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ABSTRACT

This study examined planned change in Winston-Salem State University's teacher education program. An external review of the School of Education indicated a weakness in program planning and curriculum design. This review stimulated planned change initiative to strengthen teacher education. Factors influencing the internal environment of teacher education were noted, including uneven student performance on Praxis II examinations. In examining this uneven performance, researchers determined that instruction was a function of the preferences of whichever faculty member taught each course. In many cases, faculty did not utilize recommended standards or principles. Researchers worked to re-design the special education curriculum and seek pilot-test status for NCATE 2000 standards with their scheduled accreditation visit. Neither initiative generated the necessary change, so a PT3 grant, Technology Infusion Project, was secured. The project emphasized professional development for faculty and cooperating teachers, providing workshops on curriculum alignment, computer skills, and multimedia technology use. Over time, training became more sophisticated. Two years of evaluation data suggest that teachers found the workshops useful. The workshops resulted in enhanced student performance. Teachers felt more competent in curriculum design, assessment, and computer utilization. They appreciated the opportunity to network. Quality and accessibility of technical support were significant factors in participants' skills and knowledge acquisition. (Contains 22 references.) (SM)



Planned Change in Teacher Education: Unfreezing the Status Quo Through the Integration of Technology

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This paper describes a case study of planned change in the Teacher Education program of Winston-Salem State University (WSSU). WSSU is a historically Black college that is a constituent institution of the University of North Carolina. It was the first HBCU in the United States to offer a degree in Elementary Education in 1925. It has an enrollment of approximately 3,000 students. The case will address the context of the planned change, the key strategies in the intervention, and an assessment of the impact of the interventions.

Context

The Chancellor of the University commissioned an external review of the School of Education in the academic year 1997-1998. The review indicated a weakness in program planning, and curriculum design. This external review was the initial stimulus for the planned change initiative to strengthen teacher education at WSSU. The analysis of the context for this intervention began in the fall of 1998. The external environment and the internal environment of the institution have a major impact on Teacher Education.

External. Several factors influence the external environment for teacher education at WSSU. First, North Carolina is a Praxis II state. This means that it requires successful scores on this examination for state licensure of teachers. Second, the North Carolina Legislature mandated that the Department of Public Instruction develop a report on all the public and private teacher education programs in North Carolina. The Institution of Higher Education (IHE) report was not designed to be a valid assessment mechanism, but rather a political tool to



communicate the legislature's commitment to accountability in K-16 education in North Carolina. The Department of Public instruction already provided "Report Cards" on K-12 schools (NCDPI, 2002). As one lobbyist stated in an unguarded moment "We know the best programs; we need to work with the IHE report until it reflects what we know" (Personal Communication, 1999). Third, North Carolina requires NCATE certification for its teacher education program and NCATE 2000 was on the horizon. This change in the accreditation process moved from an assessment in the inputs into the teacher education process to an assessment of outcomes and systems that are used to guide teacher education (NCATE, 2002). Fourth, North Carolina was one of the founding states in the Interstate New Teacher Assessment and Support Consortium (INTASC). This consortium identified 10 principles to guide the preparation of beginning teachers (INTASC, 1992). These principles would guide the development of North Carolina standards for state licensure (see Table 1).

Fifth, there was a major power struggle that affected how decisions were made and how resources were allocated in the Institution. The Chancellor of the Institution had a disagreement with a major gatekeeper of the dominant coalition of the Black community in Winston-Salem and this coalition began to wage a war against the Chancellor that eventually drove him out (Holmes, 1999). When the dominant coalition that had removed the previous chancellor brought in their preferred replacement (Johnson, 2001), a member of that coalition was heard to say, "it's a new day now, we are in charge" (Personal communication, 2001).



Many teacher education faculty members translated this statement to mean that academic decisions were made based on social and political connections.

Table 1

INTASC Principles.

Principle	Description
1	The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.
2	The teacher understands how children learn and develop, and can provide learning opportunities that support their intellectual, social and personal development.
3	The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.
4	The teacher understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills.
5	The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and selfmotivation.
6	The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.
7	The teacher plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.
8	The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner.
9	The teacher is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.
10	The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being.

