



Snow Grant Final Report
“CSI-White Plains: Science, Literacy, and the Arts”
Manhattanville College
August, 2007

Overview

“CSI-White Plains: Science, Literacy, and the Arts” (CSI stands for Changing Suburbs Institute) was implemented during the 2006-2007 grant period at the George Washington Elementary School (GW) of White Plains. Three Manhattanville faculty members (1 biology professor and 2 literacy professors) and 25 undergraduate students worked with 100 fifth graders on an integrated learning experience that involved literacy development through storytelling, science through forensic exploration, and the arts through finger painting and poetry.

A Leadership Planning Team prepared collaboratively for the project’s implementation and assessment. Instruction at GW took place over a four-month period of time, February through May, 2007. The assessment tools indicated that George Washington teachers and students benefited from the project, and would want to participate again (see survey results below). An Art Conversations booklet, including all fifth-grade students’ finger painting pieces and poetry, was developed to demonstrate students’ learning experiences. Manhattanville and George Washington faculty and administrators collaborated on scholarly projects as a result of this grant.

Achievement of Goals

Goal 1: Develop an integrated learning experience that involves literacy development through storytelling, science through forensic exploration, and the arts through finger painting and poetry

The three faculty members developed instructional lessons on storytelling, forensic exploration, and the arts through finger painting. Given that they had previous experience with their own lesson frameworks with students at different grade levels, they were able to use these experiences to collaborate on ways to provide an integrated learning experience for fifth-grade students. The faculty member responsible for storytelling actually identified and prepared stories that depended on the use of clues to make inferences about a story’s resolution to support the forensics lesson, which was based on the concept of the board game, *Clue*.

Storytelling

Literacy Professor Jane Gangi and her undergraduate students from the literacy class, Methods of Literacy II, grades 3-6, conducted 15 one-hour sessions (3 sessions for each of the 5 fifth-grade classes) between February 6, 2007 and March 6, 2007. Professor Gangi introduced the concept of storytelling as a method for developing literacy and prepared her undergraduate students to tell stories and work with elementary students on storytelling before the instructional workshops

with the fifth-grade students. Professor Gangi introduced the entire storytelling instructional series by telling stories that her undergraduate students helped dramatize. She used stories such as a participatory folktale that involved clues for students to make predictions and deductions so that there was a connection with the subsequent forensics lesson. Her undergraduate students then led a Storytelling Workshop for the fifth-graders in which they selected stories to create and share with their peers. Professor Gangi purchased books to use with the fifth-grade students for the storytelling workshop.

Professor Gangi used students' storytelling to determine the value of this workshop. Fifth-grade students were able to create and tell stories, and then have discussions with their peers about the messages from the stories. Some of the fifth-grade teachers were so involved that they too participated in dramatizing stories. Professor Gangi discovered that some of the most challenged fifth-graders could create and tell their stories, indicating the power of this method for developing students' literacy. Professor Gangi also discovered that her undergraduate students had quite the talent for telling and dramatizing stories and guiding fifth graders accordingly. Positive feedback from her undergraduate students prompted her to now include in her literacy methods course a field experience requirement with storytelling.

Forensics

Biology Professor Annemarie Bettica and her undergraduate biology students from the Tri Beta Biological Honor Society conducted 5 two-hour sessions on forensics, from March 2, 2007 through March 30, 2007. Professor Bettica purchased microscopes for the fifth-grade teachers that were used with the forensics materials, and had a several training sessions with her biology students beforehand to prepare them for overseeing their specific stations. Three stations -- hair and fiber analysis, blood samples, and fingerprinting--were set up in the homework room at George Washington.

The undergraduate biology students, responsible for their respective content and demonstrations, gave a short presentation to the fifth graders about the purpose of their specific station-related activities before engaging them to: dust and lift prints, determine blood types from blood samples, look at angles to determine blood spatter, and match hair and fibers to the suspects, rooms, and weapons. The undergraduate students became the "Clue" characters, using their backstories to bring to life the complexities of solving a crime. Fifth graders rotated to the three stations gathering facts and clues. To help in the process of elimination and deductive reasoning necessary for the groups to solve the crime, the fifth-graders completed a section of a worksheet at each station. After each of the three groups met to solve the mystery, the class came together to discuss how they used the data with the professor and facilitator.

Professor Bettica used students' ability to solve the crime as an indicator of their involvement with the project. One of the fifth-grade teachers actually said that students came in the next week still talking about their discoveries. Professor Bettica, who spent a great deal of time with her biology students to prepare them for their role as station instructors/facilitators, found that most fifth-graders responded appropriately to the lesson.

Art/Poetry

Literacy Professor Mary Ann Reilly conducted her 5 two-hour sessions on art/poetry between April 11, 2007 and April 26, 2007. She worked with Professors Gangi and Bettica to identify ways to capture students' learning experiences from the storytelling and forensics lessons to help prepare her own lesson. For storytelling, Professor Reilly had the fifth-grade students answer two questions about the storytelling lessons: What did I learn? How did I learn?

Sample responses to the question, "What did I learn?" included:

- "Storytelling helped me to realize the fun in telling stories."
- "I learned stories from Africa and how to speak with my hands."
- "I learned how to tell my story to my family."
- "I learned to ask for help."
- "I used to be afraid to talk out loud, but now I'm not."
- "You can get a whole lot of information from just one small story."
- "I learned that anyone can tell a story no matter what. All you need is a mouth, and a voice, and you're set to go."
- "There's a difference between storytelling and telling a story from a book."
- "I learned to volunteer."
- "When telling a story you can change your voice."
- "You can remember your story by drawing."

