DOCUMENT RESUME

ED 461 656 SP 040 516

AUTHOR Fitzpatrick, Corine; Nicholson, Karen; Mucciardi, Michael; Musal, Richard

TITLE TITAN: Transforming Instruction through Technology and Networking.

PUB DATE 2001-11-00

NOTE 23p.; Paper presented at the Biennial Convocation of Pi Kappa Delta (43rd, Orlando, FL, November 8-10, 2001). Appended color diagrams may not reproduce clearly.

PUB TYPE Reports - Descriptive (141) -- Speeches/Meeting Papers (150) -- Tests/Questionnaires (160)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS *Computer Uses in Education; *Curriculum Development; *Educational Technology; Elementary Secondary Education; *Faculty Development; Higher Education; Inner City; Preservice Teacher Education; Teaching Methods; Urban Schools

IDENTIFIERS Manhattan College NY

ABSTRACT

This paper describes an effort by Manhattan College, New York, and its consortium of partners (a local school district, the Archdiocese of New York, Apple Computer, and Educational Video Conferencing) to ensure the availability of technology-proficient educators in the area's inner city schools, where the digital divide is most prominent. A TITAN (Transforming Instruction through Technology and Networking) technology grant is facilitating this effort to educate teachers for New York's inner city schools. Goals include curriculum redesign, faculty development, infrastructure development (including human resources), and dissemination. This paper focuses on: (1) curriculum redesign teams, which revised undergraduate and graduate courses to reflect technology infusion as a teaching and learning tool, developed individual technology skills, and modeled technology use in K-12 settings; (2) faculty development, which links with curriculum development; and (3) the technology support team, which is made up of students from the School of Education graduate and undergraduate programs and from the Schools of Science, Engineering, and Business. The appendix presents data on Manhattan College faculty members' technology skills and attitudes about technology, survey instruments, information on TITAN grant workshops, a general preparation performance profile, and available TITAN resources. (SM)

1

TITAN:

Transforming Instruction through Technology and Networking

www.TITAN.manhattan.edu

Corine Fitzpatrick, Ph. D.
Manhattan College
718-862-7497
Email: cfitzpat@manhattan.edu
www.manhattan.edu/~cfitzpat

Karen Nicholson, Ph. D.
Manhattan College
718-862-7806
Email:knichols@manhattan.edu

Michael Mucciardi
TITAN Tech Team
718-862-7973
Email: mmucciar@manhattan.edu

Richard Musal
TITAN Tech Team
718-862-7973
Email: rmusal@student.manhattan.edu

Presentation at the Kappa Delta Pi, Orlando, Florida, 2001.

Manhattan College, bordered by the Hudson River and Van Cortlandt Park in the Riverdale section of the Bronx, is a private, independent institution of higher learning founded in 1853 upon the LaSallian Catholic tradition of excellence in teaching, respect for individual dignity, and commitment to social justice. With a student body of approximately 2,600 undergraduate and 525 graduate students, the College maintains a full range of programs in the liberal arts and sciences joined with professional programs in engineering, business, and education. The quality of the undergraduate programs has been demonstrated by the College's record as one of the nation's leading undergraduate sources of doctorates in the arts, sciences, engineering and education, and recognized by the establishment of chapters of such prestigious honor societies as Phi Beta Kappa, Sigma Xi, and Tau Beta Pi. From its very beginning, Manhattan College paid particular attention to educating first-generation college students, and was an early proponent of access for minority students, establishing special scholarship funds for minority students as early as 1938. Currently, over 30% of the student body are from racial and ethnic minorities (up from 14.7% in 1987), with the percentage of Hispanic students (16.8%) at above twice the national average (U.S. Census Bureau, 1998).

Teacher preparation began at Manhattan College in the late 1800's. In the tradition of Saint John Baptist de La Salle, the "Patron of all Teachers," the School of Education and Human Services now prepares dedicated professionals for careers in teaching and allied health services. A strong liberal education emphasizes effective communication, scientific literacy, and multi-cultural awareness. Course work and practical experiences provide those skills necessary for work in a school or clinical setting. Undergraduate programs of study are offered in Elementary, Secondary, and Special Education; graduate programs confer Master's degrees in Counseling, Administration, and Special Education.

Manhattan College as an institution -- together with its consortium partners Community School District Ten, the Archdiocese of New York, Apple Computer and Educational Video Conferencing -- has committed to spearheading a long-term effort designed to ensure that the availability of technology proficient educators becomes a reality in the area's inner city schools where the "digital divide" is most prominent. The TITAN grant has enabled us to pursue this commitment. Four goals have been established including: curriculum redesign, faculty development, infrastructure

development (including human resources) and dissemination. The focus of this paper is on curriculum, faculty development and the technology team that has been an integral part of this endeavor.

