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

A Five Volume Research Report

Volume Two
History and Foundational Literature

Charlene E. Dell, Ph.D.

Volume 2 of 5

Oklahoma A+ Schools®

Research Report: 2002 – 2007

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Preface

The Oklahoma A+ Schools® (OAS) Research Report is a series of five volumes written to document the longitudinal study investigating the OAS, its transference from North Carolina, its implementation, and its impact upon the teachers and children in the OAS Network. Written independently, the five volumes work together to provide an insight into the A+ process, employing both quantitative and qualitative techniques to describe its complexity. Volume 1 provides the reader with a rich description of three fictional A+ Schools. Based on composites drawn from the qualitative data, these fictional schools set the stage for the reader to understand the profile of A+ Schools. Volume 3 provides a quantitative analysis of both achievement and attitudinal data that speaks to the ways in which the A+ process has impacted the teachers and students in its schools. Volume 4 examines data collected through five years of interviews and observations of network schools, as well as the professional development provided to these schools by Oklahoma A+ Faculty and Fellows. Volume 5 is a meta-analysis of all of the data that suggests a continuum of engagement in the process and describes the driving forces empowering schools to move along that continuum. Though each volume works alone, the reader is encouraged to examine each of these volumes in order to garner the most complete understanding of Oklahoma A+ Schools®.

The current volume provides an historical and foundational context of the OAS process. The History of A+ provides a brief history of the development of the A+ Process in North Carolina, a detailed account of its transplantation to Oklahoma, and an examination of its independent growth since its beginnings in 2002. The history is based

upon interviews with North Carolina and Oklahoma A+ staff, Fellows and researchers, as well as documents and internal memos provided by Oklahoma A+ staff and members of the Oklahoma research team. The foundational literature review provides an examination of the available literature in three key areas—whole school reform, professional development, and arts integration—and places those foundational elements of the OAS process in a research context. Examination of this literature provides a deeper understanding of both the common and unique qualities of the OAS process.

Because the volume incorporates qualitative data, a brief explanation of the citation procedure used is necessary. Citations in the historical section are based upon personal communications (including personal interviews, internal memos, and correspondence between key stakeholders in the Oklahoma A+ process) as well as electronic media found in the bibliography of the volume. The initial citation of each personal communication is labeled as such; each succeeding use simply gives the surname of the interviewee and the year of the interview/document in hopes that the narrative will read more freely.

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History of A+ Schools

Introduction

What is A+?

When asked to define the term "A+," one often thinks of the grade everyone hopes for on projects or tests in school. But in some schools in North Carolina, Oklahoma, and Arkansas, A+ has a much different meaning. For those schools, "A+" is short for "A+ Schools," a network of schools employing a whole school reform model that uses the arts, experiential learning, enriched assessments, and Gardner's multiple intelligences theory to encourage creative learning opportunities for all students while also improving curriculum, infrastructure, and climate in their school (North Carolina A+ Schools, 2009a; Oklahoma A+ Schools®, 2009).

Initial Dream and Resultant North Carolina A+ Schools Model

The original design for the A+ Schools was the brainchild of Ralph Burgard, an arts activist and cultural planner in North Carolina. During the late 1980s and early 1990s, Burgard monitored the work of two arts-based schools: the Davidson School in Augusta, Georgia, and the Ashley River Elementary School in Charleston, South Carolina. Despite a high degree of racial and socioeconomic diversity, both of these schools maintained very high tests scores. Burgard believed the daily infusion of arts education and the interdisciplinary approach to teaching energized and inspired the staff and students of these schools. Building upon the Ashley River Model, two schools in North Carolina were chosen as pilot schools, and the A+ Schools program was begun. While working with the two pilot schools, Burgard applied for funding from multiple sources. The Kenan Institute for the Arts expressed interest in supporting the project and

with the help of its director, Jeanne Butler; and William Friday, Executive Director of the

William R. Kenan, Jr. Fund. A+ Schools was chosen as Kenan's inaugural project. The

original name for the program "A+" came from "Arts plus academic achievement." This

was shortened to "A+" so the arts were not considered separate from academics, and the

model would be seen as more of a whole-school reform project (Gerstl-Pepin, 2001;

Warner, personal communication, 2008).

Building upon the work done in the two pilot schools, 25 schools were initially

chosen to participate in the A+ Schools Program by the Kenan Institute in 1995. The

schools were chosen to represent the diversity of North Carolina and would include all

regions of the state (North Carolina A+ Schools, 2009a; Warner, 2008). Two additional

staff members were enlisted to assist in planning and implementation of the program.

Vincent Marron was hired as the assistant director of the Kenan Institute and brought

experience in working with non-profit organizations. Gerry Howell was hired to serve as

a liaison between the Kenan Institute and the newly selected schools. Howell brought

previous experiences as an art teacher as well as experiences as an administrative director

for a school for high-risk students (Gerstl-Pepin, 2001).

Each school entering the program was required to meet initial guidelines and

commitments:

1. To embrace arts integration within its curriculum;
2. To incorporate the theory of multiple intelligences into its teaching strategies
   and pedagogy;
3. To use interdisciplinary, experiential forms of instruction;

4. To develop partnerships with parental, cultural, and educational programs; and

5. To commit to a four-year implementation of the program, including attending professional development and adding additional arts staff. (Gerstl-Pepin, 2001)

Schools were not easily convinced at first. Many believed that although the process sounded interesting, they were concerned it would be gone in a few years' time. As each school was being required to add additional artistic staff, this was a valid concern. North Carolina A+ Schools staff worked hard to ensure schools that a commitment from A+ would include free professional development from A+ for them for the first four years of the program (Warner, 2008).

In 1995, the A+ Schools endured financial and political pressures. Initial expectations for funding from the North Carolina Department of Public Instruction (DPI) were diminished from what was expected, and concrete funding for the program seemed in jeopardy. North Carolina A+ Schools believed that state funding would legitimize the program, so they sought funding from the Governor through the establishment of a budget line. Though funded at a reduced rate, the program was able to move forward. This concern regarding funding continued through the following years, forcing Kenan to work each year to maintain funding for the program (Gerstl-Pepin, 2001).

To complicate matters, the North Carolina General Assembly also began to pilot the ABC - School-Based Management and Accountability Program in 1995 (North Carolina Department of Public Instruction, 2008). . The ABC's was a high-stakes testing

program holding all schools accountable for yearly progress on standardized tests in reading, writing, and mathematics. Some teachers felt it difficult to teach creatively when student evaluation would be much more structured (Gerstl-Pepin, 2001). Yet, for some of the A+ schools, this increased accountability encouraged the schools to meet the needs of their children. A+ Schools provided professional development in integration, multiple intelligences, and curriculum mapping and encouraged each school to align its curriculum to the North Carolina Standard Course of Study while integrating the arts. This training encouraged teachers to consider what they wanted their students to know and understand, and work backwards from there to develop thematic materials (Warner, 2008).

Within the first three years, principals from the A+ Schools began to realize that each A+ School appeared different. Working together with the A+ Schools staff, principals drafted a set of commitments to more clearly define what it meant to be an A+ School. The A+ Essentials™ were later developed as a series of commitments by each school that included daily arts instruction, experiential learning, enriched assessment, and curriculum mapping so that instruction could be integrated across subject matter. The A+ Essentials™ also encourage the use of multiple intelligences to structure learning opportunities for every child (North Carolina A+ Schools, 2009a; Wade, personal communication, 2008; Warner, 2008).

At the completion of the initial fourth year, the North Carolina A+ research team completed its initial evaluation of the development of the A+ Schools process. It determined that the sustainability of the program was the result of the use of arts and school reform, the quality of its professional development, and the network of its schools. An additional follow-up research study was done at the eighth year, and demonstrated

that the sustainability and resilience of the program has continued (North Carolina A+

Schools, 2009b).

An Assessment of the State of the Arts in Oklahoma[1]

In 1998 as the A+ Program continued to grow in North Carolina, the

Kirkpatrick Foundation in Oklahoma City, a philanthropic organization in support of

the arts, culture, and education, began to convene meetings of faculty and

administrators from private and public colleges and universities in central

Oklahoma to discuss the impact that higher education might have in improving K-12

education through the arts (Clinton, personal communication, 2000; Kirkpatrick

Foundation, 2009). This group of creative leaders would later form the DaVinci

Institute in 1998 (DaVinci Institute, 2009). At the request of Susan McCalmont, a

joint research team from the University of Oklahoma and Oklahoma State University

was charged with investigating the current state of the arts in Oklahoma and to

research the most successful education reform models with a strong arts integration

emphasis in the country (Clinton, 2000; Hendrickson, personal communication,

2009; Raiber, personal communication, 2008). This research team investigated

demographically matched schools with different levels of arts usage (high arts vs.

low arts) and compared their academic achievement scores. Results indicated that

those schools with a high arts usage did not have lower test scores than those with a

low arts usage (and were often higher), though the differences were not statistically

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[1] A timeline of official activities for the development of the Oklahoma A+ Schools from the perception of
its two executive directors, John Clinton and Jean Hendrickson, can be found in Appendix 1.

significant. These results were not unexpected given the limitations of the study (Raiber, 2008).

Models of Arts-Centered Reform

In 2000 the research team investigated several different arts-based programs, including *Arts for Academic Achievement* in the Minneapolis Schools, *Chicago Arts Partnerships in Education* (CAPE), *Discipline-Based Arts Education* (DBAE) in Alabama and Georgia, the *ABC Project (Arts in the Basic Curriculum)* in South Carolina, and the *A+ Schools* in North Carolina. The team determined they were looking for a program centered within the school day and was not dependent upon the specific leadership or inspiration of only one or two people. They hoped to find a program that would not be considered an "add-on" but one that worked within all types of schools (Raiber, 2008). Members of the research team traveled to visit several A+ Schools in North Carolina and were particularly interested in the individualized approach that A+ took with the schools in its network:

> One of the things that appealed most about that model in addition to [its] success and research base is that it took into account differences from school to school and community to community. As opposed to a one-size cookie cutter kind of approach, it allowed for some flexibility in the actual nuts and bolts of implementation and day to day operation, which I think is one of its most valuable attributes still: the ability to see each school as a community, a hub having strengths and gifts, resources that they already bring to the table and enabling that group to set the goals that they want to achieve and then facilitating a process with structure that makes those

goals attainable. (Raiber, 2008)

The flexibility and resiliency were also enticing aspects of the A+ program. The research team submitted its impressions of the different arts-based reform models to Susan McCalmont, Executive Director of the Kirkpatrick Foundation as well as to the DaVinci Institute. Beginning in spring 2000, McCalmont and the DaVinci institute began a strategic planning process in consultation with the Kenan Institute that would begin the process of bringing the North Carolina A+ Schools model to Oklahoma (Clinton, 2000; DaVinci Institute, 2009; Hendrickson, 2009).

Initial Planning to Implement Oklahoma A+ Schools®

In the intervening months between February 2000 and September 2000, strategic planning to bring the North Carolina A+ model to Oklahoma took place (DaVinci Institute, 2002). Susan McCalmont was a leading advocate in this planning (Hendrickson, 2009; Wade, 2009). On October 5, 2000, the Kirkpatrick Foundation invited teachers, principals, and potential financial supporters to an informational breakfast meeting held at the *Oklahoman*, the newspaper located in Oklahoma City. Vincent Marron and Gerry Howell presented an overview of the A+ Schools process, the success they had with the schools in North Carolina, and the potential impact the process could have in terms of development of arts programs and whole school reform (Clinton, personal communication, 2008). This meeting was the first time all potential stakeholders were brought together to hear about the North Carolina A+ Program. In the months that followed, the DaVinci Institute and the Kirkpatrick Foundation began to identify potential partners who would assist in bringing the model to Oklahoma. In April 2001, Vincent Marron and Gerry Howell came to Oklahoma again, this time visiting potential

schools to get a feel for the arts and school reform in Oklahoma. One of the schools they visited was Mark Twain Elementary School, in the Oklahoma City District. Its principal, Jean Hendrickson, was very interested in bringing A+ to Oklahoma. Other potential partners were brought together for this meeting to consider if Oklahoma were ready for a whole-school reform model with a significant arts component (Clinton, 2008; Hendrickson, personal communication, 2008).

During July 2001, members of the supportive funding foundations as well members of Oklahoma A+ staff were invited to attend the North Carolina Summer Institutes. Jean Hendrickson accompanied the group and participated alongside the foundation members as a process observer to a new North Carolina A+ school. At the end of the week, they were allowed to sit in on the meetings of the North Carolina Fellows (the instructional staff for the professional development). Given her background as an Oklahoma teacher and principal, she was uniquely situated to provide potential funders with a practitioner's point of view regarding the transference of the A+ process to Oklahoma schools (Hendrickson, 2008).