Sample responses to the question, "How did I learn?" included:

- "I learned by listening, trying to out, pantomiming, mirroring, and watching Professor Gangi."
- "I learned by watching how the teachers and other children told stories."
- "I learned by making mistakes."
- "I learned by paying attention and getting involved in the activities."
- "I learned by watching others and doing it myself."
- "I learned by listening, performing, watching, telling the story over and over again, drawing, acting without sound, and rereading."
- "I learned by pantomiming and working with a partner."
- "I learned by watching my classmates."

Professor Reilly created posters of students' responses that the students reviewed during the first part of the lesson.

For forensics, Professor Reilly had the fifth-grade students watch a 7-minute slideshow of photographs taken by Professor Bettica that captured their participation during the forensics lesson.

After viewing the slideshow and discussing how students had learned in both engagements, Professor Reilly invited the students "to converse" about what they had heard and seen. Students' conversations, however, were not verbal. Paint was the medium they used. For twenty minutes, students were silent while "conversing" with their respective partners using paper and finger paint. After the paintings were completed, Professor Reilly modeled for the students how to pull a poem from the paint. Then students began to compose poetry about learning. During

this time, Professor Reilly conferred with the students and scaffolded their efforts. Professor Reilly later photographed each painting. She had the fifth-grade teachers work with the students to check and revise their poems in preparation for using them in an “Art Conversations” booklet that displayed all students’ work. Professor Reilly then created a booklet that included each students’ art work and poetry. This booklet was given to each fifth grader to take home (see attached booklet).

Goal 2: Develop a Process for Implementing CSI-White Plains: Science, Literacy, and the Arts

A Collaborative School-College Leadership Team was formed to plan for and implement the project. The Snow Grant CSI (Changing Suburbs Institute) Leadership Team was able to meet five times (12/4/06, 12/18/06, 1/25/07, 3/1/07, and 5/8/07) to develop an instructional schedule, identify a location for the instructional workshops, identify instructional needs, order the necessary materials for each series of workshops, develop an assessment survey, discuss and resolve issues that arose, and reflect on outcomes. The Leadership Team included faculty and administrators from the School of Education at Manhattanville College and the George Washington Elementary School, White Plains School District. Manhattanville representatives include Annemarie Bettica, Associate Professor of Biology; Jane Gangi, Associate Professor of Literacy; Mary Ann Reilly, Associate Professor of Literacy; and Shelley B. Wepner, Dean of the School of Education; George Washington School representatives include Terri Klemm, Principal; and Jonathan Monti, Fifth-Grade Special Education Teacher.

The Leadership Team worked very well together, and resolved many of the challenges that emerged (see Challenges Faced and Overcome section). The principal helped the fifth-grade teachers understand the value of the grant for their students and themselves, identified times and locations for the lessons, and ensured that the assessment instruments were used. The fifth-grade teacher-liaison helped the principal to organize the instructional schedule, the teachers, and the students for each set of lessons; receive the necessary materials and supplies; and serve as the conduit between the classroom teachers and the college faculty. The college faculty used the team meetings to exchange ideas on experiences with their own instruction and prepare for future lessons.

Goal 3: Involve all fifth-grade students from the George Washington Elementary School in the integrated learning experience

All fifth-grade George Washington students, including special education students, participated in the science, literacy, and the arts projects. Survey results (see below) indicated that fifth-grade students were excited about these new learning experiences.

College faculty observations indicated that students were engaged in all three types of learning experiences. The two literacy faculty observed that some of the students who were heretofore low performing in literacy were very involved and successful with the literacy tasks. The biology faculty member found that all students were actively engaged in the activities for each station, and completed the worksheet activity that accompanied each station.

Although not explicitly stated from the outset, an outgrowth of this goal was the involvement of some fifth-grade teachers in the implementation of the lessons and the monitoring of students' level of engagement.

Goal 4: Involve undergraduate students in working more directly with a diverse student population

Undergraduate education and biology students worked with the diverse group of fifth-grade students for the storytelling and forensics lessons.

Undergraduate students for the storytelling lessons were education students who learned about the purpose of storytelling, techniques of storytelling, and instructional methods for teaching storytelling. They applied what they learned from their literacy methods course to the storytelling lessons with the fifth-grade students. Some of the undergraduate students have subsequently presented at educational forums about the benefits of storytelling for literacy development. One student participated as a storyteller at the Connecticut Storytelling Festival, sponsored annually by the Connecticut Storytelling Center (CSC). CSC asked Manhattanville College undergraduates to write an article for its newsletter, *HearSay*. Another student emailed Professor Gangi that she would be using what she learned about storytelling in a diverse summer camp.

In addition to building community, home-school connections (“I learned how to tell my story to my family”), and facilitating emotional concerns (“I learned to face my fears”), literacy components, especially fluency, oral language, and comprehension, were addressed. To internalize their stories, children read and reread their stories, which builds fluency. They made text-to-self, text-to-text, and text-to-world connections, visualized strong images, synthesized, summarized, and made predictions, which builds comprehension. Opportunities abounded for the development of oral language, which is one of the necessary cueing systems for reading proficiency. Undergraduates made many connections between what they saw the fifth graders doing and the content of the Language Arts and Literacy Methods II course.

Undergraduate students for the forensics lessons were biology majors who were responsible as the main facilitators for each of the stations. The biology undergraduates, many of whom were familiar with this age group through camp counseling and teacher's aide experiences, learned how to communicate their content knowledge so that it was understandable to the fifth-grade students; thus, enabling these students to make their scientific investigations and discoveries at each table. The undergraduate biology students are anxious to have the opportunity to repeat this program next year and have already talked about improvements they would make. An added benefit for some was the possibility of a elementary education career choice, especially since they experienced the excitement of fifth graders who were engaged in scientific activities.

