MU Interdisciplinary Innovations Fund 2009-2010

Cover Page

Project Team:

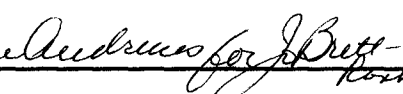|		
[signature]	*[signature]*	*Rebecca J. Meisenbach*
Kim Allen, Ph.D., M.F.T.	**Heather Eastman-Mueller, Ph.D., CHES**	**Rebecca Meisenbach, Ph.D.**
State Specialist	Coordinator , Sexual Health Advocate Peer Education Curriculum (SHAPE)	Assistant Professor of Communication
Director, Center on Adolescent Sexuality, Pregnancy and Parenting (CASPP)		
College of Human Environmental Sciences	Student Health Center, Health Promotion Department	

Project Description:

This project proposes to utilize students from the departments of Communication, HDFS, Business, and the Sexual Health and Peer Advocate Education (SHAPE) program to create and disseminate sexual health information using a multi-faceted website that includes educational information in a variety of electronic formats.
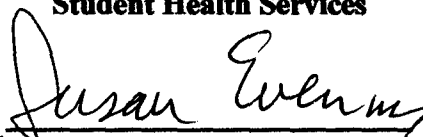
Department/Division Approvals

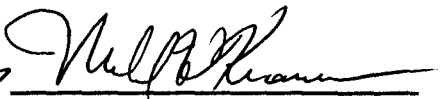| **HES Extension**	**Student Health Services**	**Communication**
Sue Audrews for J Britt-Rankin	*Susan Even m*	*Michael Kramer*
Jo Britt-Rankin, M.S., Ph.D.	**Dr. Susan Even, M.D.**	**Michael Kramer, Ph.D.**
Associate Dean of HES Extension	Director, Student Health Center	Professor and Chair, Department of Communication
Interim Associate Dean for Research & Graduate Studies HES		
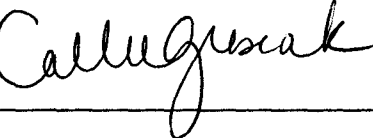
[signature]	*[signature]*	*[signature]*
Steve Williams	**Mike McNellis**	**Mike Watson**
Systems Support Analyst	Business Technology Analyst	Associate Director, Computing Services
College of Human Environmental Sciences	Student Health Services	Arts & Science Department
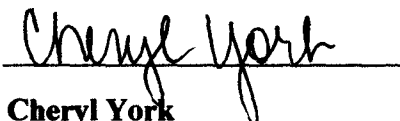
Callie Glascock	*Cheryl York*
Callie Glascock	**Cheryl York**
Assistant Director of Fiscal Operations, MU Extension	Administrative Associate I Student Health Services

Goals and Objectives

The primary goal of this project is to ensure undergraduates leave the University with sufficiently developed skills in leadership, communication, and technology use to successfully compete in the job market. The secondary goal of the project is to keep undergraduate students safe from the risks of sexually transmitted diseases and unintended pregnancies. The proposed project will work toward those goals by accomplishing the following measurable objectives within one year:

- *Objective 1*: Provide an interdisciplinary team of students the opportunity to assume a leadership role in this project by applying technology skills and sexual health information in a service learning project.

- *Objective 2*: Increase the knowledge of STD prevention by 50% among a minimum sample of one hundred undergraduate students enrolled at the University of Missouri.

- *Objective 3*: Prepare one manuscript for publication that reports on the efficacy of an interactive website as a vehicle for teaching sexual health information.

The primary project activity will be convening an interdisciplinary group of undergraduate students to build the infrastructure for an innovative web environment. The interactive web space will be designed to capitalize on undergraduates existing comfort with online sexual health information in order to increase their knowledge about contraceptive methods, sexually transmitted diseases, and perceived risk assessment

Description

Results from a study conducted in spring 2008 (n=956) showed that approximately 75% of MU respondents had engaged in oral and vaginal sex in their lifetime. Students reported the last time they engaged in oral, vaginal, and anal sex, only 1.7%, 37.6%, and 4.8% had used barrier protection, respectively. Furthermore, when investigating where students seek health information (including sexual health material), 79% of students reported using the Internet. Current mechanisms for MU students seeking sexual health information include presentations conducted in residence halls, Greek life, and academic classrooms. These data indicate a need for exploring alternative, innovative, and Internet-focused ways to reach our student body.

