

Chicago Arts Partnerships in Education's Research and Evaluation Series  
*Contributions to Arts and Learning*



**How Arts Integration  
Supports Student Learning:  
Students Shed Light  
on the Connections**



## Improving Teaching and Learning through the Arts

Founded in 1993, Chicago Arts Partnerships in Education (CAPE) convenes and guides a network of schools, artists, and arts organizations in co-developing and implementing innovative and effective approaches to teaching and learning in and through the arts.

## Arts integration and Cognitive Growth in Students

Learning in and through the arts has been linked with increased student achievement (Fiske, 1999; Deasy & Fulbright, 2001), but the means by which the arts support cognitive growth in students is relatively undocumented. In this study, thirty students across ten classes in a range of grades (1st – 9th) in veteran CAPE partnerships were selected to explore the processes associated with learning in arts-integrated units versus learning processes in comparable non-arts units with the same students and the same teachers. The findings were robust. The arts consistently engaged all students in complex and analytical cognitive processes, including those students who typically struggle with academic content. No such gains were associated with traditional instructional experiences.

## Design and Methods

Ten participating teachers identified comparable academic units that they would teach during the year, with one unit incorporating the arts and the other unit using more traditional instructional approaches. (An example of “comparable units” is teaching about ancient Mesopotamia for 6 weeks followed by teaching about ancient Egypt for 6 weeks.) Teachers then selected three students who represented a range of comfort with the traditional academic approaches used in the classrooms- from those who excelled easily in traditional basic academic tasks to those who found such tasks very challenging.

Three kinds of data were collected in each participating class: 1) Students were interviewed before and after each unit about their learning experiences and processes 2) Students wrote about their understanding of and experience with the learning content of each unit 3) The investigators observed the arts-integrated units and culminating events. The content of these interviews, writing samples, and observations were analyzed for statistically significant trends, using indicators of engaged learning (Newman, 1996).

## Data Collection

Cognitive Processes	Content Learning	Contextual Picture
10 students from each of 3 achievement ranges per class	Same 10 students from each of 3 achievement ranges per class	10 classrooms
Pre-interviews; N=30 Post arts unit interviews; N=30 Post non-arts unit interviews; N=30	Pre-arts unit writing sample; N=30 Post arts unit writing sample; N=30 Pre-non-arts unit writing sample; N=30 Post non-arts unit writing sample; N=30	2 arts integrated unit observations; N=20 1 final event observation; N=10
90 interviews total	120 writing samples total	30 classroom observations total

## **Finding: Arts Integration Created More Independent and Intrinsically Motivated Investments in Learning**

Students often found the mainstays of their traditional learning methods – reading the textbook, concentrating on unfamiliar subject matter, tests, and lectures – to be boring:

*“Reading out of the textbook is really boring. You don’t remember the stuff.”* (8th grade student)

*“Being bored was hard. It was kind of like a job.”* (9th grade student)

None of the interviews about arts-integrated units assessed those units to be boring:

*“They (the artist and teacher) weren’t just a boring old history teacher saying, ‘Next we are going to blah, blah.’ One time my teacher was doing the Chicago Fire and she threw bits of paper up to show how the fire spread, and it was really cool. We pretended there were flames about us, and it was just real interesting.”* (3rd grade student)

As students across the board indicated in their interviews, the kinds of activities that the arts provide engage children more deeply in their learning by creating intrinsic responsibility for their learning activities. This finding held particularly true for those children hardest to reach by traditional approaches. Rather than depending on teachers’ capacity to entertain and keep them from being bored, students found the arts to bring enjoyment to their learning irrespective of the teacher’s personal style.

## **Finding: Arts Integration Transformed Student’s Characterizations of “Learning Barriers” into “Challenges” to Be Solved**

When students were discussing what they found hard about learning, they evidenced an attitude shift regarding the nature of difficulties when comparing their non-arts units to their arts-integrated units. Students’ experiences during their non-arts units frequently involved instances of working in isolation as an individual learner. When students talked about what made learning hard for them during traditional non-arts classroom activities, several distinct themes emerged: feelings of isolation, a sense of competition with their peers, and a sense that someone was to blame for their difficulties.

*“Just the way some teachers teach. They just tell us to read the stuff and don’t really explain it to us. We just have to read it and try to figure it out and just because you can read it, doesn’t mean you understand it. It makes it really hard.”* (8th grade student)

*“It is hard when I have to read something like a textbook. I don’t like to read. I don’t like to read anything. I read half a book and then I have to stop. I like to ride my bike.”* (9th grade student)

At no time during the non-arts interviews did students discuss what makes learning hard with anything other than a kind of resignation: math is hard, tests are hard, remembering stuff is really hard.