Goal 5: Make this project an integral part of the CSI initiative at Manhattanville

GW is one of the schools identified as a changing suburban district (5% or more increase in Hispanic students in the last four years), and is part of Manhattanville's Changing Suburbs Institute. As a result, Manhattanville formed a Professional Development School with GW. This project enabled the principal and the teachers to see how the curriculum could be enhanced with

lessons focused on storytelling, forensics, and the arts. They saw how undergraduate students could be used effectively in the classroom to present concepts, oversee specific aspects of a lesson, and work with students in small groups and individually. The project also provided the impetus for the principal to promote her goal of professional development for the teachers by getting them involved in professional conferences and presentations.

Information about this grant, as it relates to general and content-based literacy development, was shared at one of the bimonthly CSI Consortium meetings that include school district and community representatives. Two workshop sessions at the second annual CSI educational forum were given by Snow grant participants to help other teachers and college faculty understand how such a project can be implemented. Data gathered from this project, both qualitative and quantitative, is now being used to demonstrate specific accomplishments for a Professional Development School in a CSI district.

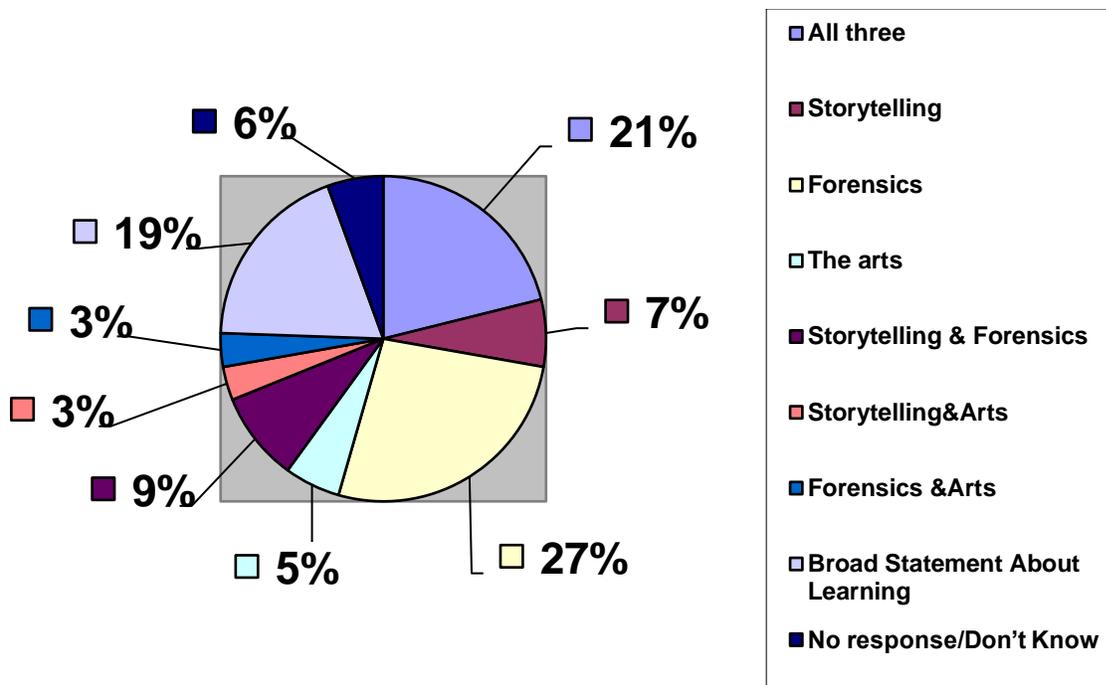
Outcomes

Student Survey

Ninety fifth-grade students completed a four-question survey at the end of the project. The four questions were (1) What did you learn from this entire project? (2) What did you like best about the project? (3) Would you want to participate again in this project? Why? Why not? (4) What suggestions do you have to make this project better? The findings follow:

Question 1: What did you learn from this entire project?

All three	Storytelling	Forensics	The arts	Storytelling & Forensics	Storytelling & Arts	Forensics & Arts	Broad Statement About Learning	No response/ Don't Know
19	6	24	5	8	3	3	17	5
21%	7%	27%	6%	9%	3%	3%	19%	6%



* 60% of students included forensics in their responses.

* 27% of students indicated exclusively that they learned forensics from the entire project.

* 21% of students included a response about all three sessions – storytelling, forensics, and the arts.

* 19% of students provided a broad statement about learning to indicate what they learned from the entire project.

* 6% of students did not write a statement about what was learned. Roughly half of these students were not in attendance the days the project took place.

Generally speaking, all students indicated that they learned something from this project. With storytelling, students commented that they learned how to tell stories without looking at a paper, with expression, and with movement. With forensics, they learned how to solve a mystery using fingerprints and blood samples. They commented about the usefulness of science to investigate. With art/poetry, students learned how to have a conversation through finger painting and how to write a poem about a painting. Overall, students commented that they learned “a lot,” and learned how to work together in teams.

