

ARTS FOR ACADEMIC ACHIEVEMENT:  
**Results from the  
1999-2000 Teacher Survey**

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**PREPARED FOR**  
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# Executive Summary

The purpose of the four-year Arts for Academic Achievement project is to transform teaching and learning through partnerships between schools and artists and arts organizations. The theory of action underlying the initiative is that when teachers and artists collaboratively develop instruction that integrates arts and non-arts disciplines, instruction in non-arts disciplines becomes more effective and student achievement increases.

Unlike arts integration initiatives that focus on partnerships as a way to restore *discipline-based* arts instruction to the curriculum, the purpose of the Arts for Academic Achievement project is to strengthen instruction and improve student learning in non-arts areas such as reading and science. In this project arts integration is not intended to replace the comprehensive, sequential arts instruction that is already provided by trained arts educators in the district. Instead, the project is based on the belief that students benefit from a curriculum that includes *both* disciplinary-based instruction in the arts and non-arts instruction that is enhanced by integrating the arts. The major issue of this project is not about which is better, disciplinary education in the arts or arts integration, but rather what, when, and how to use each in order to teach students most effectively.

This report is one in a series of reports based on research conducted throughout the Arts for Academic Achievement project by the Center for Applied Research and Educational Improvement at the University of Minnesota. The purpose of this report is to summarize the results of a teacher survey administered in Spring 2000, near the end of the project's second year of implementation. The survey was designed to gather information in areas such as: frequency of arts integrated instruction, what teachers and arts partners did together, teacher satisfaction with their arts partnership experiences, the impact of arts integration on teachers' work, and teachers' personal experiences in the arts.

Overall, 1209 teachers took the survey for a completion rate of 77%. Although ideally 100% of the teachers would have completed the survey, a completion rate of 77% indicates we can be fairly confident the results represent the experiences of all teachers in the project sites.

The results are organized around the following series of questions.

- How many teachers integrate the arts?
- Which disciplines are being integrated?
- How much professional development about the arts did teachers receive?
- What do teachers and arts partners do together to integrate the arts?
- What is the impact of integrating the arts, especially on student achievement?
- What factors facilitate arts integration?
- What concerns do teachers have about arts integration?

**How many teachers integrate<sup>1</sup> the arts?** Over two-thirds of the teachers (71%) report they integrated the arts into their students' lessons during the 1999-2000 school year. A comparison of responses by elementary teachers with responses by secondary teachers reveals that elementary teachers are significantly more likely to integrate the arts than secondary teachers – 77% versus 65%, respectively.

**Which disciplines are being integrated?** The area of English/Reading is most often integrated at both the elementary and secondary levels. Math is the discipline least likely to be integrated; only 10% of the elementary teachers who integrate the arts are integrating art and math and the rate in secondary schools is only slightly higher at 15%.

Next, we looked at which arts teachers were using to integrate with non-arts instruction. In elementary schools the literary arts are used most often, followed closely by music and visual arts. In contrast, secondary teachers who integrate the arts are most likely to use media arts. This difference may be caused at least in part by differences in the level of technology available in secondary schools compared with elementary schools.

**How much professional development about the arts did teachers receive?** Less than 10% of the teachers received “a lot” of professional development this year related to either teaching in an arts discipline or integrating the arts. Teachers who report having arts partners received significantly more professional development than those who do not<sup>2</sup>. Having an arts partner provides professional development through the relationship; it is a direct form of classroom-based teacher development, sometimes called job-embedded professional development, which research shows to be the most effective form of professional development. Having a partner may also stimulate teachers to reach out for more.

**What do teachers and arts partners do together to integrate the arts?** Almost one-third of the teachers (31%) said they worked with an arts partner this year to integrate the arts. Elementary teachers were more likely to have arts partners than secondary teachers (73% and 27%, respectively).

Arts partners did a variety of activities during their collaboration but they were more likely to provide activities or instruction for students than to collaborate with the teacher.

Teacher satisfaction with their arts partnership experiences was high. Overall, 55% rated their experiences as “excellent” and another third rated their experiences as “good”. Teachers did agree there are downsides to working with an artist, but this statement had the lowest average rating.

**What is the impact of integrating the arts?** Generally speaking, teachers said integrating the arts had a positive impact on their work. The impact was seen as most

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<sup>1</sup> The survey defined arts integration as instruction in which arts-related concepts and activities are infused with other academic area. Others may call this arts infusion or education through the arts.

<sup>2</sup> On a t-test of independent samples the probability was less than .0001 that this difference would be caused by chance.

positive when it came to getting the attention of students (student engagement) and staff (school's interest in and support of the arts). Teachers weren't as confident that these positive changes influenced student achievement; not quite half of the teachers said arts integration positively affected their students' achievement.

Teachers who have an arts partner are more likely to see a positive impact from arts integration. Teachers who said they integrated the arts "a lot" in a subject, especially the core academic areas, were much more likely to see a positive effect on achievement than those who integrated the arts to a lesser extent. It appears that a "critical mass" of arts integration may be needed to have an impact on student achievement.

Teachers with arts partners who co-developed curriculum or assessments, or shared ideas about teaching and learning with them, were more likely to see arts integration having a very positive impact on their students' academic performance. These same teachers were also the ones who were more likely to team-teach when the arts partner came into the room. Overall, the results suggest that arts integration is more likely to have an impact on academic achievement when there is close collaboration between the classroom teacher and the arts partner.

**What factors facilitate arts integration?** Some factors related to arts integration reside with the teacher. For example, teachers who say they are very interested in the arts say they integrate the arts into their students' lessons to a greater extent than do teachers who are not as interested in the arts.

The Arts for Academic Achievement project itself is responsible for other factors. The more professional development teachers have had in integrating the arts, the more they integrate arts into their lesson plans.

The amount of arts integration in a school was not related to the income level of the families served by the school. The percent of students eligible for free and reduced lunch at the four schools doing the most arts integration ranges from 21% to 91%.

**What concerns do teachers have about arts integration?** Generally speaking, the level of skepticism and worry about arts integration has been reduced over the course of the project. However, there are still some rough spots out there. The two big concerns in have to do with role and resources. Two-thirds of the teachers wonder how their role will change, and 20% of those are very concerned about it. Teachers also say they don't have enough material to integrate the arts, and over a third are very concerned about it.

The level of skepticism and worry about increasing the emphasis in the arts has been significantly reduced over the course of the project. Teachers report less concern about: lack of knowledge about the AAA program; concern about how their own role will change; skepticism that arts infusion is a better model than what currently exists; lack of time; and lack of equipment and resources<sup>3</sup>. The reduced level of concern suggests, as

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<sup>3</sup> Two other items did not change significantly: concern about managing an increase in arts education in the classroom, and belief that there are better ways to raise student achievement.

we anticipated, that effective implementation efforts result in a decrease in teacher concerns.

# INTRODUCTION

The purpose of the four-year Arts for Academic Achievement project is to transform teaching and learning through partnerships between schools and artists and arts organizations. The theory of action underlying the initiative is that when teachers and artists collaboratively develop instruction that integrates arts and non-arts disciplines, instruction in non-arts disciplines becomes more effective and student achievement increases.

