

Arts Education Research Summary Kirkpatrick Foundation, Inc. Compiled March 2009

The Kirkpatrick Foundation has dedicated significant resources in terms of time, expertise and funding to education research, largely within grades K-12, in Oklahoma's public and private schools. As a result, much has been learned about the state of affairs in Oklahoma classrooms with regard to the arts. Public and private schools located in rural and metropolitan areas of the state were included. Whether art subjects in schools are valued just for creativity's sake, or whether the arts are valued as a tool to enhance achievement in core academic subjects such as math, or both, this summary will frame an overview of the status of Oklahoma's arts education within the following six key questions:

- I. What are the major issues in arts education that are identified by the research?
- II. What does the research tell us about how children learn?
- III. What are the common factors for high risk/high performing schools?
- IV. What are the realities, obstacles or challenges faced by schools?
- V. Where does arts education interconnect with achievement?
- VI. How does this information relate to the A+ Schools approach to education?

Answers to these questions were gathered from the following research studies that were funded by the Kirkpatrick Foundation:

- Oklahoma Business and Education Coalition - Oklahoma Best Practices: What Works in High Challenge Elementary Schools, What Works in High Challenge Middle Schools, & What Works in High Challenge High Schools
- TDA Consulting, Inc. - The Reality of Arts Education: A Profile of the Arts in the Oklahoma City Public School District
- Music for All - Music Education in Oklahoma Schools
- Oklahoma Association of Music Schools – 2008 Summit Report: "Music in Oklahoma in the Next Century"
- Northeastern State University – Using Music to Increase Child Outcomes in Math and Language/Literacy (Can musical keyboard training increase skill acquisition in mathematical and language/literacy abilities in 3 & 4 year olds?)
- University of Oklahoma – Music for At-Risk Students (effectiveness of using music as intervention for at-risk students in Oklahoma Alternative Schools)
- University of Oklahoma – Elementary School Music-Math Integration/Teacher Collaboration Study
- University of Oklahoma – Integrated Teaching and Learning: A Study of Curricular and Cultural Teacher Collaboration at the Middle School Level
- University of Oklahoma and Oklahoma State University – The Impact of Arts Education: An Investigation into the Effects of Arts Education on Student Learning in Oklahoma Schools
- University of Oklahoma and Oklahoma State University – Oklahoma A+ Schools® Research Reports: Year One 2002-2003; Year Two 2003-2004
- University of Oklahoma – Oklahoma A+ Schools® Research Report: Year Three 2004-2005
- University of Oklahoma and University of Central Oklahoma – Oklahoma A+ Schools® Research Report: Year Four 2005-2006

- Auburn University – Oklahoma A+ Schools® Research Report: 2002-2007 Quantitative Measures: Executive Preview

HIGHLIGHTS OF KEY FINDINGS

I. What are the major issues in arts education that are identified by the research?

Research continues to reveal that **limited resources** has led to the “**one size fits all**” **instructional approach** that is typically used in Oklahoma schools, focusing on the rote memorization of facts that are required for passing mandated state tests. This approach largely factors into the diminished importance of arts and humanities subjects as compared to other core subjects. In turn, research is finding that without arts and humanities subjects, **classrooms have severely reduced pathways for individualized instruction**. As a result, large numbers of students lose their opportunity to succeed in school, and begin to lose self-esteem and interest. This disenchantment eventually materializes into discipline and drop out problems for perhaps thirty percent of the student population in Oklahoma.

The arts (music education, visual arts or drama), and assessment for arts education, is mandated by Oklahoma’s Education code under Title 70. Priority Academic Student Skills (PASS) in the Arts, a basic curriculum framework established to document expectations for students in Music and Visual Arts, are part of the core curriculum for each grade. While passing this law has helped to keep the arts in the curriculum to some degree, inadequate funding to support its implementation has led to **huge inconsistencies in how the arts are made available in classrooms** throughout Oklahoma. Research has made it clear that **although the arts are technically in the core curriculum, they are not treated that way**. If they were, research would not have found...