Samples of students’ comments about what they learned included:

Storytelling

- How to tell stories, how to find out who people are, and how to make a conversation in art

- How to tell stories expressively
- I learned in story telling how to tell stories without looking at the paper (10 students)
- I learned how to tell stories better and to act everything out without talking
- How to tell stories to another person
- How to speak with action and expression and how to show my emotion on paper
- I learned you don't always have to read from a book. When we acted there was a lot of enjoyment in the room
- How to tell stories with movement and to someone clearly. How acting the story out can help you understand it
- I learned different folktales from different parts of the world

Forensics

- I learned how to solve problems (2 students)
- I learned that science helps me to investigate and do crime scenes
- That science is not just all about inventing stuff and testing out objects
- I learned how to find a murder in Forensics (3 students)
- I learned how fingerprints are made, what type of blood types are there, what types of fingerprint points there are (6 students)
- I learned about forensics that I never knew about
- That from all the clues you can really find out who did it (2 students)
- Learned how to solve a mystery (7 students)
- That anyone can solve a mystery! All you need is a pair of hands, eyes and ears and your set to go!
- That anyone can be a villain
- How to find a murderer (2 students)
- How to investigate
- How to be a detective and do real police work
- I learned a lot about blood types. Before I didn't even know my own blood type. Now I know there is A+, A-, B+,B-, AB+ AND AB-. Then I learned to identify blood type
- I learned about blood splatters

Art/Poetry

- I learned how to have a conversation through finger-painting
- From finger-painting that I could write about some things
- I learned how to communicate by finger-painting
- I learned how to write a poem about a painting (3 students)
- That you can get literate from a picture you painted
- I learned that the poem and finger-painting helps you to write good and imagine things good
- How to create wonderful poems from the simplest of ideas
- How to make a poem out of a picture. Even though my partner and I made a big gray mess, we found a really great poem
- How to write a very interesting poem by looking at my finger-painting
- You can tell a story from a painting

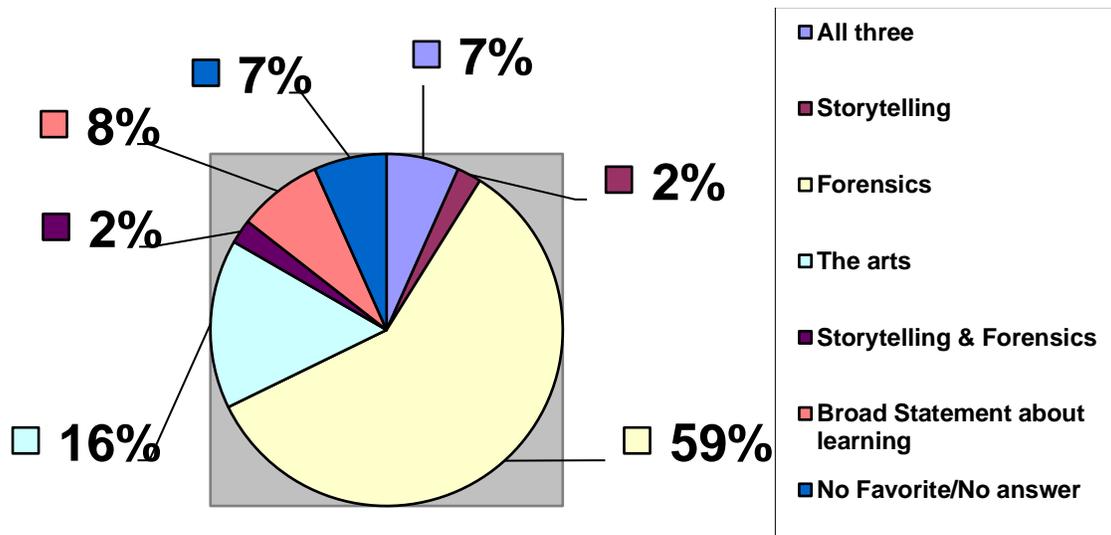
- How to express yourself in poems and art and how to tell a story without words

Broad Statements About Learning

- To have fun with everyone and learn
- I learned to cooperate with a lot of different people
- I learned that sciences literacy and art could be very fun in many different ways
- The different ways to learn
- Teamwork is very important in not only sports but also activities such as the mystery we had to solve
- How to observe what I did and how to focus really harder
- The three things we did were different in a good way they were more fun
- From this entire project I learned a lot!
- You should try something new because you may like it
- I learned that art, science and storytelling can be fun

Question 2: What did you like best about this project?

All three	Storytelling	Forensics	The arts	Storytelling & Forensics	Broad Statement about learning	No Favorite/ No answer
6	2	53	14	2	7	6
7%	2%	59%	16%	2%	8%	7%



* 59% of students exclusively indicated that the forensics session was the best part of this project.

* 68% of students included forensics in their response.

* 16% of students exclusively indicated that the art session was the best part of this project.

* 22% of students included the arts in their response.

* 2% of students exclusively indicated that the storytelling session was the best part of this project.

* 11% of students included storytelling in their response.

* 7% of students did not write a response. Roughly half of these students were not in attendance the days the project took place.

Overall, students liked the forensics session best, probably for a number of reasons: the idea of using clues to solve a murder (modeled after the game of Clue); the kinds of experimentation that they were doing; the newness of the activities for them; and the similarity of this type of lesson to a popular television series. With storytelling, students did like the opportunity to act out stories. With art/poetry, they liked the finger-painting part best.