Unlike arts integration initiatives that focus on partnerships as a way to restore *discipline-based* arts instruction to the curriculum, the purpose of the Arts for Academic Achievement project is to strengthen instruction and improve student learning in non-arts areas such as reading and science. In this project arts integration is not intended to replace the comprehensive, sequential arts instruction that is already provided by trained arts educators in the district. Instead, the project is based on the belief that students benefit from a curriculum that includes *both* disciplinary-based instruction in the arts and non-arts instruction that is enhanced by integrating the arts. The major issue of this project is not about which is better, disciplinary education in the arts or arts integration, but rather what, when, and how to use each in order to teach students most effectively.

Currently in its third year of implementation, the project has funded 44 sites, which represents 42% of the schools in the district. The majority of the sites are elementary schools (34) but three of the middle schools and seven high schools are also involved.

Arts for Academic Achievement is a “bottom-up” change effort; a team of interested teachers within a school initiates a project by designing a program of arts integration and arts partnerships that reflects the unique context of its school and community. Teams are required to link their program goals to school and district improvement plans, which include standards for student learning, but the project does not specify a curriculum framework or model for teacher-artist collaboration, nor does it stipulate which arts and non-arts disciplines should be included in the plan. As a result, a variety of art forms and non-arts disciplines are included in the project. To deepen the change process, teams are required to do an annual action research project related to how arts integration is affecting student achievement.

In one sense, each school site is a laboratory for how teachers and arts partners can work together to integrate arts and non-arts to improve teaching and learning. More than 100 arts partners, including arts organizations and individual artists in dance, theatre, visual arts, music and media are involved in the project, as well as certified visual arts and music teachers.

This report is one in a series of reports based on research conducted throughout the Arts for Academic Achievement project by the Center for Applied Research and Educational Improvement at the University of Minnesota. The purpose of this report is to summarize

the results of a teacher survey administered in Spring 2000, near the end of the project's second year of implementation. The survey was designed to gather information in areas such as: frequency of arts integrated instruction, what teachers and arts partners did together, teacher satisfaction with their arts partnership experiences, the impact of arts integration on teachers' work, and teachers' personal experiences in the arts.

## **Methodology**

During April and May 2000, members of the CAREI research team went out to each of the 35 project sites to administer the survey during a staff meeting. All teachers were asked to complete the survey even if they had not been directly involved in any project activities during the year. Teachers were informed that their responses would be kept confidential and the survey results would not be used to determine future funding. CAREI researchers collected the completed surveys before leaving to ensure confidentiality.

Overall, 1209 teachers took the survey for a completion rate of 77%. Although ideally 100% of the teachers would have completed the survey, a completion rate of 77% indicates we can be fairly confident the results represent the experiences of all teachers in the project sites.

Completion rates at individual schools varied from 53% to 100% and a complete listing is included in the Appendix. Although some caution is needed in interpreting site-level survey results from sites with completion rates in the range of 50-60%, in general we can assume that the site-level results adequately portray the experiences of all teachers in each site.

## RESULTS

### How many teachers integrate the arts?

The primary purpose of the survey is to determine how much teachers integrate the arts. Based on the definition shown below, over two-thirds of the teachers (71%) report that they integrated the arts into their students' lessons during the 1999-2000 school year.

*Arts integration* is instruction in which arts-related concepts and activities are infused with other academic areas. Others may call this arts infusion or education through the arts.

A comparison of elementary and secondary teachers' responses reveals that elementary teachers integrate the arts more often than secondary teachers – 77% versus 65%, respectively. This difference is not surprising given the results of research on school change generally, which clearly indicates that secondary schools face greater challenges to implementing a reform initiative than elementary schools. This discrepancy is also not unexpected for a project such as Arts for Academic Achievement because elementary teachers are expected to know how to teach a range of disciplines whereas secondary teachers specialize in one discipline.

The proportion of teachers integrating the arts varies considerably among the schools, a finding that is not unexpected given that the schools had different levels of previous experience with partnerships and arts integration at the start of the project. Among the 27 elementary schools in the project the proportion of teachers integrating the arts ranges from 49% to 92%. The range among the 8 secondary schools is slightly narrower, 51% to 82% of teachers in secondary schools report they are integrating the arts.

### How much do teachers integrate the arts?

To gain a picture of which non-arts disciplines teachers are integrating with the arts and the extent of integration, the survey asked how much the arts have been integrated into their students' lessons in nine non-arts disciplines<sup>4</sup>. To assess the overall extent of arts integration that occurred, regardless of which non-art area is under consideration, we created a scale called Total Arts Integration by adding up teachers' responses for each discipline. The possible values of the scale range from 1 to 27. To obtain a scale total of 27, a teacher would have had to indicate they were integrating the arts "a lot" into their instruction in all nine academic areas listed on the survey.

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<sup>4</sup> From this point on, our percentages are based on the subgroup of teachers who reported they had integrated the arts during the current school year, not all teachers who completed the survey. Teachers who did not integrate the arts at all were instructed to skip to a later section of the survey. This reduces the number of teachers by 29%, from 1196 to 850.

Among teachers who were integrating the arts, the mean Total Arts Integration score was 7.2. This score could result from several integration scenarios, such as: a teacher doing “a lot” of integration in two non-art disciplines and “very little” in a third, a teacher doing “some” integration in three non-art disciplines and “very little” in a fourth, or a teacher doing “very little” arts integration in seven disciplines.

Other data collected by CAREI through teacher interviews and classroom observations suggest that teachers are more likely to concentrate their arts integration in one area rather than do a sprinkling across many non-arts disciplines. This suggests that when interpreting scores on the Total Arts Integration scale, a scenario of greater integration with a few non-arts disciplines is a more likely explanation for a score than a scenario of less intense integration with more non-arts disciplines. This is also consistent with other data describing the amount of time teachers and artists need to collaboratively develop instruction; again, they would be more likely to focus on one non-arts discipline rather than several.

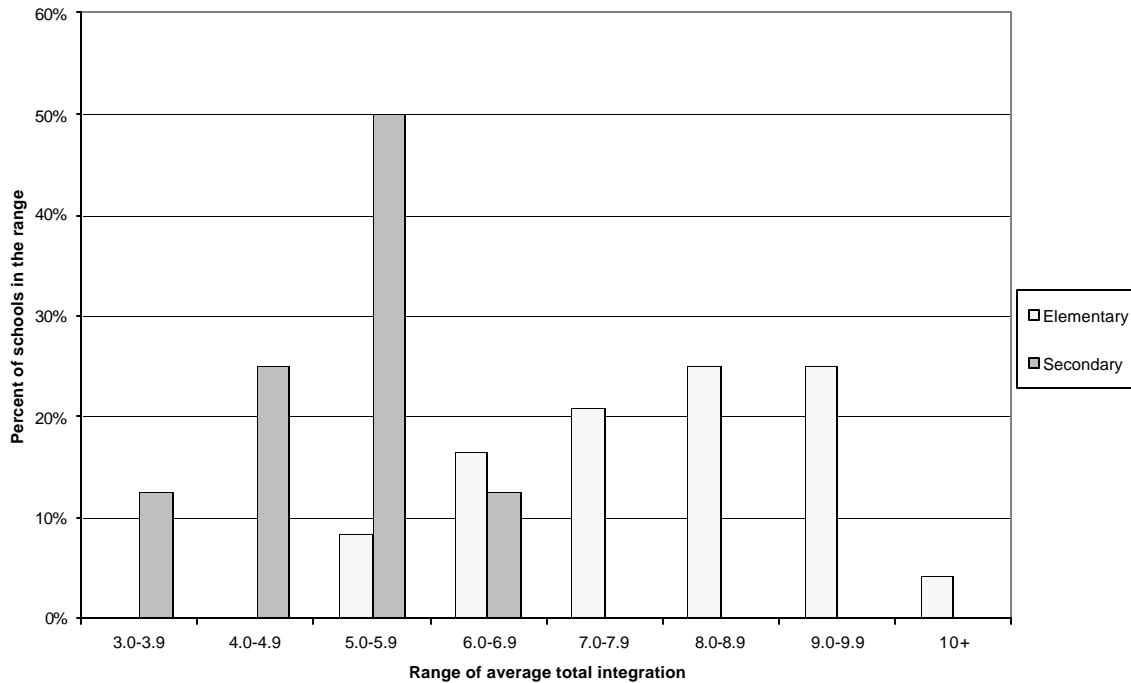
Just as more elementary than secondary teachers reported they were integrating the arts, the Total Arts Integration scores for elementary teachers are significantly<sup>5</sup> higher than the scores for secondary teachers. In both cases the scores ranged from 1 to 27 but the mean score for elementary teachers was 8.0 in contrast to a mean of 5.2 for secondary teachers. Because elementary teachers are responsible for teaching multiple subject areas whereas secondary teachers focus on a single discipline, we would expect the extent of integration to be lower in secondary schools because a single teacher has only one discipline option available for integrating with art.

