

THE AEP WIRE

Transmitting Research to the
Arts and Education Field

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Oklahoma A+ Schools: What the Research Tells Us 2002-2007

Part One: Students and Teachers

Barry, Nancy H. (2010). *Oklahoma A+ Schools: What the Research Tells Us, 2002-2007 Volume Three, Quantitative Measures*. Oklahoma A+ Schools/University of Central Oklahoma.

Background

History of the Network. Oklahoma A+ Schools (OAS) is a statewide network of 60 public, private, and charter schools that use arts-integrated instruction to create enhanced learning opportunities for all students. This comprehensive whole-school reform model engages and supports school principals and teachers via professional development to integrate dance, drama, music, visual art and writing into classroom practices. The effect of this integration is evident in school practice, student assessment, class scheduling, staff collaboration and parent involvement. The A+ Schools model was originally founded in North Carolina by the Kenan Institute for the Arts, and was established in Oklahoma in 1998 by the Kirkpatrick Foundation. Oklahoma A+ Schools is also part of the National Consortium of A+ Schools.

Joining the Network. To join the A+ network, schools must secure the buy-in of the principal, at least 85% of the faculty, and the support of the school's community. After joining, the school's principal and faculty, including arts specialists and classroom teachers, commit to ongoing professional development.

School Demographics. OAS school demographics include 20.2% Black, 15.3% Hispanic, 10.3% Native American and 2.4% Asian students, almost twice the average percentage of Black and Hispanic students attending non-network schools, and a slightly greater average percentage of Asian students. Native American students are the only minority group for which non-network schools serve a greater average percentage of students. The OAS network also serves a greater average percentage of students eligible to receive free or reduced-price lunch than other Oklahoma schools: 61.3% compared to 54.6%.

HIGHLIGHTS

- A five-year evaluation of the A+ Oklahoma program examined the impacts on student engagement and success and teacher engagement and effectiveness. This brief focuses on findings from Volume Three, specifically student outcomes and teacher eb[U[Ya YbhUbX' dfUMjW.
- A+ Schools serve greater proportions of racial and ethnic minorities and disadvantaged students. Their achievement levels, measured by standardized test scores, exceed those of other schools in Oklahoma.
- Arts-integrated learning environments encourage students to develop self-confidence and self-empowerment.
- The A+ peer-driven professional development model promotes greater teacher collaboration and confidence in teachers' abilities to teach through the arts.

Research Model. The A+ program builds in comprehensive, university-based research as a central component. A five-year longitudinal study of the program has yielded extensive qualitative and quantitative data about the progress of students, development of teachers and staff, and effects on each school's community. Principal investigators from three Oklahoma universities and graduate research assistants, scholars, and consultants from across the nation have conducted the research and presented its findings in five volumes.

This edition of the AEP Wire focuses on findings from Volume Three—the study related to students and teachers. A second Wire focuses on the findings from the study related to schools and communities.

Significance of the Study

For decades, policymakers, funders, educational leaders, and educators have sought solutions to persistent problems in American education. Disparities in student achievement across divisions of race, ethnicity and language, along with unacceptable levels of student failure to graduate and attend college, are among the most pressing concerns. These trends, disturbing for their intrinsic implications, have important consequences for America’s competitiveness in the global economy.

The quality and effectiveness of teaching—and of America’s cadre of teachers—have increasingly become a major focus in school turnaround efforts. Research has shown that teaching effectiveness is a key determinant of student success. Concern over teacher effectiveness has led to greater efforts to recruit, train, retain, and continuously improve teaching professionals. The learning of their students—and consequently the success of their work—depends on an array of contextual factors, including the quality of teacher training, their ability to engage students in curriculum, and teachers’ sense of motivation and empowerment in the school environment.

The evaluation of the Oklahoma A+ Schools Program provides compelling, research-based evidence that high quality arts education can impact the engagement, confidence and success of both students and teachers.

