

The Virtual Informal Education Web Project:
 Schenectady City School District
 Technology Innovation Challenge Grant

Content Provider Case Study
 Center for Puppetry Arts

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The Center for Puppetry Arts, located in Atlanta, GA, is both an educational and entertainment institution visited annually by thousands of children and adults. It offers a number of programs, which include puppet performances, curriculum-based workshops, a hands-on museum, distance learning, and outreach programs.

Initiated by the director of the education department, the Center commenced videoconference broadcasting in 1998. The director viewed videoconferencing as an avenue for infusing the arts into the school curriculum, as well as for popularizing the Center's programs and activities. The Center purchased and installed state of the art videoconference equipment in 1998. Soon after the distance-learning program was established, the Center hired distance learning educators specifically charged with the task of conducting videoconferences. The addition of a new staff member enabled the accommodation of the increasing demand for new programs.

Distance learning educators have since developed a number of new programs over the course of the last five years. Currently, the Center offers 16 programs for PreK-12. All programs were designed with teacher participation and were developed to meet both national and Georgia State Learning Standards. The distance-learning educators update their repertoires of videoconference programs annually. The videoconferences also can be tailored to the specific content of the science, social studies, and ELA subject areas, making each videoconference unique.

Through the medium of videoconferencing, participating students are introduced to different styles of puppets from around the world and engage in hands-on puppet-building workshops. The central activity in each videoconference is the creation of puppets, which is done under the supervision of the distance-learning educator. By the means of these hand-on experiences, children of all grade levels are exposed to various characters and subject matter. Materials for pre-conference activities and comprehensive study guides are routinely provided by the Center prior to each videoconference. Programs for the lower grades focus mostly on the process of puppet building, whereas middle and high school programs are designed to encourage dialogue between the presenter and participating students. The Center also offers workshops designed to introduce teachers to the facilities educational programs. During these sessions, the teachers have an opportunity to explore specific programs that could be presented to their students, and that will enhance their curriculum.

Project VIEW

In April of 2000, a consortium of school districts in the New York State Capital Region, under the leadership of the Schenectady City School District, implemented the Virtual Informal Education Web Program (Project VIEW) as a means of fostering the integration of content-rich, non-traditional, and geographically distant educational resources and activities into classroom instruction via interactive videoconference technology. Funded as a component of the United States Department of Education's Technology Innovation Challenge Grant initiative, Project VIEW strives to create, implement, and assess interactive curriculum resources that enhance student learning across multiple content areas and grade levels.

Project VIEW links components of professional development and technology integration models. This integration emphasizes collaboration among teachers and content providers in creating videoconference programs and related curricular materials, and the implementation of these materials into instructional practices. Processes enabling schools and content providers to build capacity for videoconferencing are incorporated into the program, as is the construction of sustainable professional development and technical support structures.

Since 2000, the Evaluation Consortium at the University at Albany has served as the principal evaluator for Project VIEW. Specifically, the Evaluation Consortium was commissioned to assist project staff by documenting the design and implementation of professional development activities and the immediate and long-term impacts of this professional development model on educators and schools.

The Center’s distance learning educators believe that the overarching goal of each videoconference is to assist students in learning by providing information to children in ways, which ordinary lessons cannot. The videoconferences create memorable experiences for students by sparking interest, keeping students cognitively involved, and contributing to the long-term retention of the acquired knowledge.

A number of conditions have to be met for a videoconference to be successful—key to a successful videoconference is students’ initial preparation for the videoconference. This preparation is facilitated by pre-videoconference activities and materials that are provided to the teachers by the Center. This includes initial instruction on the proper videoconference etiquette by the students. The success of videoconference activities also requires skillful participation on the part of the teacher, who acts as a facilitator of the class discussion and independent work. Center educators have observed that younger children greatly benefit from the presence of an active teacher in the classroom, who can provide students with help in the process of puppet construction. The interaction and question-answer exchanges between the distance learning educators and the students are essential features of an effective videoconference and is facilitated by active teacher involvement. The technical quality of the videoconference connection also is crucial for the videoconference success as well.

Videoconferencing has enabled Center educators to reach a large number of diverse audiences across the United States. Approximately four to six videoconferences are being conducted each day, which results in 80 videoconferences per month. The majority of these videoconferences involve out-of-state school sites that normally would not have access to the Centers’ resources. Times of specific offerings may vary; for example, because of the growing popularity of the “Gingerbread Man” the number of implemented videoconferences sharply increases during the holiday season.

The Center educators have developed close relationships with many of the teachers who have participated in their videoconferences and with other providers. The distance learning educators solicit teachers’ opinions and suggestions about possible improvements and modifications of particular videoconference programs through informal interviews. In addition, distance learning educators remain flexible and try to accommodate teachers’ special requests for coverage of a particular content or material. The partnership between the Center and the other providers rests on mutual respect and the appreciation that the members of the collaborating organizations have for each other.