This interdisciplinary, student-centered, technology-based project involves students in project leadership, website development, maintenance, content development and message construction, yielding learning opportunities for both the students implementing the project as well as website participants. This project will enlist content expertise from three student groups: peer educators from the Sexual Health and Peer Advocate Education (SHAPE) program, Service Learning students enrolled in WGST 2960, and student interns from the Human Development and Family Studies Department's Center on Adolescent Sexuality, Pregnancy and Parenting (CASPP). Students from the Communication Department will transform the content into meaningful messages that will be delivered via multiple technology interfaces. A graduate student in the School of Business will develop and maintain the website.

During the initial year, the entire campus community will have access to the website with a random sample of students (n=100) recruited to evaluate the site's effectiveness by participating in a study. These students will be randomly-assigned to either an intervention or control group. Students in the intervention group will log into the site at 1 month, 3 months, 6 months, and 9 months to complete online assessments following each intervention. Students in the control group will complete the same assessments without viewing the site. Student will be given incentives for their participation.

In order to effectively educate MU students, the website must be comprehensive and interactive in its approach; therefore, the proposed website will contain a variety of interactive learning opportunities to foster student engagement. Students will be responsible for designing the experiential activities as well as the sexual health content for each section of the website. A mockup of the web page front page is included in Figure 1 below.

- *Individualized STI risk assessment* – Students will complete a survey asking for their sexual health behaviors (e.g., protective barrier use, substance use, and STI testing) followed by an individualized STI risk assessment describing how they can reduce their risk given their behaviors.

- *Skill building* – Assertiveness skills will be presented in a video created by the SHAPE peer educators. Questions assessing the skills and retention of information will follow the role play video.

- *Self-esteem* – Students will complete an interactive activities such as a self-assessment. This portion will include a how-to-build-SE description and its impact on sexual health and risk-taking.

- *Healthy Relationships* – Students will complete interactive simulations on relationships and mate selection.

- *Contraceptive Method Analysis* – This module will allow students to create a table or concept map, comparing and contrasting different contraceptive methods. Students can then complete a series of questions surrounding contraceptives (i.e., health history, cost). This module will emphasize prevention of STIs and unintended pregnancy.

- *Demonstration videos* on how to effectively use barrier protection developed by the SHAPE peers.

- *How to play it safe* – Students will define sex, safer sex, and abstinence. Applying this knowledge, students will place different sexual behaviors in order from high to low risk for STIs. This section includes a video of peer educators talking about how to reduce their risk. A portion would include information about how to be safe without having sex including masturbation, watching videos, snuggling, and kissing.

- *Resource Center* for campus and community – This will include an icon students can click to view images of campus/community buildings that offer STI testing and annual screenings, including hours of operation and testing costs. The link would include a clickable event calendar of sexual health awareness activities.

- *Chat room* – This portion will allow students to leave questions or enter a live chat room to ask a peer educator or professional staff member questions about sexual health issues.

- *Interactive zone* – Students will navigate different sexual health scenarios using an "avatar". Their avatar's health will depend on different behaviors selected (e.g., alcohol use, oral sex, and not communicating about sexual history). This module will enable students to experience potential consequences without taking the risk.

- *Up- to-date* – This portion will include current sexual health news.

- *Basic Sexual Health Information* – This portion will be student-constructed and include evidence-based research on STI, contraceptives, pregnancy options, reproductive anatomy, abstinence, sexual orientation and gender identity, relationships, and alcohol.