During September 2001, Vincent Marron returned to Oklahoma for strategy meetings, as Oklahoma A+ was set to debut in October. After several meetings with Susan McCalmont, John Clinton was chosen to be the first executive director of OAS. Brochures were developed and sent to all public schools in the state introducing the A+ process. With the help of Caroline Clark, the new Oklahoma A+ Project Coordinator, Clinton traveled the state holding informational meetings for potential schools and sources of funding. Meetings were held in Ardmore, Bartlesville, Norman, Tulsa, and Woodward. Several schools expressed interest in the A+ Schools process and how it

would fit the needs of their school. Additional meetings were held with partner groups, such as Core Knowledge (Core Knowledge, 2009), Great Expectations® (Boyles, 2009), and the Oklahoma State University Center for Science Literacy to discuss how the A+ Essentials™ would work with those reform initiatives. Schools began to submit their applications beginning in December (Clinton, 2008; Hendrickson, 2003, 2008).

As interest grew and the program began to take shape, the Oklahoma A+ Advisory Committee (comprised of representatives from many of the local arts groups) met with John Clinton, Vincent Marron, and Gerry Howell on January 31, 2002 at the Oklahoma Educational Television Authority (OETA) Studios to discuss the criteria for accepting new A+ Schools. The committee determined that school applications would use the following criteria for evaluation: leadership (principal and shared), passion for the project, evidence of both internal and external collaboration, evidence of commitment to the process, opportunities for growth of the school, geographic location, degree to which the school is representative of the Oklahoma population, and a sense of the community in which the school is placed. Final selection of the inaugural OAS took place on February 20, 2002 (Clinton, personal communication, 2002). Sixteen Schools were selected: Briarwood Elementary (Moore), Choctaw Elementary (Choctaw), Cleveland Elementary (OKC), Flower Mound (Lawton), Freedom Elementary (Sapulpa), Garfield Elementary (Ponca City), Grissom Elementary (Tulsa), Jackson Elementary (Pauls Valley), Jefferson Elementary (Norman), Linwood Elementary (OKC), Mark Twain Elementary (OKC), Monroe Elementary, (Norman), Russell Dougherty Elementary (Edmond), Sadler Arts

Academy (Muskogee), Sequoyah Elementary (OKC), and Western Village Academy

(OKC) (Clinton, 2002; Wade, 2009)[2].

On the evening of January 31, 2002, Clinton, Marron, and Howell also met with

the education committee of the DaVinci Institute to begin the initial stages of choosing

the inaugural Shadow Faculty of the A+ Schools from the 64 applications (called

"Shadow Faculty," as they would "shadow" the North Carolina Fellows during their first

year). Those chosen would develop into the nucleus of A+ Fellows, charged with guiding

the new schools through professional development following a "practitioner model" in

which the Fellows would "practice what they teach and teach what they practice"

(Clinton, 2002, 2008).

Teachers considered for the Faculty positions demonstrated interests in the arts in

addition to their subject matter expertise. Both elementary teachers and arts specialists

were considered for their expertise. On the following day, potential faculty attended a

meeting held at the OETA in which Marron and Howell described the responsibilities of

a Faculty/Fellow and how they would work within the practitioner model. Several future

Fellows indicated that this was the meeting in which they knew A+ was something of

which they wanted to be a part (Cook, personal communication, 2008; Scarberry,

personal communication, 2008; Winter, personal communication, 2008). From those who

attended, 20 Shadow Faculty were chosen (Clinton, 2002; Clinton, 2008).

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[2]The Sadler Arts Academy had limited engagement beyond the summer of 2002, withdrawing from the program in October 2002. This left 14 schools to participate during the first full year (Wade, R. personal communication, May 26, 2009).

Preparations for the first Summer Institutes began in earnest in early spring 2002. In January, Caroline Clark made the decision to leave the A+ Schools program. In early March, Rosalynn Wade was hired to take over as the Coordinator of Programs and Professional Development (a title that would be changed to Program Director in 2004). Her first official event was a three-day retreat held for the North Carolina A+ Directors and Fellows, the Oklahoma Shadow Faculty, and teacher/observers from Arkansas. (Arkansas was interested in implementing the A+ process in their state the following year.) At this retreat, the A+ Essentials™ were introduced and the manner in which they were used by the A+ process was explained. The retreat also provided opportunities for all of the stakeholders to get to know one another and begin building the relationships necessary to work as integrated teams during the Summer Institutes. Detailed planning between the Oklahoma and North Carolina Shadow Faculty/Fellows for the institutes began in early May, after three one-day pre-institutes were held to familiarize participants with the 14 new schools and their needs (Clinton, 2008; Hendrickson, personal communication, 2003).

The Transfer and Transplantation of the A+ Process from North Carolina to Oklahoma

In order to better understand the historical events that transpired beginning in July 2002 with the first Summer Institutes, it is important to understand the circumstances involved in its dissemination and model of transfer, and the relationships which grew between the North Carolina A+ Schools Fellows and the OAS Fellows in the process.

Preparation of the Process for Transplantation—A Recognition of Differences

When initial plans were made in order to bring the A+ Schools process from North Carolina to Oklahoma, the North Carolina professional development process was still under development. Prior to being approached by the Kirkpatrick Foundation, the North Carolina A+ program had not considered how the process might be transplanted to a new state. Unlike other reform programs, it was not a prepackaged approach in which instructional strategies and resources were followed exactly. Its unique qualities—the qualities that had interested the Oklahomans in the first place—did not lend it to being codified and packaged. The instruction was personalized, taking into account each school's entry point. The transplantation of the A+ process from North Carolina to Oklahoma followed the same model, and an individualized plan was developed between the two states. North Carolina considered this a partnership in which both programs would work collaboratively and figure out things along the way (Warner, 2008).

There were several educational and cultural differences between the educational environments that had to be taken into consideration when transplanting the A+ process to a new state. One important area of difference lay in the manner in which each school examined its curriculum. The North Carolina A+ program of professional development in curriculum mapping had been designed around the North Carolina *Standard Course of Study*. Though not a curriculum, the corresponding document in Oklahoma was the *Priority Academic Student Skills (PASS)* of which the North Carolina Fellows were at first unfamiliar. Working with the Oklahoma staff and Shadow Faculty, staff sought commonalities between the two documents had to be found first in order to make the curriculum mapping training relevant to the Oklahoma schools (Wade, 2008).

Another difference between the states was available teacher certification. In North Carolina, state teacher certification was available in all four art forms—Visual Art, Music, Dance, and Drama, and initially, North Carolina A+ Schools were required to have certified teachers in all four areas. In Oklahoma, teacher certification was only available for visual art and music at first (dance certification has since been added). This difference in available teachers was a cultural difference between the two states that had to be addressed because not all schools could be expected to have instruction in art forms for which there were no teachers available (Wade, 2008).

An additional area in which differences between the states played a role was in the acknowledgement of alternative reform models within several of the schools. Great Expectations® (Boyles, 2009) was already being used by several member schools, as was Core Knowledge (Core Knowledge, 2009). As many new member schools considered these reforms to be important elements of their curricula/programming, the Fellows and Faculty from both states had to build a common understanding of how these pre-existing programs could be acknowledged as means to address specific A+ Essentials™ while still maintaining the focus on the state mandated curriculum (Wade, 2008).

As North Carolina prepared to assist OAS in training its initial cadre of teacher trainers, a three-year apprenticeship model was initiated. This was the model used in North Carolina when new Faculty were assimilated into the program and allowed for a measured introduction and inclusion of new Faculty as their knowledge and confidence with the tenets and strategies for professional development grew with their years of involvement. It was modified only slightly when applied to the new Oklahoma Faculty. The two states then agreed upon an operational structure. During the first year, each

school team would consist of a mixture of North Carolina Fellows and Oklahoma

Faculty. As the name implies, "Shadow Faculty" were primarily process observers to the

overall professional development during the initial five-day institutes for the new schools.

As in North Carolina, this structure allowed for each new faculty member to become

acquainted with the process without an expectation of immediately taking on a leadership

role in the process. During the second year, professional development leadership among

the mixed dissemination teams would be shared between North Carolina Fellows and

Oklahoma Fellows, allowing for greater leadership responsibilities to fall to the

Oklahomans. During the final year of the three-year plan, the Oklahoma Fellows would

begin to take the lead in instruction, while the North Carolina Fellows became process

observers, reversing the roles from the first year (Clinton, 2008; Cook, 2008; Raiber,

2008; Scarberry, 2008; Wade, 2008; Warner, 2008).

Initial Growing Pains

　　　　The first Summer Institute brought about several challenges to the process. As

often remarked, everyone was "building the plane as we fly it" (Wade, 2008). The North

Carolina Fellows brought their expertise with the process to the table but were unfamiliar

with the educational history and culture of Oklahoma schools that only Oklahoma natives

would have. The Oklahoma Fellows brought subject area and curricular understanding of

Oklahoma schools but needed to gain an understanding of the A+ process and the

strategies needed to introduce its transplantation to Oklahoma schools. Consequently,

people responded differently to the apprenticeship model during the first year. Some

Shadow Faculty welcomed a chance to see the process in action with new schools, to

observe its implementation from within, while not feeling the pressure to take on a

leadership role with an unfamiliar process. Other Shadow Faculty felt as if their expertise in their subject area was not being taken into consideration. Some wished for greater input in how the process might be molded for its transplantation (Clinton, 2008; Raiber, 2008; Scarberry, 2008; Wade, 2008). These multiple points of view provided challenges during the first summer institute, but the clarity that resulted from working through the challenges strengthened the program in the long run (Wade, 2008).

Another challenge for the North Carolina Fellows was becoming comfortable with the ways in which the process would need to change in order to fit in a new state. Those who had taken ownership of the process wanted the process to be as similar as possible when transplantation was complete, but began to realize that evolution would demand otherwise. Sharing of materials also led the North Carolina Fellows to realize that much of their work had never been copyrighted, leaving it open for adaptation and assimilation (Warner, 2008). When the work was used in North Carolina, they had control of how it was used as long as they remained with the program. After three years, their impact on how their work would be used in Oklahoma would diminish. This further complicated the transference of materials between the two states. However, by agreeing on a process of attributions and shared permissions, those involved felt as if honor was given to their contributions (Wade, 2008).

Moving Forward

As with the beginning of anything new, the A+ process rolled out at the 2002 Summer Institutes met with mixed reviews. Many of the schools and Fellows that

participated that summer remained very enthusiastic about the process and the way it would work in their schools. Others came to believe that the model was not what they initially expected. For example, the Sadler Arts Academy, which participated in the Summer Institutes as both a school and with individual teachers as Shadow Faculty, withdrew their school and their Fellows from the process (Clinton, 2008).

As summer turned into fall 2002, the Oklahoma A+ network was officially formed[3]. The new schools returned to their schools, and began to discover how to incorporate the new knowledge to change their schools. A teacher at each school was named as on-site coordinator to provide support and feedback to the teachers and assist the building principal with professional development for the school. Each school was eligible for four on-site professional development sessions provided by OAS in order to provide any support needed to assist their schools' entrance into the A+ Schools Network. Mini-Institutes and Retreats for school-site coordinators and principals followed in September with the assistance of Gerry Howell and several North Carolina Fellows. Regional meetings and recruitment meetings followed in October and November, as the OAS staff continued to recruit new schools and Fellows for the second year. . In addition, official partnerships with the Business Circle for the Arts, the Oklahoma Arts Council, the Alliance for Arts Education, Very Special Arts, and the Oklahoma Arts Institute were developed (Clinton, 2003).

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[3] Funding for the Oklahoma A+ Schools has been received from a broad cross section of organizations over the years, including the Kirkpatrick, Windgate, Barthelmes, Reynolds, and Sarkeys Foundations, the OK Arts Council, the Oklahoma State Legislature, and the University of Central Oklahoma, as well as in-kind contributions from the University of Central Oklahoma, the Oklahoma School for Science and Math, Kirkpatrick Foundation, and the Oklahoma City Zoo, in addition to others (Hendrickson, 2009).

Several new schools expressed interest, and the Oklahoma A+ Advisory Committee selected five new schools in early February to join the A+ Schools network: Britton Elementary (OKC), Lee Elementary (Pauls Valley), Madison Elementary (Norman), Millwood Elementary (Millwood), and Oologah Lower Elementary (Oologah). . New Faculty members were identified, and Gerry Howell and several North Carolina Fellows returned to assist in their initial training. Howell and the North Carolina Fellows also assisted in the Mini-Institutes and Spring Retreats that occurred in early spring as well as returning in May and June of 2003 to plan for the second year of Summer Institutes (Hendrickson, 2008).