Individual schools also vary in the considerably in the extent teachers are integrating the arts (See Figure 1). Among elementary schools the average Total Arts Integration score ranges from 5.8 to 10.1, which indicates that in the most active elementary school the average teacher was likely to be integrating three disciplines with the arts “a lot” and doing “very little” arts integration in a fourth discipline. In comparison, the average score in secondary schools ranges from 3.6 to 6.3, with an average teacher in the most active school likely to be integrating the arts “a lot” in two disciplines. The score differences among elementary schools and among secondary schools reflect the fact that at the start of the project some schools had more experience than others with integrating the arts and working with arts partners. In a later section of the report, we examine other factors that may be related to differences in how often schools integrate the arts.

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<sup>5</sup> On a t-test of independent samples the probability was less than .0001 that this difference would be caused by chance.

Figure 1: Average total integration for elementary and secondary schools



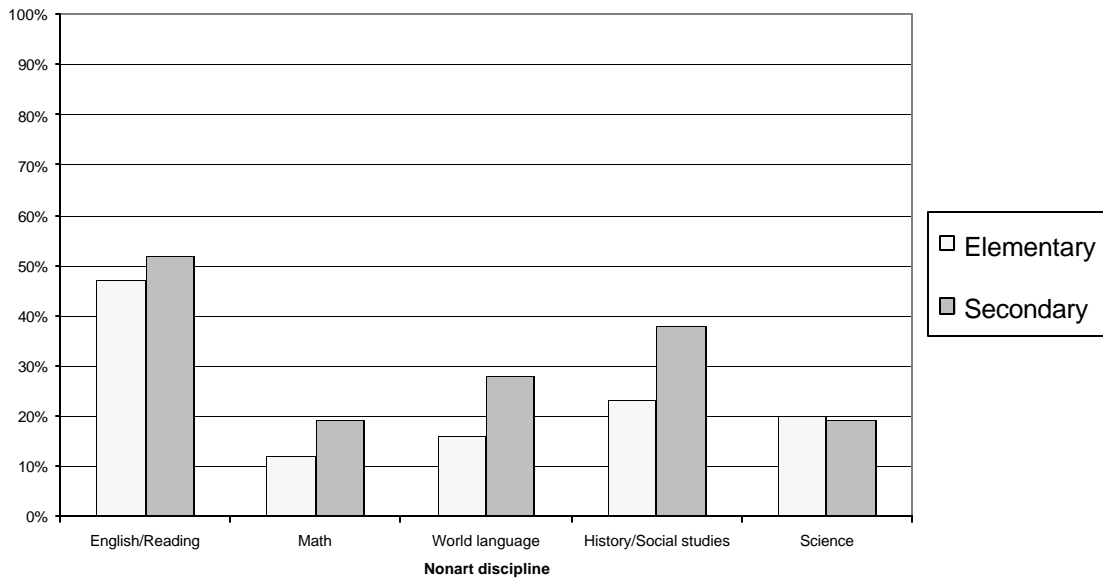
## Which disciplines are being integrated?

In this section, we take a more detailed look at the non-art disciplines in which teachers are using arts integration as an instructional strategy and then, which art forms are used most often.

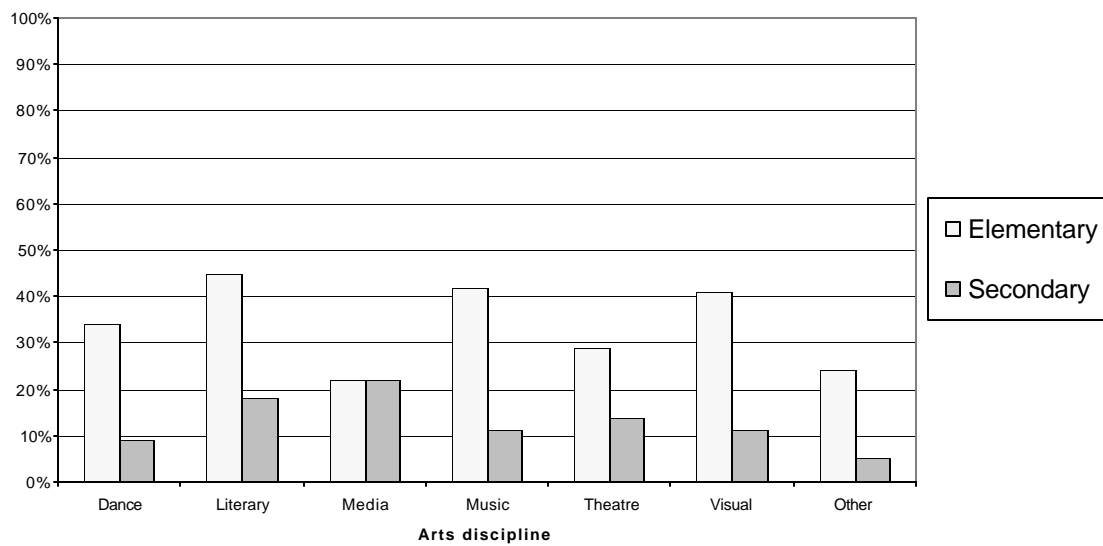
As an indicator of arts integration with specific academic disciplines we use the proportion of teachers reporting they integrate the arts “a lot” with a subject area. The area of English/Reading is most often integrated at both the elementary and secondary levels (See Figure 2). Of the elementary teachers who integrate the arts and teach English/Reading, 47% integrate the arts, the rate for secondary English/Reading teachers is higher, at 52%. Math is the discipline least likely to be integrated with the arts. Only 10% of the elementary math teachers integrate the arts “a lot” and the rate for secondary math teachers is slightly higher at 15%.

Next, we looked at which arts teachers were using to integrate with non-arts instruction. Figure 3 shows the proportion of teachers who integrated each art discipline more than ten times. In elementary schools the literary arts are used most often, followed closely by music and visual arts. In contrast, secondary teachers who integrate the arts are most likely to use media arts. This difference may be caused at least in part by differences in the level of technology available in secondary schools compared with elementary schools.

