Longitudinal Evaluation Report
for J. Paul Getty Museum's
Art Together:
A Getty Museum and School Multi-Visit Program

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EXECUTIVE SUMMARY  
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In 2010, the Education Department at the J. Paul Getty Museum initiated a multiple-visit program for fourth grade students called Art Together. The first year of the program took place in the winter and spring of 2010 with the goals of increasing students’ understanding of the role of art museums and why art museums are important; to teach students how to navigate and learn in art museums; and to positively affect students’ perceptions of art museums.

Museum staff collaborated with evaluation consultants to conduct a formative evaluation of the program to address how well participants learned the purpose, values, and skills of navigating a museum; expanded their knowledge about art; and improved their perception of the museum as a place of fun and learning. Three evaluation tools were implemented including a free-write exercise, a bubble map, and a plan-a-tour exercise. Data was gathered from a treatment group made of students who participated in the program and a control group of students who participated in a single museum visit. The results of this study strongly suggest that the Art Together program is effective in reaching its goals. The formative evaluation results specifically suggest that treatment students increased their ability to analyze works of art and showed greater expansion in their ability to communicate ideas about the function and importance of art museums.

Education Department staff initiated a longitudinal evaluation in December 2010 to continue to track program participants. The evaluation addresses the longitudinal affect of the program in the following areas:

1) To what degree does participation in this program help students “learn to learn” in a museum? This involves learning the purpose, values, and skills related to navigating through a museum.

2) To what degree does participation in this program enable students to gain or expand knowledge about how to learn about, learn from, and be inspired by art?

3) To what degree does participation in this program change or enhance students’ perception of the museum as a place of fun and learning?
The formative evaluation was based on two small studies that included a treatment/comparison group study with fourth grade students and a series of interviews with Art Together families. The longitudinal study follows the format of the original treatment/comparison study by revisiting students from Palms Elementary (treatment) and Charnock Road Elementary (comparison) who participated in the pilot year of the Art Together program in 2010. Students at both schools completed a free-write activity, a bubble map, and a questionnaire.

**Main Findings**
The results of the longitudinal evaluation suggest that treatment students continue to display a greater ability in some of the concepts and skills that are focused on in the Art Together curriculum than comparison students.

Treatment students continued to show greater competency in their ability to analyze a work of art than comparison students and showed particular strength in the area of description. They also continued to show a higher ability to articulate numerous concepts about the purpose and function of art museums. When describing their visit(s) to the museum, treatment students included more details about works of art and memories of their experiences at the museum as compared to the responses given by comparison students.

63% of Palms students attended the culminating event at the end of the program and moreover, 36% self-selected to return again to the museum. This finding points to the pattern of behavior that was noted in the formative evaluation which suggests that participation in Art Together increased students' interest in art and art museums; and the J. Paul Getty Museum in particular.

**Recommendations**
Treatment students appear to have formed strong and lasting impressions of the J. Paul Getty Museum and have a broader appreciation of the purposes and functions of art museums. The following recommendations are intended to support specific program goals:

An important component of the Art Together program is to increase students' ability to learn from works of art and students are given multiple opportunities to discuss and orally analyze works of art throughout the program. If increased competency in analysis is a long-term program goal, evaluation would be more effective, and may show even greater differences between treatment and control groups, if evaluation measures were more directly aligned with current program activities. To measure growth in spoken analysis future evaluation efforts could focus on methodologies that study student conversations about works of art rather than student writing.
To support students in developing their ability to think about works of art, increase modeling and instruction in the four dimensions of the Feldman Art Criticism model whenever possible. When facilitating conversations about works of art museum educators can elicit descriptive details, encourage students to support their opinions, and ask questions that will help students expand their thinking and their overall fluency.
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Introduction

In 2010 the Education Department at the J. Paul Getty Museum initiated a multiple-visit program for fourth grade students called Art Together. The first year of the program took place in the winter and spring of 2010 with the goals of increasing students' understanding of the role of art museums and why art museums are important; to teach students how to navigate and learn in art museums; and to positively affect students' perceptions of art museums.