Curriculum Teams

Technology advances challenge us to think in new ways to improve the learning experience for those in K-12 settings and for those who are in teacher education programs. Yet technology must be a vehicle for learning. For teachers to learn to integrate technology into their work, they must experience it in their own development. Sandholtz, Ringstaff & Dwyer (1997) indicate that students learn best about appropriate use of technology when they are provided with models of good practice. We decided that focusing on developing curriculum to make it more technologically enriched would enhance the opportunities for our students to see models of good practice.

Teacher education does not occur in isolated rooms not connected to the practice of teaching in the real world. We wanted to involve master teachers, who use and have the desire to enhance their own work by embracing technology, to interact and influence our students and us as we went through this process. These ideas led us to develop "Curriculum Revision Teams", which included a faculty member from the college, educators from K-12 settings and students from our own programs. Our K-12 partner, Community School District 10, which serves the needs of approximately 47,000 students, has a critical need for mathematics and science teachers generally and in particular, those who are learning newer technologies. They asked us to include in our planning, attention to mathematics and science courses that might be taken by our students. As a result, we included certain mathematics and science courses in our plan. We currently have 20 teams engaged in the revision of curriculum, each team examining one of our courses or a course in the School of Science. While many of the teams are reviewing undergraduate courses, our graduate courses in the administration, counseling and special education programs have also been included. In this way, we believe we are impacting the entire school community.

The goals of the curriculum teams include: revising the undergraduate and graduate courses to reflect the infusion of technology as a tool for teaching and learning; developing individual technology skills of faculty, educators and students; and modeling

technology use in K-12 settings and college classrooms. Embedded in this process is an examination of various technology standards (e.g., ISTE, New York State). Any curriculum revision process must address these standards and it is the expectation of our faculty that our revisions will demonstrate the connection between the goals of the grant, the mission of the School of Education and other state and national standards.

A three-year process has been envisioned including a first "Design" year (DES), a second "Implement" year (IMP), and a third "Refine" year (REF). In year 1, the team meets at least once a month in person and also engages in on-line discussions. Technology workshops are often part of those meetings and the professional educators also have the opportunity to seek review of their work. Most members of the group plan to produce some project using technology. During the Implementation and Refinement stages, teams will still meet regularly and address needed concerns related to the curriculum modifications and their own work.

Evidence of our accomplishments includes revised syllabi, strong faculty attendance at workshops (over 90% attendance by School of Education faculty), and increased desire by professional educators to be on newly formed teams.

Faculty Development

Linking curriculum revision to faculty development is critical. Kaminski (2000) has noted that there are a variety of ways to aid faculty in integrating the learning of technology including weekly workshops throughout the academic year, one-week intensive workshops, and once a week workshop over a longer period. She found that the link between curriculum and learning technology was crucial for successful integration of technology into a course. The highest rate of integration was achieved when the objective was to target information for a particular course. Furthermore, faculty reported that release time and individualized, in-office support were the most important factors in their perceived success. Our project has attempted to link faculty development with curriculum revision.

An Individual faculty development plan (IFP) included an interview by the TITAN Technology staff regarding faculty perceived needs and skills and a review of their equipment for determination of upgrading needs. A Technology Coordinator, a recently retired professor who had become immersed in technology, came on board to

work with faculty and on other aspects of the grant, in a variety of ways including devising ways to fulfill idiosyncratic desires of faculty. This Director is also responsible for the learning and subsequent teaching of new software by the technology assistants (e.g., Lectora web authoring software).

Another model that has guided our development is Project THREAD which used institutional structures to support the infusion of technology throughout the UNLV's (University of Nevada, Las Vegas's) teacher preparation program. They sought to implement a systematic planning model and move from "pockets" of technology integration toward widespread infusion throughout UNLV's teacher preparation program. To engage in this widespread infusion they developed programs for faculty and for curriculum revision and included workshops that provided exposure to new technologies. We have extended this notion through our student driven model of technology support and through our connection to Apple Computer. For example, our faculty and/or staff learn from Apple trainers and then receive follow up implementation support from our staff. Nowhere is the success of this process more evident than in the increase in the development of faculty use of video-editing and faculty encouragement of student use of video-editing.