**Figure 2: Percent of teachers reporting "a lot" of integration**



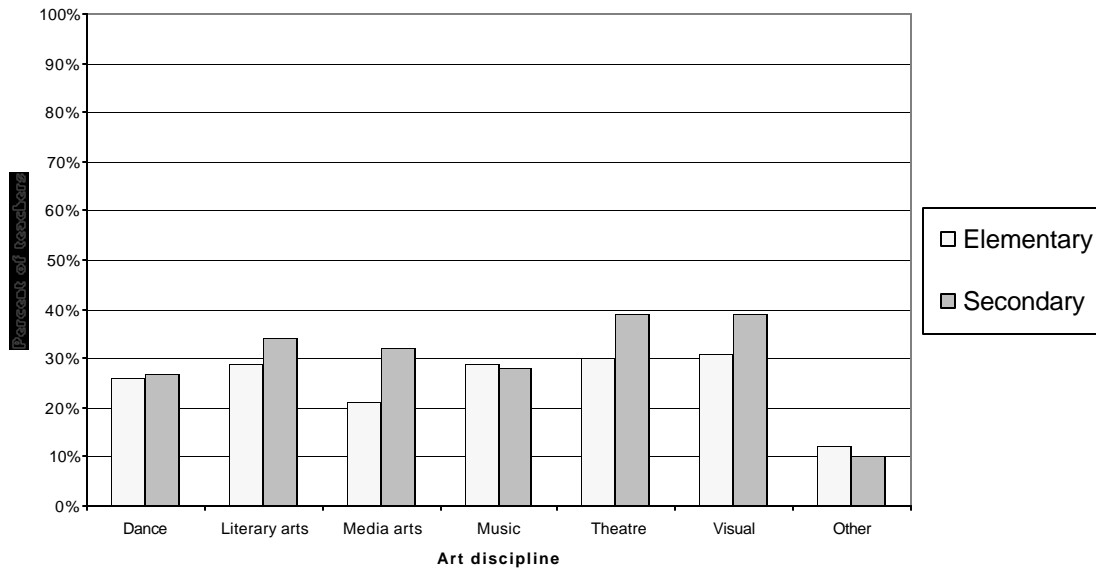
**Figure 3: Percent of teachers reporting arts discipline integrated more than ten times**



Teachers were asked to compare the 1998-1999 and 1999-2000 school years in how often their students received arts integrated instruction in specific disciplines. At

least one-fourth of the teachers reported their students received more arts integrated instruction during the 1999-2000 school year (See Figure 4). There were two exceptions – media arts at the elementary level and other arts. Teachers were most likely to report an increase in theatre and visual arts, although the results are similar among the disciplines.

**Figure 4: Percent of teachers integrating art more often in 1999-2000**



To provide a global comparison of how often students received arts-integrated instruction across the arts disciplines between the 1998-1999 and 1999-2000 school years; an Integration Change scale was constructed to summarize teacher responses across the seven arts disciplines. At both the elementary and secondary grade levels, almost half the teachers reported their students received arts-integrated instruction more often during the 1999-2000 school year. These increases document growth in the Arts for Academic Achievement project from the first year of implementation to the second.

**Table 1: Change from 1998-1999 to 1999-2000 school years in extent of arts integration.**

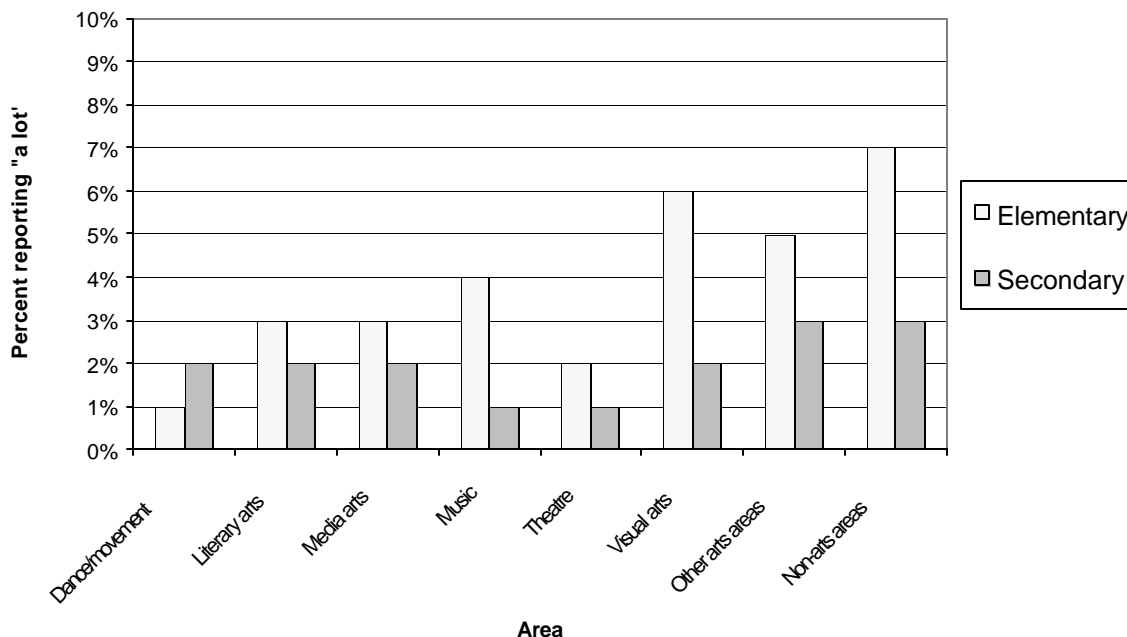
	<b>% Less Often</b>	<b>% No Change</b>	<b>% More Often</b>	<b>N</b>
Elementary teachers	14	38	48	358
Secondary teachers	15	36	49	104

We also looked for patterns in which arts and non-arts disciplines teachers were integrating. For example, do mathematics teachers tend to work with dance more often than history/social studies teachers, or do science teachers work more often with music than visual arts? No patterns emerged from these analyses. Not surprisingly, the literary arts are the most frequent choice of art discipline regardless of which non-art discipline the teacher is integrating. At the elementary level, however, math teachers who integrate the arts were just as likely to choose visual arts, as they were literary arts.

### **How much professional development about the arts did teachers receive?**

Less than 10% of the teachers received “a lot” of professional development this year related to either teaching or integrating the arts. As shown in Figure 5, teachers were most likely to receive professional development in how to integrate the arts with non-arts areas, a likely reflection of the professional development opportunities provided by the project.

Figure 5: Teacher professional development



Teachers who report having arts partners received significantly more professional development than those who do not<sup>6</sup>. Having an arts partner provides professional development through the relationship; it is a direct form of classroom-based teacher development, sometimes called job-embedded professional development, which research shows to be the most effective form of professional development. Having a partner may also stimulate teachers to reach out for more.

Elementary teachers report significantly more professional development than secondary teachers<sup>7</sup>. This is likely to be caused, in part, by the higher proportion of elementary teachers who have arts partners (as will be shown later in this report).