One hundred and eighty-six students who participated in

**Table 1:
List of Programs Offered by Center for
Puppetry Arts**

Name of the Program	Grade
Stage Design for Puppet Theater	9th - 12th
Dinosaurs	Kindergarten-2nd
Discovering Puppetry in Other Cultures	4th - 12th
Butterflies	K-2nd
Africa (Mali)	4th - 8th
Native Americans	3rd - 6th
Rainforest	3rd - 5th
Plants	2nd - 3rd
Spiders	1st-6th
Gingerbread Boy	PreK-2nd
Exploring Africa	1st - 3rd
Introduction to Puppet Manipulation	7th - 12th
Edgar Allan Poe	8th - 12th
Don Quixote, Faust, or A Midsummer Night's Dream	9th - 12th

**Table 2:
Activities Engaged in by Students During the
Puppetry Arts Videoconferences**

Activity	% Agree
Watching the program	93
Participating in an activity with the presenter(s)	81
Answering questions	80
Designing or making something	75
Participating in an activity with my teacher	47
Working by myself	46
Asking questions	42
Solving a problem with the presenter	35
Discussion the topic with others	34
Working in a group	34
Other	24
Solving a problem with my teacher	17
Talking with my friends	17
Working on an experiment	12
Doing things not related to the program	8
Taking notes	3
Writing about the topic	4
Working on other homework	4

N=186

videoconferences with the Center of Puppetry Arts under the auspices of Project VIEW were surveyed about their perceptions of the programs offered by the Center. The participants represented five different schools. The vast majority of the students indicated that the videoconference was easy to understand (94%) and interesting (96%), and that they learned a lot from it (90%). Participating students were involved in several activities; these included: watching the program (93%); answering questions (80%); participating in an activity with the presenter (81%); and creating something (75%). A smaller percentage of students indicated that they worked by themselves (46%); asked questions (42%); solved a problem with the presenter (35%) or the teacher (17%); participated in an activity with their teacher (47%); and worked in a group (34%).

Despite the uncertainty surrounding the funding of the videoconference programs and the imposed budgetary constraints, the museum educators are eager to continue to conduct videoconferences. They would like to have an opportunity to connect with children from other countries and become a part of a global international network. The number of programs offered largely depends on the creativity and the insight of the distance learning educators, and is likely to increase as long as the distance learning educators are able to generate ideas about new puppets.

In conclusion, unlike many other distance learning content providers who commenced their videoconference programs due to their involvement with Project VIEW, The Center for Puppetry Arts initiated its distance-learning program independently and formed a collaborative relationship with Project VIEW. The documented success of the program is indicative of the opportunities for many specialized providers who are geographically bound for site visits to support virtual trips that allow access to new and creative resources.

**Table 3:
Students' General Perceptions of Point-to-Point Puppetry Arts Center Videoconference Programs**

Statement	% Agree
The videoconference was easy to understand.	94
The videoconference was interesting to me.	96
I learned a lot from the videoconference.	90
The topic fit with what I am doing in school right now.	82
I would like to learn more about what I saw on the videoconference.	85
I learned more about the topic through the videoconference than I would have in an ordinary class.	70
The videoconference made me more interested in visiting the content provider.	87

N=186

**Table 4:
Videoconferences Observed by the Evaluation Consortium Staff**

Program	Subject Matter Grade & School	Objective	Pre -VC	VC Activities	Instructional Materials	Role of the Content Provider
Butterflies	<p>Science</p> <ul style="list-style-type: none"> ▶ 1st Grade Clarksville Elementary School; BCSD ▶ 1st & 2nd grade Cohoes Catholic School 	<ul style="list-style-type: none"> ▶ To learn about butterflies: their body parts, coloration, life stages ▶ To learn about different kinds of butterfly 	<ul style="list-style-type: none"> ▶ Program guide downloaded by the teacher from the CP website ▶ Students prepare their own activity bags ▶ Students practice videoconference etiquette 	<ul style="list-style-type: none"> ▶ Students make a butterfly puppet ▶ The museum educator creates a butterfly puppet as well ▶ Discussion: questions from the CP 	<ul style="list-style-type: none"> ▶ Video clip of butterflies ▶ Pictures of butterflies ▶ Construction paper, glue, tape, pipe cleaners, string 	<ul style="list-style-type: none"> ▶ Demonstrates the process of making puppets ▶ Discusses each part of the project ▶ Introduced the concepts of proportion and symmetry
Edgar Allan Poe	<p>ELA</p> <ul style="list-style-type: none"> ▶ 7th & 8th grade; Cohoes Catholic School; Albany Diocese 	<ul style="list-style-type: none"> ▶ To learn about the process of producing a play 	<ul style="list-style-type: none"> ▶ Students have a preprogram lesson on Edgar Allan Poe 	<ul style="list-style-type: none"> ▶ Discussion on the different aspects of a successful play 	<ul style="list-style-type: none"> ▶ Marionettes; a model of a stage used for Poe's plays 	<ul style="list-style-type: none"> ▶ Discusses Poe's plays ▶ Explains the manipulation of the marionettes ▶ Explains the different stages of play production
Rain Forest	<p>Science & Social Studies</p> <ul style="list-style-type: none"> ▶ 3rd grade Wood Road Elementary school; Ballston Spa School District 	<ul style="list-style-type: none"> ▶ To learn about the rain forest's geographical location, ecosystem, animals, different layers; ▶ To learn to build a puppet of a bird from the rain forest 	<ul style="list-style-type: none"> ▶ A pilot pre-videoconference with the content provider to learn about the steps of building the base of the puppets to be created later 	<ul style="list-style-type: none"> ▶ CP presentation: review of the rain forest ▶ Students create a puppet of a bird ▶ Discussion on the rain forest and the process of building puppets 	<ul style="list-style-type: none"> ▶ Maps, pictures of birds, and animals from the Rain Forest 	<ul style="list-style-type: none"> ▶ Provides information about the rain forest ▶ Demonstrates the process of creating puppets
Dinosaurs	<p>Inter-disciplinary</p> <ul style="list-style-type: none"> ▶ Kindergarten; St. Luke; Albany Roman Catholic Diocese 	<ul style="list-style-type: none"> ▶ To learn about the characteristics of different kinds of dinosaurs by engaging in creating hand puppets. 	N/A	<ul style="list-style-type: none"> ▶ Students model dinosaur teeth ▶ Students make puppet dinosaurs ▶ Discussion on different types of dinosaurs 	<ul style="list-style-type: none"> ▶ Styrofoam cups, glue, 4 pieces of tape, scissors, precut construction paper; ▶ Pictures of dinosaurs 	<ul style="list-style-type: none"> ▶ Demonstrates and explains the process of making hand puppets ▶ Engages students in discussion

Program	Subject Matter Grade & School	Objective	Pre -VC	VC Activities	Instructional Materials	Role of the Content Provider
Puppets from different parts of the world	<p>Cultural Global Studies</p> <ul style="list-style-type: none"> ▶ 7th grade, Bethlehem Middle School ▶ 7th grade Wood Road Middle School 	<ul style="list-style-type: none"> ▶ To archive a broader understanding of the different cultures discussed in the program ▶ To learn how to create art 	<ul style="list-style-type: none"> ▶ Students are provided with diagrams and materials for creating puppets 	<ul style="list-style-type: none"> ▶ The presenter shows the countries involved on a map ▶ Video clips featuring the cultures are shown to the students ▶ Students create puppets representing different cultures ▶ Class discussion on the characteristics of each type of puppet 	<ul style="list-style-type: none"> ▶ Video clips and pictures of different cultures ▶ Computer animation ▶ Construction paper, glue, tape, pipe cleaners, string 	<ul style="list-style-type: none"> ▶ Introduces the cultures involved; ▶ Leads the discussion on the distinctive features of different cultures ▶ Demonstrates the process of puppet making ▶ Demonstrates how to use the created puppets
Ginger-Bread man	<p>Interdisciplinary</p> <p>1st grade Stevens Elementary School; Ballston Lake</p>	<ul style="list-style-type: none"> ▶ To learn to make a shadow puppet ▶ To examine the ingredients used to make gingerbread 	<ul style="list-style-type: none"> ▶ Teacher reads 3 different gingerbread stories 	<ul style="list-style-type: none"> ▶ Students make a shadow gingerbread man ▶ Discussion: questions from the CP 	<ul style="list-style-type: none"> ▶ Construction paper, scissors, tape, straws, metal clips, tissue paper 	<ul style="list-style-type: none"> ▶ Tells a story about gingerbread ▶ Shows the ingredients ▶ Explains the process of making gingerbread
Native Americans	<p>Social Studies</p> <ul style="list-style-type: none"> ▶ 4th grade Albany Diocese ▶ 4th grade Wood Road Elementary School (Ballston Spa School District) 	<ul style="list-style-type: none"> ▶ To learn about how different geographical regions shape the cultures of their inhabitants by demonstration of clothing, food, housing and materials/ resources of different regions 	<ul style="list-style-type: none"> ▶ Research on Indian tribes ▶ Advance preparation of the instructional materials to be used ▶ Artifacts, books, curriculum materials from the classroom used to deliver pre-program material 	<ul style="list-style-type: none"> ▶ Game: match items to their proper culture and region; ▶ Creation of an authentic mask puppet 	<ul style="list-style-type: none"> ▶ Video clip and pictures of Indian tribes; types of houses; clothing and food ▶ Construction paper, glue, tape, pipe cleaners, string 	<ul style="list-style-type: none"> ▶ Demonstrates the process of puppet making; ▶ Helps with the project ▶ Asks questions