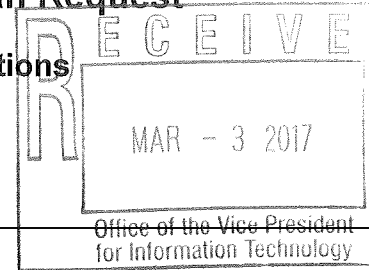


NDSU Student Technology Fee Action Plan Request

#1702

I. Action Plan Introduction and Authorizations



NDSU ORGANIZATION OR UNIT			
Department of Public Health			
TITLE OF PROJECT			
Expanding the Reach and Function of Distance Education			
Project Duration (3 years maximum)	From: May 2017	To: December 2017	
Type of Project (Check one)	<input checked="" type="checkbox"/> New X	<input type="checkbox"/> Previously Submitted	<input type="checkbox"/> Renewal
Total Technology Fee Request \$11,100			
Project Director (Must be NDSU faculty or staff) Stefanie Meyer		Campus Address: Research Park 2 Phone: 231-6549 Fax: 231-5586 E-mail: stefanie.meyer@ndsu.edu	
Name (Type or Print)	Signature	Date	
Project Director Stefanie Meyer		3-3-17	
Unit Head Abby Gold		3-3-17	
IT Division Consultant Daniel Erichsen		3/3/17	

Executive Summary (maximum of 175 words)

Distance education is an increasingly important option for the Master of Public Health (MPH) program and other graduate and undergraduate programs at NDSU. Appropriate distance education collaborative technology classrooms are limited. The pedagogical style for many instructors in professional and graduate programs is heavy in discussion and much less use of traditional lecture. For this reason, having a classroom with a more flexible design for tables and chairs is important and one that allows for maximal integration of the students at a distance also. Having a system that supports this teaching style is an innovative solution for multiple program needs. This technology request will bring distance collaborative technology to the A. Glenn Hill Center in a classroom that is designed for innovative integration. All NDSU students deserve to have access to the A. Glenn Hill Center and that requires distance and collaborative technology to be available in a scale-up classroom. This proposal will increase the flexibility of uses in the Hill Center and has been preliminarily vetted through the Learning Spaces Executive Committee. Blackboard collaborate will be used and integrated into a scale-up classroom to pilot a distance education teaching structure for all programs at NDSU that currently have a distance component; currently through the Interactive Video Network (IVN). Alternative platforms to the use of IVN need to be explored. This proposal will help to pilot a more innovative and less costly approach to distance education that also allows for small-group and discussion-based pedagogical style.

The Technology Fee Advisory Committee will only accept for consideration Student Technology Fee Action Plan Request forms which are fully completed and signed, and whose Project Directors have no past due reports on previously awarded projects as of the current submission deadline date, according to the guidelines listed in the Instructions, pages 1 and 2.

Technology Action Plan Request forms will be opened and reviewed after the submission deadline.

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II. Project Overview

1. How does this project meet student needs?

The MPH program began in 2012 with a distance education option. Therefore, the number of students using IVN technology to earn their degree from NDSU has increased. The American Indian specialization of the MPH degree has attracted national attention and as a result, the program has students from many states including California, Oregon, Colorado, and Oklahoma earning their degree from NDSU. In order for the MPH program and other graduate, professional programs to be sustainable and competitive (e.g. Educational Leadership, Nursing), appropriate distance technology needs to be available. In addition, the most effective distance technology needs to be used. This project aims to pilot a different approach to distance education.

2. What audience does this project directly serve? What audience is indirectly served? How many students are affected?

This project will directly serve courses using distance technology delivery and those that use an interactive or flipped classroom teaching style. A flipped classroom is a style of teaching in which material is read and prepared outside of class so class time can be spent on discussion and critical thinking activities. The MPH program is one of many programs that rely on IVN technology. Indirectly, using IVN technology increases student diversity in the classroom by connecting distance students from all over the world with on-campus students. This past fall semester over 25 classes were taught through IVN which affected over 380 enrolled students. In the global world we are teaching to, using distance technology is increasing in importance and demand from students. Hundreds of students could be impacted by using a better distance education delivery method such as collaborative tools online and in the classroom.

3. For projects that target a subset of NDSU's students, please describe the possibility for broader application in the future.

The use of distance education has grown at NDSU and proof of this can be seen in the College of Health Professions through the addition of the MPH program in 2012 and the addition of the School of Nursing Bismarck campus. Increasing the number of distance education classrooms is one strategy to help meet the NDSU goal of increasing the student body to 18,000. By integrating distance technology into the Hill Center, there will be increased opportunities for NDSU students to complete their degree by allowing them to start or finish coursework from a distance should circumstances arise (e.g. securing a full-time job; leaving the Fargo-Moorhead area). Piloting this innovative distance education strategy will allow other programs to explore distance learning as options as well. In a time of budget cuts, this could be vital to utilizing limited space and faculty resources.

4. Describe both the immediate and long term impact of this project.

The immediate impact of adding distance education technology to the A. Glenn Hill Center is to allow programs that are currently using this technology to have enhanced resources which allow for more courses to use an interactive teaching style. This will also allow classes already scheduled in the A. Glenn Hill Center to have access to using distance education. The long term impact will be increased exposure to NDSU curriculum by distance students and more effective training to students.

5. Who will pay for ongoing expenses following the technology fee funded portion of this project (e.g., who will replace hardware or software after it has reached its end of life)?

This system will not require regular, on-going expenses so the plan is to re-evaluate the use and costs at the end of the life of the system. With the speed that distance technology is changing, there will be different features and options available to consider.

