

Omaha SCIENCE MEDIA PROJECT

2009 Workshop Follow-up: Participating Teachers' Plans and Activities Using New Science Media Skills



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Project Description

The Omaha Science Media Project (OSMP) involved sixteen Omaha Public School (OPS) teachers in an intensive, collaborative two-week summer workshop about viruses and infectious disease in July 2009. Teaming up with media professionals and content specialists, teachers and students worked as “science journalists” to create media productions (audio, video, and multimedia) focusing on different virology topics. One key goal of the project was to improve the pedagogy of these teachers through this experiential professional development. It was expected that the teachers would infuse these new skills and knowledge into their classroom teaching, thus increasing student learning and interest in science and health careers. To understand how the OSM teacher participants are making use of what they learned, we asked the teachers to share their plans for the current school year. This brief report summarizes the teachers’ descriptions of their new science media activities and plans.

Data Collection

In late September 2009, ten weeks after the completion of the workshop and six weeks into the new school year, the Omaha Science Media Project conducted a professional development session as part of an OPS curriculum day. Fourteen of the 16 OSM participant teachers attended the OSM session, which included time to verbally share with one another their current plans for incorporating new “science media” into their classrooms. We also asked them to write down their activities and plans as they move forward in the school year.

Teacher Responses

Thirteen teachers provided written summaries of what they are currently doing or planning to do in their classrooms and schools using their new journalism, science, and media skills. Of these teachers, the following percentages indicated that they are working on or toward these new activities:

<u>100%</u>	incorporating student-generated media production in my curriculum
<u>54%</u>	working with other teachers to help them learn more about journalistic techniques and media production
<u>85%</u>	creating new media products to use with my students
<u>85%</u>	using my new skills to enhance the curriculum
<u>23%</u>	other changes in my school
<u>15%</u>	other changes outside my school

In their verbal and written descriptions, teachers provided some detail about their work, their plans, and some of the barriers they face. Below is a summary of their feedback with examples in their own words.

Teachers already implementing what they've learned

About a third of the teachers indicated they are already using their new skills in the classroom. These teachers described the new ways they are using their media and journalism skills:

“My first attempt was to interview students with my flip camera during a “Pill Bug Inquiring Lab” that student partners designed...I was really surprised to see how the students responded to just the taping with my flip camera.”

“I have implemented a science media project where six media students will work in pairs to produce science media during class.”

Teachers creating media

Several teachers are using or planning to use their new skills directly by creating science media to enhance their teaching.

“I use and make video clips to use to teach concepts in my class. The students love them, especially since they are the stars of the video.”

“My plan is to tape students “cell organelle” presentations and use the clips to teach cell structure to my ELL and regular students – rather than me lecture!”

Students creating media

All of the teachers are implementing or planning to implement student-created media in their schools. Some teachers are implementing media production with a smaller subset of students rather than with entire classrooms of students. For example, they are using media production with the science club group, the science Olympiad team, an afterschool club, or a select group of students. Others will be incorporating student created media products in their regular curriculum classes. Across these different applications, student media projects are taking a variety of forms, some as learning tools for the students creating them, some as teaching tools for other students to use, and still others are being used as a means of assessing student learning or as a significant part of a portfolio of student work.

Teachers working with select or smaller groups of students

For the science Olympiad, “each student will have a choice of making their own ‘myth buster-like’ video of their science Olympiad project”... “I have a science club that will be using video to enter to win science contest”

“We will be videotaping our science Olympiad day, then we may put it up on a blog or the school’s website”

“I am working with any students to produce a slide show [to present at an upcoming school event]”

Teachers working with classes of students

“[For the human body unit], students will make a documentary about a disease that has affected their family”

“[For] human body project/invention convention/natural disaster projects: [I will have] students videotape skits, news reports, infomercials on what they have learned about the topic or showing off their inventions.”

“[I am using] video lab summaries. Students create these as opposed to written explanations. This is a required piece of their labwork.”

Students creating media for other students

“[I plan to have] students videotaping classroom projects to use to teach other students concepts.”

“[I] would like to create videos to use in the classroom, made by other students.”

“Students will create media on communicable disease and share with their peers.”