As previously noted, the School of Science was also included in the project. Faculty from both schools were involved in a pre-assessment analysis of their skill level and their attitudes about the role of technology in their work. Of particular note in the results was the finding that while School of Science faculty indicated that they were more highly skilled in teaching with a technology (57% vs. 18%), the Education faculty believed it had more instructional, personal and student benefits. A copy of this data is in the Appendix. More recently, faculty from the College were asked various questions about their use of technology. The table below illustrates School of Education faculty use of certain technologies as compared to faculty in the School of Science and in comparison to faculty overall. Results from this data suggest that faculty in the School of Education are clearly using as much or more of the technologies emphasized in the grant than professors from other Schools. What needs to be noted, however, is that faculty were not asked about using video editing or final produced videos in classes, both technologies that have been developed through the grant.

FACULTY TECHNOLOGY SURVEY

Skill used extensively or often	Education %	Science %	Highest School in College
Student computer use in class	15	15	Education & Science
Use of Blackboard	33	18	Education
Discussion Board	60	16	Arts; School of Education was second highest
Use of LCD	23	15	Bus; School of Education was second highest
Encourage student electronic presentations	33	33	Education & Science

Faculty have been motivated to learn the technologies and incorporate them into their courses. Although time and skill level have been factors, faculty who headed up teams were given reduced time or financial compensation to work on the project. This approach is strongly recommended as it enabled faculty to become more immersed in their development. Samples of a faculty team's comparison of ISTE standards to course implementation and the Individual Faculty Development Plan may be found in the Appendix.

Technology Support Team

The support team is made up of students from the School of Education graduate and undergraduate programs as well as from the Schools of Science, Engineering and Business, thereby providing a wide spectrum of experience, knowledge and maturity. The team functions as liaison between faculty, students and technology. As such, the team works closely with faculty individually, with the teams, and in classes. More importantly, the team has often been the initiator of ideas for the development of technologies and the ways in which these technologies can best be taught to faculty and students. The project has clearly been enhanced by their presence and the institutionalization of the work of the

grant will most likely include this model of technology support campus wide. In the Appendix are two diagrams that show the evolution of technology use from Year 1 to Year 2 of the grant.

In the future, we expect to continue to develop our technologies at a more advanced level, to focus more specifically on the infusion of those technologies into our curriculum and into the everyday work of our faculty and students. Further developments including a web and video server are projects taken on by the Tech Team to enable faculty and students to better store and retrieve edited video material. We hope to expand our collaborations with professional educators and develop an on-line mentoring program with those educators to better serve our novice teachers who will serve the K-12 community in urban schools.

References

Kaminski, K. (2000). Integrating technology into the college classroom. TechTrends v 44 no3 Apr 2000.p. 38-9.

Sandholtz, J., Ringstaff, C. & Dwyer, D. (1997). *Teaching with Technology: Creating student centered classrooms.* New York: Teacher's College Press.

Strudler, N; Heflich, D.; Anderson, D. (2000). Project THREAD: Technology Helping Restructure Educational Access and Delivery. In: Society for Information Technology & Teacher Education International Conference: Proceedings of SITE 2000 (11th, San Diego, California, February 8-12, 2000). Volumes 1-3; see IR 020 112. ED444568.

APPENDIX

Faculty Member's Technology Skills and Attitudes – Baseline Data

Twenty-five Manhattan College faculty members, including 11 professors from the School of Education and 14 professors from the School of Science completed a Technology Skills and Attitudes Assessment during the three-day Faculty Technology Immersion Institute in August, 2000. The respondents reported that they had been using computers for an average of 20 years (range = 5 – 43 years). Eighty-eight percent indicated that they used a computer at work almost daily, and 72% indicated that they used a computer at home just as frequently. Clearly, the faculty at Manhattan College were not computer novices at the start of the TITAN grant. Many, however, tended to use computers for relatively basic purposes.

As part of the Technology Skills and Attitudes Assessment, faculty indicated how familiar or comfortable they were with each of 33 computer skills, including basic skills, and skills in using various features of the following technology tools: word processing, spreadsheets, databases, presentations, graphics, audio, video, Internet and online communication. Table 2 presents the percentage of faculty members whose average rating of their technology skills fell at each point on a six-point scale on which '0 = I don't know what this means' and '5 = I would feel comfortable teaching this to others.

Table 1
Percentage of Faculty Whose Average Technology Skill Rating Fell at Each Point on a Six-Point Scale.

Group	0	1	2	3	4	5
Education faculty	0%	18%	36%	27%	18%	0%
Science faculty	0%	0%	21%	14%	57%	7%
All faculty	**0%**	**8%**	**28%**	**20%**	**40%**	**4%**

Based on the ratings in Table 1, science faculty had mastered more technology skills than education faculty. Despite this advantage, the education professors were more likely than the science professors to indicate that they *integrate technology into their courses* on a regular basis (36% of education faculty compared to 7% of science faculty).