Museum staff collaborated with evaluation consultants to conduct a formative evaluation of the program to address how well participants learned the purpose, values, and skills of navigating a museum; expanded their knowledge about art; and improved their perception of the museum as a place of fun and learning. Three evaluation tools were implemented including a free-write activity, a bubble map, and a plan-a-tour exercise. Data was gathered from a treatment group made of students who participated in the program and a control group of students who participated in a single museum visit. The results of this study strongly suggest that the Art Together program is effective in reaching its goals. The formative evaluation results specifically suggest that treatment students increased their ability to analyze works of art and showed greater expansion in their ability to communicate ideas about the function and importance of art museums.

Education Department staff initiated a longitudinal evaluation in December 2010 to continue to track program participants. The evaluation addresses the longitudinal affect of the program in the following areas:

1) To what degree does participation in this program help students “learn to learn” in a museum? This involves learning the purpose, values, and skills related to navigating through a museum.
2) To what degree does participation in this program enable students to gain or expand knowledge about how to learn about, learn from, and be inspired by art?
3) To what degree does participation in this program change or enhance students' perception of the museum as a place of fun and learning?
Methodology

The formative evaluation was based on two small studies that included a treatment/comparison group study with fourth grade students and a series of interviews with Art Together families. The longitudinal study follows the format of the original treatment/comparison study by revisiting students from Palms Elementary (treatment) and Charnock Road Elementary (comparison) who participated in the pilot year of the Art Together program in 2010.

Museum staff selected Palms Elementary (Palms) to participate in Art Together for several reasons. The primary reason for selecting Palms was its status as a Title 1 school with a diverse student population. 39% of students are English Language Learners with over 14 languages spoken at home. 59% of Palms students are Latino and 18% are African American.

Charnock Road Elementary (Charnock), the school selected as the comparison school, has a similar demographic breakdown and percentage of English Language Learners, and is also a Title 1 school.

Evaluation Tools and Analysis
The evaluation tools administered for the longitudinal study include free-write responses to a work of art from the permanent collection, a bubble map activity that asks students to respond to three questions about art museums, and a questionnaire that asks students to describe what they remember about their visit to the museum. These measures were administered to students at Palms approximately seven months (one academic year) after participating in the Art Together program as fourth graders and students at Charnock who visited the J. Paul Getty Museum one time on a single-visit school tour as fourth graders. All students are now in fifth grade. 22 student from Palms and 16 students from Charnock completed each measure.

Free-Write Activity
Museum Educators Kelly Williams and Ami Davis visited Palms on December 3, 2010 and Charnock on January 28, 2011 to conduct the free-write activity. Students were shown a reproduction of the painting Storm on a Mediterranean Coast and asked to respond to the following question: “What is going on in this picture?” Williams and Davis followed the protocol developed for the formative evaluation, please see Appendix A.

1. The data gathered during the family interviews was not analyzed statistically but was looked at qualitatively as related to the positive change in students’ perceptions about art museums resulting from their participation in the Art Together program.
2. The free write and bubble map activities were developed and administered as part of the formative evaluation, the questionnaire was newly implemented as part of the longitudinal evaluation.
3. During the formative evaluation, 20 students from Palms and 15 from Charnock completed the bubble map; 16 students from Palms and 13 from Charnock completed the free write.
Student responses were coded according to a rubric based on Edmund Burke Feldman’s Art Criticism Model, which includes the following categories:

**Description**—identification of people, places, or things in the painting. Student comments in this dimension included: “I see a lighthouse.” “The ocean.” “Wrecked boats.”

**Analysis**—attention to the relationship or properties of things in the painting. Comments included: “The blue sky fighting with the dark clouds.” “Wind is blowing.” “Rough waves.”

**Interpretation**—speculating on the meaning of things and the relationships in the painting, such as creating a story about what is represented in the painting. Student responses included: “I see people struggling to get to shore.” “The people on the ship went overboard.” “People were sailing and a hurricane came in.”

**Judgement**—providing an evaluation or statement of personal preference for the painting. Selected responses in this dimension included: “Very realistic.” “The storm looks scary.”