Figure 1. Mockup of webspace—Front Page
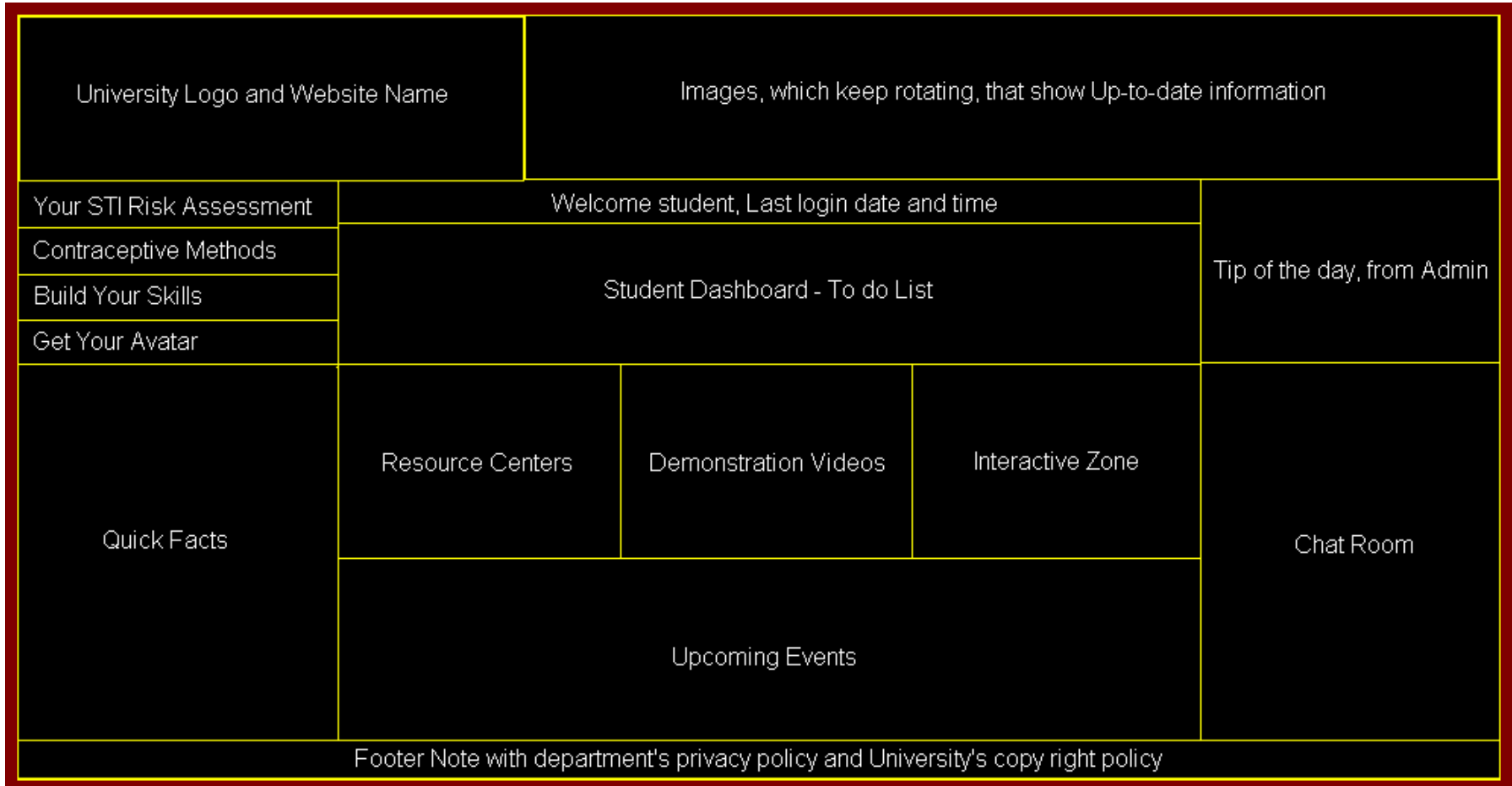
University Logo and Website Name	Images, which keep rotating, that show Up-to-date information	
Your STI Risk Assessment	Welcome student, Last login date and time	Tip of the day, from Admin
Contraceptive Methods	Student Dashboard - To do List	
Build Your Skills		
Get Your Avatar		
Quick Facts	Resource Centers / Demonstration Videos / Interactive Zone	Chat Room
	Upcoming Events	
Footer Note with department's privacy policy and University's copy right policy		

Management Plan

This project will be led by Dr. Kimberly Allen and co-led by Dr. Heather Eastman-Mueller and Dr. Rebecca Meisenbach. Dr. Allen brings years of grants management and content expertise to this project through her position as the Director of the Center on Adolescent Sexuality, Pregnancy and Parenting and as a State Extension Specialist at MU. Dr. Allen brings 12 years experience serving children and families as a teacher, marriage and family therapist, human development regional extension specialist, and has worked on numerous collaborative grants. Her expertise on adolescent sexuality and alternative research-based education will be instrumental as she oversees all project components and reporting.

Dr. Heather Eastman-Mueller brings years of teaching experience at MU as well as sexual health content and research expertise within the college population. Her current position as the Curriculum Coordinator of the Sexual Health Advocate Peer Education (SHAPE) program sponsored by the Student Health Center and the course WGST 2960, Sexual Health Advocacy and Service Learning she created, gives her immediate access to students that are trained to be content specialists on sexual health content and decision making. Her experience with sexual health content and student learning will be integral in the content development piece of the grant.

Dr. Rebecca Meisenbach brings an expertise in the construction and analysis of persuasive messages to this project. She will work with students who are designing the specific content of the videos and messages to be presented on the project website.

