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ABSTRACT

This external evaluation report provides formative evaluation data on several aspects of a project at the University of Northern Colorado (UNC) to implement performance-based evaluation of student learning. The first section evaluates feedback from 12 senior mathematics and 4 senior chemistry majors regarding their understanding of the mathematics standards. The evaluation found that the mathematics majors had little knowledge of standards-based education and that students wanted benchmarks that would indicate whether they were meeting department performance standards throughout their undergraduate years. The second section reports students' evaluations of the speech and communication department's capstone course and departmental expectations of students. While the student comments are varied, they stress the importance of freshmen being informed of the requirements of the final capstone course. The third section contains informal reports from the evaluator to the project director. These focus on interviews with speech, chemistry, and Spanish professors involved with the project and working to establish standards, capstone courses, and standards-based assessment procedures. The final section notes other project activities, including dissemination, institutionalization of the project, and writing UNC commencement standards and rubrics. Appended are a meeting agenda and standards on cultural understanding for Spanish majors. (DB)

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"PERFORMANCE-BASED EVALUATION OF STUDENT LEARNING: A CONTINUUM FROM K-12 THROUGH THE UNIVERSITY LEVEL"

FIPSE PROJECT #P116A20142 UNIVERSITY OF NORTHERN COLORADO

Dr. Francis A. Griffith, Project Director

Evaluation Report: 4/93 to 8/94

Prepared by
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External Evaluator

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A PROCESS EVALUATION REPORT OF THE FIPSE PROJECT

"PERFORMANCE-BASED EVALUATION OF STUDENT LEARNING: A CONTINUUM FROM K-12 THROUGH THE UNIVERSITY LEVEL"

April 1993 - August 1994

A. Rose Shaw



TOPIC: EVALUATION OF STANDARDS BY
SENIOR MATHEMATICS MAJORS AT UNC
SENIOR CHEMISTRY MAJORS AT UNC



INTRODUCTION

During spring semester 1994, twelve senior mathematics majors and four senior chemistry majors were asked to evaluate the Mathematics Standards. One project goal is to improve the preparation of UNC teacher-education graduates for entry-level positions in outcomes-based school systems, such as School District #6. One program objective is to include students, faculty, and community members in the formulation and evaluation of UNC Commencement Standards. The evaluation of the standards and the feedback from mathematics and chemistry majors at UNC is one of the steps in the process of meeting these goals and objectives.

FEEDBACK FROM MATHEMATICS STUDENTS

Responses are summarized below:

1) Do you know what graduation standards have been established in your department?

10 responded "no"

2 responded "yes"

2) If yes, what are they?

Responses were: "Cum 2.50 gpa, 48 semester hours of math content" and "2.50 GPA. Selected courses consisting of 48 semester hours."

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At this time the students were given copies of the Mathematics Standards developed by UNC and School District #6 faculty. They were asked:

3) Are there any parts that you don't understand, don't agree with, or which need further clarification?

One student responded, "This seems a bit ambiguous and quite subjective. But, in general, there needs to be concrete standards."

4) Do you think students should be able to do these things by the time they graduate?

All 12 students responded, "Yes."

5) Would you have found these helpful when you decided to choose your academic major?

Nine students responded, "Yes."
Three students responded, "No."

6) Suppose a senior is told, "You cannot graduate because you haven't met these standards." What is your reaction to this?

Comments were (direct quotes):

"If the standards changed mid-stream I'd be pXXXXX."

"The senior should not have been allowed to get that far until the "bombshell" is dropped. Students should be required to meet requirements at certain periods and this should be monitored."



"WRONG From my experience half the mistakes or problems are caused by UNC and faculty."

"Students need to make sure they settle things before they are seniors."

"I hope it's not me. Make sure students <u>fully</u> understand as freshman: the standards."

"As a senior, teachers should be teaching students so they are prepared to pass the standards. It's not fully the student's fault."

"As a senior, I would be angry. These standards should be made known at an earlier time."

"It depends on the circumstances."

"Why wasn't I told this before?"

"Why wasn't anything mentioned at my advising appointments until my last semester?"

"Standards should be phased in so freshmen can be given the requirements they need to fulfill."

"Why didn't someone tell me this 4 years ago?"

7) If you could show these standards to a potential employer, do you think it would enhance your opportunities for employment?

7 responded, "Yes."

4 responded, "No."

1 no response

8) Please note any further feedback you have for us...

Two students commented. One said, "The standards should be



an integral part of <u>every</u> class. Getting some entrenched professors to do this will be close to impossible." The other student said, "There are far too many things to do to graduate as a teacher. No other major requires so much for so little pay."