6. Describe how this project will follow NDSU's best practices in information technology. (Please make sure the NDSU IT Division staff you consulted signs in Part I of this form.)

Daniel Erichsen, Micah McGowen, and Melissa Stotz were all consulted on the project. The use of IVN for distance education, while still a popular method, is being questioned as the best technology for now and in the near future of education. The project was discussed with a team of ITS professionals and public health faculty members who decided to pursue this project as an innovative pilot for best practice in teaching collaborative distance education. ITS will provide the necessary support for installation, system training, trouble-shooting, and maintenance.

7. What service on campus is most similar to the one proposed here? How does this project differ?

The IVN rooms in the QBB and EML buildings are the current learning spaces that allow for distance delivery courses to be offered. The Department of Education uses IVN and some collaborative learning software which is the most similar to this proposed project. This project differs from NDSU IVN rooms already established in that the request is for interactive distance technology that allows for discussion-based and group-work facilitation which requires an open classroom (moveable table) design, found in the A. Glenn Hill Center and nowhere else on campus. The proposed and vetted classroom is Hill 300.

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III. Project Description (5 pages maximum)

Include information on the background of this project: how did it come to fruition?

The MPH program has grown rapidly since the first class began in 2012. Offering a distance education option was very important from the beginning and using the IVN technology was the best option to allow for real-time student interaction between on-campus and distance students. The program matriculated four distance students in the first year. Now, in the fifth year, the number of distance students has grown to seven. The MPH program has enrolled, on average, 20 students each year and so seven distance students is a substantial percentage of the student body.

Curriculum for professional public health education is best delivered in discussion format and the traditional classroom is not practical. Also, by having such a large number of distance students, the traditional lecture-style set-up is really disengaging for the distance students. For these reasons, the MPH program has been looking for ways to use distance education technology in a more engaging way.

In order to change the way NDSU delivers distance education and use the best pedagogical methods, new technology and classroom design needs to be used. By using the scale-up design and layout of the Hill Center room 300, the MPH program and other distance-education classes will be able to use the most effective, evidence-based teaching methods and technologies. Currently, distance education style classes are not scheduled in the Hill Center and this proposal aims to increase the uses and access for all students in the newest, and most technologically advanced building.

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IV. Milestones

List the date for each project milestone. These milestones should represent the *significant* accomplishments that will be associated with the action plan. For each milestone, please indicate its expected outcome and the means for assessing that outcome. (The table may be extended as needed.)

	<u>Date</u>	<u>Milestone</u>	<u>Expected Outcomes</u>	<u>Means of Assessment</u>
1.	May 2017	Order equipment	All equipment is purchased	Inventory
2.	July 2017	Equipment installed	Classroom has all equipment installed	Equipment installed and working appropriately
3.	August 2017	Public Health courses scheduled	Public Health courses are taught using pilot model for distance education	An additional classroom is gained for NDSU distance education to be delivered
4.				
5.				

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V. Supporting Documentation

NDSU Student Technology Fee Action Plan Request VI. Budget

(double-click on the form to begin entering data)

1.	NDSU ORGANIZATION OR UNIT Public Health		
2.	PROJECT DIRECTOR(S) Stefanie Meyer		
3.	SALARIES AND WAGES		
	Personnel description	Number employed	Number of months
	A. Staff		
	B. Graduate students		
	C. Undergraduate students		
4.	TOTAL SALARIES AND WAGES		\$0.00
5.	FRINGE BENEFITS		\$0.00
6.	TOTAL SALARY, WAGES AND BENEFITS		\$0.00
7.	EQUIPMENT		\$11,100.00
	Describe Equipment specifics in the Budget Justification section		
8.	MATERIALS AND SUPPLIES		\$0.00
	Describe Materials and Supplies specifics in the Budget Justification section		
9.	TOTAL TECHNOLOGY FEE REQUEST		\$11,100.00
10.	MATCH (Describe in Match Section)		\$0.00
11.	TOTAL PROJECT EXPENDITURE		\$11,100.00

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VII. Budget Justification

Describe how you arrived at the budget totals in Section VI, Budget.

You are expected to follow all applicable university policies and procedures regarding salary expenditures.

You are expected to follow the state-approved purchasing guidelines when purchasing materials and supplies.

- **Equipment:** List name, estimated cost and quantity of each item and explain why it is important to the project. Include installation and maintenance costs in your estimates.

Manufacturer	Model	Quantity	Unit Cost	Quantity Cost	Description
Biamp	TesiraFORTE CI with AVB	2	\$2000	\$4000	Audio Mixers for bringing the microphone feed into the computer
Epiphan	DVI2PCIe	2	\$1000	\$2000	Capture cards for bringing the content and camera signals into the computer to send to the students
Vaddio	RoboShot 12 - 999-9909-000	1	\$3800	\$3800	Pan/Tilt/Zoom Camera
Crestron	DMC-4K-HD-HDCP2	1	\$500	\$500	Input card for integrating the camera signal into the video system
Crestron	DMC-HDO	1	\$500	\$500	Output card to feed the video signals to the two capture cards
Cables		1	\$300	\$300	Cables for connections

The equipment requested are all necessary components to outfit a classroom.

- **Materials and Supplies:** List name, estimated cost and quantity for each non-equipment items and explain why it is important to the project.

NDSU Student Technology Fee Action Plan Request

VIII. Budget Match

1. Attempted Budget Matches:

There are no budget matches to the equipment but staff time for preparation and installation will be in-kind.

2. Actual Budget Matches:

3. Additional Budget Match information: