Annual Report for Period: 09/2007 - 08/2008   **Submitted on:** 06/06/2008

Principal Investigator: Wolz, Ursula C.   **Award ID:** 0739173

Organization: The College of New Jersey

Submitted By:

Title:

Broadening Participation in Computing via Community Journalism for Middle Schoolers

<p align="center"><u>Project Participants</u></p>

Senior Personnel

> **Name:** Wolz, Ursula
>
> **Worked for more than 160 Hours:**   Yes
>
> **Contribution to Project:**

During the past academic year Dr. Wolz's contribution to the project have been as follows:

1. Responsible for coordinating activities between our content management development team (lead by Monisha Pulimood, co-PI), our interactive journalism curriculum team (lead by Kim Pearson) and our independent evaluator (Meredith Stone), as well as working closely with Mary Switzer our project manager to develop procedures for dealing with all the details of getting the project off the ground.

2. Took primary responsibility for getting the project approved by our Institutional Review Board (IRB). This proved to be a far greater undertaking than expected because the IRB had never been presented with a project of this complexity and magnitude that involved children. Consequently significant renegotiation took place before full approval took place.

3. Worked with Meredith Stone and Mary Switzer to assemble and develop pre and post test instruments for both our study group and a comparison group. In particular, with support from Pulimood & Pearson, an instrument was developed to study how middle school children can develop a story given a set of paper construction tools. We anticipate seeking further funding to validate this instrument for application beyond this project.

4. Developed a working relationship with Mitchel Resnick and John Maloney, MIT Media Lab, and creators of the programming environment 'Scratch.' An outcome of this was a co-presentation with Maloney & Pulimood at the ACM SIGCSE conference on Scratch, as well as a 'Birds of a Feather' session. A second outcome was development of a project that extends the goals of this one, submitted to NSF ITEST in April 2008. Resnick & Maloney are co-PIs, MIT is a subcontractor. More informal collaborations involve a visit by Wolz, Pulimood & Pearson to MIT, a visit from Karen Brennan, graduate student of Resnick's to TCNJ, as well as internet-based idea sharing. Wolz was invited to be an 'alpha' tester for the imminent release of a Scratch update. Was asked to present Scratch storytelling to a conference at Stevens Institute of Technology for High School teachers and their students, and was asked to develop curriculum for the SIGCSE Kidscamp in its first year as a service to SIGCSE attendees children.

5. Was also directly involved with the recruitment of six TCNJ undergraduate students to participate in this project from June 2, 2008 - July 28, 2008 as part of a TCNJ Summer Undergraduate Research Program. This included successfully applying for both NSF REU funding and internal TCNJ support for the students.

6. Worked with Mary Switzer and Jill Schwartz (guidance councilor at Fisher Middle School) to recruit a team of 5 middle school teachers who will work with us on this project for two years. Also contributed to the profile development and recruitment documents used by Stone to create the study and comparison group of middle schoolers who will participate in the project in the first study year (July 08 - June 09)

7. Successfully applied to present this project to (a) The New Media Consortium Conference, June 12-14, 2008, Princeton NJ, (b) Scratch@MIT, July 24-26, Cambridge MA. All PIs involved.

8. Preparing for her role as a lead teacher in the two weeks summer program that will commence on July 7.

During the summer, 2008, she is receiving the summer stipend designated by the grant. She is also receiving a small stipend given to faculty mentors of undergraduate researchers participating in TCNJ's summer research program. In addition, she is receiving

travel support her participation in panels at the New Media Consortium 2008 Summer Conference at Princeton University (June 2008) and the Scratch@MIT conference (July, 2008). Both panel presentations are devoted to the BPC project.

Name: Pearson, Kim

Worked for more than 160 Hours: Yes

Contribution to Project:

Since the award period, Pearson created a wiki to facilitate project management, contributed to the completion of the IRB application for the project, participated in discussions with regard to the selection of the study participants and student staff, and assisted in in the creation of the assessment tool used for the pretest. She has also participated in the content design for the content management system that will house the work for the project. In addition, she developed a journalism curriculum for the summer workshop and is creating lesson plans for that curriculum. Under her supervision, the college student assistants on the project are collecting information for the CMS database that will provide some of the research material for the participants in the summer institute and after school program.

Pearson will be part of the teaching faculty for the summer institute and school-year afterschool program and will help coordinate participation by news sources and guest speakers for the program.