(INTASC, 1992)



Another factor was facilities planning, The University of North Carolina developed a 5-year, 4.9 billion facilities campaign for the University system (UNC General Administration, 1999) and identified WSSU as one of the UNC institutions that should absorb significant enrollment growth over a 10-year period (UNC General Administration, 2000). The first 5 years of the facilities plan was funded through a successful bond referendum. In addition, UNC General administration placed in the state continuation budget special funds for school university partnerships that could be available to Teacher Education programs at individual institutions. At WSSU in 1998 these funds still came straight through to teacher education. However, North Carolina is currently enduring a major budget crisis and state funds are very limited.

Internal. There are several factors that influenced the internal environment of teacher education at WSSU. First, the University Partnership funds were available for Teacher Education, but they were primarily used to support a summer program for High school students who had an interest in teaching as a career. Second, the University was establishing a staff development center in Academic Affairs, the Center for Innovative Teaching, Technology, Learning, and Evaluation (CITTLE) (Winston-Salem Sate University, Retrieved July 1, 2002). Third, the student performance on Praxis II examinations was very uneven. In some areas, the student success rate was in the 90's and some areas the success rate was in the 30's (see Table 2). The comments from faculty members in meetings suggested that many of them did not have high expectations for all their students. Fourth, a pilot test of a paper and pencil test



of technology skills, given to graduating seniors indicated that only 30% of those taking the examination passed. Fifth, the School of Education had received permission to plan a Master of Elementary Education program. The learning

WSSU 1999 Praxis II Scores from IHE Report on Teacher Education Institutions.

Area	Percentage Successful
Professional Knowledge Test (PK/PLT)	96%
Elementary Education	75%
9-12 Social Studies	33%

Note: Report only listed majors that reached a specific numerical threshold (NCDPI, 2000)

outcomes for this Program would have to meet INTASC principles, NCDPI standards and National Board for Professional Teaching Standards guidelines. The authors believed that planning the curriculum for the new program might influence the other program areas.

However, when one of the authors conducted a force field analysis of the status quo (lowa State University, Retrieved July 1, 2002), the biggest restraining force was the perceived lack of efficacy of the faculty in teacher education (see Table 3). Many faculty members did not believe that they could change the direction in which things drifted. A powerful statement that echoed through discussions was "you have to remember where you are" (Personal Communication, 1999). The distal objective for the authors was strengthening the teacher education program; the proximate objective was strengthening faculty efficacy.



Strengthening the WSSU Teacher Education Program to Meet State and
National Standards: A Force Field Analysis.

Driving Forces (the pro's)	Restraining Forces (the con's)	
Administrative commitment to Teacher Education (2)	Lack of faculty efficacy (5)	
Faculty desire to demonstrate	Faculty creative activity (3)	
competence (2)	Inadequate funds (4)	
Forsyth County Superintendent request for improved technology instruction (2)	Inadequate infrastructure (4)	
NCATE reaffirmation visit (3)	Poor curriculum design (3)	
Pending IHE report (3)		
History in teacher education (1)	· .	
School/University partnership project (2)		

Strategies

When we began to analyze possible causes for uneven student performance on Praxis II, we discovered that the instruction, which took place in each course each semester, was a function of the preferences of the faculty member who taught the course at that time. In many program areas faculty members neither addressed nor utilized the standards or principles recommended by their professional association or INTASC. In the area that had the most success – PK/PLT, i.e. the professional knowledge test, faculty aligned the learning outcomes with the national standards in their field and used assessments that mirrored or exceeded the level of complexity that students



would face on Praxis II. After this analysis, we began two initiatives. The first was to use funds from the University School Partnership to support the work of two faculty members and an external consultant in the realignment of the curriculum in one area, special education. The second was to seek pilot-test status for NCATE 2000 standards with our scheduled accreditation visit. These new standards emphasized performance assessment and data-driven curriculum planning. We felt that the emphasis on performance assessment would become a driving force in unfreezing and changing the status quo.

Curriculum redesign. Two junior faculty members in a subject area that had consistently poor performance on Praxis II agreed to work an overload during the spring and to work during the summer to redesign the Special Education curriculum and learning outcomes of the major courses in this area with the assistance of a consultant from a nearby state institution. Some of the senior members of the faculty who had been unwilling to redesign their curricula resented the extra pay incentives provided to the junior faculty. However, the curriculum outcome was very positive. The team of faculty redesigned all of the professional courses in their area. In two years, student success on Praxis II went from 30% to 100%. However, we did not have the resources to replicate this model throughout the entire teacher education.