After their arts-integrated units, however, a significant change took place not only in what students said made learning hard, but also in the very characterization of what ‘hard’ meant. The term “hard” now seemed to imply a challenge rather than a barrier. It may be significant that much of the discussion after the arts-integrated units centered on working in groups. Students explained how they solved their problems with others rather than listing the barriers that hindered their learning alone:

*“The thing where you make up the story and people in the group say they don’t want that in their story so we had to get the teacher but she said we had to solve it and we had to talk about what would go into the story. It was hard to get everyone to say okay but we did.”* (4th grade student)

Additionally, in contrast to their descriptions of non-arts units taught by the same teachers, even those students whose arts-integrated units required working alone did not complain about inattentive teachers, boredom, or dislike for the subject.

The arts provided democratic access to authentic intellectual challenges for students, removing barriers of competition and correctness, allowing students the space to solve problems in ways that were suited to their own understandings and goals, rather than in one “right” way. The arts consistently engaged all students in complex and analytical cognitive processes, including and especially students who typically struggle with academic content.

## Percentage of Student Writing Responses Reflecting Analytic Interpretations of the Importance of the Subject Studied, by Type of Unit and by Student General Achievement Level

Student Achievement Level*	Non-Arts Units	Arts Unit	Increase in Performance
Highest achievement	44%	78%	77%
Medium achievement	44%	72%	64%
Lower achievement	33%	56%	70%
Average	37%	61%	70%

\* As identified by teachers when asked to select students who represented a range of competencies as traditionally measured in academic subjects

### Finding: Arts Integration Inspired Students to Pursue Further Learning Opportunities Outside of Their Classroom

During arts integration units, students found a wide variety of resources to help them in their learning. Artists, friends, work groups, and printed resources all found their way into students' lists of who helped them learn the most- these in addition to teachers and family members. In non-arts units, students only cited teachers and family as sources of help for learning. Students showed little motivation to pursue content beyond school during non-arts units:

*"I didn't want to learn anything else on my own. This was a school lesson and I learned it all at school."*  
(1st grade student)

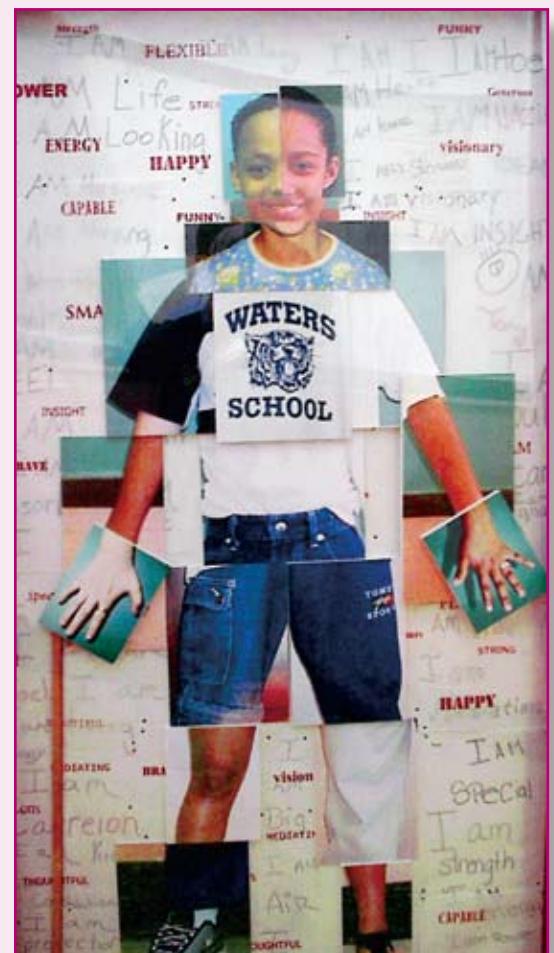
In contrast, during arts-integrated units, students showed significant interest in independent learning about academic content:

*"I read at home. There's a computer web site where there is a big huge book that I can find. I found the folktales that I want to read and I read them off the web site."* (1st grade student)

*"How the government went all together and how everything worked, and with the election going on, I wanted to learn about it more. Well, I would watch the news and talk about it with my parents. I would learn more and stuff that I never knew I would learn."*  
(3rd grade student)

### Conclusion

The arts and student attitudes toward learning: Contrary to how popular media frequently portrays youth, students in the study value learning. At the beginning of both non-arts and arts-integrated units, they consistently demonstrated interest in learning new content. However, by the end of both units, student attitudes toward their own learning showed dramatic differences. After the non-arts units, students often noted discouragement. After the art-integrated units, students typically showed increased interest in the subject matter, even pursuing information on the content during out-of-school time. These effects could have significant positive impact on students' general cognitive growth over time, particularly if students experience arts-integrated learning in their classrooms on a regular basis.