There is no significant change in respondents' reports about the amount of professional development they received about the arts from the 1998-1999 surveys to the 1999-2000 surveys.<sup>8</sup> This is not surprising. The project has not, because of its constant resources, been able to expand professional development for all teachers in significant ways. It does, however, mean that teachers have not been motivated to seek additional professional development on their own, outside of what is offered through the project and

<sup>6</sup> On a t-test of independent samples the probability was less than .0001 that this difference would be caused by chance.

<sup>7</sup> On a t-test of independent samples the probability was less than .0001 that this difference would be caused by chance.

<sup>8</sup> On a t-test of independent samples the probability was less than .01 that this difference would be caused by chance.

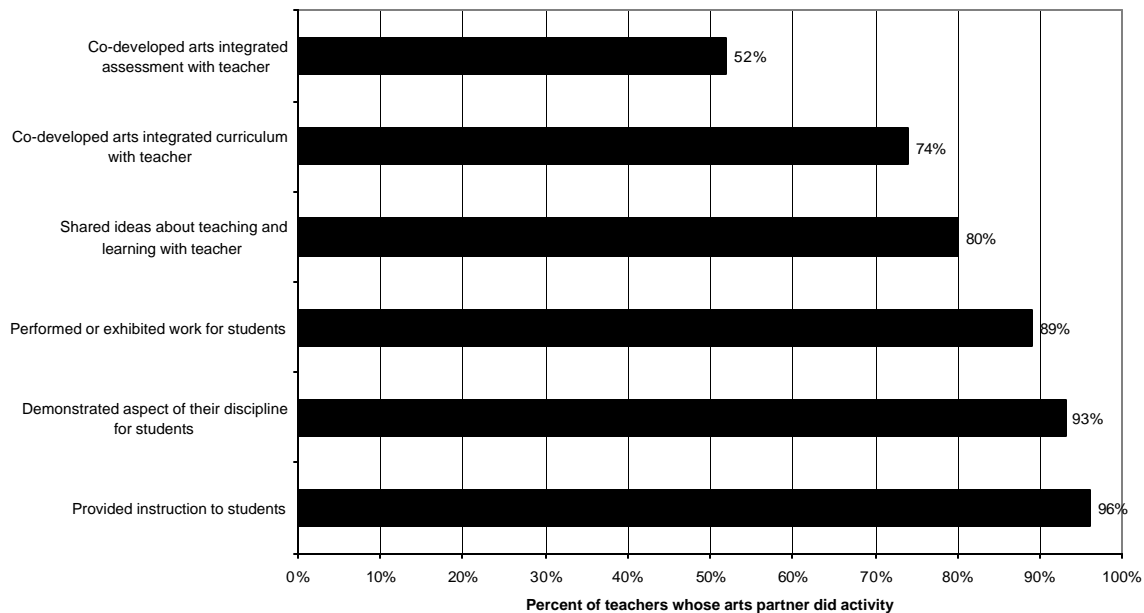
that schools have not used their site-level staff development funds for this purpose. Again, this is likely due to the lack of increase easy availability of this kind of professional development.

## What do teachers and arts partners do together to integrate the arts?

Almost one-third of the teachers (31%) said they worked with an arts partner this year to integrate the arts. About half of them said they worked with more than one partner; most typically, this meant working with two or three different partners.<sup>9</sup> Elementary teachers were more likely to have arts partners than secondary teachers (73% and 27%, respectively).

Arts partners did a variety of activities during their collaboration. As shown in Figure 6, they were more likely to provide activities or instruction for students than to collaborate with the teacher. This is not unexpected because collaborating with the teacher to co-develop curriculum or assessment, or to share ideas about teaching are more complex tasks that require more time. The lower frequency of co-development relative to providing instruction could also reflect the reality that teachers and artists develop multiple activities in a single planning session.

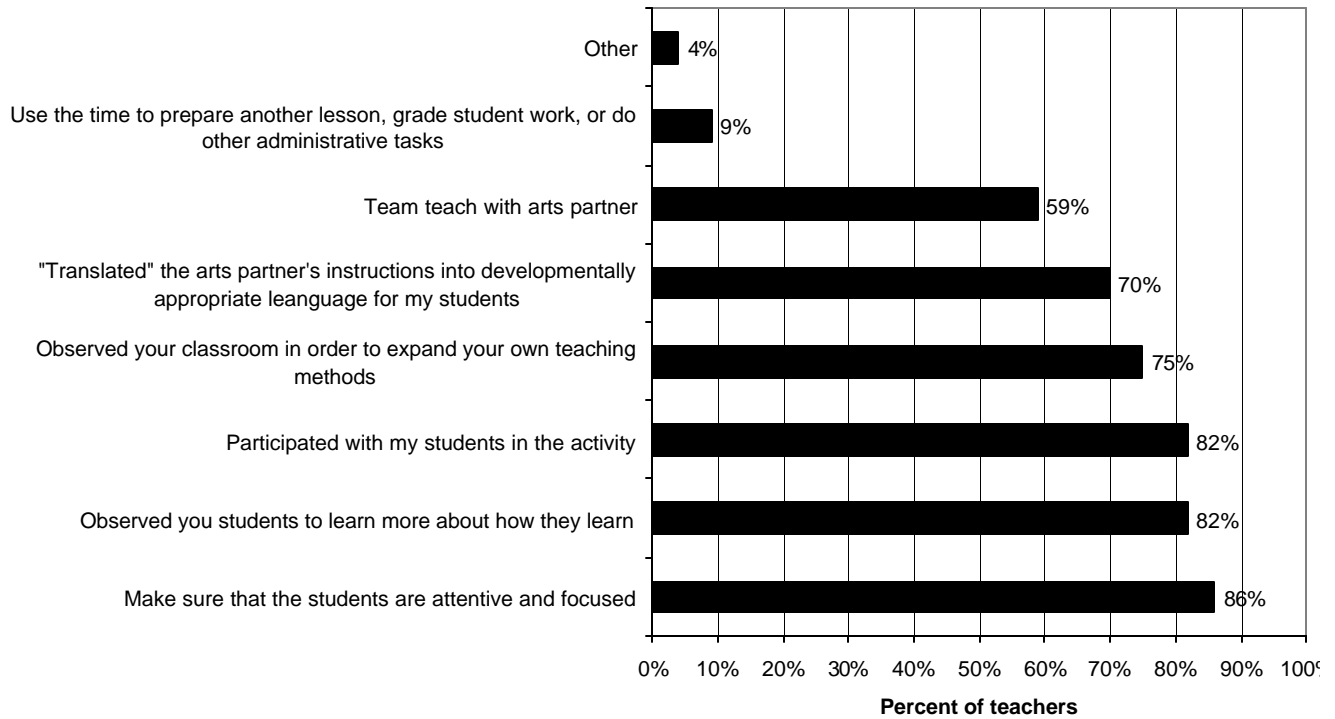
Figure 6: Arts partner activities



<sup>9</sup> If teachers worked with multiple people from one arts organization they were instructed to count this as one arts partner.