NCATE 2000. Our participation in NCATE 2000 led to extensive and valuable discussion about our mission and objectives throughout teacher education, which led to this theme "Critical and Creative Thinkers: Evolving Professionals Who Facilitate Learning for All Students in a Diverse,



Technologically Dynamic World" (School of Education, Retrieved July 1, 2002). We spent 2 years developing a comprehensive assessment and feedback model and we began using rubrics consistently in our culminating course (School of Education, Retrieved July 1, 2002), but we did not impact the process of a critical mass of professional and major courses in teacher education. We developed an assessment model and we redesigned our culminating course to fit that model, but we did not complete the realignment of learning outcomes to national standards and develop rubrics for all the learning outcomes in the majority of teacher education courses.

In addition, neither initiative generated the change in our proximate objective, faculty efficacy, which we believe is a necessary condition for our long-term objective, a teacher education program that enables and models our theme. To complement previous and on-going efforts aimed at unfreezing the status quo, the authors secured a PT3 grant sponsored by the U. S. Department of Education in the spring and summer of 2000. The grant is titled the Technology Infusion Project (TIP). We hoped that the Technology Infusion Project would help us address this necessary condition.

Technology Infusion Project. The project, funded in 2000, grew out of the analysis of our own organization and the literature (Anonymous, 1999; ISTE, 1999; Office of Technology Assessment, 1995). The major emphasis of the project is professional development for faculty and cooperating teachers and the logic model for the project emphasizes the "end-product approach" (Ireh & Bell, 2002).



The conceptual framework or logic model of this intervention was based on certain assumptions:

- 1. Specific learning outcomes that were aligned with national standards and that were assessed through the upper levels of the cognitive domain of Bloom's Taxonomy, i.e., analysis, synthesis, and evaluation (Learning Domains or Bloom's Taxonomy, Retrieved July 5, 2002) would improve student mastery of the discipline and performance on Praxis II.
- Asynchronous and synchronous use of technology in instruction would improve student mastery of the discipline (Mayadas, 1997).
- 3. Faculty must integrate the effective use of technology throughout the curriculum (ISTE, 1999).
- 4. Faculty must model the effective use of technology (ISTE, 1999).
- Comprehensive and systematic professional development for faculty and cooperating teachers in the use and integration of advanced technologies is a necessary condition for success.
- 6. Thorough and authentic assessment is a necessary condition for success.

We made every effort to model behavior that exemplified our beliefs during the planning and implementation of the professional development. We designed high standards for the performance-based rubrics for the products (Technology Infusion Project, Retrieved July 1, 2002) and developed a comprehensive



formative and summative evaluation plan with our external evaluator, Dr. Willie Pearson, Jr., Chair of the Department of History, Technology & Society at the Georgia Institute of Technology. Working with our partners in CITTLE, we tried to make certain that the professional training was developmentally appropriate. The purposes of the professional development were to (a) transmit knowledge and skills, (b) strengthen the driving force – faculty desire for competence, and (c) reduce the strongest restraining force – lack of faculty efficacy, i.e., that they did not expect to make a difference in the quality of teaching and learning at WSSU.

We began the first year with workshops on curriculum alignment, basic computer skills, and the use of multimedia technology (Technology Infusion Project, Retrieved July 1, 2002). We continued the emphasis on curriculum alignment and multimedia in the second year and introduced the production of web pages, web-assisted courses, digital portfolio development, and WebQuests (Dodge, 2001). Two years of Evaluation data are beginning to paint a picture of where we are.

Impact

The external evaluation from the first year was positive.

In sum, five major themes emerged from both the interviews and mail surveys: 1) The technological infrastructure of the University is a limiting factor in PT3 efforts to infuse instructional technology in the classroom and faculty development; 2) The primary reason for taking the workshop was skills and knowledge acquisition; 3) The structure and organization of the workshops contributed much to its overall success; 4) Participants cited evidence of enhanced student performance as an outcome of workshop participation; and 5) The development of new networks, including interdisciplinary ones, was a major outcome of workshop. (Pearson, 2002, February 12, p. i)

We began to see some signs of change in faculty efficacy:



One participant said that: "What I had been doing was so rudimentary compared to what was required to be done..." This also speaks to the high performance set by the PI and PD. Another remarked that: "I have seen people doing things that they were not doing before." (Pearson, 2002, February 12, p. 1)

We also saw the impact of our emphasis on curriculum design and assessment.