A count was made of the number of times students used any of the four ways of thinking to talk about the painting. A class average was calculated for each dimension to determine the average fluency for each approach. An overall fluency average, which combined all four dimensions, was also calculated. Fluency averages were analyzed statistically to determine if the differences between schools could be due to the continued affects of participation in the Art Together program.

**Bubble Map Activity**
During the same visit, students at Palms and Charnock were also asked to respond to three questions on a bubble map: “What is an art museum?,” “Why are art museums important?,” and “What can you see and do in an art museum?” Williams and Davis followed the protocol developed for the formative evaluation, please see Appendix B. Refer to Appendix C for the bubble map form and Appendix D for a sample of a completed bubble map. Student responses were scored based on the number of concepts students listed for each question (fluency) and on how they expanded upon and supported their concepts about art museums (ideas). See figure one for the scoring rubric.
Fluency | Ideas
--- | ---
0 = no concepts | 0 = circular/limited support
1 = one concept listed | 1 = support beyond fun or cool
2 = two or more concepts listed | 2 = support with detail

Figure One: Scoring Rubric for Bubble Map Activity

The individual fluency and ideas scores were averaged and analyzed statistically to determine if the differences between scores could be attributed to the continued affect of participation in the Art Together program.

**Questionnaire**
During the same visit, Williams and Davis administered a questionnaire to determine whether students had returned to the museum after the program and to assess what students remembered about their visit(s) to the J. Paul Getty Museum. Student responses were coded and counted. See Appendices E and F for the full questionnaires.

**Results and Discussion**

**Free-Write Activity Results**
Free-write results from the formative evaluation suggested that the Art Together program is effective at increasing students' ability to analyze works of art. In particular, after participating in the program, Palms (treatment) students showed a greater degree of change pre-to-post visit in their thinking about a work of art in both description and analysis when compared to students from the comparison group. The free-write activity was administered to the same groups of students approximately seven months later to determine if the treatment students continue to show a higher competency in this area.

Figure two illustrates the overall fluency averages from the longitudinal evaluation for Palms and Charnock and figure three compares scores across the four dimensions of the Feldman Rubric. Figure four shows a comparison of the post-to-longitudinal assessment scores for Palms, which reflects a significant decrease in overall fluency and analysis. Analysis is an area where Palms students excelled in the formative evaluation.\(^4\)

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\(^4\) The increase in interpretation scores post-to-longitudinal is not statistically significant.
Although Palms’ overall fluency score dropped in the post-to-longitudinal comparison\(^5\), this score remains significantly higher than for Charnock students in the longitudinal study (figure two). In addition to higher fluency scores, Palms students also showed a significant difference in their use of description when compared to Charnock students (figure three). These results indicate that while students’ ability to think critically in some of the Feldman dimensions have decreased seven months after participating in the program, Palms students continue to display an increased ability to analyze works of art when compared to student performance at Charnock.\(^6\) The difference is statistically significant. That students did not show any increase or change in their thinking in the dimension of judgement may be due to age and development. Critical thinking of this type generally develops with increased instruction and as children get older.

\(^5\) Palms’ overall fluency score dropped from the post-program score of 8.65 to the longitudinal score of 6.45. This change is statistically significant.

\(^6\) It is interesting to note that Charnock scores in fluency and analysis increased significantly from post-to-longitudinal assessments, however, their average fluency scores remain lower overall.
Figure Three: Longitudinal Comparison of Palms and Charnock Free-Write Activity Scores
(Scores are averages.)

Figure Four: Palms Post-to-Longitudinal Comparison of Free-Write Scores
(Score are averages.)
**Bubble Map Activity Results**

Data gathered by the bubble map activity in the formative evaluation showed that Palms students developed a greater understanding of the function and importance of art museums as compared to Charnock students. Museum staff administered the bubble map activity approximately seven months after students had participated in the program to study whether treatment students continue to show greater ability to address concepts about the function of art museums and why they are important.