Pearson will be part of panel presentations on this project at the New Media Consortium 2008 Summer Conference and the Scratch@MIT annual conference.

Pearson's involvement in BPC during the Spring, 2008 semester was supported by one course release funded under the BPC grant. During the summer, 2008, she is receiving the summer stipend designated by the grant. She is also receiving a small stipend given to faculty mentors of undergraduate researchers participating in TCNJ's summer research program. In addition, Pearson is receiving travel support her participation in panels at the New Media Consortium 2008 Summer Conference at Princeton University (June 2008) and the Scratch@MIT conference (July, 2008). Both panel presentations are devoted to the BPC project.

Name: Pulimood, Sarah

Worked for more than 160 Hours: Yes

Contribution to Project:

During the past academic year Dr. Pulimood's contribution to the project have been as follows:
1. Took primary responsibility for guiding a student researcher through the design and implementation of the CAFE (Collaboration and Facilitation Environment), our content management system, in collaboration with Kim Pearson and Ursula Wolz.

2. Contributed to development of the software engineering aspect of the curriculum for the summer interactive journalism institute.

3. Participated in discussions on the selection of the study participants and student staff, and creation of the assessment tool used for the pretest.

4. Co-presented a special session and a 'Birds of a Feather' session on Scratch with John Maloney (MIT Media Lab) and Ursula Wolz at the ACM SIGCSE conference. Contributed to development of a project that extends the goals of this one, submitted to NSF ITEST in April 2008. Have been asked to lead a day-long session on Scratch as part of a larger summer workshop for high school teachers at Haverford College, Pennsylvania.

5. Took the lead in applying for NSF Supplemental REU funding and internal TCNJ support for six TCNJ undergraduate students to participate in this project from June 2, 2008 - July 25, 2008 as part of a TCNJ Mentored Undergraduate Summer Experience. Was directly involved with the recruitment of the students.

6. Will co-present this project with the other PIs at (a) The New Media Consortium Conference, June 12-14, 2008, Princeton NJ, (b) Scratch@MIT, July 24-26, Cambridge MA.

7. Guiding undergraduate students as they continue development of the CAFE.

During the summer, 2008, she is receiving the summer stipend designated by the grant. She is also receiving a small stipend given to faculty mentors of undergraduate researchers participating in TCNJ's summer research program. In addition, she is receiving travel support her participation in panels at the New Media Consortium 2008 Summer Conference at Princeton University (June 2008) and the Scratch@MIT conference (July, 2008). Both panel presentations are devoted to the BPC project.

Post-doc

Graduate Student

Undergraduate Student

Technician, Programmer

Other Participant

Research Experience for Undergraduates

Organizational Partners

Other Collaborators or Contacts

Activities and Findings

Research and Education Activities:
Our project began in September, 2007, so our initial activities have been primarily organizational. However, we have designed our study, obtained IRB approval, selected subjects for both the control group and experimental group, developed our assessment criteria, and conducted a pretest to assess our subjects' baseline grasp of skills related to interactive storytelling. We are in the process of analyzing the pre-testing data. We have also created a curriculum plan for our summer program for teachers and students that we are currently implementing and refining.

Presentations related to this project have already been given at SIGSCSE (March, 2008) and The College of New Jersey's Information Technology Workshop (May, 2008) We will present the project at the 2008 New Media Consortium Summer Conference in June, and the Scratch@MIT conference in July.

Findings:
This is a new project, so we have no findings to report as of yet.

Training and Development:

Outreach Activities:

Journal Publications

Books or Other One-time Publications

Web/Internet Site

Other Specific Products

Contributions

Contributions within Discipline:

Contributions to Other Disciplines:

Contributions to Human Resource Development:

Contributions to Resources for Research and Education:

Contributions Beyond Science and Engineering:

Special Requirements

Special reporting requirements: None
Change in Objectives or Scope: None
Animal, Human Subjects, Biohazards: None

Categories for which nothing is reported:

Organizational Partners

Activities and Findings: Any Training and Development

Activities and Findings: Any Outreach Activities

Any Journal

Any Book

Any Web/Internet Site

Any Product

Contributions: To Any within Discipline

Contributions: To Any Other Disciplines

Contributions: To Any Human Resource Development

Contributions: To Any Resources for Research and Education

Contributions: To Any Beyond Science and Engineering