## CAPE's Mission

CAPE advances the arts as a vital strategy for improving teaching and learning by increasing students' capacity for academic success, critical thinking and creativity.

## CAPE's Vision

CAPE works toward a future in which:

- students are valued as creators of culture in our society;
- teachers, artists and students work collaboratively to develop and share innovative approaches to teaching and learning in and through the arts in our public schools;
- teachers, artists, school administrators and parents recognize the arts as a key element in transforming schools into vibrant, creative and successful learning communities;
- professional colleagues and partners regularly communicate and share their practices and research in order to continually improve and evolve the field of arts in education; and
- policy makers, business leaders and all citizens value the arts in education as essential to a just and equal society, a thriving economy and an inclusive democratic culture.



## CAPE's Position

### Improving Teaching and Learning through the Arts

CAPE convenes and guides a network of schools, artists, and arts organizations in co-developing and implementing innovative and effective approaches to teaching and learning in and through the arts.

## Solutions to Educational Challenges

### Generating New Knowledge about Effective Schools

CAPE is a learning organization, a living laboratory, in which teacher and artist practitioners partner with each other and with scholars and researchers to develop solutions to educational challenges in their schools, while they simultaneously study and document their practices to contribute new knowledge to the field of educational improvement at the practice, pre-service and policy levels.

### Critical and Creative Thinking

CAPE's approach engages the arts as an essential pathway for developing the critical and creative thinking skills needed by learners for success in the 21st century.

### Leading Innovation

CAPE's logic model (which includes long-term partnerships, arts learning integrated across the curriculum, and practitioner reflection on effective practice in partnership with formal researchers) contributes to the local, national and international discourse on re-visioning the role of the arts in effective public education.



The CAPE Research and Evaluation Series contributes new knowledge developed by CAPE programs in Chicago Public Schools to the field of arts and learning. These abstracts bring to the fore how arts integrated education, utilizing CAPE's methodology, can positively impact student, teacher and artist learning, and that the collaboration between the three imbues all participants with values that have effects extending beyond the classroom and their time in class.

CAPE's recursive methodology develops self-awareness in its participants – student, teacher and artist, alike. Because participants are more aware of what they are doing (and what they hope to achieve), they are able to adjust their practice as they work through the curriculum unit.

Through their collaborative efforts in melding core curriculum with artistic expression, the participants' whole minds (and often hearts) are engaged in class, and critical thinking and creativity no longer are treated as opposite modalities.

Students, teachers and artists become empowered during this process. The exhibition/performance output of CAPE's logic model allows students the chance to display their work in front of their peers (often the entire student body) and sometimes at-large in the community. Teachers are able to direct their own practice, and team-teaching with an artist allows them the freedom to expand their capacities as teachers. Artists are forced to examine their practice, and display and communicate it from a much more critical stance. This, in turn, enables them to approach their own work from a freshened perspective.

The formal research validates the action research participants' energies and outcomes, and when research results are communicated back to teachers and artists, offers them additional insights that further enrich their practice.

The Research and Evaluation Series is also being published to stimulate educational policy makers to re-envision the role of the arts in schools, to create truly effective public education that graduates life-long learners who excel in critical and creative thinking.

The full version of *How Arts Integration Supports Student Learning: Students Shed Light on the Connections* is available for download at [www.capeweb.org/demossrpt.pdf](http://www.capeweb.org/demossrpt.pdf) in PDF file format.



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She earned her Ph.D. from the University of Chicago, where she also worked for 7 years at the Consortium on Chicago School Research as Productivity Researcher on school improvement and reform. She has worked on a variety of research projects on school reform, from arts initiatives to charter schools to systemic efforts including the Annenberg project in Chicago.

She is co-editor of the *2004 American Education Finance Association Yearbook, Money, Politics, and Law: Intersections and Conflicts in the Provision of Educational Opportunity*, co-author of *Effective Partnering for School Change: Improving Early Childhood Education in Urban Classrooms*, and author of several articles and reports on change initiatives in schools. Her dissertation, *Political Dispositions and Educational Finance Equity: An Analysis of Court Decisions Across the United States*, was co-awarded the 2002 American Educational Research Association (AERA) Division L Policy and Politics Dissertation Award.