Changes in the Second Year

Marked changes took place during the second Summer Institutes in July 2003. The five new schools participated in a five-day institute similar to the previous year, but the original 14 schools returned for a more compact three-day institute. The relationships between the North Carolina Fellows and the Oklahoma Fellows and Faculty changed as well. During this second summer, the Oklahoma Fellows were trained in how to lead these three-day institutes while they began to take on more responsibilities with the five-day institutes, and the mixed teams seemed to work much more in tandem. Conversations flowed more freely, and there seemed to be more collaboration. Several Fellows mentioned how much they grew that summer as they spread their wings with the support and scaffolding of the North Carolina Fellows (Cook, 2008; Scarberry, 2008).

Fall 2003 brought several important changes to the Oklahoma A+ Network. OAS became independent of the Da Vinci Institute, though it would continue to have a

cooperative relationship. OAS also became an official component of the University of Central Oklahoma (UCO) in Edmond, Oklahoma. In December 2003, John Clinton stepped down as Executive Director of the A+ Schools and was replaced by Jean Hendrickson. Jean had been involved in the process from its inception, having been on the team that visited the North Carolina schools, and as the Principal Advisor through the first two years. This leadership has remained constant since 2003 (Hendrickson, 2003, 2008).

Ways in which Oklahoma A+ Schools® has become Homegrown

Beginning with the third year, the OAS began to develop its own identity as the North Carolina A+ team members began to wean themselves from the Oklahoma process. Though North Carolina Fellows were still involved, they attended activities during the school year in fewer numbers, providing support as the Oklahoma Fellows began to take on greater responsibilities and control. For some Oklahoma Fellows, this process of removal was uncomfortable since many had come to regard their North Carolina Fellows as colleagues and felt odd as these colleagues stepped back and let Oklahoma take the lead. Others felt good about being able to "step up to the plate" and take leadership roles (Scarberry, 2008; Winter, 2008).

Several modifications have taken place in the OAS process since its transplantation in 2002. Those who participated in the program from its beginning have seen greater definition in how material is shared with new and returning schools. While discovery learning is still an important part of the A+ process, several workshops have included more direct conceptual instruction as well. Schools develop an understanding of

the process (e.g., curriculum mapping) they take back to their schools rather than trying to complete products with those processes within the five-day institutes. Placing experiences and activities in the context of each school is another area that has changed since the first year (Cook, 2008; Scarberry, 2008). A "triple-track agenda" has recently been instituted in which participants are guided through seeing how workshop instruction impacts them personally (perhaps as new content) and impacts their classrooms (in new ways that it might be applied), as well as demonstrates a model of facilitation (Wade, 2007). Additional focus has been placed on helping teachers place instruction in context of their own schools. Teachers are now directed to consider a particular child and to consider how what they learn will impact that "child in the chair," a metaphor attributed to Heidi Hayes-Jacobs (2004). These changes have allowed schools to more easily return to their schools and begin to incorporate A+ into their daily routines (Cook, 2008; Scarberry, 2008; Wade, 2008).

At the same time, there have been growing pains. Since its inception with 14 schools and 20 Fellows, OAS has added 46 schools in all regions of the state, bringing on as many as nine schools each year. These schools include public, private, charter, and faith-based schools at the early childhood, elementary, middle school and high school levels in rural, suburban, and urban settings. In essence, the schools in the OAS Network represent the racial and socioeconomic diversity of schools in Oklahoma. Three regional coordinators have been added to the A+ office staff to meet the needs of individual schools and assist in organizing professional development workshops during the school year. The one-day Statewide Conference, begun in summer 2006, provides an opportunity for all Oklahoma A+ schools to come together as a network to share ideas,

successes, and examples of best practice within their schools (Oklahoma A+ Schools®, 2009c).

The expansion of the network has been met with a similar growth in the number of Oklahoma A+ Fellows. Currently, 77 Faculty and Fellows provide professional development workshops around the state and at Summer Institutes. Designing the spring and fall Fellows Retreats has changed considerably since the early years because they must now be organized around over three times as many Fellows (Oklahoma A+ Schools®, 2009c). For some, the large number of Faculty and Fellows has caused the network to lose some of its intimate qualities, but the large number is seen as necessary in order to meet the needs of the additional schools (A+ Fellow, 2008).

An additional area of growth has been in the number of partnerships with other programs that have taken place in the past few years. OAS maintained contact with both the North Carolina and Arkansas A+ programs, culminating in a national conference held in Greensboro, North Carolina in December 2006. In addition, more than 20 state, national, and international organizations have entered into partnerships with OAS, often providing support and collaborative training for A+ Staff and Fellows. Partnerships with the San Francisco Symphony, Creative Oklahoma, Arts Education Partnership Forum, and AT & T Educational Development are but a few of the more recent collaborations that demonstrate a willingness by the OAS staff to seek additional knowledge in the arts, technology, and school leadership. Additional national and international collaborations place OAS in a position to influence and transform educational practices in the future (Oklahoma A+ Schools®, 2009e).

Foundational Literature Review

Whole School Reform

Introduction

The quality of public schools has been a concern of parents and the business community alike for several decades. In order to understand the current educational reforms one must look to the past, to the political underpinnings that set the current desire for research-based reform in place. Since World War II, schools have seen multiple efforts to improve instruction and increase student achievement (Nunnery, 1998). Several waves of educational change followed, as the pendulum has swung back and forth between specificity and innovation, between top-down and bottom-up reforms. The most current political influences have heightened concerns regarding the level at which our schools are competing nationally and internationally. As the blue-collar labor market shrinks in the United States, the demands for stronger levels of school preparation are ever greater (Nunnery, 1998). The most current reform efforts have included comprehensive, whole school reform as well as an increase in the importance of high stakes testing to measure school progress. This section will examine the initiatives of the past decade and their impact on current school reform.

The federal government began to address the difficulties in American high-poverty schools with the passage of the "Goals 2000" Act. Beginning in 1994, Title 1 funds were made available to help schools develop reform programs (Sterbinsky, 2006). Initially, schools used these funds with targeted populations within their schools, often in

either pullout or after-school programs. But these supplemental programs did not promote

drastic systemic change in the schools themselves (Rowan, Barnes, & Camburn, 2004).

Without changing the cultural and organizational aspects throughout an entire school,

reforms lacked the power to be sustained beyond their initial introduction and funding

(McKinney, Corbett, Wilson, & Noblit, 2001). According to Datnow (2000), in order for

change to be effective, it must be accepted and integrated by the whole school.

Modifications to instruction may occur for a specific grade level or to a specific

population at first, but as students and teachers change, the impact of the initial

professional development training wanes. As students are taught by teachers who were

not part of the initial training, the instructional effects are not sustained (Stringfield,

2000).

According to a study by the RAND Corporation (Rowan et al., 2004) in order for

educational change to be effective it must provide specific professional development and

materials developed by an external agent. With the change in Title I legislation in 1988,

schools were allowed to use available funding for school-wide, or "whole school" reform

efforts rather than those with a more targeted focus.

Parallel to these changes in funding was a quest to develop reform initiatives

based upon research into best practices in the schools. This desire for whole school

reform that was strongly research based brought about the development of the *New

American Schools*. This non-profit corporation raised more than $130 million to foster

development of "a new generation of American schools" and encouraged the

development of unique, cutting-edge reform initiatives through competitive grants in

1991 (Rowan et al., 2004). The federal government followed in 1997 with the

Comprehensive Schools Reform (CSR) Demonstration Act. This Act funded the adoption

of varied whole school reforms in schools, granting $50,000 to schools over three years

(Hatch, 2000; Muñoz, Ross, & McDonald, 2007). The funding for this program was

expanded even further with the passage of the No Child Left Behind Act of 2001 (Rowan

et al., 2004). Given the extent to which CSR programs have been adopted in public

schools (it is estimated that between 10% and 20% of all elementary schools have

adopted external reform initiatives, or are working to develop their own local initiative),

consideration of the federal requirements for funding provide an indication of the

components of school reform that may be the strongest predictors of successful

implementation (Rowan et al., 2004). In order to be eligible for funding through the Title

I, Part F portion of the Elementary and Secondary Education Act, schools were required

to choose a research-based program that had been designed and implemented with

external technical support by those with expertise in school-wide reform, and had the

support of teachers, administrators, and staff. The reform effort was required to be

aligned with state and national standards, include annual benchmarks for student

achievement, and demonstrate improved academic achievement annually.

Concerns with Whole School Reform Research

Given the complexity of school environments, research in the area of whole

school reform brings about several areas of concern. Schools do not exist in a vacuum

making it difficult if not impossible to control for all extraneous variables in a whole-

school experimental design. The multiple reform initiatives that occur in a single school

only serve to complicate the issues even further, making it difficult to discern the specific

impact of any one single reform initiative (Stringfield, 2000). Many CSR designs are focused at the elementary level (Hatch, 2000), and several of the models focus on specific subject matter, at times to the exclusion of time spent on other subjects less assessed by high-stakes testing (Lytle, 2002). Few current large-scale research studies into whole school reform in general and CSR programs specifically exist. Such research, by its nature, is time consuming and expensive. Often, the studies are based on ideology rather than hard data or are carried out by the proponents of the initiatives themselves rather than a third party, possibly clouding the results with research bias (Nunnery, 1998). Very little third party research has been conducted, and only a few of the programs measured have demonstrated generalizable results. Many of the available studies are not longitudinal in nature, perhaps not allowing enough time for full implementation to occur before measurement takes place (Sterbinsky, 2006).

Components of Successful Whole School Reform

While each reform CSR Demonstration Program is unique, there are several common components that seem to indicate stronger implementation in participating schools (Desimone, 2002). A school's preparation for reform, willingness and capacity to change, and available resources are all school attributes that must be considered before entering into a reform initiative. The role of the teachers, principals, and school district officials in the initial choice of reform initiatives will all contribute to the successful or failure of its implementation. The initiative itself, its level of clarity and specificity, as well as the level of support from the external consultant for the school will all influence the depth of its implementation. Lastly, the specificity of professional development, and

the level of teacher buy-in will profoundly influence the final implementation (Desimone, 2002).

Preparation for Reform

Two of the more influential components of the CSR model are acquiring a research-based design for improvement that fits the school and determining that the school itself is ready for such reform (Sack, 2002). As a school begins to consider the implementation of reforms, there is a need for self-evaluation. Each school as a whole must decide the areas in greatest need and begin to determine how best to meet those needs. One of the most common mistakes made in choosing a reform initiative is the assumption that one initiative will fit every school equally as well. School districts must take into account each school's needs and willingness to change (Sack, 2002). Allowing time for self-evaluation by the administration and teaching staff may prove beneficial in preparing them for the changes necessary to improve student achievement. It may allow the school to consider how external reforms might assist them to meet the needs of their students (Hatch, 2000; Ross & Gil, 2004).

Although certain organizational attributes are good indicators of success in reform, strategies which focus on change at the administrative and organizational level alone are often not successful (Nunnery, 1998). When choosing a reform initiative, schools should consider the resources required in planning and initial training, as well as the start up and maintenance costs required over time to allow the implementation to truly take hold. This is especially true for schools that participate in multiple initiatives (Hatch, 2000).

Choice of Specific Reforms

One of the first considerations when choosing a reform initiative is whether control of the reform will be internally- or externally-based. Research indicates several drawbacks to locally developed reform. It may be a better fit for the school, but there is more risk and usually more cost involved. Locally developed reforms are less likely to produce substantial change since those involved are often too close to the areas in need of reform to see them objectively, making change more difficult. Local programs may not be completely developed, especially if those responsible for its development are still responsible for teaching as well (Nunnery, 1998; Sack, 2002).

Recent research in CSR suggests that while both internally- and externally-developed reform designs can be successful, there are several benefits to externally developed designs (Muñoz et al., 2007). Externally developed designs often have a stronger research basis. They often are much more specific in their design and in the guidelines for their implementation (Desimone, 2002). External developers have feedback on implementation not only from the local site but also from all the other school sites participating in their initiative. Consequently, improvements on their program may happen more rapidly. Professional development can begin immediately, as it has already been developed and tested with prior school districts (Stringfield, 2000). Externally developed initiatives come ready to be used "right out of the box" and carry with them the name recognition and a pre-existing track record of success (Datnow, 2000). Schools must weigh the importance of name recognition and the ability to use the reform immediately with the less than optimal fit that the reform might have for their individual school.

Concerns with External Reforms

Though externally designed reforms have many positive attributes that lead to successful implementation, they can also be hampered by school politics and a certain amount of careerism on the part of the faculty and staff. External reform experts must be able to demonstrate that the changes to be made will be in the best interest of the students before teachers are assimilated into the process. As districts determine the need for reform initiatives, it is imperative teachers and administrators in each school have a chance to be heard. Research indicates such reforms will only be successful if the teachers and administrators have a voice in its selection (Desimone, 2002). Often teachers will completely buy into a reform only after seeing a practical demonstration of how the reform works with *their kids*. The degree to which adaptations are made in order to get the reform initiative to "fit" a school—or maintain the same locus of control within a school—can also severely hamper effective implementation (Nunnery, 1998). A common benchmark among reform developers is that 80 percent of a prospective faculty must be willing to buy into the reform in order to predict success within a school. However, that 80 percent is at times achieved through coercion or teacher transfer (Boreman, Carter, & Aladjem, 2004).