Scope of the Research

This Wire will concentrate on the following two areas of the research:

1. Research regarding the impacts of the Oklahoma A+ program on student engagement and success
2. Research regarding the impacts of the program on teacher engagement and practice

Methodology of the Study

Oklahoma A+ researchers collected qualitative data that included student and teacher perceptions as captured through surveys and researcher observations of classroom activities.

Researchers also collected quantitative student data from School Report Cards¹ and the state’s Academic Performance Index (API)². Quantitative data were tabulated and contrasted with similar data from non-A+ schools. Qualitative data were analyzed through a process of coding (categorization).

Summary of Findings

At the end of the 2006-2007 school year, the Oklahoma A+ Schools network consisted of 39 schools, 12,636 students, 874 teachers and 202 para-professionals. The quantitative student data gathered from the School Report Cards and the APIs account for the academic performance of each OAS student in grades 3-5, with the exception of those attending certain types of schools not included in state testing. The qualitative data for both students and teachers report the responses of participants who elected to participate in the researchers’ surveys and classroom observations. The research findings in this AEP Wire represent the data collected for students and teachers.

1. OAS students’ performances on standardized tests generally meet or significantly exceed state and district averages.

Data from the 2004-2007 Oklahoma State School Report Cards show that OAS students generally performed at or above state averages on the Oklahoma Core Curriculum (OCC) tests. Figure 1 compares the performance of OAS students in grades 3-5 with that of the average in the state.

2. OAS students also consistently outperformed non-A+ students in both their districts and the state on the Academic Performance Index (API).

Researchers’ analysis of OAS averages versus district averages found that these API differences were statistically significant (Figure 2).

It is notable that these high-performing A+ schools have consistently served greater percentages of minority and

¹ The Oklahoma School Report Card provides an overview of what is happening within a particular community or school by providing data on community characteristics, school educational process, and student performance. It is published by the Oklahoma Office of Accountability.

² The Academic Performance Index (API) includes indicators such as Advanced Placement credits, state-mandated test scores, attendance, dropout and graduation rates.

2007 School Report Card OCC Scores (2006-2007 Academic Year)									
A+ Entry Year	3rd Grade Math	3rd Grade Reading	4th Grade Math	4th Grade Reading	5th Grade Math	5th Grade Reading	5th Grade US History	5th Grade Science	5 th Grade Writing
2002-03	83.08	95.8	87.42	96.25	95*	94.17*	89*	93.58*	93.75*
2003-04	69	78	88	92	81	77.5	64.75	80.5	84
2004-05	85	95	82	92	91.5	98	87	93.5	90
2005-06	85.2	91.2	90*	98.4*	87.8	84.2	73.8	78.5	92.2
2006-07	88*	97.17*	77	88.5	84.67	86.67	68.5	84	85.5
State Average	80	91	86	94	88	86	73	87	87

*Highlighted data show the highest average test score in each category among OAS entry years.

Figure 1

Average API for A+ Schools, District and Oklahoma State Average			
Academic Year	OAS Average*	District Average	State Average**
2002-03	1109	975	1046
2003-04	1135	1049	1086
2004-05	1261	1137	1159
2005-06	1308	1170	1180
2006-07	1332	1196	1252

*Data are not available for A+ private schools and early childhood centers, which are not included in state testing.
 **A+ schools were included in calculations of district and state API averages.

Figure 2

economically disadvantaged students than other Oklahoma schools. Also, as the Oklahoma Department of Education made incremental increases to performance targets, OAS students maintained consistently high performances. The length of time that a school participated in the A+ model was not found to be significant in the analysis of API scores.

3. Oklahoma A+ Schools promote challenging learning environments in which students gain self-confidence, enjoy school, and feel empowered by the learning process.

Researchers used the My Class Activities (MCA) survey to measure students' perceptions of classroom climate, interest, challenge, and enjoyment of class activities on a scale of 1 to 5, where 1 was "Never" and 5 was "Always." On average, students reported strong connections to learning, responding positively to survey items such as "I am challenged to do my best" (average score: 4.4), "I have fun in my class" (average score: 4.08), and "The teacher makes learning fun" (average score: 4.08). Students reported feeling empowered, responding favorably to the survey item "My work can make a difference" (average score: 3.99). Such favorable self-reported responses to these statements indicate that the A+ model has contributed to students' positive feelings about their classroom and learning experiences.