Maintaining a strong forward momentum and communicating across programs will be of the utmost importance to assure that project objectives are met. We have listed several strategies that we will undertake to manage this integrated project in both a collaborative and timely manner.

Coordination Strategy to Enhance Communication. Communication will take place between directors via informal day-to-day conversations and email. Additionally, monthly project meetings will be scheduled to provide updates, share information, schedule tasks, and report on student progress.

Student Meetings. Because students from at least four departments will be collaborating, monthly meetings will be scheduled with students and administrators to organize the project, address questions and potential pitfalls, and provide time for group thinking of key project concepts. Projects will be divided into categories and will be a working team for each category that will meet with their respective administrator. Teams include content development, web based and video technology, and information dissemination.

Project Reporting. Official project reports will be prepared by Kim Allen and disseminated to other project team members for input prior to submission. All three project directors and a student representative will attend the two presentations required for the project and will be available to share knowledge with other faculty members and students as needed.

Timeline. This project will be completed in three phases (see figure 2). The infrastructure phase includes development of the website template as well as content prioritization. The second phase consists of content development, including web based activities and video creation, as well as implementation and data collection. The final phase includes evaluation, analysis, and reporting.

Figure 2. Timeline of major project phases.
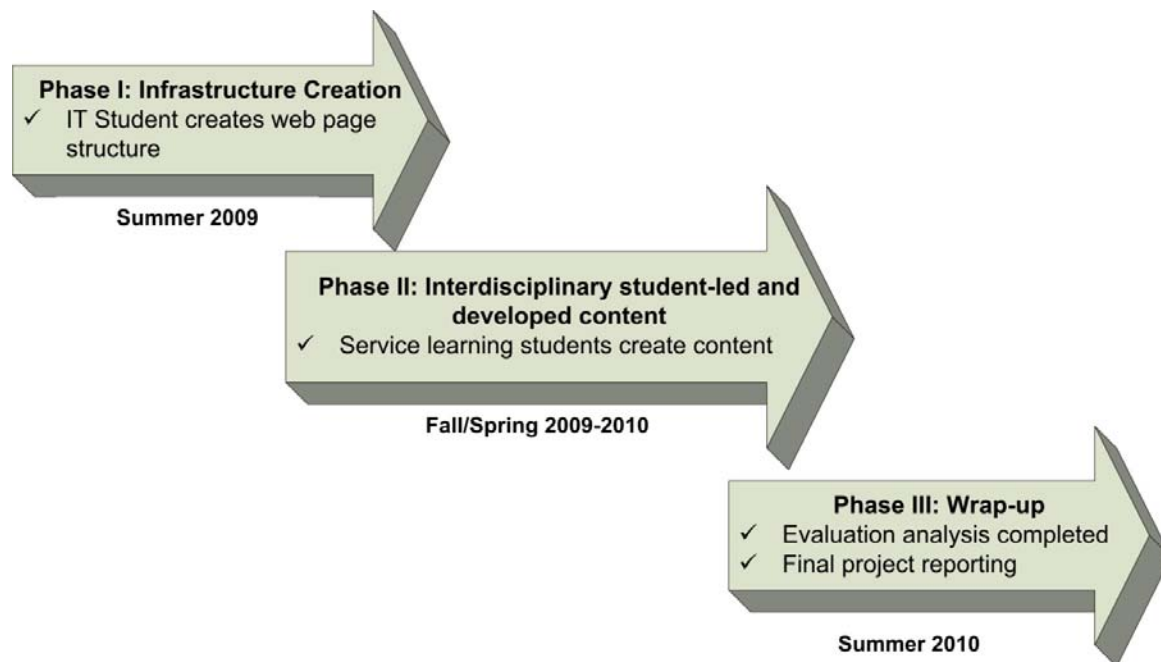
Evaluation Criteria

In an effort to evaluate the project, we have included a strong applied research component. The project proposes a two-prong evaluation that investigates student learning and leadership as well as evaluating the effectiveness of the tools created for the broader MU population. Specifically, this project will evaluate the creative team in the following ways:

Strategies to evaluate Objective 1:
- Team members will complete a brief pre-test assessing collaboration and leadership skills in small group settings. Students will complete the same test at the end of the project to determine the extent to which these skills have improved.
- Team members will maintain an electronic journal/blog -of reflections throughout the entire project addressing their learning, application of this experience to their future, collaboration, and team cohesiveness. Project leaders will analyze these data to determine the extent to how meaningful their experience was related to their participation. Qualitative data will be used to facilitate "teachable moments" throughout the creation of the site. Professionalism will be assessed by gaining feedback from each of the team members.

