in core subjects (instrumentality). Rather, the A+ premise is that the arts can open up **deeper understandings of the curriculum** by tapping into the multiple ways that students learn (influenced by Howard Gardner's work on multiple intelligences). A+ integrates arts instruction into all subjects to enhance learning opportunities for students.

An independent evaluation found that A+ schools achieved growth on North Carolina's accountability tests comparable to that of other schools statewide. Positive changes within the schools were found related to schools, communities, teachers, and students. Schools saw **increased organizational capacity, supportive networks, channels of communication, and a more focused sense of identity**. The community had **increased partnerships and support; parent involvement, awareness, and affiliation with the school**. Teachers provided **enhanced learning opportunities and more authentic and substantive assessments**; they also participated in **more collaborative work and took on new leadership roles**. Students benefitted from an **enriched academic environment; increased equity in access to the curriculum; improved attitudes, attendance, behavior, and assessment results**.

**Smithrim, K., & Uptis, R. (2005). *Learning through the arts: Lessons of engagement*. *Canadian Journal of Education*, 28, 109-127.**

This study was conducted as part of a Canadian national implementation of the Learning Through the Arts (LTTA) program, a comprehensive arts education program that involves professional artists collaborating with teachers to integrate the arts into lessons. The artists also work directly with students in LTTA schools. Over 6,000 students in grades 1-6 from 55 LTTA schools were studied over the course of three years. Schools selected to be in the sample were matched with demographically similar schools in their geographic area to form a comparison group. No baseline differences on student achievement, engagement, or attitude were found between the groups.

At the end of the study, no differences were found on measures of student achievement, save for a slightly higher performance on a **mathematical computation** instrument for the students in LTTA schools.

Qualitative data from the study suggested that students in LTTA schools rated higher on measures of **attentiveness, engagement, and emotional involvement**.

**Sternberg, R. E. (2006). Arts at the core: How six districts integrate arts education into the curriculum. *American School Board Journal* 193(6), 44-47.**

The author profiles six diverse school districts representing various areas of the country on how arts are integrated into their curricula. Some districts focused intensely on one area of their arts curriculum, such as the Corvallis district in Montana. This small district had a Media Arts curriculum taught by a former Hollywood director which gave students practical experience in many areas of the filmmaking trade. Other districts, such as San Juan, California, used funding to contract with visual artists, musicians, potters, poets, and other artists to enhance the entire arts curriculum. All districts profiled in this article provide anecdotal evidence from faculty members about the ways in which their arts curricula have enhanced student learning through enhanced **communication, self-esteem, and focus**. While not an experimental study, it does point out other areas for further study of the impact of the arts.

### RECOMMENDATIONS

This overview points to a number of positive impacts of the arts that appear in the research literature. However, most studies point to correlations between the arts and academic success rather than to causal links. This is not atypical in curriculum research, but the research base could definitely be strengthened. The research base points to a number of promising areas for research with experimental or quasi-experimental designs, but studies must be designed to get around the fact that students usually elect to take arts courses beyond the elementary level. We have three recommendations.

1. **Utilize this literature review to inform discussions of ways art programs within WCPSS can be evaluated.** All WCPSS programs are to be evaluated, but determining the best way to accomplish this in the arts is more complex than in some other subject areas. The arts are more varied in disciplines and objectives than subject areas such as reading and mathematics. Evaluation is possible at the school and district level with careful thought. Any evaluation system should include measures specific to achievement within the particular arts discipline as well as some selected impacts that can support students' overall success in school (which could be more behavioral, attitudinal, or academic in nature). This annotated bibliography provides information on possible measures of success from which WCPSS arts educators can select goals for evaluation of their program.

One fruitful area for evaluation of the contribution of the arts which cuts across behavioral, attitudinal, and academic measures is student engagement in school. If students see the arts as a key reason to stay in school, this should promote lower rates of student failure, suspension, and dropout, and higher graduation rates. Post-secondary outcomes might also be considered, surveying past participants now in college or the work world, or twelfth graders before they leave WCPSS.

Magnet school staff could also use this document to spur discussion of ways they can measure the success of their schools and to share their value with the public in ways that go beyond achievement test scores.

- 2. Consider ways to assess success within arts disciplines that consider the research findings reported here and go beyond them.** One area not reviewed extensively in this literature is how to measure skill development and student performance levels in the particular discipline and course of interest. Some articles that are specific to arts disciplines can help, but in a fairly general way. Arts staff members are currently exploring and developing ways to assess skill attainment in the arts across the system. Currently, arts teachers tend to develop their own way of assessing success and grading. Current systems rely on paper and pencil tests and performance measures to varying degrees. In the past, the Evaluation and Research (E&R) and arts staff developed a rubric system that each discipline tailored to rate their programs' success in developing key skill areas. Something similar could be done in areas where normal assessments seem inappropriate. Performance assessments with rubric ratings could be part of such a system. Issues to keep in mind are how consistency can be promoted across the system and how performance level and improvement might be reflected in such a system. Arts staff might also want to discuss the use of these assessments in grading, and what other factors should be included (such as participation and effort levels). Could this be done consistently across the district? Are students graded on skill development or performance levels?

A second area not discussed in this literature is how selection for performances, recognitions, scholarships, and career choices can be used as an evaluative measure of the arts. Creating a logic model would help to summarize desired short, intermediate, and long-term outcomes expected (and serve as a communication tool).

- 3. Consider whether WCPSS could conduct experimental studies to study further the impact of the arts.** Our magnet schools offer variation in offerings to students that might afford the opportunity to study achievement in schools that integrate the arts into instruction and similar schools that do not. Such studies could also benefit magnet programs related to the arts in sharing data about their success.

Within the magnet system, desired outcomes within schools that offer more and fewer arts opportunities could be compared. One example of a promising study would be to compare two approaches to the same arts discipline area and have a third control group that is interested but simply delayed in terms of their involvement. Some experiments were found in the literature review that could help generate ideas for studies in WCPSS related to evaluating our arts offerings. Beyond experimental studies, consideration of surveys, case studies, or focus groups to provide more depth of information could also be quite valuable in rounding out the picture of the impact of the arts on student success in school and in life. As well as enriching our WCPSS understanding of impact, experimental or mixed research study(ies) could be a valuable contribution to the research in this field.

## REFERENCES

Kennedy Center Alliance for Arts Education Network (KCAAEN). (2007). *A community audit for arts education*. Retrieved from: <http://www.kennedy-center.org/education/kcaaen/resources/CAudit6-9.pdf>