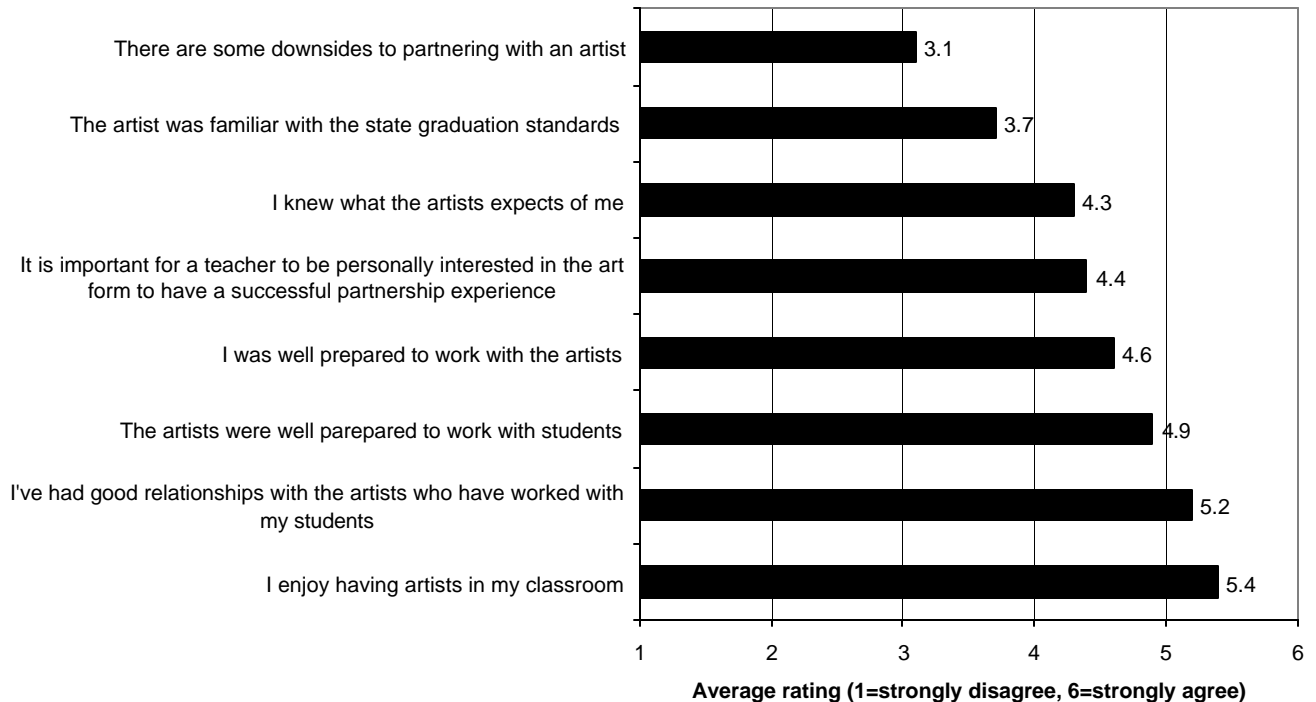
We were also curious about the roles teachers play when the arts partner is working in their classroom. Ideally, the teacher and artist would be team teaching and 59% of the teachers reported this was the case for them. Teachers were more likely to do other activities, however, such as making sure the students are attentive and focused (See Figure 7). Overall the results indicate that even if they weren't team teaching the majority of teachers were participating in ways that would increase their knowledge of their students or make the activity go smoothly.

**Figure 7. Teacher roles when partner is in classroom**



Teacher satisfaction with their arts partnership experiences was high. Overall, 55% rated their experiences as “excellent” and another third rated their experiences as “good”. Figure 8 shows teacher agreement with statements about several aspects of the partnership experience. On a scale from 1 to 6, where 1 indicates “strongly disagree” and 6 indicates “strongly agree”, the average rating for the statement “I enjoy having artists in my classroom” was 5.4. Teachers also gave high ratings to how well prepared the artists were to work with students and their own relationship with the artists.

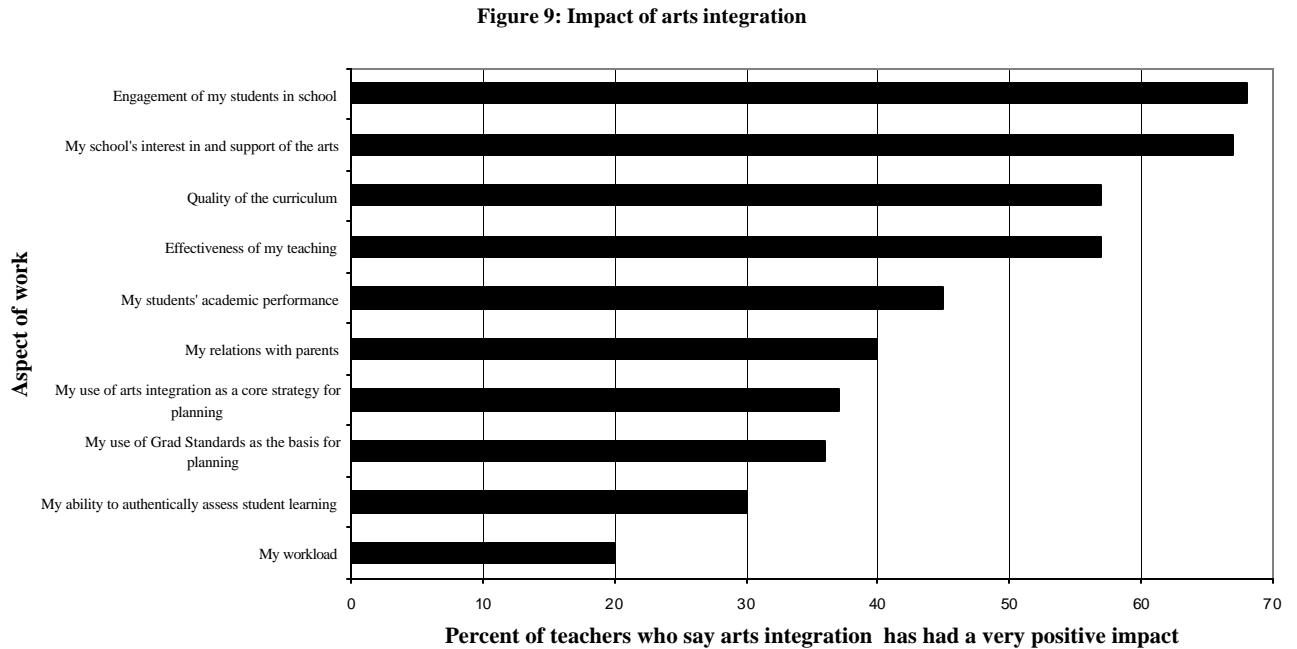
**Figure 8: Satisfaction with partnering experience**



Teachers did agree there are downsides to working with an artist, but this statement had the lowest average rating. Teachers also felt it was important for a teacher to be personally interested in the art form to have a successful partnership experience. This has implications for future partnerships, matching teachers to art forms and preparing teachers that there will be some downsides even if overall the experience is good.

## What is the impact of integrating the arts?

Generally speaking, teachers said integrating the arts had a positive impact on their work. Figure 9 shows the percent of the staff that saw a very positive impact for each area.



The impact was seen as most positive when it came to getting the attention of students (student engagement) and staff (school's interest in and support of the arts). Other areas positively affected were effectiveness of my teaching and quality of the curriculum. Teachers weren't as confident that these positive changes influenced student achievement; not quite half of the teachers said arts integration positively affected their students' achievement.

Using arts integration as a core strategy for instructional planning was less likely to be seen as positively affected by arts integration. Finding time for planning is clearly an issue for many teachers, as we will see in the next section, but teachers may also not yet know how to use arts integration as a strategy. The only aspect of work related to school level was school interest and support; teachers report much more at the elementary level.