Student media productions used as assessment

“2nd semester final will be a media product (likely a video) that will meet content assessment criteria, but will allow a great deal of student creativity”

“I want students to generate some video reports to demonstrate their understanding of the concepts. Students are involved with hands-on projects including the growing of plants from seed stage to flower stage, and the care of classroom animals. I want to develop audio and/or video products in which the students can document the progress of these projects.”

“[I plan to have students do] video book talks. Students [will] be creating short (1-2 minute) advertisements for their favorite books. This would be a form of assessment...[students will be creating] media on ‘green’ awareness. This is part of my new elective course that is centered around competition-based science. This is done either small group or individually depending on the task. These serve as both assignments and assessments for kids. Some will have their final product be a movie.”

Changes beyond the classroom

Several teachers also have plans to work with other teachers in their schools, with their principals, and/or to continue to collaborate with OSM partners. One teacher has already scheduled one of her classes to visit the UNL campus and have a day learning about virology with some of the OSM partners. Some are also looking forward to sharing their students’ work through a blog.

Collaborating within the school

“I would like to encourage my principal to add a ‘science media class’ to our schools curriculum. I visualize this class working like our summer workshop in which students produce short media projects.”

“My art teacher just started a new after school club that will use animation and video. I am hoping to work with her to help me reach students and learn how to work the equipment.”

“[I plan to do a] media piece with foods and human growth teacher...students will create a “restaurant review” of local restaurants; I will cover the nutrient components.”

“[I am planning on] working with the after school program and having a group to videotape and interview the students and volunteers – having the students run the whole thing”

“[I plan to work] in collaboration with my school’s broadcast and computers classes by assigning student to be “science reporters or “science editors” for our daily T. V. show.”

Blogging

“I will set up a blog for students to use.”

“Media products will be published on a class web blog for student to engage in thoughtful dialogue. Parent, teachers, and other community members also have access to our class web blog.”

“[I] really would like to have a blog.”

Barriers to implementation

Barriers to teachers using their new science media skills fell into three primary areas: lack of time, lack of equipment, and need for additional support or resources. The barrier mentioned most often, by one-third of the teachers, was lack of time. Teachers felt they needed more time, both to be able to plan as well as time in the curriculum to integrate these new activities. One teacher whose students are already creating media products also identified the need to protect students who post material online.

Lack of time

“We don’t have time to really sit down and plan.”

“I just need to find time in my schedule.”

“My biggest struggle now is finding time to add all this to my currently packed curriculum program.”

“Significant time is required for students to produce high quality products.”

Lack of equipment

“I do not have enough computers capable of editing (I only have mine).”

“[There is a] lack of equipment to be able to truly engage all students in the production.”

Need for additional support or resources

“I am concerned on how well I understand the use of the cameras, etc. Is it enough to teach it?...I need help teaching the students how to use the technology.”

“I’m intimidated by the technology.”

Teachers value the use of media to teach science

Nearly all the teachers articulated how much they valued their new skills and how it provides important motivation and additional interest for kids in learning science.

“I definitely see a benefit to this approach.”

“I see the importance of incorporating as much technology as possible into learning science as it will motivate my students.”

“With the experiences of the past summer through OSMP, I am finding a renewed sense of enthusiasm with everything I do.”

Media teachers can provide support

The two OSM participating teachers who teach multimedia skills to students both expressed a willingness to step in and work with the other OSM teachers, and this may be an important role for them to play to continue the momentum of the project within OPS.

“My greatest way to give back may be in the form of helping others, either with working with the technology (hardware) or helping others develop their ideas”

Conclusions

Overall, the OSM participating teachers continue to express their enthusiasm for their new skills and a desire to incorporate what they’ve learned and bring technology into their science classrooms. These teachers identified specific activities to use their new media skills with their students. The opportunity to have time to converse and exchange details about what they are doing in their classrooms, how they are doing it, and what resources they are using was clearly valuable to them. This communication provided both some motivation and some practical information they could use.

While some of these teachers have been able to immediately incorporate more media creation in their work with students, others expressed the need for additional and ongoing support, including the need for additional guided, hands-on time with the technical tools. Creating more opportunities for these teachers to communicate and share with one another would enhance the ability of these teachers to implement and sustain the integration of these new science media skills in their schools.