- ✓ wide disparities in student/teacher ratios in the arts as compared to science,
- ✓ wide disparities in classroom time spent teaching music and visual arts as compared to other core curriculum classrooms,
- ✓ wide disparities in resources allocated to arts education classrooms (such as supplies, equipment, technology, teaching assistants) as compared to other core curriculum classrooms,
- ✓ disparities in teacher planning time as compared to other core curriculum classrooms,
- ✓ drama taught by non-drama certified teachers at the high school level,
- ✓ some school districts require arts teachers to travel to multiple schools during the work week, unlike other teachers,
- ✓ sequential K-12 instruction offered in the arts in all school districts, rather than in only some grades and/or some school districts.

II. What does the research tell us about how children learn?

The majority of arts education research studies funded by the Kirkpatrick Foundation shows time and again that **the arts offer multiple avenues for individualized instruction and learning** for K-12 students. This is significant in that Howard Gardner's (1983, 1991) work around multiple intelligences (see addendum) should have a profound impact when examining the educational experiences of students in Oklahoma. "...the theory validates educators' everyday experience that **students think and learn in many different ways.**" (Mindy L. Kornhaber, a researcher involved with Project Zero, 2001: 276).

In addition to Howard Gardner's work, Project SUMIT (2000) listed the following indicators characterizing schools with some success in implementing practices that focus on the multiple intelligences (MI) theory. They are:

- *Culture: support for diverse learners and hard work.* Acting on a value system which maintains that diverse students can learn and succeed, that learning is exciting, and that hard work by teachers is necessary.
- *Readiness: awareness-building for implementing MI.* Building staff awareness of MI and of the different ways that students learn.
- *Tool: MI is a means to foster high quality work.* Using MI as a tool to promote high quality student work rather than using the theory as an end in and of itself.
- *Collaboration: informal and formal exchanges.* Sharing ideas and constructive suggestions by the staff in formal and informal exchanges.
- *Choice (by teachers): meaningful curriculum and assessment options.* Embedding curriculum and assessment in activities that are valued both by students and the wider culture.
- *Arts: employing the arts to develop children's skills and understanding within and across disciplines.*

Below are quotes from two Oklahoma studies as examples of support for the MI theory with regard to how students learn:

1. University of Oklahoma – Music for At-Risk Students (the effectiveness of using music as intervention for at-risk students in Oklahoma Alternative Schools):
 - "The findings in this study are consistent with the literature in demonstrating a positive relationship between music and arts integration and overall academic performance of at-risk students. For some, music is the key for unlocking tremendous academic and creative potential."
 - "Research and practice indicate that participation in arts experiences can be an effective intervention strategy for decreasing certain 'high risk' student behaviors."
 - "Music and other arts classes provide students with an intellectually and emotionally nourishing environment that may not be available in other courses."
2. University of Oklahoma and Oklahoma State University – The Impact of Arts Education: An Investigation into the Effects of Arts Education on Student Learning in Oklahoma Schools:
 - "Through a rich exploration of substantive conceptual and critical thinking skills, arts integration has a powerful, broad-based positive impact on student learning. Arts integration curriculum must be valid within each individual discipline, across all disciplines concerned, and in an interdisciplinary setting. Successful implementation of an integrated curriculum resides in schools which seek to nurture higher order thinking skills. These schools make use of materials

designed to actively stimulate student learning such that students may recognize and ultimately discover on their own, an ability to put shared knowledge to use in new and creative manners.”

III. *What are the common factors for high risk/high performing schools?*

Oklahoma Business and Education Coalition - Oklahoma Best Practices: What Works in High Challenge Elementary, Middle & High Schools?

