

## TRIANGLE INITIATIVE: MULTIMEDIA CONNECT

### About the Triangle Initiative

The Triangle Initiative is a strategic effort of the Columbia Center for New Media Teaching and Learning (CCNMTL), creating digital tools and capacities to serve the intersecting interests of education, research and underserved communities. Multimedia Connect is the first Triangle Initiative project.

### Overview

CCNMTL is teaming up with researchers from the School of Social Work to construct a multimedia environment that builds on the effectiveness of a proven HIV-prevention program. The Web-based system — which generates high-quality research data — has the potential to increase dramatically the number of people around the world who can benefit from the program. The project has also generated new Web-based tools and training videos for social work students.

### Background

Nabila El-Bassel, Susan Witte, and Louisa Gilbert, senior researchers of the Social Intervention Group (SIG) at the Columbia University School of Social Work, developed and tested Project Connect, the first couples-based, HIV-prevention intervention funded by the National Institute of Mental Health (NIMH). Once SIG proved the effectiveness of Connect's six-session program, however, they found two substantial barriers to wide dissemination: (1) implementation required a box-load of peripheral materials and (2) the skills of an advanced clinician. When they met CCNMTL in 2005, the SIG researchers had been working on Connect and several related projects for eight years and were looking for ways to both enhance and streamline the intervention.

### Getting to Work

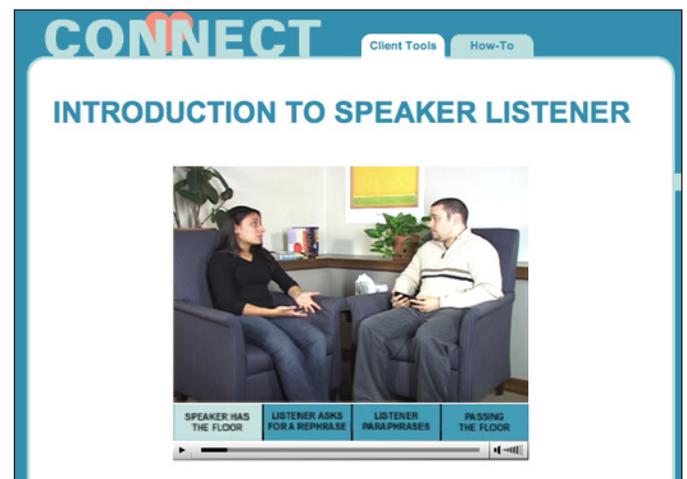
Engaging in CCNMTL's Design Research methodology, which follows an iterative path of Discovery, Design, Development, Implementation, and Evaluation\*, the CCNMTL/SIG team embarked on an extended Discovery phase. SIG learned about the range of possibilities digital media could support, while CCNMTL become conversant with the content, process, and theoretical underpinnings of the intervention as well as the materials that accompanied each session: videos, anatomical models, condoms and other prophylactics, and charts.

From the very beginning, the team imagined how to use digital technology to replace and enhance Connect's physical objects and extend their impact. At the same time, they also began to

For more on Design Research, visit <http://ccnmtl.columbia.edu/dr/>.



CCNMTL's Web-based application - with games, videos and other interactive features - helps facilitators guide couples through a six-session HIV prevention program.



CCNMTL produced original video vignettes with actors modeling communications skills that couples learn and practice in each of the program's six sessions.

envision how facilitator training might be improved, how the tool might be repurposed for use in Columbia's Social Work courses, and how to capture data for future research.

### The Shaping of Multimedia Connect

Dubbing the new project Multimedia Connect, CCNMTL asked a set of questions during the Design and Development phases:

1. **How can we help the participants better internalize what they need to institute healthier sex practices in their relationships?** CCNMTL designed an interface that is visually rich, dynamic, and engaging. The team created digital ver-

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sions of many of the paper-based activities to create a more satisfying experience.

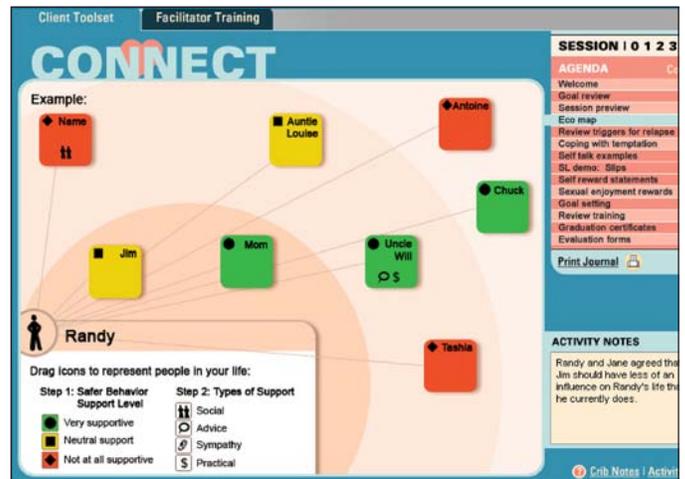
**2. How can we better support the communication and listening skills component that is part of the essential core in all six sessions?** The CCNMTL/SIG team added a palette of video vignettes of people using speaker/listener skills addressing the specific topic of each session. These are designed to model the technique and to provide the facilitator with a more flexible set of examples that can be used as necessary.

**3. Is there a way to provide participants with take-home materials that serve both as useful tools and more active memorials of their contract with one another as well as the successful completion of the intervention?** Multimedia Connect provides the capacity to print out all the specific information as well as general knowledge participants have learned and created in the intervention (including the session-by-session notes participants create as they go through the sessions).

**4. How can we broaden the base of facilitators so that a community-based health worker with some basic training could implement Connect?** Multimedia Connect tackles the difficult challenges of facilitator training and preparation in a variety of ways. First, the sessions are organized within the computer environment as a roadmap that is used both to train facilitators and perform the intervention itself. This allows the training to be more consistently delivered to a broader base of community health workers who will then use the same environment in their actual delivery of the intervention. Providing such a scaffold relieves the facilitator from the anxieties related to managing the sequence of events in the intervention and, simultaneously, gives both the facilitator and the participants a consistent and stable set of media objects and utilities that accompany them through the experience. In addition, the computer environment includes extensive resources on general knowledge and practice skills as well as "how-to" instructions for each session.

**5. How can we enhance data collection so that the delivery and dissemination processes can be evaluated and improved?** The Web-based system is designed to capture a wealth of use-data from the sessions that will inform future research and refinements of the intervention and its dissemination.

**6. How do we make elements of the project useful and relevant for Columbia's Social Work curriculum?** A social network mapping tool, speaker-listener technique video vignettes and other video assets developed for the project have already been incorporated in classrooms as well as in the field.



Each participant plots the individuals in their lives on an interactive map to create a visual representation of their social support network.

## Results to Date

Multimedia Connect is currently in the Development phase. An initial two-session beta test was completed during the summer of 2006, demonstrating a strong proof of its concept and execution. Now, replacing the box of physical objects and the hefty paper-based intervention and training materials is a unified, Web-based environment that addresses the needs of couples, facilitators, and facilitator trainers. The SIG team anticipates that the intervention will be able to be executed more consistently and more effectively. Dr. Witte has applied for new NIMH funding to test whether disseminating the intervention using a Web-based system leads to more frequent adoption of Connect, when compared with traditional paper-based and conventional training protocols. If funded, this study will begin in summer 2007. As the CCNMTL/SIG team proceeds with its design research, the team foresees adapting the language and cultural attributes of Multimedia Connect as part of a global solution for the prevention of HIV transmission.

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