The education professors' higher scores on the curriculum integration scale appear to be related to their responses to a set of 25 questions about their attitudes and dispositions toward technology use. Faculty rated the extent to which they agreed (+3 = strongly agree) or disagreed (-3 = strongly disagree) with statements that addressed their perceptions of the instructional benefits of using technology, and specific ways in which technology is helpful for themselves and their students.

Table 2
Faculty Members' Mean Level of Agreement with Statements About The Potential Benefits of Technology

Group	Instructional Benefits	Personal Benefits	Benefits for Students
Education faculty	0.67	1.17	1.67
Science faculty	0.25	0.69	0.43
All faculty	**0.44**	**0.90**	**0.97**

The data in Table 2 show that faculty from the School of Education tend to perceive technology as being more beneficial for instruction, personal efforts and students' learning than do faculty from the School of Science. This difference may be due in part to the barriers to technology integration that the science faculty reportedly face. Science faculty were more likely than education faculty to agree (on a scale on which '-3 = strongly disagree' and '+3 = strongly agree') that inadequate hardware (mean ratings = +1.3 for education faculty and +2.0 for science faculty), software (-0.1 compared to +1.6) and technical support (+1.5 compared to +2.1) limited their use of technology.

Participation in Technology Training Activities

Despite initial differences in technology expertise and utilization, both science and education faculty showed great interest in and enthusiasm toward the technology training opportunities offered through Project TITAN. The high level of interest appeared to increase over time as well as spread to faculty from other departments at Manhattan College (including Business, Engineering, and Arts). The number of attendees at the Faculty Technology Day sessions offered in January 2001 was twice as high as the number who attended the August, 2000 Institute. In addition, faculty and staff from across the college participated in workshops and tutorials offered through the TITAN grant. These workshops covered topics such as computer graphics, PowerPoint, HTML, Blackboard, and iMovie. Almost 50 individuals attended at least one workshop, and some faculty members attended as many as three to four workshops during a two-month period. In addition, members of the TITAN curriculum teams received additional training through tutorials that targeted each teams' needs. These tutorials were led by Manhattan College undergraduate and graduate students (TITAN Tech Staff) who are each available to assist faculty members for 10 – 20 hours per week.

Summary

The initial evaluation findings suggest that faculty from the School of Education and the School of Science may have different technology training needs. Faculty from the School of Education may, at least initially, require more assistance with learning how to use specific technology tools, whereas faculty from the School of Science may require greater attention to the ways in which these tools can be appropriately integrated into their courses. At our August 2001 faculty technology days, evaluation activities will examine whether these hypotheses are supported by differences in the types of training each group seeks, as well as document changes in the skills and attitudes of the two groups. In addition, data will be gathered on the effectiveness of the first year TITAN activities to ensure that any needed adjustments are made to keep the project on target toward meeting its objectives

FACULTY DEVELOPMENT PLANS

Faculty Name

Dates of Meetings 4/9/01

Personal Skill Interview Richard A. Musal

Equipment/Technology Evaluator Bhargav Vyas

1. Personal Interview:
   Professor has a more advanced knowledge of technology. He uses programs such as Power Point, Excel, Word, and Blackboard for personal and classroom reasons. He has a good understanding of what he knows and has a positive attitude toward learning new technologies. He prefers to stick with what works, but is willing to learn new technologies if he feels they will enhance the lesson. He is able to pick up the material at a quick rate. uses Blackboard extensively in his classes along with the internet and Power Point presentations. He also uses e-mail to communicate with his students sometimes. encourages his students to learn and implement technology in their classrooms.

2. Technology Staff Evaluation:

Present condition:

- Computer has window 98 operating system.
- 32 MB memory.

Recommendation:

- At-least 10 GB hard drive needed.
- At-least 64 MB memory needed.
- If possible need 17" monitor.
- Need Acrobat Reader
- Need Adobe Photoshop

3. Overall Recommendations:
   Our recommendation is for to engage in some of the technology workshops that will be offered by TITAN over the summer. We also recommend that make appointments for private learning sessions if he feels he needs them. should also contact computer services and inquire about getting some of the upgrades Bhargav recommended in section 2 of this document.

Qualitative Assessment of Faculty Technology

1. What software applications do you use?
   a. Personal:
   b. In class:

2. What technologies do you know?
   - Power Point
   - Excel
   - Access
   - Word
   - Black Board
   - I-Movie
   - Other

3. What specific technologies do you currently use in your class?

4. What technologies would you like to learn and implement into your class?
   - Power Point
   - Access
   - Word
   - I-Movie
   - Black Board
   - Scanning

5. Do you think that technology has changed the ways faculty work?
   - Planning
   - Delivery of courses
   - Making assessments
   - Grading
   - Making assignments

6. "The goals of infusing technology into our education curriculum are to enhance student learning through motivation. Educators need to tap into the variety of ways students learn, as well as being role models in staying current with the educational technology used today."