Samples of students' comments about what they liked best about the project included:

Storytelling

- Acting in literacy (2 students)
- Telling a story to the class (3 students)
- The storytelling that they told (3 students)
- The stories

Forensics:

- I liked finger-printing (11 students)
- The forensics and how it was, like you were racing to find who was the murderer (4 students)
- Messing with all of the chemicals and blood and finding out who was the perp
- Looking at the different types of hair for forensics
- Looking at the blood types and fingerprints, searching for who did the crime (3 students)
- Forensics because it taught me how to track down a criminal, and solve a crime (24 students)
- The science because we had a chance to do different activities (2 students)
- Playing clues with the forensics people (2 students)
- When we did the crime scene investigation. My favorite part about the CSI was when we learned about fingerprints
- Testing out the clues to get the suspect
- I liked how we got to look at the different types of bloods through the microscope
- To solve the mystery (2 students)
- That I got to use real tools that CSI people use
- Forensics because it taught me police work
- It was like a big game of clue

- There was so much to do! We played clue and the fingerprint was cool on the clothing was my favorite
- It was so fun to solve the crime who did it what weapon with the tiles and hair and blood.
- Everyone made it fun and the students from Manhattanville are very helpful and explained the directions well. It was so fun!
- Testing the blood
- Because we did stuff we didn't normally do.
- The fingerprints, hair samples, and blood samples it was a lot of fun
- I like testing the blood (2 students)

Art/Poetry

- Painting in the arts (8 students)
- Finger-painting because it was so interesting (5 students)
- When we finger-painted because we got to show our emotions
- When we made a poem out of the finger-painting
- The finger-painting because we got dirty
- The finger-painting part the best because I learned and expressed my feeling into a painting and then turned it into a poem
- I like the finger-painting in this project because I had never finger-painted
- You get to make a mess with the paint

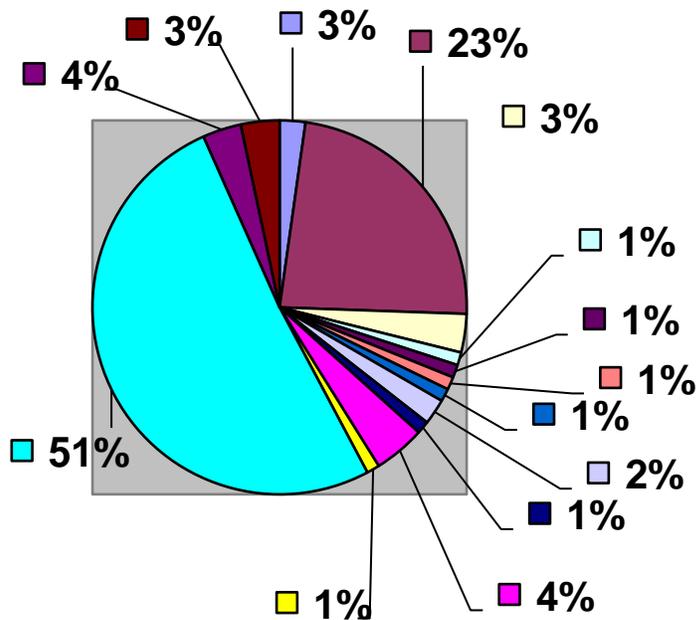
Broad Statements About Learning

- Learning something new that I never knew before
- That it was fun! (2 students)
- Sharing thoughts and doing fun experiments
- How everyone got to participate
- I liked all of them because they were fun and I learned a lot
- I had fun and I learned all new things in all the activities

Question 3: Would you want to participate again in this project? Why? Why Not?

YES- All three	YES- Forensics	YES- The arts	YES- Storytelling & Arts	YES- Forensics & storytelling	YES- Forensics & Arts	YES- Storytelling NO- Arts	YES- Storytelling & Forensics NO- Arts	YES- Forensics NO- Arts	YES- Forensics NO- Storytelling & Arts	YES- Forensics & Arts NO- Storytelling	YES- Broad Statement
2	21	3	1	1	1	1	2	1	4	1	46
2%	23%	3%	1%	1%	1%	1%	2%	1%	4%	1%	51%

NO- All three	NO- The arts	NO-Storytelling	NO- Forensics	NO- Broad Statement	No response
-	-	-	-	3	3
-	-	-	-	3%	3%



* 93% of students indicated in some way that they would participate in this project again.

* 3% of students indicated that they would not participate in this project again.

* 3% of students did not respond to this question.

Generally speaking, students want to participate again with this type of project, mostly because it was fun and interesting. They realized that they learned “a lot,” and enjoyed being actively involved with learning. Students’ comments about their experiences match the college faculty’s expectations for them. While many focused on forensics as their favorite activity to participate in again, many commented that they enjoyed all three lessons.

Samples of students’ comments about why they would want to participate again in this project included:

- Yes because...
 - In literacy I would do it again because it was fun telling stories. In science I would because I like solving problems (2 students)