- Consistently performing school systems have **clear academic targets** from kindergarten through twelfth grade.
- Principals and teachers understand the learning goals and understand that these **goals are for all students and are non-negotiable**.
- Once the academic goals are clear, the leaders and teachers are selected and given **professional development opportunities** to make these goals a reality for every learner in the system.
- Strong instructional leaders and highly qualified teachers need **evidence-based tools and resources** to reach high standards with every learner.
- Accessing many instruments for gathering data from students, **benchmark assessments** are used to monitor progress toward instructional goals. While state tests are important, more emphasis is placed on learning the skills and content the teachers decided students in that grade should learn.
- School systems use **pyramids of intervention** that provide immediate and intense intervention at multiple levels when learning is interrupted.
- All high schools (average and higher performing) reported **supportive School Boards and funding shortfalls**.
- **Character training and school procedures/expectations** are taught.

The major difference between average and higher performing schools is planning.

- Higher performing schools are more proactive with a **long range formal organizational plan for managing change**.
- While all schools (average and higher performing) place a priority on horizontal and vertical alignment of the curriculum, higher performers more often use a **systemic form of planning** in order to assist in the process.
- Teachers are encouraged to **collaborate**.
- Teachers are allowed **time for planning**.
- Teachers are **involved in curriculum development**.

- Teachers are provided with **instructional support**, such as support personnel and professional development opportunities.

IV. *What are the realities, obstacles or challenges faced by schools?*

Oklahoma City Public Schools Foundation - The Reality of Arts Education: A Profile of the Arts in the Oklahoma City Public School District.

- Non-arts classroom teachers have little or no training in the arts or music education, are less likely to attempt to connect the arts with their discipline, and seldom collaborate with arts specialists to integrate lesson plans.
- Although classroom teachers indicate that arts education is important, they rarely seek help from arts teachers, access pre-packaged curriculum or textbooks to teach the arts, or have planning periods together.
- Teachers report that visual arts and music curriculum are aligned sequentially, parallel the states standards, and are in direct support of the National Standards for Arts Education. However, survey results indicate the curriculum is neither integrated with other arts subjects nor other academic subjects.

Music for All - Music Education in Oklahoma Public Schools.

- A lack of uniformity exists in the types of music programs found in schools - such as general music, band, orchestra, choir, and jazz band.
- A disconnect is found in the consistency or continuation of those music programs found in elementary to middle and on through high schools (leading to a lack of opportunity for follow through and the lack of opportunity for students who want to explore music for first time in high school, for example).
- The following factors play a role in what programs are offered: rural/metropolitan; public/private; large/small; wealth is typically not a factor in elementary and middle school but becomes a significant factor in determining music opportunities in high schools.

University of Oklahoma – Elementary School Music-Math Integration/Teacher Collaboration Study.

- After reviewing data gathered from arts integration programs throughout the U.S., a substantive relationship between musical concepts and math concepts was not evident in most situations. While informal surveys indicated music teachers had a considerable interest in connecting math and music concepts, they had almost no training in doing so and did not really know where to start.
- More time is needed for math and music teachers to collaborate.
- Administrators need to develop systematic procedures that reward teacher collaboration.
- Teachers need to time and incentives for learning how technology can relate to their classrooms.
- A pervasive change is needed in how teachers are trained in integrated teaching, in order to break away from compartmentalized teaching methods.

University of Oklahoma – Integrated Teaching and Learning: A Study of Curricular and Cultural Teacher Collaboration at the Middle School Level.

- At the middle school level, there is a distinct separation of teacher thinking between “core” subjects and the arts.
- Arts teachers don’t view themselves as “team” members among other arts educators or other core teachers.
- Collaborative planning time is the greatest obstacle to integrated instruction.
- “Core” team members are relatively comfortable in sharing ideas across disciplines, but are intimidated by the arts.
- Administrators voice strong support of integrated instruction, but are unwilling to adjust teacher responsibilities and school schedules to support team planning.
- Subject matter integrity may be compromised for the sake of integration unless teachers are diligent to maintain the core ideas of their individual disciplines.
- Initial excitement concerning a new integration project is replaced with trepidation when obstacles concerning school schedule, teaching assignments and other “immovable” blocks to creative planning are identified.
- An arts educator’s primary concern was how collaboration will affect the production of art.
- The proximity of teacher’s classrooms has an effect on teacher collaboration.
- There is a need for certification in drama education and so that the discipline can be equally represented in a collaborative teaching team.