   Based on this idea what do you see as a priority, technology wise, to bring to your students?

7. What kinds of software and hardware would you like to see in the future?

Your school: Arts ☐ Business ☐ Education ☐ Engineering ☐ Science ☐

Please fill in one of the boxes to the right of the question, using the scale below.
Scale: 1. *Extensively* 2. *Sometimes* 3. *Rarely* 4. *Not at all* [or] *I am not familiar with the content of the question.*

		1	2	3	4
1.	Do you have access to a networked computer?	☐	☐	☐	☐
2.	Do you make use of online library resources (catalog, databases)?	☐	☐	☐	☐
3.	Do you know which electronic library reference materials are licensed by the college?	☐	☐	☐	☐
4.	Do you access the library's electronic reference materials from off-campus?	☐	☐	☐	☐
5.	Do you use e-mail for professional correspondence?	☐	☐	☐	☐
6.	Do you correspond with students through e-mail?	☐	☐	☐	☐
7.	Do you make use of electronic information (Internet, CD, etc.) when preparing your syllabi?	☐	☐	☐	☐
8.	Do you include websites or other electronic sources on your reading lists?	☐	☐	☐	☐
9.	Do you make use of a computer laboratory or wireless laptops during class time?	☐	☐	☐	☐
10.	Do you review the process of electronic information gathering with your classes?	☐	☐	☐	☐
11.	Do you assist the students in creating criteria for evaluating material gathered through electronic means?	☐	☐	☐	☐
12.	Do you accept Internet citations on reports?	☐	☐	☐	☐
13.	Do you make use of Blackboard to list your course syllabus and reading list?	☐	☐	☐	☐
14.	Do you make use of Blackboard to make announcements or give assignments to your classes?	☐	☐	☐	☐
15.	Do you make use of electronic discussions groups (e.g. threaded discussions)?	☐	☐	☐	☐
16.	Do you provide reference material to the students in electronic form (e.g. provide articles on the course website)?	☐	☐	☐	☐
17.	Do you use an LCD projector for class presentations?	☐	☐	☐	☐
18.	Do you encourage students to use electronic projection for class presentations?	☐	☐	☐	☐
19.	Are there electronic resources available to your students to help them learn your course material?	☐	☐	☐	☐
20.	Do your students have access to electronic resources that are designed to assist them to be successful in their careers?	☐	☐	☐	☐
21.	Do you support students receiving credit for courses taken electronically from other sources?	Yes ☐		No ☐	
22.	Are you interested in teaching a course via distance learning technology?	Yes ☐		No ☐	
23.	Are you aware of any staff development workshops on technology that were given recently?	Yes ☐		No ☐	
24.	Should the college have specific computer/IT competency requirements for all graduates?	Yes ☐		No ☐	
25.	If you use Blackboard, in how many courses do you use it for more than just posting the syllabus	1 ☐	2 ☐	3 ☐	4 ☐

Titan Grant Workshops

Schedule for the Week of April 30, 2001
Time: Monday, Tuesday, Wednesday: All workshops 4:00 - 5:30

To Register: E-mail Sr. Frances Cardillo at fcardill@manhattan.edu (preferred)
Or call Office, Bio. Dept. 405-3385 (leave message)
Titan Office: 862-7933

Permanent Schedule: Week of April 30	**Mon. April 30** **FTP (File Transfer Protocol) -- Part I** Transfering files to the Internet **Presenter:** Vlad Panov **Place:** Miguel 110	**Tues. May 1** **Scanning Text and Graphics** Bring text, photos, etc. for scanning. **Presenter:** Sr. Frances **Place: TITAN office**	**Wed. May 2** **Simple HTML Coding** for BlackBoard or **Powerpoint** **Presenter:** Dr. Peter McCartthy **Place:** to be announced

As of Wednesday, May 2, 2001 the TITAN Workshops will be suspended for the summer. In place of the workshops, the TITAN Staff will be available for individual services for faculty interested in adding technology to their courses. If you need assistance in learning Blackboard, or any other software for the courses you teach, and want to work on a program this summer, call the TITAN Office (862-7933) for an appointment. A TITAN Staff member will set up meetings to assist you.