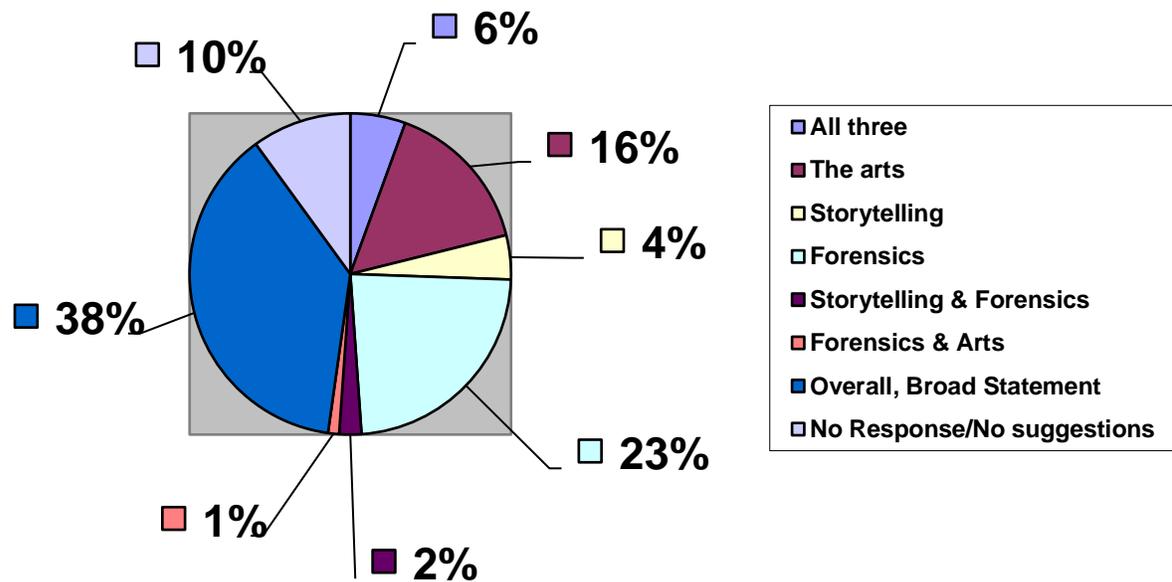
- It was very fun and interesting (26 students)
- Especially forensics because they were fun activities
- It was really fun to tell stories, to finger-paint, and to find who killed Mr. Boddy
- Then you can remember the things you did if you did finger-painting you can remember it and then you can do that when you grow up and be a good finger-painter
- It was really nice to solve a mystery and learn at the same time and to memorize a story and then read it. So it was fun
- It was a lot of fun and I learned a lot (9 students)
- I would do forensics again because it was fun and kept my attention
- Doing forensics is a good way to work with others in a group
- I would like to learn more things about how to solve a mystery (3 students)
- It was fun and a good experience to remember
- I love solving mysteries and finding clues. They made it a lot of fun! (3 students)
- You learn how to make the finger prints appear
- It was fun and everybody could participate
- I love Crime Scene Investigation
- I had a lot of fun finding clues to solve a mystery
- It was the most fun learning I've had all year so far
- I liked how it was active
- I love it
- Poems and finger-painting are fun
- Exciting fun and really enjoyable especially for little kids
- I would like to practice in the blood because you could know what type of blood it is
- I wish we had these classes everyday! I was so happy and excited and couldn't wait for the next class with the Manhattanville students
- The whole thing was fun. Everything was great. I would love to do it again
- I liked the storytelling and finger-painting
- They storytelling help me build up courage, the forensics taught me about science and the finger-painting's fun
- I love mystery that was all about mystery. I loved it!
- I enjoyed the whole project
- I liked the idea of hands on. Also because you got to know each Manhattanville student
- It was very fun to do those activities. It made me think differently. Like in the art/poetry when she said you'll speak to each other in the painting. I had no idea what she meant
- I would like to participate in the forensics science project. The other two I didn't like that much
- I would be able to learn about it all over again which was awesome
- I want to do the forensics science project (7 students)
- It's fun finding the bad guy
- You work with your hands
- I liked to do poetry and art and forensic science again but not storytelling
- I would want to learn about more science

Samples of students' comments about why they would *not* want to participate again in this project included:

- No because...
 - Some of the teachers, even though they weren't doing it on purpose, were bossy and the professor in the art kept crossing out a lot of poem and writing her own
 - In the arts, it was hard to have a conversation in a blob of paint
 - I didn't really have that much fun
 - I wouldn't like to do finger-painting because it wasn't that fun
 - The finger-painting and poem didn't keep my attention (2 students)
 - I already learned a lot from the project and if I do it again it won't be as exciting as before
 - If we do it again it won't be fun anymore

Question 4: What suggestions do you have to make this project better?

All three	The arts	Storytelling	Forensics	Storytelling & Forensics	Forensics & Arts	Overall, Broad Statement	No Response/ No suggestions
5	14	4	21	2	1	34	9
6%	16%	4%	23%	2%	1%	38%	10%



* 38% of students suggested a broad response to improve the project.

- * 10% of students did not respond with suggestions.
- * 32% of students included forensics in their response.
- * 22% of students included the arts in their response.
- * 12% of students included storytelling in their response.

Generally speaking, students' suggestions for making the project better were very useful: more time to participate and finish the projects; involvement in more activities; longer lessons; and more obvious connections between the three types of lessons. With art/poetry, students did not want their poems corrected.

Samples of students' suggestions include:

Storytelling

- Less storytelling
- You should do more storytelling it's fun
- Find a way to make storytelling more fun not boring
- Do storytelling 2 times
- More interesting stories

Forensics

- They should make science more realistic
- More things in science would be fun
- Bring back science because I really liked it
- Should have more suspects and more investigations
- Let the kids do more stuff. For instance, at the hair station. I would have liked to dip the cloth into the liquid
- Make the person that did it a student in the class
- Next time we do the solving ourselves
- A little more action because the person who did the thing, I already guessed it was that guy
- They should put on a costume of who they are and act like them
- Make more parts for the forensics lab. I think that would make it more fun
- More forensics time or days because it was the most fun (4 students)

Art/Poetry

- It would be awesome if we could get more time finger-painting (2 students)
- In finger-painting the person there doesn't correct a whole lot of our poem, because it felt like that person almost re-wrote the poem (7 students)
- Let us finger-paint whatever we want
- Don't make us do a poem after making a finger-painting. Also we should have made a finger-painting just for fun and not with a partner

- Have an auction of the finger-paintings and you only have \$200 and there is judges and a winner is picked
- I wish you could make a longer poetry lesson (4 students)
- Probably the finger-painting was the least enjoyable. I looked around and didn't see everybody's faces as happy as the faces were in forensics and storytelling
- Maybe when we paint you can give the option for a paintbrush

Broad Statements About Learning

- Make sure everyone understands what you are saying and don't get confused. Also, try to give more time to say the stories so everybody gets a chance
- Nothing really it is great already (16 students)
- Come more days! (4 students)
- Let kids get a little more active
- To make a few more stations (7 students)
- In my opinion you did an outstanding job! Thanks!
- They can come longer and more so we can learn more (9 students)
- More time to finish the projects
- I really don't understand the connection between the three activities. I didn't understand the connection and now they went together. They seemed like they were different topics and subjects (3 students)
- I kind of understand how storytelling, and the painting/poetry went together. You would tell a story in the painting. But I don't know how that's connected to forensics. Anyway, it was all fun!