How a reform is introduced to and adopted by a school has a great deal of influence on the level of buy-in by teachers. Schools that are given little choice but to participate in reform or are made to choose from a series of different reforms will often not be as successful. Reforms that are mandated by district administration will often be less stable and successful in development. Schools often choose a reform that requires only superficial changes or allows them to maintain the greatest amount of autonomy.

Unfortunately, reforms that do not require substantial change in the manner in which students are taught often bring about negligible results (Aladjem & Le Floch, 2006; Boreman et al., 2004; Desimone, 2002).

Principal leadership is critical for successful implementation of reform because principals have a broader and deeper whole school view and a more intimate understanding of the school's needs. They are the key players for successful implementation, as they control the resources and the scheduling that can make the initiative work in each of their schools (Datnow, 2000; Desimone, 2002; Hatch, 2000). Principals must have clear short and long term goals, be actively involved in decision making at the site level, and encourage change at the district level if reform is going to be successful (Rowan et al., 2004).

Clarity and Specificity Components of Design

An important element of reform is the clarity and specificity of the program chosen. Reform initiatives with a great degree of specificity are more likely to be implemented close to the original model. Models in which the strategies and materials are provided have a greater chance of accurate implementation. Research by Desimone (2002) indicates those initiatives that provide whole school professional development in the use of initiative specific materials and strategies will achieve the strongest level of implementation. Reforms that provide strategies and lesson plans as well as assistance by external facilitators allow for a faster start to implementation.

Although teachers might welcome the ready-made lesson plans and specified strategies, they might feel their teaching constrained or stilted by the initiative. Some might believe that they cannot meet the specific needs of their students using only the prescribed instructional tools. Others may find their ability to work creatively with their students is challenged: the greater level of scripted material, though increasing the fidelity to the original reform model, hampers the originality of their teaching. Older, more experienced teachers may be especially prone to feeling these constraints as they have already developed their own teaching styles (Desimone, 2002). Each school must take into consideration the level of teacher professionalism (Sack, 2002). Interestingly, when teachers who receive more frequent training are asked to make more extensive changes and are given greater autonomy in the day-to-day use of the reform strategies, implementation is greater (Rowan et al., 2004).

The Impact of Professional Development

The style and intensity of professional development also greatly influences the level of reform program implementation. Programs that provide extensive professional development—especially when it is more practically than philosophically focused—have a greater chance for success. The professional development must be as site- and grade level/subject-based as possible, as teachers look for strategies that require little adaptation for their classroom (Desimone, 2002). In order to bring about real change, professional development opportunities must be ongoing, allowing teachers the time to use the new skills in their own classrooms, so that they can come back with specific questions (Desimone, 2002; Sterbinsky, 2006). Ongoing professional development also lessens the negative impact of faculty turnover (Lytle, 2002).

Interestingly, traditional professional development is often thought to be more credible when it is given by external facilitators, and higher levels of implementation seem to come from external facilitators (Desimone, 2002). Externally-developed whole school professional development is thought to be more adventageous because it has been used in many other schools implementing the same reform program, and thus has been "tested" (Stringfield, 2000).

Feedback and Support from External Consultants

As important as the structured professional development opportunities are, the follow-up relationship between the school and the external consultants is even more crucial. Schools require substantial feedback and support when implementing new teaching strategies, and external consultants have the experiences of multiple schools to share (Desimone, 2002; Muñoz et al., 2007; Sterbinsky, 2006). The efficacy of external facilitators is also associated with their willingness to learn from the school itself. As each school is its own social entity, reform programs may look somewhat different in each school. Facilitators consider the school, its principal, and the practitioner knowledge of its faculty in order to be truly effective (Lytle, 2002).

The use of locally trained practitioners as facilitators is also very efficacious, although they may require additional time for training before they can be effective (Desimone, 2002; Nunnery, 1998). School networks may also be effective in providing feedback to member schools, especially when the feedback comes from schools that have recently experienced similar situations or schools that are much farther along in development and have greater experience in the reform (Desimone, 2002)

Consistency with School and District Expectations

When choosing a reform initiative, it is important that schools consider the strength of "fit" of the initiative with all aspects of the school. The initiative <u>must</u> meet the needs and desires of the individual school, its faculty, administration, and district, as well as coincide with the state and national standards (Desimone, Porter, Garet, Yoon, & Birman, 2002). The initiative cannot be seen as an additional burden or an interference with pre-existing initiatives used by the school. It should align with the constructs required by statewide testing and the expectations of No Child Left Behind. Examination of these aspects should be considered to determine the goodness of fit of the chosen initiative. Without this fit, teachers will consider the changes asked of them to be frivolous and unnecessary, and the initiative will be tolerated at best (Desimone et al., 2002)

Components Leading to Stability

Stability—of administration, faculty, students and policies—plays an important part in the implementation of reform initiatives. Schools in which there is constant turnover of teachers and students will become frustrated as they try to progress with the implementation of a reform program. Where there is a constant influx of new students, teachers cannot assume prior knowledge and may begin to feel they are repeating their "first year" of the reform over and over again (Hatch, 2000). Implementation becomes uneven, as teachers who have had the benefit of training are moving their students farther along, while their new colleagues must try to learn as they go. The impact of instability at the administrative level has an even more profound effect. Principals influence the efficacy of whole school reform because they have the potential to impact all aspects of

school policy, from decisions about curriculum, instruction, teacher hiring, and assignment of students to teachers and after-school programs (Brock & Groth, 2003). Often the support and the leadership for the reform go with a departing principal (Desimone et al., 2002).

Reform in Context and the Impact of No Child Left Behind (NCLB)

Beginning with the CSR Act in 1997 and continuing with the 2001 No Child Left Behind (NCLB) Act, many initiatives have focused on improvements in specific subject areas, leaving other subject areas with access to fewer resources of time and money. Often reforms are chosen in order to strengthen specific tested areas of the curriculum, show improved Academic Performance Index (API) scores, and demonstrate the Adequate Yearly Progress (AYP) required by NCLB. A research study conducted by the Center on Educational Policy indicated the following findings regarding the impact of reform initiatives on the whole school:

- In 62 percent of the districts surveyed, the time spent on mathematics and English language arts increased by over 40 percent.

- In social studies, science, music and art, and physical education, 44 percent reported decreased time of approximately 32 percent.

- Over 80 percent of the schools surveyed indicated their curriculum had been modified in order to focus on the content and skills emphasized on the standardized tests used. (McMurrer, 2007)

The impact of these shifts in curricular focus on the total education of the students in schools choosing reform is disconcerting. According to a study by Le Floch, Taylor, & Thomsen (2006), the focus on certain subjects over others often results in an uneven

approach to instruction. Some schools target instruction on students with a moderate chance of improving their test scores. Students at the extreme ends of the spectrum are neglected thus working against the "whole" in "whole school reform." Other schools place a greater focus of resources and responsibilities on those subjects being tested (Graczewski, Ruffin, Shambaugh, & Therriault, 2007; Le Floch et al., 2006).

Integration of tested subjects with other subjects is one alternative strategy becoming more common. As instructional time for non-tested subjects has decreased, integration of those subjects into tested subjects has increased (Pederson, 2007). The Center on Educational Policy suggests that integration of reading and mathematics into other subjects might be a way to continue to improve test scores, while not totally dismissing those subjects not tested (McMurrer, 2007). While this approach may allow students to focus on the tested subject material, it often does so at the expense of the non-tested subjects. Without additional professional development in the manner in which this integration can take place to the benefit and enhancement of all subjects involved, non-tested subjects may become more invisible (Graczewski et al., 2007, Pederson, 2007).

Placing Oklahoma A+ Schools® in the Context of Whole School Reform

Viewing OAS in the context of the effective elements of whole school reform as detailed above, one can see there are many common components, especially with the North Carolina A+ Schools upon which it was based. OAS does work as a whole school reform initiative, incorporating not only the faculty and students at every grade level but also its administration and school support staff. A large component of the program's professional development assists teachers in aligning their curricula to both the state standards and the Oklahoma PASS skills as well as assisting in vertical alignment between grade levels and all subject areas. It is based upon longitudinal research and uses the results of such research in its evolution (Oklahoma A+ Schools®, 2009a).

As with other examples of effective reform, OAS requires an 85 percent buy-in of support from the faculty and support staff of each of its member schools. The OAS staff encourages schools to thoroughly investigate the program and what A+ will require from their school prior to assimilation. Interested schools initially attend informational meetings in early fall where they are introduced to the A+ process. They then submit a letter of intent, indicating a willingness to send two different five-member teams along with the school principal to two pre-institutes in December and January for more detailed information. School members bring this detailed information back to their schools, and if they can ensure an 85 percent commitment by the members of their school community, they proceed with the application process (Oklahoma A+ Schools®, 2009f). While this process cannot guard against coercion to participate, it allows the OAS staff to interact

with multiple stakeholders from each school in order to get a sense of the school's interest to participate.

The OAS process demonstrates many of the qualities consistent with other externally developed initiatives. Yet, while it employs external facilitators with great experience in its implementation through its Faculty and Fellows, it encourages and trains local facilitators from each school to work as its school-site coordinator. It also looks from within the ranks of new schools for additions to its cadre of teacher trainers. It provides extensive, ongoing professional development that is designed to incorporate the unique needs of the school and the professionalism of its teachers during the summer and throughout the school year (Oklahoma A+ Schools®, 2009a)

There are also components of the OAS process that are unique from other reform programs. Unlike other whole school reform initiatives, it does not single out specific subjects but rather trains its teachers to integrate all subjects so students will make connections between them and think more holistically. It requires its member schools to commit to eight essential elements that include not only academic components but also infrastructural components as well. Its professional development is provided at no cost to the schools. It also provides a network among schools, allowing teachers and administrators to seek additional information from others that are at similar or more advanced places in its implementation. This network also allows the principals to seek ways to improve the infrastructure and climate of their schools (Oklahoma A+ Schools®, 2009c).

Unlike many reform initiatives in which schools must strictly adhere to all elements of the model to ensure successful implementation, OAS fosters implementation of the initiative at each individual school's own entry level. While there are observable A+ components in each school, the focus of the initiative is situated in the individual school context rather than conformity to an external model. It is not a scripted initiative. Professional development is meant to provide a greater knowledge and skill base from which teachers may draw in order to determine lesson plans and units that fit their students' needs strengthen their own teaching abilities. The fostering of two-way integration of the arts with other subjects is another unique element of the initiative that fosters creativity of its teachers and its students (Adkins & McKinney, 2001; Oklahoma A+ Schools®, 2009c). Table 1 demonstrates a comparison between the strongest predictive components of successful Comprehensive School Reform (CSR) implementation (Rowan et al., 2004) and those seen in the OAS process (Oklahoma A+ Schools®, 2009c).

Table 1   Predictive Components of Successful CSR implementation and Those Seen in the OAS Process

Components Required for Federal Funding as Part of the Comprehensive School Reform Initiative	Components Seen in the OAS Process
Employs proven methods and strategies based on scientifically based research	√
Integrates a comprehensive design with aligned components	√
Provides ongoing, high-quality professional development for teachers and staff	√
Supports measurable goals and benchmarks for student achievement	√

Is supported within the school by teachers, administrators, and staff	√
Provides support for teachers, administrators, and staff	√
Supports meaningful parent and community involvement in planning, implementing, and evaluating school improvement activities	√
Uses high-quality external technical support and assistance from an external partner with experience and expertise in school-wide reform and improvement	√
Plans for the evaluation of strategies for the implementation of school reforms and for student results achieved annually	**X**
Identifies resources to support and sustain the school's comprehensive reform effort	√
Has been found to significantly improve the academic achievement of students or demonstrates strong evidence that it will improve the academic achievement of students.	**X**

√ = seen in OAS School Sites
X = not seen in OAS School Sites

* Schools participating in OAS have been found to have increased academic achievement, but current research is not designed to indicate causality.

As shown in Table 1, the OAS Network demonstrates all but two of the components

identified for effective CSR reform. Research is considered an important and on-going

component of OAS. The network fosters support for and among participating schools,

allowing for collaboration between teachers and schools at different levels of engagement

in the process. The OAS process supports curricular alignment and the development of

measureable goals and benchmarks by which to assess student achievement. It also

provides site-specific and long-term professional development in the incorporation of the

A+ Essentials™. As the stakeholders in each school choose how to implement the

process, OAS does not measure the implementation of specific strategies or require

measurement of student achievement. While schools participating in the OAS network have demonstrated increased academic achievement, the complexity of each school community prevents an implication of causality.