Teachers who have an arts partner are more likely to see arts integration positively affect their school's interest in the arts, the engagement of their students, the effectiveness of their own teaching, and perhaps most importantly, their use of arts integration when planning instruction.

Comparisons of the 1998-99 and 1999-2000 surveys indicate that there is a significantly increased impact in three areas: The quality of the curriculum, the school’s interest in and support of the arts, and student academic performance. Although the differences are not large, they reflect teachers’ beliefs that the increased emphasis on the arts affects the school, the content of what is taught, and student learning. While this is not an “objective” measure of change, it corresponds to information that has been gathered from other sources (observations, interviews). The forthcoming student impact analysis will be an additional test.

## **ARTS INTEGRATION AND STUDENT ACHIEVEMENT**

In a future report we will be looking at the relationship between arts integration and student achievement. Because this relationship is complex, we wondered if there were any patterns in the teacher survey that might help us better understand this relationship. For example, who are the teachers who said that the increased emphasis on arts integration had a very positive impact on their students’ academic performance?

Teachers who said they integrated the arts “a lot” in a subject, especially the core academic areas, were much more likely to see a positive effect on achievement than those who integrated the arts to a lesser extent. It appears that a “critical mass” of arts integration may be needed to have an impact on student achievement.

**Table 2: Teachers who integrate arts “a lot” are more likely to say arts integration positively affects their students’ academic achievement.**

<b>Subject</b>	<b>Amount of Arts Integration in the Subject</b>	
	<b>"Some"</b>	<b>"A lot"</b>
Reading/Language Arts	35%	56%
Math	41%	73%
Science	43%	65%
Social Studies	38%	66%
World Language	41%	51%
PE/Health	46%	64%

Teachers with arts partners who co-developed curriculum or assessments, or shared ideas about teaching and learning with them, were more likely to see arts integration having a very positive impact on their students’ academic performance. These same teachers were also the ones who were more likely to team-teach when the arts partner came into the room. Tables 3 and 4 show the extent arts partners and teachers did various activities in the classroom. Those activities associated with seeing arts integration as having a very positive impact on student achievement are marked with an asterisk. Overall, these patterns suggest that arts integration has an impact on academic achievement when there is close collaboration between the classroom teacher and the arts partner.

**Table 3: Activities performed by arts partners.**

<b>Done by arts partner</b>	<b>5 or more times</b>
Provided instruction to students	49%
Shared ideas about teaching*	31%
Demonstrated an aspect of their work	29%
Co-developed arts integrated curriculum*	22%
Performed their art for students	14%
Co-developed arts integrated assessment*	10%

\*Statistically significant at .05 level

**Table 4: Activities performed by teachers when arts partner is present.**

<b>Done by teacher (when arts partner present)</b>	<b>Very likely to do it</b>
Made sure students are attentive	83%
Observed students to see how they learn	69%
Participated with students in the activity	68%
Observed arts partner to expand teaching methods	61%
Team taught with arts partner*	45%
“Translated” arts partner’s directions	45%
Used time to do other classroom work	2%

\*Statistically significant at .05 level

## What factors facilitate arts integration?

New school initiatives like arts integration need the support of the principal and the program coordinator if they are to be successful. Our interviews are full of examples of school leaders setting expectations, providing resources, and otherwise giving support to teachers integrating the arts into their instruction.

Some factors related to arts integration reside with the teacher. For example, are teachers who consider themselves interested in the arts generally more receptive to the idea of arts integration? Table 5 shows that the vast majority of teachers say they are at least “somewhat interested” in the arts, with little difference between elementary and secondary teachers.

**Table 5: Interest in the arts.**

<b>Level of Interest</b>	<b>Elementary Teachers</b>	<b>Secondary Teachers</b>
Not at all interested	1%	2%
Not very interested	3%	3%
Somewhat interested	36%	43%
Very interested	60%	53%
N	875	318

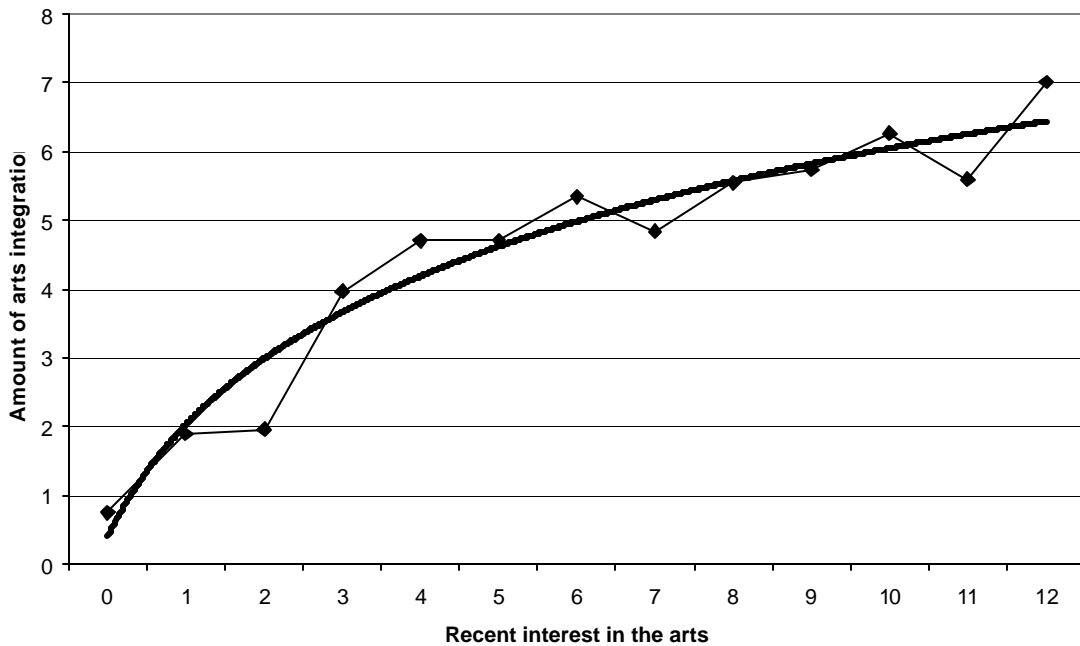
Teachers who say they are very interested in the arts say they integrate the arts into their students' lessons to a greater extent than do teachers who are not as interested in the arts. This trend is true in each of the core subjects, Reading/English, Math, Social Studies, and Science (See Table 6). The p. value represents the probability that there is no real difference between the two groups. The last column in Table 6 gives the number of teachers who answered the item. Teachers very interested in the arts are also more likely to call their experience with an arts partner excellent.