The workshop enhanced some participants' ability to more clearly articulate course requirements and relate them to performance objectives. One respondent noted that "Prior to the workshop, I could not write instructional or performance objectives according to Bloom's Taxonomy." Another found that "I can develop a rubric which clearly spells out expectations for a culminating project, the different levels of performance, and the criteria assessing the product at each level." Still another found that "I had to think about everything that I am asking students to do. If it doesn't relate to standards, then I am leaving them out. I feel better about requiring them to do things with technology because I feel better about my ability to do it myself and show them how." (Pearson, 2002, February 12, p. 5)

Possibly the most important unintended consequence that was reported in first year evaluation was the networks that were developed among faculty who participated in the workshop.

A major benefit from participating in the workshop was the opportunity to become part of new networks: "I am now part of a network of people who are interested in multimedia technologies. Had I not been part of the PT3 workshop, I probably wouldn't be a part of that (network)." Another major benefit was forming interdisciplinary collaborative groups: "Before the workshop, we really didn't have much contact with the people in Education. Now, we (math/science faculty) are planning to form a program so that we can prepare science teachers." (Pearson, 2002, February 12, p. 5)

Some of the issues of concern that emerged from the first year evaluation were designing staff development for diverse ability groups and diverse learning styles, meeting the needs of the disabled in the design of multimedia material, providing adequate equipment for faculty so that they



could practice and implement their new skills in their offices and classrooms (Pearson, 2002, February 12).

In addition, the TIP staff development helped produce a very positive unintended consequence. Although our performance rubrics focused on the redesign of existing programs of study, faculty members took the skills and knowledge that they had acquired and developed web-assisted modules of instruction for lateral entry teachers in Middle Grades Education (MGE). The modules integrated the learning outcomes of the professional core and the MGE outcomes into cohesive units that required the students to produce electronic portfolios of their work.

During the second year of the project, we emphasized small group instruction and tutorials to support diverse ability groups and learning styles and we provided authoring software in our ad hoc computer laboratory for faculty use. The evaluation report for the second year summarized the program participants' key issues.

Finally, six major themes emerge from the interviews: 1) The University's technological infrastructure (as measured by the equipment provided to professors in their offices and in the classrooms) is a limiting factor in the Technology Infusion Project's efforts to infuse instructional technology at the University; 2) The primary reasons for taking the workshops are "skill development" and "knowledge acquisition"; 3) Participants' view the workload (expectations) as demanding; 4) Participants are either unsure of or doubtful about the level of support for the TIP initiative from the University's most senior administrators; 5) The development of new networks, both interdisciplinary and with the teaching and learning center, are a worthwhile outcome of the workshops; and 6) The quality and accessibility of technical assistance (support) are significant factors in participants' skills and knowledge acquisition. (Pearson, 2002, May 16, p. 2)



Although the resources are limited and the work environment demanding the staff development and follow-up support are bringing about a positive response from the faculty. The stipends that we use help the process, but the desire and opportunity for mastery has become the most important driving force. The project has strengthened the driving force – faculty desire for competence and impacted the restraining force – lack of faculty efficacy.

All of the participants in the workshop regard "knowledge acquisition as "very important" or "most important". One participant remarks: "I am intrinsically motivated...Don't get me wrong, I need the money but I want the knowledge more than anything." Furthermore, the participants believe their "new skills" are absolutely mandatory to compete in a more technologically sophisticated world. In the words of one respondent: "I am going to be a constant learner when it comes to technology." Another adds: "I want to know my technology as well as I know my subject." (Pearson, 2002, May 16, p. 5)

We believe that we have achieved our proximate objective faculty efficacy and that we are making good progress toward our distal objective – a stronger teacher education program. Forty-four teacher education courses have been redesigned and aligned with various national standards (see Table 4). Technology competencies have also been integrated in these courses (ISTE, 2002) In addition; teams of faculty are designing integrated, web-assisted instructional modules for lateral entry teachers in Elementary Education and Special Education. The faculty will deliver the modules in fall 2002 as weekend instruction. Also, faculty members believe that the project has had an immediate impact on their students (Pearson, 2002, February 12).



Table 4

Number of Courses Redesigned and Web-Based through TIP July 5 2002

Area	Number of Courses
Art Education	5(23%)
Birth to Kindergarten Education	4(40%)
Education (professional core)	5 (100%)
Elementary Education (BS)	5(83%)
Elementary Education (M. Ed.)	6(50%)
Mathematics Education	3(27%)
Music Education	6(27%)
Physical Education	5(50%)
Special Education	7(77%)
TOTAL	44

We believe that this case illustrates the power that resides in faculty members' desire for competence. Despite organizational turmoil, limited infrastructure, and uncertain administrative support (Pearson, 2002, May 16), the desire of faculty members to master their discipline and their craft unfroze the status quo and is moving the equilibrium toward higher standards of performance for students and faculty.