![Bubble Map Activity Results](image)

**Figure Five: Comparative Analysis (longitudinal) of Bubble Map Question One, “What is an art museum?” (Scores are average.)**

Fluency and ideas scores in the longitudinal measures varied by school for all three questions on the bubble map. Significant results are seen in the difference in fluency scores for the questions, “What is an art museum?” and “What can you see or do in an art museum?” Figures five and six illustrate the comparison between fluency and ideas scores for both schools on these questions. Palms students listed a higher number of concepts in response to these questions than Charnock students and the difference is statistically significant. These results suggest that Palms students continue to show greater understanding of the function of art museums when compared to Charnock students. The data also show that Palms students have not maintained a higher ability to expand upon and support their ideas, which was seen in the formative evaluation. This suggests that while Palms students have retained a broad understanding of the role of art museums, their ability to explain their ideas in detail seems to have decreased one academic year after their participation in the program.
Questionnaire Results

Museum staff also administered a questionnaire that was developed for the longitudinal study. Students were asked to describe what they remembered about their visit(s) to the museum and more Palms students named specific works of art such as “the handmade tapestries,” and “the bed” rather than broad categories or genres of artworks like “paintings,” “old things,” or “sculptures” that were indicated by Charnock students. Palms students were also more likely to include details of the works of art they remembered seeing such as, “I remember a parade painting and a painting of animals,” “I remember ‘The Calm and the Storm,’” and “I saw tapestries that told stories.” Some Palms students discussed the museum or their experiences there using values-based language saying, “I learned that people make amazing art.” and “I had a great time at the greatest museum in California.”

Data gathered by the questionnaire show that Palms students were significantly more likely to have visited the museum again after participating in the Art Together program than Charnock students. 36% of Palms students self-selected to return again to the museum in the months following their participation in Art Together. In contrast, 12% of Charnock students stated that they had returned to the museum after their single visit in 2010. This difference is statistically significant. It is interesting to note that although significantly fewer Charnock students returned to the museum, the percentage is higher than the usual three to four percent return rate for an average single-visit student. Palms' return rate as well as the students' use of values-based language and descriptive details in their discussion of their experiences at the museum supports the formative evaluation finding that suggests participation in the Art Together program positively affects student's perceptions of art museums.
Conclusions and Recommendations

Summary of Conclusions
One school year after launching the Art Together program, the Education Department at the J. Paul Getty Museum commenced a longitudinal evaluation to build upon the data gathered by the formative program evaluation that was conducted in the winter and spring of 2010. The results of the longitudinal evaluation suggest that treatment students (Palms Elementary) continue to display a greater ability in some of the concepts and skills that are focused on in the Art Together curriculum than comparison students (Charnock Road Elementary).

Although Palms students reflected a decrease in their overall ability to analyze a work of art in the post-to-longitudinal comparison, specifically in the areas of fluency and analysis, their average scores across the four dimensions of the Feldman Rubric remain significantly higher than Charnock students. They showed the greatest ability in the description dimension. Palms students also continued to show a higher ability to articulate numerous concepts about the purpose and function of art museums although they showed a post-to-longitudinal decrease in their ability to expand upon and support those concepts.

The responses given by Palms students to the questionnaire included more details and description about works of art and memories of their experiences at the museum as compared to the responses given by Charnock students. Palms students were also more likely to return to the museum. This finding relates to the pattern of behavior noted during the formative evaluation which suggests Palms students had formed a greater interest in art, art museums, and the J. Paul Getty Museum in particular, after participating in the program.

Recommendations
Treatment students appear to have formed strong and lasting impressions of the J. Paul Getty Museum and have a broader appreciation of the purposes and functions of art museums. The following recommendations are intended to support specific program goals:

An important component of the Art Together program is to increase students' ability to learn from works of art and students are given multiple opportunities to discuss and orally analyze works of art throughout the program. If increased competency in analysis is a long-term program goal, evaluation would be more effective, and may show even greater differences between treatment and control groups, if evaluation measures were more directly aligned with current program activities. To measure

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7. Rather than naming specific works of art they had seen, Charnock students listed broad categories of art. Fewer Charnock students included descriptive details about works of art, their time at the museum, and used less values-based language when discussing the museum.
growth in spoken analysis future evaluation efforts could focus on methodologies that study student conversations about works of art rather than student writing.