The previous discussion has indicated the elements of effective whole school reform, and isolated those that are components of the OAS process. Results from the current study reveal that although all but two of the elements are inherent in the OAS process, individual schools have differing levels of engagement of each of these elements. Analysis of these different levels of engagement seem to indicate the schools fall upon a continuum of reform, from those merely interested in information to add to a traditional approach to teaching to those that are interested in transforming their school into something new. A detailed analysis of the qualitative and quantitative data is available in Volumes 1, 3, 4 and 5 of this five-volume research report (Barry, 2009; Duke, 2009; Raiber, Duke, Barry, Dell, & Jackson, 2009; Raiber & Jackson, 2009).

Introduction

Teachers often consider attending professional development programs each year in the same way they consider going to the dentist. The sentiment that "in-service is something that everyone agrees someone else needs" is a commonly held position concerning professional development (Radencich, 1995, p. 64). Without a belief that the professional development provided will be beneficial to their teaching and their students, teachers will not consider the time expenditure to be worth their efforts. Training will meet with resistance unless teachers consider the material shared to be relevant to their individual programs. Barnard and Hetzel (1982) state, "Relevant in-service is something done *with* people, not *to them* (p. 65)."

There seems to be an almost natural resistance to professional development by some teachers. Most teachers believe they are already doing what is best for their students. They have a level of comfort with the strategies and skill sets they use daily in their classrooms. For many, to accept the need for change in their teaching is to consider that they are doing something *wrong*. The sheer introduction of new teaching methods by their school district is perceived as a slight on their teaching. This perception inhibits their openness to change and to new ideas, placing them on the defensive (Godt, 2008).

In the past, teacher training focused on memorization of facts rather than a depth of knowledge in a subject area (Garet, Porter, Desimone, Birman, & Yoon, 2001; Klentschy, 2005). If education is to begin to make the evolutionary changes necessary to enter the twenty-first century, a more conceptually-based approach is necessary.

Adaptation of the skills and strategies teachers learned by watching their mentors is necessary to develop a more subject-centered model. Teacher training must shift its focus in order to enhance subject matter knowledge as well as acquire a greater understanding of how children learn specific subject. Professional development with a focus on subject matter may provide teachers with the knowledge and skills necessary to make this shift (Garet et al., 2001; Klentschy, 2005).

Change in education is difficult. Teachers are often not comfortable taking risks. Because they do not make change lightly, they must truly believe change is necessary and will only begin to take on new ideas when they feel comfortable in presenting them to their students (Guskey, 2002). Some teachers are beginning to discover they are not prepared to make the changes their students are requiring of them:

> If all educators had to do was develop (i.e., grow, expand, advance,
> progress, mature, enlarge, or improve), perhaps development
> would be enough. But educators often find that more and better are
> not enough. They find they often need to change what they do, on
> a daily or sometimes hourly basis, as they respond to the needs of
> the learners they serve. Doing this takes learning. (Easton, 2008, p.
> 755)

As students are being asked to problem solve and think at a higher cognitive level, it is important that teachers move to teaching for understanding rather than memorization. This may require teachers to make a transition from telling to facilitating in their

classrooms. In order to improve instruction, Hawley (1999) recommends that teachers

need experience in facilitation skills through focused professional development.

The Call for Effective Professional Development

The 1990s were a period of educational reform in which national standards were

developed in each core area to ensure that all students were being held to similar

educational levels. With the introduction of the Goals 2000: Educate America Act in

March 1994, schools began to see the need to enhance teachers' subject knowledge

through professional development (Abdal-Haqq, 1996). In order to meet the need for

additional subject area knowledge, the focus of professional development shifted to

specific teacher practices that would enhance the manner in which content was shared

with students (Klentschy, 2005). The "one-size fits all" model of professional

development, so common in public schools, seemed to no longer provide the depth of

subject-specific training needed to enhance teacher knowledge. Staff development which

centered around one-time workshops was considered to be no longer adequate. A new

model of professional development necessitated a paridigm shift from this traditional

model of professional development (Hawley, 1999). This shift would require that

professional development assist teachers in strengthening their content knowledge,

general pedagogical knowledge (including aspects of classroom mangagement and

organization), student learning knowledge (describing the ways in which students learn),

and pedagogy specific to content knowledge (which describes specific teaching strategies

and practices for instruction in specific content). A need was seen for professional

development to provide instruction that focused on specific ways of knowing so that teachers might understand the research behind the specific skill sets they were being trained to implement (American Federation of Teachers, 2002; Klentschy, 2005).

Earlier efforts in whole school reform often did not take into account the systemic complexity of the local school context and the impact that complexity played in the school's transformation (Glazer & Hannafin, 2006). Many reform programs imported expert consultants to assist teachers in adopting and adapting new knowledge and skills into their classrooms, but often the number of experts needed to truly service the entire school was insufficient. A majority of professional development was often scheduled outside the school day in intensive learning experiences. Without long-term support or feedback for the new content or strategies in which teachers were being trained, systemic change was difficult. Without placement of learning into the appropriate context, content simply did not transfer (Glazer & Hannafin, 2006). Professional development programs often did not take into account the overall picture of the school or work to make connections among the subject, teacher, and student within the school environment (Little, 1993).

Lessons Learned from the Eisenhower Professional Development Program Survey

As part of the reauthorization of the Elementary and Secondary Education Act (No Child Left Behind Act), the Eisenhower Professional Development Program provided funding to assist schools in providing professional development to meet the changing needs of education. Results from the national evaluation of this program indicated professional development was more likely to bring about change if it had

several qualities. Accordingly, the professional development must accomplish the following:

- take place over time,

- foster collective participation among its members,

- utilize active learning in which teachers are engaged through discussion, common planning, and practice,

- fit in with the federal, state, and local expectations, and

- be content focused

- incorporate observation by and of others, and

- utilize instruction which bridges the gap between initial introduction and classroom implementation (Garet et al., 2001; Porter, Garet, Desimone, Yoon, & Birman, 2003).

Elements of Effective Professional Development—The Importance of Time

As demands are made upon teachers to teach more content with greater focus, there is a need for professional development that provides depth and support over time. A recent study by Scotchmer (2008) indicates that a majority of teachers receive eight hours or less of professional development each year. This small number of contact hours greatly inhibits the possibility of change and growth within teacher classrooms. In order to bring about change in teacher knowledge and instructional practices, Scotchmer (2008) argues that professional development activities must take place over time, with contact hours made available throughout a school year. Teachers require time to internalize new skill sets and additional knowledge and integrate new material into their teaching style. They

must be provided with training that engages them for extended number of contact hours over the span of several months. Researchers are in agreement that concentrated professional development given over a few days or weeks simply does not allow teachers the time to integrate the new material to the same deep level. The additional time allows teachers to employ the new strategies in their classrooms and receive the peer feedback necessary to tweak its implementation. It is the greater intensity of training spanning over a long time period that allows teachers the opportunity to make real changes to their instruction (Garet, Birman, Porter, Desimone, & Hermman, 1999; Garet et al., 2001; Glazer & Hannafin, 2006).

Elements of Effective Professional Development—The Importance of Collective Participation

The impact made by the collaborative elements of professional development is often overlooked. When professional development activities bring together teachers with common understandings, such as by grade level or subject, greater opportunities for sharing ideas at high levels exist. Teachers that experience training together bring a feeling of camaraderie back into their schools and their classrooms. As common problems are discussed, shared problem solving brings about creative alternatives to classroom concerns (Garet et al., 2001; Hawley, 1999; Klentschy, 2005). Observation of and by peers brings about greater cross-pollination of ideas, as models of new strategies bring about growth and modifications. Teachers are able to see new skill sets demonstrated from multiple frames of reference and see them used to meet the needs of students different from their own. Feedback is more freely shared between those with common experiences in a safe environment. Through discussion and observation,

teachers learn from each other's mistakes and begin to determine where clarification or additional instruction is needed, and the group as a whole improves more quickly. The openness and collaborative support often allows teachers to learn more from peer interaction than might be possible from an expert. Groups formed through mutual experiences and concerns are the ones most likely to bring about teacher change and student impact (Garet et al., 2001; Hawley, 1999; Klentschy, 2005; Park, Oliver, Johnson, & Graham, 2007).

As school districts begin to shift their professional development from traditional models, they must consider the cost benefit analysis and infrastructural aspects these new models will bring. Working within the school schedule and infrastructure is challenging when administrations try to arrange teachers' schedules so observations and discussions can occur on a regular basis. Scheduling common planning and discussion times for teachers working together to incorporate new teaching strategies is a challenge at best. One alternative to onsite observation is the use of video. As schools begin to develop professional development archives that can be shared among the teachers involved, mentor teachers and peers can watch the video at times convenient for them. While not quite as beneficial as on-site observation, it does allow teachers to see new strategies modeled, but schools must still be willing to structure collaborative feedback time if they wish real change to take place (Klentschy, 2005).

Elements of Effective Professional Development—The Importance of Active Learning

In order for professional development to effect change in teacher instruction and student learning, it must involve active learning on a regular basis. Workshops in which

teachers passively listen to experts discuss new teaching strategies do not have the same

degree of impact on instruction as professional development in which teachers are

actively and thoroughly engaged (Desimone et al., 2002; Easton, 2008). It is important

teachers see new strategies modeled in authentic contexts in order to understand how they

might incorporate the same strategies in their own classrooms. Teachers must be

provided with opportunities to apply new material in the context of their own classrooms

on a daily basis in order for them to discover any additional questions they might have

regarding its application in context. Peer feedback is an essential part of this active

learning component as it fosters discussion of both the manner of teaching and the

process of learning within a classroom (Garet et al., 2001; Hawley, 1999; Little, 1993;

Scotchmer, 2008).

Elements of Effective Professional Development- The Importance of Teacher Involvement

Professional development is most effective when teachers are responsible for

determining the content and skills necessary to meet the needs for improved student

performance in their school. It is important that teachers are involved in every aspect of

professional development planning, from the determination of the needs of their school

and program to the selection of the design and content of the professional development

necessary for school reform, to its final evaluation (Barnard & Hetzel, 1982). Without

this reflective process, teachers may not see or understand the need for change and

improvement and thus will be reticent to change.

For a reform to be successful, it is often more the way in which teachers are

involved in choosing the reform rather than the reform itself (Datnow, 2000). When

teachers are allowed to collectively choose their path towards reform, they begin to perceive an opportunity to improve instruction for their students, to transform their school in substantial ways. They also perceive the need for ongoing professional development, a greater focus on student learning, and the reallocation of resources to support school-wide initiatives (Brock & Groth, 2003). With this involvement, teachers are more likely to remain actively engaged in professional development activities and truly believe in the relevance to their programs and their students beyond the initial professional development (Barnard & Hetzel, 1982).

Elements of Effective Professional Development—The Importance of Principal Leadership

When investigating reform implementation and professional development efficacy, the impact of principal leadership must be thoroughly examined. Principals have the benefit of both the administrative and instructional points of view. They can consider the administrative impacts of professional development—the costs and alignment of professional development with district and state standards and philosophies—while also being very aware of the instructional needs of their faculty and students. Visionary principals have a holistic view of their schools' needs and are better able to balance the needs of the many, thus impacting the instructional and behavioral strategies used in the classroom (Kruger, Witziers, & Sleegers, 2007). When principals initiate reforms and the professional development that accompany them, they may be more apt to match reforms with local school problems. As a result, there is a greater chance reform efforts will have credibility with teachers and lead to school improvement. The greater the degree of principal leadership, the more likely the professional development will bring about change (American Federation of Teachers, 2002; Brown, 2001).

When principals participate in the professional development, they are better able to observe their teachers and provide appropriate feedback. This feedback is especially needed when new teachers are brought on staff and have not experienced the initial professional development. Principals impact the efficacy of whole school reform because they have the potential to impact all aspects of school policy, from decisions about curriculum and instruction, teacher hiring, assignment of students to teachers, and after-school programs (Brock & Groth, 2003; Datnow, 2000; Easton, 2008; Good, 2008; and Hawley, 1999).

Distributed leadership provides an alternative road to implementation, especially when the principal lacks the skills or knowledge to lead specific elements of reform. In these settings, it is the principal's willingness to place those with the necessary expertise at the front of the reform and professional development—while remaining responsible for the structural changes needed, such as collaboration time and professional communities (Brock & Groth, 2003). According to Bork, Wolf, Simone, & Uchiyama,

> Instructional leadership is the key factor in determining the success of school improvement efforts, and a distributed model of leadership may be particularly important to change efforts. . . .Learning opportunities for teachers and professional community, both of which are fostered by strong leadership, may, in turn, influence the remaining factors in a model of school capacity for reform. Professional development is the key to building teachers' knowledge and skills, and it provides opportunities for focused work on improving instructional programs. The collective responsibility and commitment to collaboration that are central to professional community create a supportive atmosphere within which the difficult work of teacher learning and program development can flourish. (2003, p. 198)

As principals provide stronger leadership and make structural and instructional changes possible, teachers begin to believe in their collective capacity to bring about greater student achievement (Herrmann, 2006; Ross & Gray, 2006). Principals' instructional leadership and teachers' professional communities have an impact on the successful level of implementation (Kurki, Boyle, & Aladjem, 2006).