Teacher Survey

The five fifth-grade teachers completed a three-question survey at the end of the project. The three questions were (1) What did you find most valuable about any or all of the three sessions? (2) Suggestions? and (3) Additional comments regarding the program?

Overall,

- All five teachers commented that this project was valuable in some way to their students.
- All five teachers suggested a follow-up activity or lesson to extend and/or enhance the project.
- Two out of the five teachers enjoyed seeing their students interact with new teachers.
- Three out of the five teachers responded that they want students to understand the connection between the three sessions.

The following patterns existed based on the above findings*:

Teacher 1 (17 students)

- Three students were unhappy with the arts lesson because they didn't like that the teacher was making changes to their poems. Their suggestion was that they should not make tons of changes to the students' poems.
- 12 students answered that they would participate in this project again because "it was fun."

Teacher 2 (12 students)

- Four students wrote that they didn't see the connection between the three lessons of science, literacy, and the arts.
- Two students wrote that they enjoyed interacting with Manhattanville students.

Teacher 3 (21 students)

- 13 students answered the survey questions exclusively referring to the forensics lesson. This class showed an overwhelming favoritism towards the forensics lesson.
- 10 students wrote favorably about the "fingerprinting" portion of the forensics lesson in their response.

Teacher 4 (20 students)

- Nine students included all three lessons in their summary response of what they learned.
- 16 students answered that the forensics lesson was the best part of the project.
- Nine students wrote that the arts lesson was the best, or at least one of the best, parts of the project.
- 16 students suggested more lessons and more time to make the project better.

Teacher 5 (20 students)

- 13 students answered that they would participate in this project again because "it was fun."
- 16 students answered that the forensics lesson was the best part of the project.

*Teacher responses seemed to be influenced by what students wrote on their surveys. For example, in the class where students complained about the arts lesson, the teacher commented, "they didn't like that the teacher edited their work for them!" In the class where students included all three lessons in their summary response of what they learned, the teacher also included all three lessons in outline format to tell what was the most valuable about the sessions.

Teachers' responses to what was valuable included:

- I always find it valuable to have a chance to sit back a bit and watch my students as they interact with new teachers and activities. It is also beneficial to see how much other people put together a lesson
- All three provided students with a positive experience. The opportunity to have guest teachers and new topics (such as forensics) are worthwhile
- *Forensics*: The students found the whole forensics session enjoyable and interesting. They were highly engaged in forensics, and it was an area in which they had no experience. A follow-up is needed so that the students can think about the process and apply it once again
- *Storytelling*: Storytelling was useful for oral recall and struggling students' fluency when they reread the story. The most valuable portion of storytelling was when the kids went out to the lower level classes.
- *Painting/Poetry*: Most valuable was pulling thoughts/feelings/stories out of a simple piece. Poetry needed an additional session, possibly with scanned images to work on the poetry itself.

Teachers' suggestions included:

- More explanation to the teachers about how the idea for this project came about
- More explanation of how the three activities fit together and follow-up suggestions for teachers to explore further in their own classrooms
- A handout for the students to share with their parents
- Multiple sessions of forensics to build upon what was covered (possibly two of the three sessions on one day so that the students can really see the connection), and more student use of the microscope
- Better connections between the three activities
- More explicit instruction on storytelling strategies

Teachers' additional comments included:

- An overview for the students on how this project came about; why they are doing it and what they would walk away with
- Orientation with the college students on appropriate attire for the school building
- Willingness of storytelling and poetry instructors to come back to George Washington on their own time for follow-up/small group work is commendable
- "Forensics appealed to the majority of the students. Many enjoyed the storytelling-poetry left many of the kids unsatisfied-they didn't "get it." They did not like that the teacher edited their work for them. They were quite upset-that's why we need to spend more time on that part next time."
- "This follow-up with the storytelling and poetry was excellent, a necessary task when taking on a large project. Could the storytelling be introduced to the lower grades? The early readers benefit from acting out literature (They're about to make an immediate connection with what they have read)."

Scholarly Projects**Presentations:**

- A workshop entitled "Outcomes: Science, Literacy, and the Arts for Elementary Students" was given by one of the fifth-grade teachers, the principal, and one of the literacy faculty at Manhattanville College's Changing Suburbs Institute Second Annual Educational Forum, June 8, 2007. Principal Terri Klemm commented that this project enabled her teachers to make formal presentations at conferences, which is one of her professional development goals for her teachers.
- A proposal entitled "Generating Student Success Stories with a Cross-Disciplinary College Team in a Multi-Ethnic Professional Development School" has been submitted to the 2008 American Association of Colleges for Teacher Education annual conference, New Orleans, LA, February, 2008. Representatives from both White Plains and Manhattanville would co-present.
- Three undergraduate students (Jackie Moschetti, Erika Werbeck, and Elizabeth Eklund) and one of the literacy professors (Jane Gangi) were part of a panel presentation given by

Kappa Delta Pi Education honorary to Manhattanville students and alumni, April 12, 2007.

- Undergraduate student Elizabeth Eklund participated in the 26th Connecticut Storytelling Festival at Connecticut College, April 27, 2007, and was a storyteller in the “Once & Twice Upon a Time” concert.