To support students in developing their ability to think about works of art, increase modeling and instruction in the four dimensions of the Feldman Art Criticism model whenever possible. When facilitating conversations about works of art museum educators can elicit descriptive details, encourage students to support their opinions, and ask questions that will help students expand their thinking and their overall fluency.
Appendix A: Free-Write Protocol

Facilitators: Kelly Williams and Ami Davis, J. Paul Getty Museum

Treatment Group: Palms Elementary School, fifth grade students

Control Group: Charnock Road Elementary School, fifth grade students

Time: 10 minutes

Materials: Color print of artwork for each student (same artwork for pre, post and longitudinal visit free-writing exercise), pencils, free-writing exercise worksheet

Introduction
Sample script: Now we’re going to take a look at a picture of an artwork from the Getty Museum and write about what we see.

Procedure
Distribute color prints and free-write exercise worksheet to each student. Sample script: Look closely at this picture of an artwork from the Getty Museum. “What is going on in this picture?”

Write your responses to this question on the worksheet I passed out. You can write sentences, ideas, or individual words.

Remind students to write their first and last names on their worksheets.

Conclusion
“Let me know when you’ve finished writing and I will pick up. Thanks for your responses to my question.”
Appendix B: Bubble Map Protocol

Facilitators: Kelly Williams and Ami Davis, J. Paul Getty Museum

Treatment Group: Palms Elementary School, fifth grade students

Control Group: Charnock Road Elementary School, fifth grade students

Time: 20 minutes

Materials: 11 x 17 paper with printed bubbles containing three questions: “What is an art museum?,” “Why are art museums important?,” and “What can you see and do in an art museum?”; square post-it notes in three colors (enough for all students to have a stack of each); pencils

Introduction—Treatment Group and Control Group
Sample script: Hi, my name is Kelly/Ami from the Getty Museum, you visited the museum about a year ago. Today, we are going to make a bubble map about art museums. I am going to ask you a few questions about art museums and I want you to write down all of the thoughts and ideas that come to mind for each of the questions on your map.

Procedure
Distribute paper with printed bubbles to each student. Have students write their names in the spaces provided. Distribute the first color of post-its (i.e. pink) and ask students, “What is an art museum?” Encourage students to write down what comes to mind when they hear this question and to use as many or as few post-its as they need. Students can write down words, ideas, or complete sentences. Have students place post-its on their paper around the circle containing this question.

When students have written all responses to the first question, collect extra blue post-it notes and distribute the second color (i.e. blue). Ask students, “What can you see and do in an art museum?” Proceed as described above, collect extra yellow notes and distribute the third color (i.e. orange). Ask students, “Why are art museums important?”

Ask students to put pencils down then allow students to talk and share ideas.

Conclusion—Treatment Group and Control Group
Sample script: Nice job, it looks like you’ve written a lot of great responses to these questions.
Appendix C: Bubble Map Form

What is an art museum?

What can you see and do in an art museum?

Why are art museums important?
Appendix D: Completed Bubble Map
Appendix E: Questionnaire Charnock Road Elementary

Art Together Longitudinal Evaluation: Charnock Road Elementary

Name

Grade

Who was your teacher last year?

Did you visit the Getty Museum with your class last year?  Yes  No

Have you visited the Getty Museum with your family?  Yes  No

What do you remember about your visit or visits to the Getty Museum? Tell us about your experience below!
Appendix F: Questionnaire Palms Elementary

Art Together Longitudinal Evaluation: Palms Elementary

Name
Grade

Who was your teacher last year?

Did you visit the Getty Museum with your class last year?  Yes  No

Did you visit the Getty Museum with your school and family at the big celebration last year?  Yes  No

Have you visited the Getty Museum with friends or family since the big celebration last year?  Yes  No

What do you remember about your visit or visits to the Getty Museum? Tell us about your experience below!