University of Oklahoma and Oklahoma State University – The Impact of Arts Education: An Investigation into the Effects of Arts Education on Student Learning in Oklahoma Schools.

- Planning time is not sufficient for most schools.

- Technology was not used to integrate across disciplines.

Oklahoma Business and Education Coalition - Oklahoma Best Practices: What Works in High Challenge Elementary, Middle & High Schools?

- In larger school districts, high student population mobility creates uncontrollable disruption in the continuity of instruction both for the mobile students and their classmates.
- In smaller districts, money and resources are a problem.

V. *Where does arts education interconnect with achievement?*

A review of the research funded by the Kirkpatrick Foundation led to many interconnections between arts education and achievement. Some of the highlights are as follows:

University of Oklahoma and Oklahoma State University – The Impact of Arts Education: An Investigation into the Effects of Arts Education on Student Learning in Oklahoma Schools.

- ❖ The arts interconnect with achievement through the development of critical thinking skills, creative problem solving, and collaborative learning.
- ❖ The arts provide positive venues for the exploration of values, feelings, ethics, standards and social or environmental concerns.
- ❖ The arts offer substantially increased probabilities of improved academic performance.
- ❖ The arts provide opportunities for life enrichment.
- ❖ The arts lead to chances for whole school change.
- ❖ The arts afford opportunities to learn in an environment in which arts teachers work together with other core classroom teachers to plan an integrated curriculum with integrity, honoring the uniqueness of each subject area while finding appropriate connections across the curriculum.
- ❖ The arts offer students a better understanding of their culture and cultures around the world.

Oklahoma Business and Education Coalition - Oklahoma Best Practices: What Works in High Challenge Elementary, Middle & High Schools?

- ❖ Any form of instructional option increases alternatives for successful teaching and learning.
- ❖ Arts and humanities programs offer multiple avenues for individualized instruction.
- ❖ Arts and humanities can increase opportunities for success and motivation in school, while improving attitude and attendance.

University of Oklahoma – Elementary School Music-Math Integration/Teacher Collaboration Study.

- ❖ Similarities between the concepts in music and math brought about positive responses in children, such as (<)/greater than (>) indicators as compared to crescendo/decrescendo symbols, and pattern recognition.
- ❖ Teachers commented on their increased awareness of the value of using technology, such as how using musical sequencing software to help students understand the “meaning” of percentages helps students develop a “number sense” (or a meaningful life application).

Oklahoma City Public Schools Foundation - The Reality of Arts Education: A Profile of the Arts in the Oklahoma City Public School District.

- ❖ Research indicates that students in OKCPS district’s visual arts curriculum are exposed to standards of performance at or above National Visual Arts Standards at the elementary and high school level for the majority of the standards assessed.
- ❖ The district’s music curriculum is on target per grade level and students perform at or above the National Music Standards for the K-12th grade.

University of Oklahoma – Integrated Teaching and Learning: A Study of Curricular and Cultural Teacher Collaboration at the Middle School Level.

- ❖ Dance/movement is a strong motivator for student engagement.
- ❖ The concept of a performance or informance is a strong motivator for students and faculty.

University of Oklahoma – Music for At-Risk Students (effectiveness of using music as intervention for at-risk students in Oklahoma Alternative Schools).

- ❖ Music and the arts offer students a way to express themselves and take pride in individual accomplishment.
- ❖ Participation in performing ensembles enables students to become productive group members and helps develop a sense of belonging.