TITAN Tutorials available for July and August, 2001

Subject: TITAN Tutorials available for July and August, 2001
Date: Mon, 2 Jul 2001 10:28:42 -0400
From: "JasperNet Email Distribution" <x@x.x>
To: "JasperNet Email Distribution \(JasperNet Email Distribution\)" <x@x.x>

TO: Manhattan College Faculty and Staff
RE: TITAN Tutorials available for July and August, 2001
FROM: Sr. Frances Cardillo

In the event that you have the time and need to learn a computer program this summer, TITAN is offering tutorials at your convenience during July and August. Send me an email describing your needs and the time you are available. Programs such as Microsoft Word, Powerpoint, Excel, Access, HTML, Blackboard, scanning, digital still photography and video are some of the topics that can be offered. Let us hear from you soon.

fcardill@manhattan.edu

GENERAL PREPARATION PERFORMANCE PROFILE

Upon completion of the general preparation component of their program, prospective teachers:

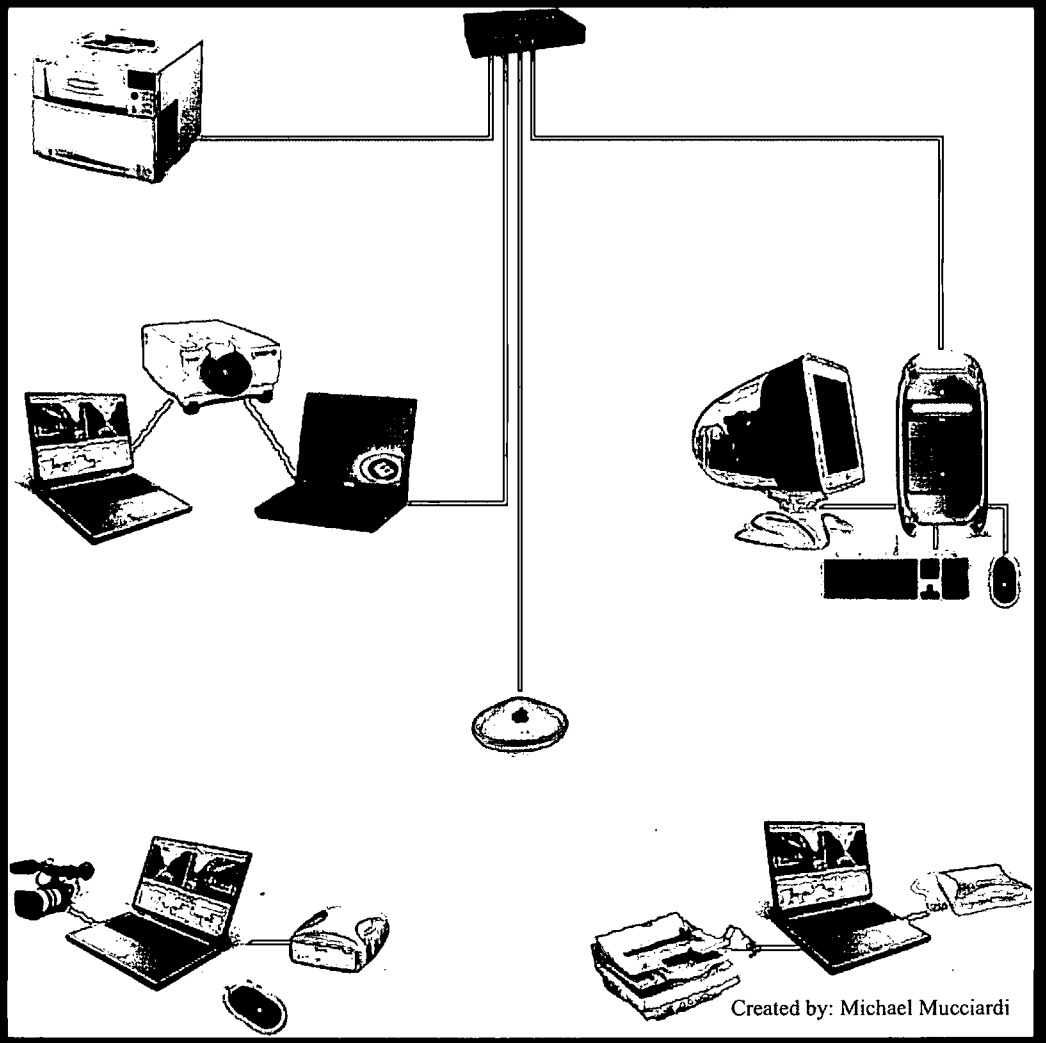
iste	
1. demonstrate a sound understanding of the nature and operation of technology systems. (I)*	Word Processing, PowerPoint Use of email Web searches
2. demonstrate proficiency in the use of common input and output devices; solve routine hardware and software problems; and make informed choices about technology systems, resources, and services. (I)*	Class on evaluation of web sites Class on search engines and library searches Email of 1 assignment Web site evaluation assignment
3. use technology tools and information resources to increase productivity, promote creativity, and facilitate academic learning. (I, III, IV, V)	Threaded discussion
4. use content-specific tools (e.g., software, simulation, environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research.(I, III, V)*	N/A to this Class (Methods)
5. use technology resources to facilitate higher order and complex thinking skills, including problem solving, critical thinking, informed decision making, knowledge construction, and creativity. (I, III, V)*	Evaluation of Web sites Library database search Research paper to include web sites
6. collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works using productivity tools. (I, V)*	Use of PowerPoint Threaded discussion
7. use technology to locate, evaluate, and collect information from a variety of sources. (I, IV, V)*	Library database search Class on evaluation of web sites