Elements of Effective Professional Development—The Importance of Coherence with Federal, State, and Local Expectations

Decisions in any classroom are made in the hopes of improving instruction for the student involved. In order for teachers to be willing to modify their current instructional strategies, they must see new strategies and skills sets as better meeting their students' needs than those currently in use. Professional development is most effective when it responds to specific needs of individual school sites. The degree of fit between the needs of the individual schools and the benefits of a specific professional development program greatly impact its perceived authenticity by the teachers involved. Only when teachers understand and believe the new material will benefit their students will strong connections be made and transfer happen (Hawley, 1999).

Attending to the learning needs of adult learners is an important facet of effective professional development often overlooked. Similar to their younger counterparts, adult learners enjoy and excel with instruction that is active. Much of the traditional model of professional development allows the teacher to be passive, and the content is often presented without an authentic context (Little, 1993). Unlike their students, teachers bring with them a considerable experience in learning and ways of knowing. Teachers as learners must take new information, compare it with prior knowledge, and modify their existing frames of reference, all within a safe learning environment (Brown, 2001). Facilitators of adult learning should be willing to consider different points of view in order to assist their learners in making the connections necessary. They must also find ways to honor the prior knowledge of their adult learners.

The degree to which teachers see professional development as realistic and relevant greatly impacts its level of implementation in their classrooms. It is important that teachers see the new skills and strategies introduced as necessary for improved achievement of their students and not something additional that must be endured. Teachers are more likely to modify their teaching to incorporate new strategies if the new material meets their students' needs and aligns with the standards and assessments already required (American Federation of Teachers, 2002; Brown, 2001; Garet et al., 1999; Garet et al., 2001; Porter, Garet, Desimone, Yoon, & Birman, 2003).

Elements of Effective Professional Development—The Importance of a Focus on Content

In order to have the greatest impact upon change in instructional practices, effective professional development must focus upon the enhancement of the content and pedagogical knowledge of the teachers in attendance. If teachers are to guide their students in making greater connections between subject matter and promote more creative solutions to problems, a deeper understanding of each of these subjects is necessary (American Federation of Teachers, 2002; Garet et al., 1999; Garet et al., 2001; Porter et al., 2003; Scotchmer, 2008). As the paradigm shifts from district wide professional development, there must be an increase in practitioner knowledge and stronger understanding of the thought processes their students employ (Klentschy, 2005). Most importantly, the content must be useful and authentic—based on real classroom problems—and be seen as an improvement over the strategies currently used. Teachers must believe that the changes they are being asked to make are not simply a fad, but will produce long-lasting change (American Federation of Teachers, 2002; Brown, 2001; Guskey, 2002; Hawley, 1999).

Elements of Effective Professional Development—Types and Models of Effective Professional Development

Current trends seem to indicate most professional development programs fall into two categories: traditional and reform. In traditional professional development activities, teachers are brought together to attend workshops or participate in conferences presented by the district, such as those presented at the start of the school year. Coursework presented by local academic institutions as well as state and national conferences in specific instructional areas are also considered to be traditional professional development activities. While these traditional programs can be extremely informative and support change in teacher approaches in their classrooms, they lack specificity. They may be content or pedagogically centered, but they lack the site- specific elements that allow direct transfer into the classroom. They also lack the time commitment necessary to bring about effective teacher change (Garet et al., 2001).

In contrast, reform types of professional development are more site-specific and transpire over longer periods of time. These activities include teacher study groups, professional networks, taskforces, peer coaching, collaboratives, internships, and resource centers. Such activities allow for more active learning and often allow for collaborative efforts across subject, school, or grade level. They occur during the day, are more conducive to the ways teachers learn, and incorporate each teacher's classroom into the learning process. Common goals and content between teachers brought together for professional development builds connections that foster stronger networking capabilities, and a support system as the teachers involved begin to implement new content and strategies in their classrooms. Reform-type activities allow teachers to search for answers

to questions as they arise and develop and implement new ideas as they are ready. While these activities seem to bring about a stronger impact, the greater time commitment must be considered (American Federation of Teachers, 2002; Desimone et al., 2002; Garet et al., 2001; Little, 1993; Porter, Garet, Desimone, Yoon, & Birman, 2003)

Seven specific models of reform-type professional development have become more commonplace in recent years. The Training Model is the closest to the traditional model and is the most cost effective. Instruction is given to large groups at once but assumes a certain degree of common prior knowledge and skill of all involved. Its workshops focus on explaining the theory behind the skills being introduced, incorporate demonstration of the new skill sets involved, allow practice time for those involved to begin to develop the new skills, and use peer coaching to assist in development in context. The difficulty with the Training Model is that it places teachers in a learner role, rather than engaging in the facilitation role they will need in their own classrooms. In the Observation/Assessment Model, teachers use the new strategies and skill sets in their own classrooms and are observed by peer coaches. This model must be well organized and planned and, as is often the case, is very time consuming for all involved. It also can cause difficulties when peer coaching is interpreted as evaluation. The Development/Improvement Model involves teachers brought together to make changes and decisions about specific components of their school, including curriculum. However, this model only involves a small number of persons in problem solving to improve their specific school sites, thus diminishing its impact. The Individually Guided Activities model allows teachers to develop personal goals for their classroom, further allowing the

time and support to develop a plan to improve their teaching to reach these goals. While fostering individual teacher growth, this model has little whole school reform impact.

In the Inquiry/Action research model, teachers engage in developing specific research questions and design research to investigate these questions, collecting and analyzing data from their own school and students. However, this model is extremely time-consuming, places enormous responsibility on individual teachers and does not bring about widespread change within a school community. Each of these models has distinct benefits, but no one seems to completely fill the needs of most schools (Castañeda, 2002; Hawley, 1999).

The final two models have become much more widespread in recent years. The Study Group Model brings together groups of people with common goals and charges them with problem solving solutions that will work for their classrooms. These study groups are the precursors to the current day professional learning community. The difficulty with this model is that the groups are often unorganized, advocate their own agendas, and are often not given enough time to see their work through to its completion. The Mentoring Model, a similar but smaller model, works by pairing more experienced teachers with lesser-experienced teachers. This model provides time for these parings to meet regularly to discuss goals and problems, and formulate possible solutions for the lesser-experienced teacher's classroom. While this model allows for strong bonding between the lesser-experienced teacher and their significant other, it does not always provide growth for the experienced teacher as well (Castañeda, 2002).

Elements of Effective Professional Development—The Role of the District in Providing Professional Development

Research indicates that districts should work to provide professional development that is site-based and chosen for its closeness of fit by the teachers involved. It should encourage development of greater content and pedagogical knowledge for its teachers through collaborative participation over an extended period of time. In addition, it should foster professional development that engages teachers in active learning activities that incorporate the complex context of real classrooms within the school day. Yet, such professional development can be very expensive. Districts may have to determine if they are willing to increase the quality and intensity of professional development for fewer teachers over a longer period of time than is currently scheduled into the school calendar. Even when schools utilize their own staff to serve in mentor roles, there must be a commitment to alter the infrastructure to ensure adequate time for discussion and observation among their faculty (Desimone et al., 2002; Garet et al., 1999; Garet et al., 2001; Porter, Garet, Desimone, & Birman, 2003).

Placing Oklahoma A+ Schools® in the Context of Effective Professional Development Models.

When considering the A+ Schools process in terms of the professional development it provides, it is interesting to discover the multiple reform-type models it employs. During the Summer Institutes, the Training Model is employed. An important element of the training is the trainers themselves. Practitioner-trainers provide all professional development, each trainer having experienced incorporating the A+ process within their own teaching. This heightens the level of credibility for the process and its

inclusion in the classroom. This is a somewhat unique example of the Mentoring Model as teachers and artists who have incorporated the A+ process in their own teaching become the "more experienced teacher" and guide. Once the school year begins, the professional development shifts to a more context- based models. Each school has its own A+ coordinator to assist in providing additional support in the implementation of strategies learned during the summer. The importance of curriculum mapping for each school demonstrates the use of the Development/Improvement model with teachers working to align individual curricula across grade levels and subject areas. As more schools are able to set aside time for collaboration, the Study Group Model may be incorporated. The important element of all of these models is the active learning and collaborative nature, which allows all teachers to grow in their understanding of the process and how it fits into the context of their school and classroom.

The OAS Network possesses several of the effective components of professional development that most often bring about change. With regards to time, the OAS professional development is both intensive and long-term. Initially, the professional development begins with a five-day institute for the entire school faculty and support staff. At times when other schools are selectively choosing to provide more intensive professional development for smaller groups, OAS recognizes that all persons working in a school are stakeholders in student success. In order to provide additional follow-up, each school is provided two professional development workshops of their choice throughout the year. This allows schools to bring the new material back to the context of their school and then request specific follow up by A+ Fellows (practitioner trainers) to meet the specific needs of the school in context. Additional summer training is provided

throughout the second and third years (three days during the summer following the first year, and two days in the summer following the second year). All schools are eligible for the two professional development days during the school year. Since its inception in 2001, all professional development and inclusion in the network is provided to every member school without cost (Oklahoma A+ Schools®, 2009c).

The professional development provided by OAS incorporates a high level of active learning in collaborative settings. From initial training, faculty and staff are placed in settings that encourage and support collaborative learning and teaching. Indeed, collaboration, infrastructure, and climate are considered part of the A+ Essentials™ that are used to structure and design the professional development (Oklahoma A+ Schools®, 2009a). Strategies for integration are modeled for teachers throughout the Summer Institutes, and discussions follow that encourage teachers to place themselves using the strategies in their own classrooms (Scarberry, 2008). By nature, the professional development involves teachers that share common objectives and a desire to improve their school, all elements that promote change and growth in schools (Porter et al., 2003).

Considered a process, not a program, the professional development provided by OAS is designed so each school decides how best to integrate the components into their school. Training in curriculum mapping that fosters a stronger understanding of the Oklahoma PASS skills demonstrates a strong coherence with state and local objectives and responsibilities (OAS, 2009a). The professional development provides basic strategies, but schools must decide how they are to integrate those strategies into their schools given pre-existing climate and infrastructure. This bottom up approach to

professional development has a greater potential for change because it is decided upon by the teachers and administration involved (Desimone, 2002).

The A+ Schools approach to content goes beyond teaching subject area content. Instead, it fosters the integration of different contents within the same lessons. For example, professional development in these skills demonstrates strategies that infuse arts-related content into the science class or demonstrates ways in which movement can be integrated into a mathematics class. Using the Multiple Intelligences as a starting point, the professional development strengthens the individual pedagogical content by demonstrating ways in which subjects can be connected, thus strengthening student understanding of both (Oklahoma A+ Schools®, 2009b).

When looking at OAS and its commitment to professional development, one can identify many of the elements that bring about change in the classroom. Results from the current five-year study indicate differing levels of engagement in the OAS process as demonstrated by the schools desire for additional professional development. Schools interested in transforming the ways in which their school operates often seek additional professional development. The willingness of the OAS Staff to provide professional development that is site specific and long-term is another unique element that supports its member schools. While school sites are far too complex to infer causality of the OAS process, an analysis of the quantitative and qualitative data in this descriptive study points to distinct trends between and among schools and their component stakeholders. It appears that schools exhibiting greater engagement in the OAS process performed consistently higher on State Report Card and Academic Performance Indicator data than

those schools that engaged the OAS processes as an add-on to more traditional ways of

teaching (see Volumes 3 and 4 of this report for more information).

Arts Integration

The Need for Arts Integration

The importance of the inclusion of the arts into learning for all has been debated as long as there has been structured education. Through the writings of Plato and Aristotle, we see the inclusion of the arts as an important aspect of the education of the "whole" man. Leonardo Da Vinci was a perfect example of such a "Renaissance man": a scientist, a mathematician, an artist, and a musician. His understanding of the world hinged upon the interconnections he made about the world from the multiple perspectives at his disposal (Mark, 1992). Plato, Aristotle, and Da Vinci recognized the importance of educating the child in all areas, as well as the importance of building an understanding of the relationships between these multiple disciplines (Appel, 2006).

In the twenty-first century, educators and school districts are struggling to keep some of these Renaissance perspectives in focus. Current influences of high-stakes testing and state mandated programs that dictate school improvement influence a hidden curriculum in which the arts are at risk of being marginalized in favor of subjects such as mathematics and reading. According to Walker and Parsons, "There seems to be little doubt that the focus on standardized testing is damaging to arts education and to the cause of school reform in general. It seems inevitably to distract teachers from teaching for understanding and to focus them on less sophisticated and less desirable goals" (2000, p. 33).