Northeastern State University – Using Music to Increase Child (3 & 4 year olds) Outcomes in Math and Language/Literacy (Can musical keyboard training increase skill acquisition in mathematical and language/literacy abilities in 3 & 4 year olds?).

- ❖ Overall gains in early math and language/literacy skills were made by children in the experimental groups as compared to children in the control group. The exception was with the four years old children in language/literacy.

VI. *How does this information relate to the A+ Schools approach to education?*

Many common challenges are found in all types of schools – rural, metropolitan, public, private, charter, high income, and low income. Essentially, this research summary has highlighted the key challenges as follows: lack of time for teacher planning and collaboration across core subjects and the arts; lack of resources such as human, materials, equipment, technology and funding; lack of on-going professional development; and lack of follow-up. Importantly, Oklahoma already has in place a model for whole school reform that addresses all of these challenges and more.

HISTORY. In 1998, the Kirkpatrick Foundation began assessing the opportunities and resources available from Oklahoma colleges and universities for improving K-12 education. This led to the establishment of The DaVinci Institute in 2001, a consortium of private and public colleges and universities that reflect a belief in the importance of interrelationships between learning, the arts, sciences, and other core curriculum. The DaVinci Institute formed a joint research team from the University of Oklahoma and Oklahoma State University to identify the most successful education reform models in the United States, especially those with a strong arts integration emphasis. The North Carolina A+ Schools Program, an initiative of the Kenan Institute for the Arts, was identified as one with great potential for replication in Oklahoma. This model is not one to be implanted into new schools, rather it is a grassroots approach that makes it possible to be institutionalized into schools that wish to gain admittance into the network.

Now in its seventh year, Oklahoma A+ Schools® has grown from fourteen elementary schools to 52 schools ranging from early childhood through high school, that are rural, metropolitan, public, private, charter, high income and low income schools across the state. On March 27, 2009, Oklahoma A+ Schools® plans to notify eight new schools of their acceptance into the network for the 2009-2010 school year, growing the network to a total of 60 schools. Oklahoma A+ Schools® is also a member of the National Consortium of A+ Schools.

OVERVIEW.¹ Oklahoma A+ Schools® is the state's only research-based whole school network with a mission of nurturing creativity in every learner. Located on the campus of the University of Central Oklahoma, Oklahoma A+ provides schools with ongoing professional development, an intricate network of support, and an active research component conducted by university professors. This public/private partner model is increasingly sought as collaborator in state, national and international initiatives, helping communities create the schools that are needed to prepare the students for continued leadership in the 21st century.

The A+ approach to learning draws on Howard Gardner's (1983, 1991) research on multiple intelligences as well as other recent research on the brain and on learning. Instead of viewing the arts and the creative thinking they foster as distinct from core academic subjects, A+'s premise is that the arts can open up deeper understandings of the curriculum precisely because their creativity taps into the multiple ways that students learn.

Schools commit to a set of eight A+ Essentials™ which they learn about during the initial Summer Institute and through the ongoing professional development provided by a highly qualified, innovative group of teachers, teaching artists and practicing artists known as A+ Fellows. The A+ Fellows, under the direction of the A+ Staff, help build the capacity of each school to collaboratively set and reach the goal of creating the schools they want for the children they love. A+ Schools build community-wide ownership of a school’s collaboratively developed goals and objectives.

A+ ESSENTIALS™: A SET OF COMMITMENTS.¹ Oklahoma A+ Schools® network delivers whole school reform through ongoing professional development that focuses on collaborative, research-based practices. A+ Schools adhere to a set of commitments that include daily arts instruction, experiential learning and enriched assessment. The schools collaborate around curriculum, mapping the instruction so that interdisciplinary concepts emerge that encourage cross-curricular integration and the use of multiple intelligences to structure learning opportunities for students. Ongoing research documents changes in the climate of A+ Schools that foster an engaging learning environment. The infrastructure in A+ Schools supports common planning time, shared vision, and faculty commitment to the goal of schools that work for everyone.