Strategies to evaluate Objective 2:
- Pretest, interim, and post-test survey data will be compared to determine the percentage of change in sexual health knowledge and STI prevention education among a random sample of undergraduate students. Differences between the intervention and control group will be assessed to determine project effectiveness.
- Student engagement will be assessed by monitoring the amount of time spent at each learning module.

Strategies to evaluate Objective 3:
- At the end of the year project, co-Directors and a student representative will report on the status of a research publication as a result of the project.

Budget

Item	Calculation	Request
Personnel		
Heather Eastman-Mueller	.03 FTE @ $45,408	$1,362
Kimberly Allen	.05 FTE @ $55,452	$2,773
Rebecca Meisenbach	.01 FTE @ $57,000	$570
Administrative Assistant	75 hours @ $12.50/hour	$938
IT Student	520 hours @ $16/hour	$8,320
SHAPE students	5 @ $20/each	$100
Fringe benefits		
Full-time project staff	28.87% X $8,202	$2,368
Supplies		
Software	Microsoft Visual Studio 2008, SQL Server 2005, and Microsoft Visio	$1,000
Laptop computer	1 @ $1,850	$1,950
Miscellaneous		$500
Other		
Participant incentives	200 @ $25/each	$5,000
Student email list	1 @ $100	$100
Total Request		**$24,980**

Personnel...$14,062
Salary is requested for Project Director Kimberly Allen, as well as co-Project Directors Heather Eastman-Mueller and Rebecca Meisenbach. The Project Director and Co-Directors will spend this time coordinating the roles of other project staff, attending planning meetings, reviewing text and design for the web pages, and providing overall leadership.

A critical piece of the project is the effort of the IT student who will be hired on an hourly basis (160 hours over one month in the summer and 360 hours during the fall semester) to create the project's interactive web page. SHAPE students will also be modestly compensated for their role in developing interactive content and video production.

The project also requests time for an Administrative Assistant to compensate for the additional time it will take to process and report on the disbursement of the 200 participant incentives.

Fringe benefits *$2,368*
Fringe benefits are budgeted at the required University rate for all full-time project staff. This includes the salary amount for the Project Director, Co-Directors, Administrative Assistant, and the summer hours of the IT student (portion of his effort where he will be full-time).

Supplies..*$3,450*
The project request funds to purchase a Dell laptop with the following specifications, which are necessary for completion of the IT Students' scope of work: 4 GB Ram, 60GM hard-disk space, SQL Server 2005 and Visual Studio 2008.

For database design and editing, the following software will need to be purchased: Microsoft Visual Studio 2008, SQL Server 2005, and Microsoft Visio. Finally, the project requests funds to purchase incidental supplies necessary for the completion of the project, such as envelopes for mailing participant incentives, meetings and flip charts for meetings, etc.

Other..*$5,100*
In order to ensure adequate testing of the completed web page for its impact on students, the web page will need to be utilized by a sufficiently high number of students. Therefore, the project requests funds for participant incentives to encourage timely participation. The project also requests funds to utilize the student email list to market and advertise the project and web page.

Pedagogical and Technical Support

The project directors are experts on sexual health and communication messaging, but there is a need for guidance on integrating technology as a teaching method. Fortunately, the youth we employ are highly tech savvy, but there is also need for technical support from ET@MO. The team envisions working with ET@MO to bring the faculty members and support staff up to date on integrating technology as a teaching tool.

Specifically, students will be producing video segments, and the project will happily utilize the expertise on video shooting, lighting and editing video by ET@MO staff. Additionally, this project will utilize the generous lending policy to borrow equipment including the Canon FS-11 16GB Hybrid Flash Memory/SDHC Camcorder for film shooting and utilization of the Mac computers with Final Cut software for film editing.

I endorse this project and I look forward to housing an innovative, interdisciplinary technology program that will utilize students in the process of educating youth on sexual health. The college of HES and University of Missouri Extension works hard to improve people's lives by creating innovative teaching mythologies, and I believe this project will be beneficial for all the students involved.

Jo Britt-Rankin, M.S., Ph.D.
Associate Dean of HES
Extension
Interim Associate Dean for
Research & Graduate Studies
HES

Dr. Susan Even, M.D.
Director, Student Health
Center

Michael Kramer, Ph.D.
Professor and Chair,
Department of Communication