4. Teachers report higher levels of confidence in their individual abilities to provide arts instruction and have more favorable attitudes about arts integration and arts in education.

Teachers and administrators from both OAS and non-network schools participated in The Arts Education Perception Survey (TAEPS), which assessed their level of comfort, strengths, and weaknesses in teaching the arts. On a scale of 1 to 4, where 1 was "very comfortable" and 4 was "not comfortable," OAS participants were more comfortable overall in teaching the arts than their non-OAS counterparts: 2.19 compared to 2.74. Additionally, the Teacher Opinion Survey (TOS) assessed OAS teachers' attitudes towards the benefits of arts-integrated curriculum and opinions of the arts impact on student outcomes. Teachers responded on a scale of 1 to 4, where 1 was "Strongly Disagree" and 4 was "Strongly Agree." Survey statements such as "The arts integrated into the total curriculum promote learning across subject boundaries" (average score: 3.33), "Arts integration aids in the goal of students loving to learn" (average score: 3.4), and "Students become more self-actualized through the arts" (average score: 3.3), were ranked very highly across all four administrations of the survey. These rankings indicate teachers' positive attitudes towards the benefits of arts integration models.

5. Preliminary evidence suggests that specific qualities or practices that are associated with effective teaching show up in Oklahoma A+ schools:

In the Oklahoma A+ schools, teachers use lessons that engage students in meaningful learning and processing of information, integrate the arts with other subjects on a daily basis, differentiate instruction and use multiple approaches for varied learning modalities. Teachers also employ creative and multiple assessment methods, cooperate with students in their learning, and collaborate with their colleagues in planning. Researchers have found evidence that this cooperation and collaboration have resulted in empowered teaching and learning within the OAS network. This empowerment is indicated in both teachers' and students' positive opinions expressed in the previously mentioned Teacher Opinion Survey and My Class Activities survey.

Limitations of the Study

- Outside of test scores, the majority of the data are self-reported via surveys. The findings, especially those regarding quality of learning environments or self-confidence, empowerment, and engagement for both students and teachers, could be more rigorous if they were based on additional types of data. These might include observations, student assessments, and data on student disciplinary referrals.
- The research reports that OAS schools aim to meet the needs of all students and serve a greater average percentage of ethnic and racial minorities, at-risk, and economically disadvantaged students. The data presented, though, do not identify these needs and do not compare their academic performance to that of their counterparts at non-OAS schools. Such performance data may support claims that arts-rich curricula are especially beneficial to students given these classifications.

Interpretation

In this Wire, the interpretation of findings pertains to students and teachers only. A second Wire will interpret the findings pertaining to schools and communities.

The body of research about arts education generally lacks two substantial components: studies of entire schools as systems, and longitudinal studies. The Oklahoma A+ Schools evaluation helps fill both these gaps. For the purposes of this study, a five-year horizon is sufficient to detect important trends, and its whole-school approach can encompass systemic variables. In both these respects, this is important work. And taken together, these findings provide

valuable evidence that the arts can be an effective linchpin for school reform.

Importantly, qualitative and quantitative data corroborate each other in strengthening the major conclusions of the research: that student achievement as gauged on state assessments improved in contrast to non-A+ schools, that students' achievement gains correlated with more favorable attitudes toward school and learning, and that teachers became more engaged in their work.

AEP Recommendations

- Federal and state policymakers should ensure that at least a portion of the nation's investment in education reform includes systemic, arts-focused school reform initiatives similar to the A+ Program.
- Researchers and funders of research should allocate resources and support for rigorous, longitudinal research into arts-based systemic school reform.
- Teachers and administrators should receive professional development of equal duration and rigor in an adopted program to ensure thorough implementation of and commitment to the model throughout the school system.

Sources

Oklahoma A+ Schools: What the Research Tells Us 2002-2007

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