Arts

In A+ Schools the arts are:

- * taught daily
- *inclusive of drama, dance, music, visual art and writing
- *integrated
- *valued as essential to learning
- *included in planning
- *practiced
- *a part of personal experience



Curriculum

In A+ Schools curriculum is addressed through the use of:

- *mapping that reflects alignment
- *thematic webbing
- *development of essential questions
- *creation and use of interdisciplinary thematic units
- *cross-curricular integration



Experiential Learning

In A+ Schools experiential learning:

- *is grounded in arts-based instruction



Multiple Intelligences

In A+ Schools multiple learning pathways are:

- *used within planning & assessment

- *is a creative process
- *acknowledges entry points
- *includes differentiated instruction
- *provides multi-faceted assessment opportunities

- *understood by students and parents
- *studied, and new research is explored by teachers
- *creating balanced learning opportunities



Enriched Assessment

In A+ Schools enriched assessment:

- *is on-going
- *is designed for learning
- *is used as documentation
- *is a reflective practice
- *helps meet school system requirements
- *is used to self -assess by teachers and students



Collaboration

In A+ Schools collaboration:

- *is intentional
- *occurs within & outside of school
- *occurs during planning time: classroom teachers with arts teachers
- *occurs with teachers, students, families, the community, & local businesses
- *includes broad-based leadership



Infrastructure

In A+ Schools infrastructure supports the philosophy by:

- *addressing logistics such as schedules that support planning time
- *providing appropriate space for the arts
- *continually developing faculty commitment
- * creating a shared vision



Climate

In A+ Schools climate improves because:

- *teachers can manage the arts in their classrooms
- *stress is reduced
- *teachers are treated as professionals

*providing related professional development

*continual team building

*morale improves

*excitement about the program grows

*A+ whole school reform is invigorating

Note: Original works of art used in this chart were created by A+ Fellows.

Leading the way, preparing Oklahoma youth with skills for the 21st century workplace, this system develops schools that encourage creativity, innovation, and critical thinking. The Oklahoma A+ Schools® research results are clear. Systematic and creative use of the A+ Essentials leads to higher achievement, engaged students, teachers, and community, and more creative, focused instruction.

OKLAHOMA + SCHOOLS® RESEARCH RESULTS.

According to the Oklahoma A+ Schools® Research Report: 2002-2007 Quantitative Measures: Executive Preview, as prepared by Nancy H. Barry, Ph.D., College of Education, Auburn University, Oklahoma A+ Schools®.....

- strives to meet the needs of all students and has consistently served a **higher percentage of economically disadvantaged students** (based upon percentages of students qualifying for free or reduced lunch) in comparison to state averages.
- serves a **diverse student population**. Percentages of Black, Asian and Hispanic students in A+ schools have been consistently **higher than the state averages**.
- administered the *My Class Activities* survey in grades 2-8 over four years which indicates **overwhelmingly positive student attitudes** about their classroom activities.
- consistently **outperformed their counterparts** within their districts and the state **on the Academic Performance Index**, which is striking when one considers A+ schools have consistently served higher percentages of minority and economically disadvantaged students in comparison with state averages.
- administered the **Teacher Opinion Survey** to A+ schools over four years which **reveals teachers held favorable attitudes about arts in education, arts integration, and teacher collaboration**.
- investigated the A+ professional development providers' perspectives through the **A+ Faculty/Fellow Survey** which **reflected** the peer-trainers in this study (A+ Faculty and Fellows) believed that **A+ provides an effective model of professional development** that positively impacts the lives of children through actively supporting and improving the skills and practice of their teacher colleagues. In addition, Faculty and Fellows reported that the main incentive for embracing A+ is the belief that **this process improves the**