A recent survey indicated that over 62 percent of elementary schools have increased instructional time for reading and mathematics since No Child Left Behind (NCLB) was instituted in 2002. In order to achieve this increase in instructional time, 44

percent of the elementary schools surveyed indicated this additional time came at the expense of other subjects or activities (social studies, science, art and music, physical education, lunch, and/or recess), an average reduction of 32 percent of instructional time compared to the start of NCLB (Cavanaugh, 2006; Center for Educational Policy, 2007).

The heightened pressures brought about by the No Child Left Behind Act have continued to have a negative impact upon teachers' willingness to integrate. Curricula have become narrowed in an attempt to focus on teaching only knowledge and skills that are covered by standardized testing. Test preparation has become an important instructional strategy as schools focus on raising their test scores and their Academic Yearly Progress (AYP) scores. In some schools, instruction focuses on those students who have the potential to pass the exams, leaving lower functioning students without the instruction needed to improve. Teacher willingness to integrate areas that do not contribute to school evaluation is diminishing (Chapman, 2007).

The Impact of the Arts on Student Achievement

Given the heightened awareness of school achievement and the need for schools to demonstrate improvement on a yearly basis, one might ask: Why worry about the arts? What effects will integration of the arts have on improving school-wide achievement? By utilizing all of the senses in instruction across the curriculum, students will be able to develop a deeper, multifaceted understanding of the subject matter at hand (Fowler, 1996). Using the arts (inclusive of all art forms—visual art, music, dance, and drama) builds relationships between separate disciplines, and supplies a cohesion, a "way of knowing" not possible with each subject alone. Integration of art with other subjects can provide a greater "whole" than each of its component parts (Fowler, 1996)

Commonalities among All Forms of Knowing

According to Fowler (1996), each artistic process uses encoding and decoding. Encoding requires one to perceive, respond, or create art. Decoding requires recreating, interpreting, or evaluating an art form. In each artistic endeavor, lines, patterns, forms, and shapes are made. Meaning is formed by the combination of these elements into a code that expresses and communicates to the listener/observer. When students encode in mathematics or science, they use formulas to represent aspects of the real world. Encoding in the arts is no different. In each subject matter, students demonstrate their beliefs and understanding in a symbolic form. Larger, more abstract concepts, such as symmetry, apply to multiple ways of knowing. Students studying geometry may struggle with the ideas of angle symmetry, but when decoded through dance, the concept becomes quite clear. By physically decoding those angles, students experience mathematics in a whole new way. Discovering sequence in stories becomes analogous to the use of sequences and patterns in music. Both will have a beginning, middle, and end to their form. Decoding is a manner of deriving meaning from symbols, and art forms have symbolic systems of their own, just as languages do. The importance of literacy in all areas of knowing cannot be over emphasized. Fowler states,

> Deriving meaning from artistic symbols in the decoding process signifies that the viewer understands the content. The subject matter of the arts—their content—is life in all its manifestations. The arts are the means that humans have invented to convey their world as they experience it. Since the arts are the ways people represent their perceptions of the world, they

are also ways of knowing that world. In this sense they qualify as basic

education. (1996, p. 72)

Using commonalities among subject matter to form relationships between

subjects allows students multiple ways of knowing and understanding their world.

According to Gardner (1991), "If we can find ways in which to help students to

synthesize their several forms of knowing, we should be in a position to educate students

for understanding" (p. 309). As students begin to develop relationships between subject

matter in the context of the world around them, their level of understanding deepens.

Learning in and through the arts provides connections between subject matter that is not

afforded any other way. The multi-sensory manner in which art forms are engaged and

discovered involves an interweaving of personal and social meaning on a very individual

basis. Isolated capacities and dispositions using "core subject" domains such as

mathematics, science, and language arts are often combined and unified when

composing, painting, and dancing. Using these skills in new and cohesive ways provides

students with different levels of insight and understanding (Burton et al., 2002).

The important aspect of decoding through the arts is the personal involvement that

takes place as each individual makes sense of the concepts through their individual prior

experiences. The ability to go beyond the "facts" to better understand the feelings—the

aesthetic side of the subjects being studied—is much more easily approached through the

arts (Fowler, 1996). Emotions felt through reading a story can be magnified when

accompanied by music. This layering of understanding allows students to understand not

only what is going on in the story but also what the characters are feeling as they move

through the plot. This deeper, more personal level of understanding is available through the arts at every level. Using the arts as a tool for investigation draws students into the subject matter in a much different way that drill learning or learning by memorization can do. This greater level of engagement is substantially different. Students begin to take ownership of the content. They begin to make connections that would not be possible without the deeper meaning arrived at through the artistic elements. The arts are personal and the use of the arts as a learning tool encourages students to make all learning just as personal. They begin to construct their own understanding of the world around them (Fowler, 1996).

Perhaps it is the "doing" that is the most important part of arts integration. Integrated arts instruction may provide the greatest amount of transfer in learning, especially when higher order or creative thinking is required. The sheer involvement of multiple senses in learning may greatly impact the depth of understanding. As students respond creatively to stimuli, they do so with a personal frame of reference. Interpretation involves understanding through a personal and cultural lens, an understanding not necessarily possible with other disciplines (Burton et al., 2000; Redfield, 1990).

But, one must be careful of inferring causation when learning in other disciplines is involved. Although creativity, divergent thinking, and imagination may be fostered by artistic instruction, they are used in the other subjects as well. It may be attitudes rather than skills that hold the greatest possibility for transfer from the arts. Arts education encourages risk taking—and a willingness to try and learn from one's mistakes—to constantly improve with each attempt. It may be that arts instruction provides a freer setting in which these skills can be developed. Perhaps greater opportunities to develop

imagination and critical thinking allow students to develop the ability to focus, to try without fear of failure, to learn to be flexible and changed directions when needed, to reflect upon one's work. All of these capacities may transfer more easily when they are first developed in and through the arts (Burton et al., 2000; Eisner, 1999).

Certain personality traits fostered and developed through the arts may transfer to other subjects as well. According to Burton et al. (2000), students exposed to strong and varied arts experiences are more confident and willing to explore and take risks, exert ownership over and take pride in their work, and show compassion and empathy towards peers, families, and communities. Students in arts-enhanced schools tend to enjoy demonstrating their learning to others and have a higher academic self-concept than children whose arts learning experiences have been of a shorter duration and less rich in provision. Those students with greater arts experiences tend to believe they are proficient at reading, mathematics and in school generally (Burton, Horowitz, & Abeles, 2000).

Eisner (1999) mentions the "ancillary outcomes" that occur when one studies through the arts. Ancillary outcomes that transfer skills used in the creation and comprehension of art may build bridges to non-arts environments. Perhaps the ability to make connections within complex art forms builds similar skills in other environments as well. Sensing the complexity involved in an art form and being able to see not only the component parts but also the more global "whole" might be something the arts can accomplish that individual academic subject matter cannot do alone (Eisner, 1999).

What Do the Arts Do that Other Subjects Cannot?

While it is important to examine how skills and dispositions learned through the arts transfer to other subject areas, it may be even more important to examine the areas only the arts can provide. This question is often overlooked perhaps because the answer is much more difficult to quantify. Study in the different art forms allows students the means to transfer their feelings into something not defined by words. Often it is easier to assess a student's level of understanding through an art form, as no words are necessary. The arts may be a more accurate measurement for certain affective areas as they do not require the articulation of language. Study within art forms may also cultivate a willingness to work outside of the expected. Creating works of art requires an ability to see or hear the physically intangible, to imagine the unseen possibilities of what artworks might become. These dispositions are more easily developed in areas that do not have finite answers but rather allow for multiple complex solutions (Eisner, 1999).

In-Depth Studies of an Arts-integrated Whole School Reform Initiative

Given the focus of the current study on the OAS reform initiative, it is important to examine literature on the impact of arts-integrated reform initiatives. The North Carolina A+ Schools Program, the model upon which the OAS was developed, conducted a study of 24 schools across the state of North Carolina that participated in a four-year pilot study using arts integration as a major focal point[4]. Results from this study indicated that inclusion of the arts in the A+ process influenced a legitimization of the

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[4] The North Carolina program originally began with 25 schools, but one school did not complete the first year (Gunzenhauser, personal communication, 2009)

arts as worthy subjects. This was demonstrated not only in the individual schools but also in the political and financial support the arts in schools received in state educational policy and funding. It also created an arts-based identity among the schools involved, as arts integration became an accepted and necessary means of enhancing instruction in all subjects. The A+ process enriched the educational environment through the inclusion of arts-integrated lessons and school-wide thematic units, with the arts used as an entry point into many additional subjects. From its beginning, the A+ Schools Program provided a holistic approach to the inclusion of the arts, not only in artistic experiences but also in innovative integrated experiences across subject matter. It allowed for the locus of control to remain at the school level with additional external support. It also continues to provide ongoing professional development and supports collaborative engagement, all critical elements of effective reform (Adkins & McKinney, 2001; McKinney, Corbett, Wilson, & Noblit, 2001; Noblit, Corbett, Wilson, & McKinney, 2008).

The CSR model Different Ways of Knowing (DWoK) is another arts-based initiative (Muñoz et al., 2007). Initially an elementary initiative that integrates mathematics, reading, technology, science, and the arts, this study was the first to examine an adaptation for the middle school. This initiative also promotes positive school climate, curricular planning, and assessment organized around the standards and shared leadership. This quasi-experimental design matched schools using the DWoK initiative with control schools based on socioeconomic factors as well as a statewide accountability index. The CTBS (Comprehensive Test of Basic Skills) reading tests were used for the sixth grade, the KCCT (Kentucky Core Content Test) reading subtest for the seventh

grade, and the KCCT Arts and Humanities subtest for the eighth grade. Results indicated

DWoK schools scored significantly higher on the KCCT subtests, but no significance

was found on the CTBS. Descriptive statistics indicated that attendance rates for the

DWoK schools were higher than the control schools, significantly in the second year but

not in the third year. Unique to the DWok initiative is its emphasis on student

engagement, arts integrated curricula, and learner- centered activities. According to the

qualitative results, students were more engaged and enthusiastic (Muñoz et al., 2007).

A study by Smithrim and Upitis (2005) investigated student achievement and

attitudes in schools participating in a Canadian arts education approach. Results from this

three-year longitudinal study indicated that students in the arts enriched schools, called

Learning through the Arts (LTTA) Schools, scored significantly higher on computational

tests than students in the control schools matched on socio-economic factors. Interview

data from this study indicated a high level of engagement found in those students

attending the LTTA schools. When combined with the increased test scores at the LTTA

schools, greater engagement at school, no matter what the subject, may foster improved

academic achievement. While the authors do not imply causation, they do suggest there

may be merit in the inclusion of arts integration into the curriculum (Smithrim & Upitis,

2005). If students enjoy school and are excited and engaged in instruction, they may

attend more regularly and engage in instruction at a deeper level (Eisner, 1999).

Generalist Teacher Concerns about Arts Integration

Despite research that indicates the positive impact that arts integration has on

learning across subjects, there are still many impediments to the inclusion of arts

integration into the daily routine of many schools. A recent study by Dawson (2007) indicated that while teachers believe the arts are important, they are ambivalent about their own abilities to integrate the arts in their classrooms and about the importance of arts in general. While some teachers may see the potential for using arts in the curriculum, administrative values, increased time commitments to core subjects, and their own education backgrounds in the arts may prevent teachers from willingly seeking out opportunities for integration. Administrative support in terms of release time for collaboration with arts specialist must happen if integration is to be successful (Hull, 1993). Although teachers may believe in the positive impact of arts integration, anxiety over expectations and time away from their own classrooms often stands in the way of their collaborative efforts (Burton et al., 2000).

Many believe they are not musical or lack the training, time, and confidence to even consider integrating the arts into their classroom. Many would support arts integration if they were not solely responsible for the planning and execution. Others see themselves as capable of using the arts in their classrooms but see the inclusion of arts as a way to provide entertainment or diversion to the traditional learning that must take place (Burton et al., 2000). Successful two-way integration depends upon a belief that all subjects are on equal ground. Without mutual respect between teachers with neither teacher nor subject being seen as superior, true integration will not happen (Alesandrini, 1999).

Arts specialists also harbor concerns about the use of integration. One concern is that true two-way integration may require arts teachers to allow generalist teachers to integrate elements of the arts curriculum into the general classroom. There is also a

concern the arts as a discipline will become shallow and subservient to the core curriculum, losing its importance as a discrete discipline (Alesandrini, 1999).