Publications

- Professor Mary Ann Reilly submitted an article entitled, “Finding the Right Words: Art Conversations & Poetry” that includes her work with the fifth graders, especially the art and poetry of one student, Maria. Professor Reilly focused on this student because of the contrast between her regular school-based writing and her poetry from Professor Reilly’s lesson.
- Werbeck, E., Brenner, A., Lara, J., Florian, D., & Gangi, J.M. (2007, in-press). “All you need is a mouth and a voice and you're set to go”: Undergraduates and fifth graders go for storytelling. *HearSay: The Newsletter of the Connecticut Storytelling Center*, Summer.
- An article about the work from the Snow Grant is scheduled to appear in *The New York Times* in the fall in the context of Manhattanville’s efforts to develop the Changing Suburbs Institute.
- Shelley B. Wepner, Annemarie Bettica, Jane Gangi, Mary Ann Reilly, and Terri Klemm submitted a manuscript to *JSD (Journal of Staff Development)* about the grant.

Unachieved Goals/Objectives

Two goals were not achieved as fully as anticipated:

From Goal 2: Develop a Process for Implementing CSI-White Plains: Science, Literacy, and the Arts

The fifth-grade teachers indicated on their survey that they were pleased with Manhattanville faculty involvement with their students. However, there needed to be more opportunities for the fifth-grade teachers to meet with the CSI Leadership Team so that the teachers understood the purpose of the project, the relationship between the three sets of activities, and their role in the project’s implementation. It would have been useful to have the teachers work with the college faculty to implement the lessons by preparing their students for the lessons, working with the students during the lessons, and then following up with related classroom activities.

From Goal 4: Involve undergraduate students in all three learning experiences

Undergraduate students were involved in both the storytelling and forensics lessons. However, they were not involved in the art/poetry lessons because the course that Professor Reilly taught only had graduate students enrolled. This presented a challenge to Professor Reilly because she

did not have the student assistance that the other faculty members had, and she could not expose her own students to the value of such a project. Moreover, fifth-grade students might have responded better to having their poems revised if undergraduate students worked with them to help them understand why revisions were being suggested or made.

Challenges Faced and Overcome

Scheduling

Scheduling of the instructional sessions posed a problem for the forensics lessons because, when undergraduate students were available, such times conflicted somewhat with the school day schedule. Professor Bettica worked with the other biology faculty so that undergraduate students could switch labs. She also had to have some students be responsible for a station without backup during one set of sessions.

Classroom Management

Because the biology students handled the stations themselves, they were taken aback by different types of behavior. Some of the special education students made inappropriate comments to the undergraduates. The CSI Leadership Team had to help the undergraduate students understand reasons for such behavior, and the principal of the elementary school had to work with the children so that they knew what her expectations were for their behavior with guests.

Communication with Fifth-Grade Teachers

College communication with an entire grade level of teachers can pose difficulty because of scheduling conflicts from both arenas. Communication is essential, though, for scheduling instructional workshops; organizing classrooms; ordering equipment and materials; preparing fifth-graders for the workshops; preparing college faculty and undergraduates for special student needs; developing, disseminating, and collecting student assessments; and providing feedback to teachers about students' responses to workshops. Communication also is important so that there is teacher buy-in to the project.

In addition to the principal, a teacher-liaison must be in place to serve as the conduit between the school and the college. In our case, the principal assigned this role to Jonathan Monti, the fifth grade special education teacher, who was a member of the CSI Leadership Team, and took seriously his liaison role. However, because of his unanticipated roles and responsibilities, he was not always prepared to help the college faculty as quickly as needed.

Recommendations

If the project were to be funded again, the following recommendations would be addressed:

1. Review the entire integrated learning experience for strengths and weaknesses. Review how stronger connections can be made with all three lessons so that the fifth-grade teachers and their students understand reasons for the lessons' content and activities, the order in which lessons are presented, and specific assignments and feedback.

2. Develop a handout of the entire integrated learning project that includes general and specific goals for the overall project and the individual lessons. Distribute this comprehensive handout to teachers. Develop an abridged version of the handout to distribute to students and their parents.
3. Review and modify how time should be allocated for each of the lessons, and develop an instructional schedule accordingly. Look for ways in which lessons can be extended so that fifth-grade students have more time with each set of lessons.
4. Work directly with the fifth-grade teachers so that they understand the purpose of the project, and can be more actively involved in making connections between their instructional responsibilities, their students, and the integrated lessons' objectives.
5. Involve the fifth-grade teachers in the implementation of the lessons, including student preparation and follow-up activities. This will help to better prepare the college faculty for the diverse learning needs of the students. This type of involvement is especially important for special needs students and bilingual students.
6. Work with the fifth-grade teachers to identify ways in which they can incorporate storytelling, forensics, and arts/poetry into their own teaching.
7. Arrange the college teaching schedule so that all three faculty members teach courses with undergraduate students or, at the very least, can tap undergraduate students to participate in the project.
8. Help all undergraduate students understand the importance of appropriate attire when working with children in a school. Written guidelines, taken from a handout developed by Jane Gangi for students doing fieldwork, will be created for undergraduate students that state, "Act and dress professionally. No hats/caps. Avoid T-shirts (especially with messages like 'Drink Beer.')." "
9. Identify a person from the school to serve as the official liaison from the project's outset so that all communication and local arrangements can be managed more easily.
10. With the art/poetry lesson, help students understand that the purpose of revising their poems is to prepare them for publication in an "Art Conversations" booklet. It is important to help students understand that their ideas are not being changed, but rather the way in which they express their thoughts. The revisions help their poetry to be better understood by their readers. An overview of the writing process needs to be provided ahead of time so that students expect such suggested revisions, and understand how such revisions will contribute to the end result.