PowerPoint Word

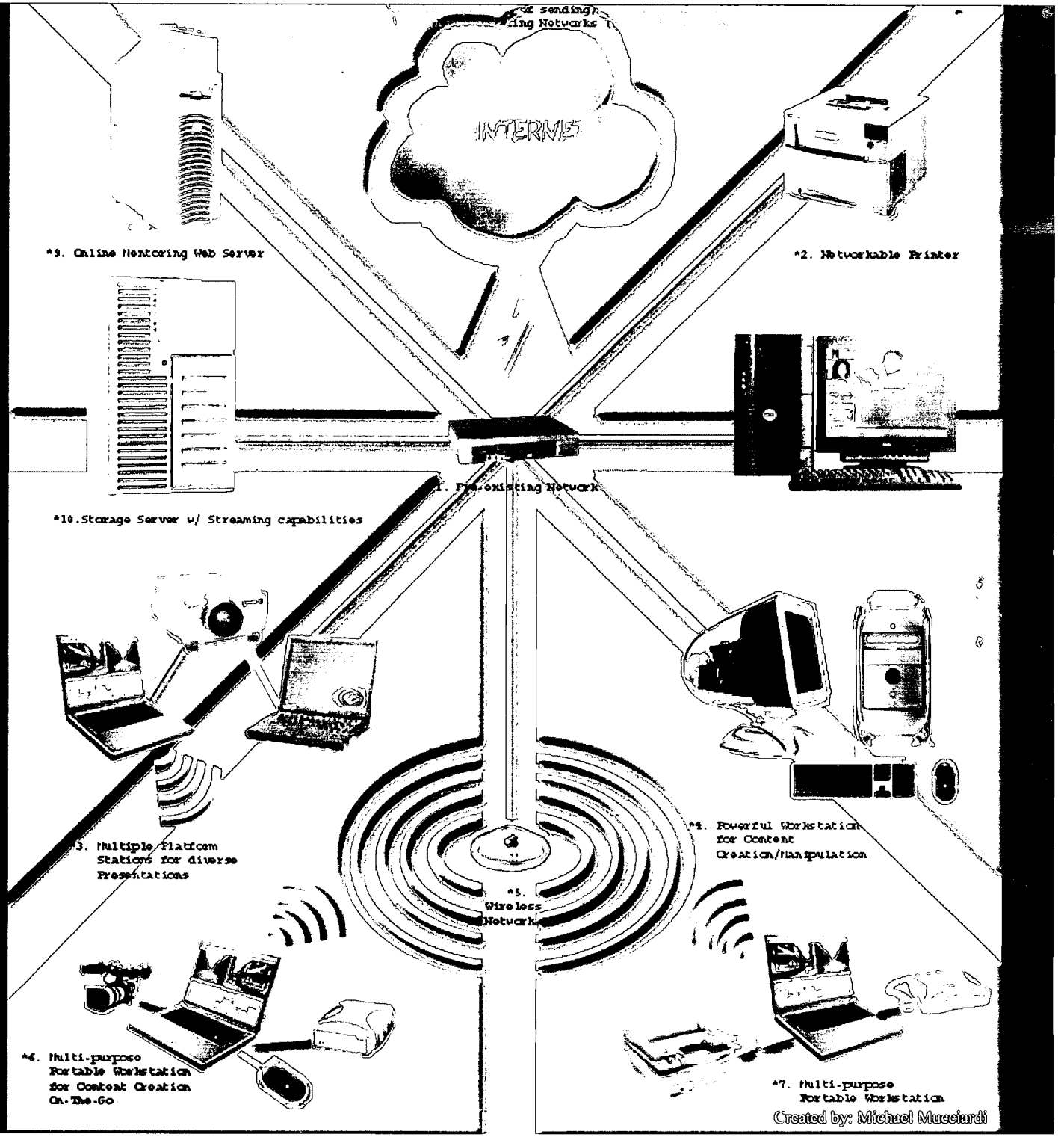
8. use technology tools to process data and report results. (I, III, IV, V)*	Use of PowerPoint Evaluated web sites posted on Blackboard
9. use technology in the development of strategies for solving problems in the real world. (I, III, V)*	Threaded discussion
10. observe and experience the use of technology in their major field of study. (III, V)	Blackboard
11. use technology tools and resources for managing and communicating information (e.g., finances, schedules, addresses, purchases, correspondence). (I, V)	Emailed assignment Threaded discussion Announcements
12. evaluate and select new information resources and technological innovations based on their appropriateness to specific tasks. (I, III, IV, V)*	Demonstrated use of search engines
13. use a variety of media and formats, including telecommunications, to collaborate, publish, and interact with peers, experts, and other audiences. (I, V)*	VCR clips Blackboard postings Expert commentary on threaded discussions
14. demonstrate an understanding of the legal, ethical, cultural, and societal issues related to technology. (VI)*	Class devoted to use of technology
15. exhibit positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity. (V, VI)*	Threaded discussion
16. discuss diversity issues related to electronic media. (I, VI)	Class devoted to the use of technology
17. discuss the health and safety issues related to technology use. (VI)	Class devoted to the use of technology