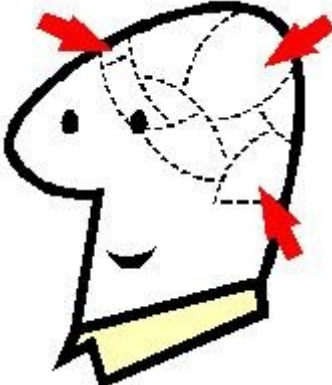
quality of education with direct and tangible benefits for the children of Oklahoma. The consensus was that when schools buy-in to A+ as a way of thinking as well as doing, A+ serves as an effective process for bringing about **meaningful school change in lasting and profound ways.**

- compared the findings of **The Arts Education Perception Survey (TAEPS)** in non-A+ communities to findings in communities associated with A+ schools. TAEPS polled legislators, business people, parents, teachers, school administrators, and school board members from a large randomly selected sample of schools and their surrounding communities across the state of Oklahoma on their attitudes about the arts in education. In addition, a modified version of TAEPS (including an additional section on the Eight Essentials) was administered to people associated with A+ schools. In the Essentials section, results indicated **high levels of agreement** by educators and community members affiliated with A+ Schools **on survey items representing ways that the Eight Essentials are manifested in school policy and practice.** In items common to all TAEPS surveys, the more positive perceptions of arts education expressed by respondents affiliated with A+ schools suggest that **a more favorable climate for arts education existed within these A+ schools and their surrounding communities** than in the non-A+ communities surveyed.

ADDENDUM.

Indicators of Howard Gardner's Multiple Intelligences¹

The following examples are indicators of some of the many ways the intelligences may manifest in individuals and are not intended to define the limits of each.

<p>Logical / Mathematical Intelligence</p> <p>...involves skills in inductive and deductive reasoning, recognizing and using abstract patterns & relationships. Math Smart students often enjoy math, problem solving and reasoning, and often ask logical questions. They may enjoy ordering objects, categorizing, calculating and experimenting with hypotheses and consequences.</p>	<p>Musical / Rhythmic Intelligence</p> <p>...involves sensitivity to pitch, timbre, timing and rhythm of sounds. Students who are Music Smart can remember melodies and are aware of surrounding sounds. They may like to produce music through instruments or make sound effects, and learn through sound and music.</p>	<p>Bodily / Kinesthetic Intelligence</p> <p>...involves using the body to communicate ideas and emotions, solve problems, and create products. Body Smart students may like physical activity and prefer active learning. They may like to do different sports and PE activities, participate in drama, and use the body to communicate with other people.</p>
<p>Verbal / Linguistic Intelligence</p> <p>...involves skills in reading, writing, sensitivity to sound order, rhythm of words, verbal explanations, and using language to express ideas or thoughts. Word smart students may be good at telling stories and playing word games and puzzles.</p>		<p>Visual / Spatial Intelligence</p> <p>...is the ability to create visual representations and understand information best with mental pictures or creating a physical picture. Picture Smart students may like to do mazes, design, draw, and create things, enjoy videos, photos, pictures and charts.</p>
<p>Intrapersonal Intelligence</p> <p>...involves the ability to be aware of and understand one's own feelings, strengths, weaknesses and overall behavior. Self Smart students tend to be good at goal setting and enjoy activities which further their understanding of themselves as individuals.</p>	<p>Interpersonal Intelligence</p> <p>...refers to the ability to work effectively with others. Students with People Smarts understand people and notice their goals, motivations and intentions, and display strong leadership, organizational and empathy skills. They may like to communicate, perform in front of others, and understand other people's behavior.</p>	<p>Naturalist Intelligence</p> <p>...allows people to distinguish among, classify and use features of the environment. Nature Smart students may enjoy pets, nature walks and fishing. They may also enjoy describing the features of every make of car around them</p>

1) Reprinted with permission from Oklahoma A+ Schools® website www.aplusok.org.