**Table 6: Teachers who say they integrate arts into subject “a lot” tend to be very interested in the arts.**

<b>Subject</b>	<b>Less than "Very Interested" in arts</b>	<b>"Very Interested" in arts</b>	<b>p.</b>	<b>Total</b>	<b>N</b>
Reading/Lang. Arts	35%	56%	0.00	48%	711
Math	9%	16%	0.00	13%	618
History/Soc. Stud	17%	31%	0.00	26%	577
Science	11%	27%	0.00	20%	577
World Language	14%	21%	0.15	18%	356
Health/PE	12%	14%	0.85	13%	280

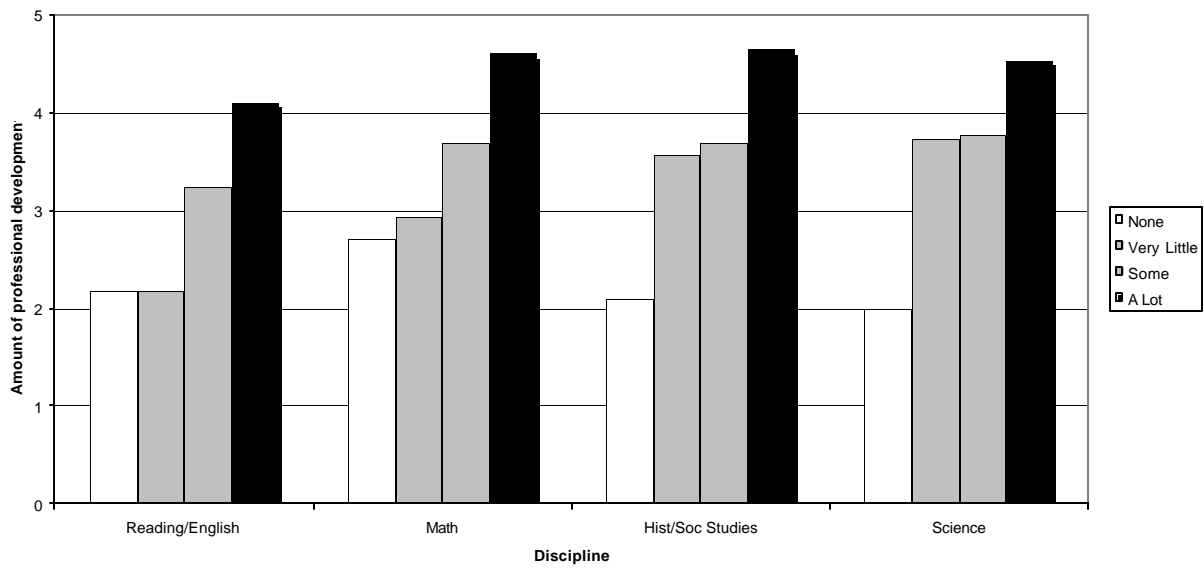
If we expand the concept of interest in the arts to include recent attendance at arts shows and performances, and look how it is related to a teacher's arts integration across all subjects, we get the figure below. Figure 10 tells us that once we get beyond a bare minimum of interest in the arts, the more interest teachers have in the arts, the more they are involved in arts integration. Like the chicken and the egg puzzle, we don't know to what extent interest in the arts makes arts integration attractive and to what extent arts integration stimulates interest in the arts. No doubt they both occur.

Figure 10: Teachers' recent interest in the arts and amount of arts integration



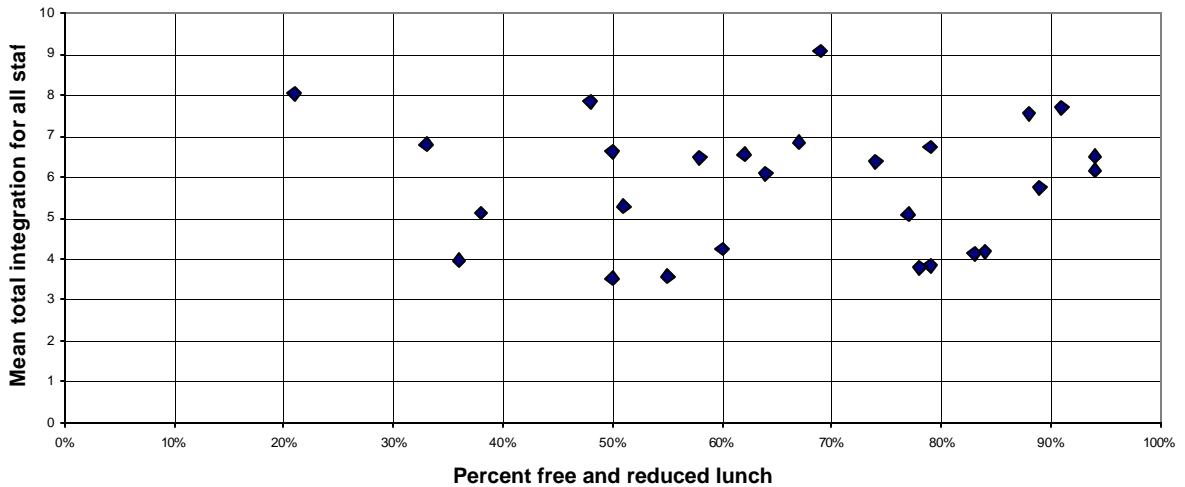
The Arts for Academic Achievement project itself is responsible for other factors. The more professional development teachers have had in integrating the arts, the more they integrate arts into their lesson plans (See Figure 11). For example, teachers who integrated arts into Reading/English “a lot” said they have the equivalent of “some” professional development in two arts areas while those who didn’t integrate arts into Reading/English had the equivalent of “some” professional development in one arts area or “very little” in two arts areas.

**Figure 11: Professional development related to extent art is integrated into a discipline**



The amount of arts integration in a school was not related to the income level of the families served by the school. In Figure 12 each school is represented by a dot that indicates both the percent of its students eligible for free or reduced lunch and the amount of arts integration in the school. The percent of students eligible for free and reduced lunch for the four schools doing the most arts integration (approximately a mean total integration of 8 or more) was 21%, 48%, 69% and 91%.

Figure 12: Amount of arts integration in a school is not related to the percent of students eligible for free & reduced lunches



The amount of arts integration in a school is also not related to the general level of academic achievement of its students.

### What concerns do teachers have about arts integration?

Generally speaking, the level of skepticism and worry about arts integration has been reduced over the course of the project. However, there are still some rough spots out there. Table 7 shows the percent of teachers who say seven statements are very or somewhat true for them. The table also gives the percentage of those teachers who are very concerned about the problem suggested by the statement.

The two big concerns in this list have to do with role and resources. Two-thirds of the teachers wonder how their role will change, and 20% of those are very concerned about it. Teachers also say they don't have enough material to integrate the arts, and over a third are very concerned about it.

**Table 7: Concerns teachers have about how they are affected by arts integration.**

<b>Concern</b>	<b>% Very or Somewhat True</b>	<b>% of these who are Very Concerned</b>
I'd like to know how my role will change with more art in curriculum	64%	20%
Materials and equipment I need are not always available	63%	37%
How are goals of AAA better than what we have now?	58%	
I have limited knowledge about program to increase arts in curriculum	40%	14%
I'm concerned about managing an increase of arts activities in my class	38%	
I don't have time to increase arts in curriculum	35%	22%
I know of other approaches that might work better than arts integration	27%	

The level of skepticism and worry about increasing the emphasis in the arts has been significantly reduced over the course of the project. Teachers report less concern about: lack of knowledge about the AAA program; concern about how their own role will change; skepticism that arts infusion is a better model than what currently exists; lack of time; and lack of equipment and resources<sup>10</sup>. The reduced level of concern suggests, as we anticipated, that effective implementation efforts result in a decrease in teacher concerns.

<sup>10</sup> Two other items did not change significantly: concern about managing an increase in arts education in the classroom, and belief that there are better ways to raise student achievement.