The Need for Professional Development

In order to overcome the level of anxiety harbored by most generalist teachers regarding arts integration in the classroom, professional development must be provided. According to Alesandrini (1999), such professional development should meet generalist teachers at their level and allow them to develop skills sets that will assist them in understanding how integration can take place. As with all effective professional development, it should be ongoing and reinforced throughout the school year. It should be active hands-on and provide teachers with the abilities to be successful at the initial "baby steps" they will be utilizing in their own classrooms. Such professional development should provide teachers with multiple opportunities to showcase their work so they see the complete cycle and can replicated it with their students. It should also include training that incorporates summative and formative assessments in the classroom context. Most importantly, it should provide guided instruction on how the generalist teacher and the specialist can work together in the classroom context (Alesandrini, 1999).

The Need for Administrative Support

Often teachers and administration indicate their belief and support of the importance of arts education in general, but in difficult times that support greatly diminishes. In order for arts integration to work, generalist teachers, specialist teachers, and administrators must adopt the process. The arts should be seen as an integral part of

overall instruction and not an add-on or a frill that can be dismissed when times are difficult. They should not be used as a reward or withheld as punishment any more than mathematics (Burton et al., 2000). The arts must be seen and honored for the importance of their content, not for the importance of the planning time its instruction provides other teachers. Schools that employ an integrated arts curriculum find unique ways in which to include the arts teachers in grade level planning. This inclusion allows for larger thematic connections to be made between subjects, enhancing student understanding of each (Walker & Parsons, 2000). It is only when arts teachers are included in the planning process that the arts will be seen as integral to the overall curriculum by administration, faculty, and parents alike (Appel, 2006; Burton et al., 2000).

Arts Education and Integration in the Oklahoma A+ Schools®

When looking at component parts of the OAS, the level of importance given to arts education is easily seen. The A+ process is structured around a set of eight commitments called the A+ Essentials™: Curriculum, Experiential Learning, Multiple Intelligences, Enriched Assessment, Collaboration, Infrastructure, and Climate. In A+ Schools, there is an expectation that the arts are taught daily, integrated into the curriculum at all levels, and valued as an important part of learning. The arts, including dance, drama, music, visual arts, and writing, are considered an important component of each student's personal experience. But the importance of the arts can also be seen in its inclusion in several of the other essentials. There is an expectation that cross-curricular integration will be an important part of the curriculum. Many schools utilize Gardner's multiple intelligences as a way to encourage student to determine their "smarts." Collaboration and planning between the arts specialists and the generalist teachers is

encouraged, with common planning between all teachers seen as a goal for each school. The infrastructure of each school should provide an appropriate space for the arts as well as schedules that foster collaboration. Teachers are instructed in ways in which arts can become an important part of their classrooms as it becomes intertwined with each subject (Oklahoma A+ Schools®, 2009c).

The importance of arts education in the OAS can also be seen by the professional development it provides its schools in each artistic discipline. Teachers learn the fundamental elements of each art form in the Summer Institutes during the first three years of training. These "101's" allow all teachers to experience the elements of each art form as well as introducing integrated experiences that can be taken back to the classroom. Arts specialists learn side by side with their generalist colleagues and connections are made that are taken back to each individual school (research field notes, 2006). This level of professional development is an indicator of the importance of the arts integration within the OAS.

Additional indicators of the prominence of arts education in OAS process are the multiple partnerships into which OAS has entered. Members of the OAS staff as well as Faculty and Fellows have attended workshops given by the San Francisco Symphony, Creative Oklahoma, and the Arts Education Partnership Forum, and materials and strategies from these workshops have been incorporated in the summer school workshops (Hendrickson, 2009; Wade, 2009).

When daily arts instruction is a part of whole school reform, the reformation becomes much more three-dimensional. While other reform initiatives focus primarily on improving cognitive skills, reform through arts integration may go beyond this, providing

connections between the cognitive and the affective areas. For some, when approached through the arts, all other intelligences and subjects are possible.

Epilogue

Schools are unique communities that are ever changing yet are often resistant to organized change and reform. In order for school reform to be successful, it must take into account the beliefs and expertise of each of its stakeholders, in addition to the wishes and expectations of its parents, school board, and state education department. This must all be done while meeting the educational and personal needs of the children. The success of any reform depends upon the willingness of teachers to believe that alternative instructional approaches may provide that which is "missing" from their current methods. Success also depends upon the willingness of the principal and administration to provide the necessary training and support over the long term in order for all teachers to become skilled at new ways to teach. Feedback is an important part of implementation, allowing teachers to make necessary modification to the reform that will better meet their students' needs. Professional development should be directed at the needs of individual school sites comprised of individual teachers with unique expertise and desires for their students. Indeed, reform and the professional development necessary to make it successful is a complicated and often difficult process.

The reformation of schools in the OAS Network embodies many of the effective elements that research indicates brings about successful whole-school reform. Its individualized approach to instruction—both of teachers and by extension, their students—has a strong chance of changing learning within the classroom. The OAS Framework utilizes many of the features of effective school reform. It encourages the

schools and teachers of the network to develop skills and strategies that exemplify best practice. Its use of extensive, long-term professional development utilizing practitioner-trainers lends credibility to the process and allows each school the support it needs to make changes within its own timeframe when all involved are prepared for such reform. The A+ Essentials™ assist each school in truly examining their "whole school"—from its curriculum to its climate and infrastructure—and allows each school to choose its own path towards change and school transformation.

The other volumes in this research report provide qualitative and quantitative data on how the OAS process—the implementation of its framework and the A+ Essentials™—has developed differently in each of its member schools. They provide an insight into perceptions of how the OAS process has developed in Oklahoma, and the differing levels of engagement that have developed in network schools. Qualitative data provides a deep understanding of how the OAS process and the professional development it provides has influenced each stakeholder group. Differences between schools on statewide assessments scores are discussed. The final volume provides a model that explains the differences in implementation and engagement in the process and the impact that these differences may have on the school community. It is hoped that the reader will seek out these volumes for more detailed information on the OAS process.

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Appendix 1

A Chronology of the Official Dates and Activities

A chronology of the official activities of the Oklahoma A+ Schools® from the perception of its two executive directors, John Clinton and Jean Hendrickson

When	What
1998	Meetings of Faculty and administrators from college and universities to discuss the role of higher education could have on impacting K-12 education
2000	Kirkpatrick undertook and developed a strategic planning process from which the Da Vinci Institute was formed.
2000	Joint research team from OU and OSU spend one year researching the most successful education reforms in country and discover the NC A+ Schools
Sept 19, 2000	Letter of Invitation distributed for an Informational Breakfast regarding education reform and utilizing the arts as a reform vehicle
Oct 5, 2000	Breakfast meeting
Oct 2000-June 2001	Information-gathering; identification of likely partners
April 8-11, 2001	Gerry Howell, Program Director for North Carolina A+ Schools, visits OK for school tours and meetings
July 2001	Oklahoma teams to North Carolina for Summer Institutes
Aug 2001	Follow-up for OK summer participants in NC
Sept 2001	Strategy meetings with Vincent Marron, Exec. Director of NC A+ Schools
Fall 2001	Executive Director and Program Coordinator hired; mailings sent to all schools
Fall 2001	Brochures developed and sent to every public school in OKC
Fall 2001	• Informational meetings for schools across the state • Regional information meetings held in Ardmore, Bartlesville, Norman, Tulsa, and Woodward. (Individual school meetings were held based upon request)
November 2001	Strategy meeting with partner groups (Core Knowledge, Great Expectations, OSU Science Center, and others)
January 13-16	Visits to NC A+ Schools
January 30,2002	Meeting of Advisory Committee
January 30, 2002	Meeting with Da Vinci Education Committee
January 31, 2002	Meeting with Potential Fellows
February 2002	20 Oklahoma Shadow faculty selected
March 2002	Schools notified of placement in OK A+ Schools

March 2002	Rosalynn Wade hired as New Coordinator of Programs and Professional Development
March 7-10, 2002	Three-day retreat
April 9-11, 2002	Three one-day pre-institutes
May 6, 2002	Announcement of new OK A+ schools: - Briarwood Elementary - Cleveland Elementary - Flower Mound - Freedom Elementary - Garfield Academy - Grissom Elementary - Jackson Elementary - Jefferson Elementary - Linwood Elementary - Mark Twain Elementary - Monroe Elementary - Russell Dougherty - Sadler Arts Academy - Sequoyah Elementary - Western Village Academy
May 3-7, 2002	Planning for Summer Institute
June 2002	Oklahoma A+ and Da Vinci are trademarked
July 2002	Summer Institutes
Fall 2002	OK A+ network is formed
Fall 2002	OK A+ receives continued support from the Kirkpatrick Foundation and the Windgate Charitable Foundation
Fall 2002	Recruitment of new faculty mailings sent to award-winning teachers in the state
Sept 24-25, 2002	Mini-Institute and Retreats (site coordinators and principals)
Oct 2002	Regional Meetings 10/14- 15 -Norman and Pauls Valley 10/21-23 McAlester, Sapulpa, and Wetherford
Nov15, 2002	Meeting for Potential Fellows
Winter/Spring 2003	Partnerships developed with Business Circle for the Arts, Oklahoma Arts Council, Alliance for Arts Education, Very Special Arts, Oklahoma Arts Council, and Oklahoma Arts Institute
Dec 2, 2002-Jan 28, 2003	Application and selection of new schools
Feb 3, 2003	New schools notified of their selection
Feb 7-9, 2003	New OK Faculty Training
March 28-29, 2003	Mini-Institute and Retreats
April 4-6, 2003	Spring Fellows Retreat
April 8-10, 2003	Pre-Institute I
April 26, 2003	New schools announced publicly

May 3-6, 2003	OK/NC Fellows retreat to plan Summer Institutes
May 6-8, 2003	Pre-Institute II
June 9-20, 2003	Returning Schools Conferences
Summer 2003	New schools begin institutes: • Britton Elementary, OKC • Millwood Elementary, OKC • Madison Elementary, Norman • Oologah Lower Elementary, Oologah • Lee Elementary, Pauls Valley
Fall 2003	OK A+ Schools become an official part of UCO
December 1, 2003	Jean Hendrickson assumes role of Director of Oklahoma A+ Schools®

Appendix 2

Oklahoma A+ Schools®, Representative Districts, and Entry Years

School	**District**
2002-03	
Briarwood Elementary	Moore Cleveland
Elementary	OKCPS Flower
Mound	Flower Mound
Freedom Elementary	Sapulpa Garfield
Elementary	Ponca City
Grissom Elementary	Tulsa Jackson
Elementary	Pauls Valley
Jefferson Elementary	Norman Linwood
Elementary	OKCPS Mark
Twain Elementary	OKCPS Monroe
Elementary	Norman Russell
Dougherty Elementary	Edmond
Sequoyah Elementary	OKCPS Western
Village Academy	OKCPS
2003-04	
Britton Elementary	OKCPS Lee
Elementary	Pauls Valley
Madison Elementary	Norman Millwood
Elementary	Millwood
Oologah Lower Elementary	Oologah
2004-05	
Jefferson Early Learning Center	Pauls Valley
Roosevelt Elementary	Pryor Van
Buren Elementary	OKCPS
2005-06	
Central Elementary	Yukon Deborah
Brown	
Community School	Tulsa Geary
Elementary	Geary Harding
Fine Arts Academy	OKCPS Mercy
School (in OKC)	Private Millwood
PK-8	Millwood Putnam
City Academy	Putnam City Quail
Creek Elementary	OKCPS
Washington Elementary	Ponca City

School	**District**
2006-07	
Del City Elementary	Del City
Glenwood Early Childhood Center	Ada
Grimes Elementary	Tulsa
Madison Elementary	OKCPS
Millwood Arts Academy	Millwood
Nichols Hills Elementary	OKCPS
Putnam Heights Academy	OKCPS
Wilson Elementary	Bartlesville
2007-08	
Central Fine Arts Academy	Sand Springs
Chouteau Fine Arts Academy	Tulsa Eugene
Field Elementary	Tulsa Owen
Elementary	Tulsa Russell
Babb Elementary	Harrah Whittier
Elementary	Lawton
2008-09	
Dove Science Academy	OKCPS
Dove Science Academy Elementary	OKCPS
Ellington Elementary	Wagoner
Little Red Schoolhouse Preschool	Private Marcus
Garvey Leadership	
Charter School	OKCPS
Mark Twain Elementary	Tulsa
Millwood Ninth Grade Academy	Millwood
Santa Fe South High School	OKCPS
Santa Fe South Middle School	OKCPS
2009-10	
Madill Early Childhood Center	Madill
Oklahoma City Educare (in OKC)	Private Peace
Academy (in Tulsa)	Private
Sacred Heart Catholic School	El Reno
Santa Fe South Elementary	OKCP
Silo Elementary	Durant
Silo Junior High	Durant
Silo Senior High School	Durant

All five volumes of the research report can be found
in full on the Oklahoma A+ Schools website:
http://www.aplusok.org/history/reports/

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