References

Anonymous. (1999, Oct). Will new teachers be prepared to teach in a digital age? The Education Digest, (65)2, 33-37.

Dodge, B. (2001, October 27). The WebQuest Page. Educational Technology Department at San Diego State University. Retrieved on July 1, 2002 from http://webquest.sdsu.edu/webquest.html

Holmes, W. L. (1999, Nov. 19). Chancellor Schexnider to leave WSSU for new job supporters, opponents praise his vision, work to make the school a leading regional university. <u>Winston-Salem Journal</u>, pp. A1, A8.

International Society for Technology in Education (ISTE). (1999). Will new teachers be prepared to teach in a digital age?: A national survey of information technology in teacher Education. Santa Monica, CA: The Milken Family Foundation.

International Society for Technology in Education (ISTE). (2002) National Educational Technology Standards for Teachers: Preparing Teachers to use Technology. Eugene, OR: Author.

Interstate New Teacher Assessment and Support Consortium (1992). Model standards for beginning teacher licensure and development: A resource for state dialogue. Retrieved on July 9, 2002 from http://www.ccsso.org/intascst.html#draft.

lowa State University Extension Force Field Analysis. Retrieved July 1, 2002 from http://www.extension.iastate.edu/communities/tools/forcefield.html.

Ireh, M. and Bell, E. D. (2002) Implementing faculty professional development: The product-based model. Paper presented at the PT3 Grantees Conference, July 25-28, 2002. Renaissance Hotel, Washington, DC.

Johnson, M. (2001, Jan. 10). WSSU's Martin likely to get top job for good; Broad nears decision on chancellor for college will bypass traditional search. Winston-Salem Journal, pp. A1, A3.

Learning Domains or Bloom's Taxonomy. Retrieved on July 5, 2002 from http://www.nwlink.com/~donclark/hrd/bloom.html

Mayadas, F. (1997, July 2). ACCESS, a report submitted to the Alfred P. Sloan foundation on behalf of Virginia Tech. Retrieved July 5, 2002 from http://www.edtech.vt.edu/access/



National Council for Accreditation of Teacher Education (NCATE) (2002). Professional standards for the accreditation of schools, colleges, and departments of Education. Retrieved July 9, 2002 from http://www.ncate.org/2000/unit_stnds_2002.pdf

North Carolina Department of Public Instruction (2000, Dec. 7). IHE performance report: Summary report 1999-2000. Raleigh, NC: Author.

North Carolina Department of Public Instruction (2002, June 18). North Carolina's testing program receives top grade from Princeton review. Retrieved July 10, 2002 from http://www.ncpublicschools.org/news/01-02/061802.html.

Office of Technology, U.S. Congress. (1995). <u>Teachers and technology:</u> <u>Making the connection</u>. Washington, D.C.: Office of Technology assessment. Retrieved, July 11, 2002 from http://www.wws.princeton.edu/~ota/disk1/1995/9541.html.

Pearson, Willie, Jr. (2002, February 12) First Year Evaluation Report Technology Infusion Project. Retrieved July 1, 2002 from http://gorams.wssu.edu/soe/Tip/yr1evaluation.htm#SUMMARY

Pearson, Willie, Jr. (2002, February 12) Phase II Evaluation Report Technology Infusion Project. Retrieved July 5, 2002 from http://tip.wssu.edu/Tip/Evaluation/yr2evaluation.htm

School of Education, WSSU, (2001) NCATE Continuing Education Institutional Report, Winston-Salem, NC: Author. Retrieved July 1, 2002 from (http://gorams.wssu.edu/soe/ncate/institutionreport.htm

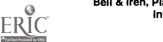
Technology Infusion Project, Retrieved July 1, 2002 from http://gorams.wssu.edu/soe/Tip/tip.htm.

http://www.wssu.edu/its/cittle.asp.

University of North Carolina General Administration, (1999, June). Board of Governors Report. Retrieve July 5, 2002 from http://www.northcarolina.edu/docs/bog/reports/1999/BR1999_06.pdf

University of North Carolina General Administration, (2000, Dec. 15). Second annual report on University of North Carolina enrollment plan. Retrieved July 5, 20002 from http://www.northcarolina.edu/docs/aa/planning/Report_Enroll_Plan_2000.pdf

Winston-Salem State University, CITTLE, Retrieved July 1, 2002 from





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