* Roman numerals relate to ISTE National Evaluation Standards for Students

Available TITAN Resources
Year 1



YEAR 2


INTERNET
*9. Online Monitoring Web Server
*2. Networkable Printer
*10.Storage Server w/ Streaming capabilities
*1. Pre-existing Network
*3. Multiple Platform Stations for diverse Presentations
*4. Powerful Workstation for Content Creation/Manipulation
*5. Wireless Network
*6. Multi-purpose Portable Workstation for Content Creation On-The-Go
*7. Multi-purpose Portable Workstation
Created by: Michael Muccihardi

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: TITAN:Transforming Instruction through Technology and Networking	
Author(s): C. Fitzpatrick; M.Mucciardi; R. Musal; K. Nicholson	
Corporate Source: Manhattan College; Graduate School of Education	Publication Date: November, 2001

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system; *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1

[x]

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) *and* paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A

[ ]

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B

[ ]

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, → please

Signature: Corine Fitzpatrick, Ph.D.	Printed Name/Position/Title: Corine Fitzpatrick, Ph.D./Associate Prof.
Organization/Address: Manhattan College, Riverdale, NY 10471	Telephone: 718-862-7497 FAX: 718-862-7472
	E-Mail Address: corine.fitzpatrick@manhattan.edu Date: 2-08-02

(over)

CLEARINGHOUSE ON TEACHING
AND TEACHER EDUCATION

June 6, 2001

Dear Kappa Delta Pi Presenter:

The ERIC Clearinghouse on Teaching and Teacher Education invites you to contribute to the ERIC database by providing us with a copy of your paper that will be presented at the *43rd Biennial Convocation,* (Orlando, FL, November 8 - 10, 2001). Abstracts of documents that are accepted by ERIC appear in the print volume, *Resources in Education* (RIE), and are available through computers in both on-line and CD/ROM versions. The ERIC database is accessed worldwide and is used by teachers, administrators, researchers, students, policymakers, and others with an interest in education.

AACTE
AMERICAN ASSOCIATION OF COLLEGES FOR TEACHER EDUCATION
1307 NEW YORK AVE., NW
SUITE 300
WASHINGTON, DC
20005-4701
202/293-2450
FAX: 202/457-8095

Inclusion of your work provides you with a permanent archive and contributes to the overall development of materials in ERIC. The full text of your contribution will be accessible through the microfiche collections that are housed at libraries throughout the country and through the ERIC Document Reproduction Service. Documents are reviewed and accepted based on their contribution to education, timeliness, relevance, methodology, effectiveness of presentation, and reproduction quality.

To disseminate your work through ERIC, you need to fill out and sign the **Reproduction Release Form** located on the back of this letter and include it with a letter-quality copy of your paper. You can mail the materials to: **The ERIC Clearinghouse on Teaching and Teacher Education, 1307 New York Ave., N.W., Suite 300, Washington, DC 20005.** Please feel free to photocopy the release form for future or additional submissions.

Should you have further questions, please contact me at 1-800-822-9229; or E-mail: lkelly@aacte.org.

Sincerely,

Linda M. Kelly

Linda M. Kelly
Acquisitions and Outreach Coordinator