FEEDBACK FROM CHEMISTRY 'MAJORS

During spring semester 1994 four chemistry majors (there are very few chemistry majors at UNC) completed the same questionnaire the twelve mathematics majors had completed.

Responses included:

- 1) 1 responded, "Yes" and 3 responded, "No."
- 2) The response to this item by the one student who had said "Yes," was: "Pass the required classes for your major and all the general education classes."
- 3) 1 responded, "No." There were three none responses.
- 4) All four responded, "Yes."
- 5) Two replied, "Yes," and two replied, "No."
- 6) "That senior should not graduate until the standards are met."

"It is appropriate to gauge a student's progress by standardized testing, but what is learned cannot be fully disclosed from the results of these tests. There should be opportunities for the student to improve in the areas of deficiency without denying the student graduation. Grades should mean something, too."



"Providing the senior has been in the standards-based education I think they shouldn't graduate."

"If a person is graduated that is not proficient in his/her field it brings down the department, school, and field. If the person cannot perform these tasks he should not graduate at all."

- 7) All four responded, "Yes."
- 8) There were no additional comments by these students.

DISCUSSION

It appears from the written feedback from the chemistry students that they have a better understanding of standards-based education than the mathematics students do. The feedback from the mathematics majors suggests little knowledge of standards-based education. Being exposed to this questionnaire will heighten the UNC math majors' awareness of SBE which will be beneficial if they decide they want to teach in a district that turns out to be an SBE district.

In general, the students felt that if there are department standards, then benchmarks should exist that tell students throughout their undergraduate years at UNC whether or not they are meeting department performance expectations. Although the students did not know the terminology, "benchmark", this is what many of them referred to in their comments.

One math major's comment about the difficulties that might exist among "entrenched faculty" in the conversion to SBE is interesting. Perhaps it is a prophetic remark. It is important



for project staff to be aware of resistance that might exist in the School District and among UNC faculty members.



TOPIC: STUDENT EVALUATION OF

SPEECH AND COMMUNICATION'S CAPSTONE

COURSE AND DEPARTMENTAL EXPECTATIONS

OF STUDENTS



INTRODUCTION

Appropriate curricular changes, the need for standards, the function of capstone courses, and feedback from students are all intertwined in the objectives of the project. One Speech and Communication's teacher asked his capstone course students for feedback on May 12, 1994.

DISCUSSION

The summary of the evaluation that was FAXed to the Project Director by the teacher has been copied and is included in the following pages.



The following data was gathered on Friday, May 12, 1994 during the final "Capstone" course session in the UNC department of Speech Communication.

The approximately thirty (30) seniors graduating from the department were broken into four focus groups consisting of approximately seven (7) students each. Each graduating student in the department was familiar with the commencement and performance standards proposed by the department.

Joe Downing, a representative of Project S.P.A.N, Dr. Warnemunde, Dr. Arneson and Dr. Allen (all faculty members of the SPCO department) rotated facilitation duties of each group. Joe Downing, then, interacted with each focus group for approximately twenty minutes.

Joe Downing introduced himself as an alumni of the department (M.A., Human Communication) as well as a representative of Project S.P.A.N. The goals of the project were delineated. Each focus group was asked to comment on how they felt about the education they received in the UNC SPCO department.

What follows are the notes Joe Downing made on the student's comments. They are written in the order they were received:

- the department offered a good theoretical base
- not enough practical analysis of the theory was given
- the internship was not stressed
- classes are too big
- interpersonal communication strategies are stressed, which is good
- students need to be told when they enter as first-year students that they will be tested on the information as seniors
- Professors need to tell students as freshmen that they will need to keep their notes for a Capstone course
- the curriculum lacks on the practical side. More role-playing is needed, especially in the organizational communication course
- not enough public speaking "demanded"
- the goals and objectives of the department need to be given to students as freshmen
- there is no continuity between the professor on departmental goals



- not enough emphasis is placed on how to write (especially the structure)
- students need to see the big picture as freshmen
- education emphasis is not emphasized in the Methods class
- communication and influence is the strongest part of the department
- small group and organizational communication courses not emphasized
- there needs to be some pre-requisites to be admitted in the department
- the communication department is thought to be the easiest on campus. There were too many people in Karre's Interpersonal
 course (everyone is the particular focus group strongly agreed with this statement)
- Courtroom Communication course best in department. Liked the team critique approach. Most practical course in department
- need more structure in department, teachers do not work together
- the internship was not stressed
- need restricted registration in courses
- diverse classes are good, as are different teaching styles
- need more emphasis on organizational communication
- communicating as a manager not taught, not enough applied communication. Not taught how to communicate with a boss
- mediation and arbitration courses not taught
- conflict mediation skills not taught
- same teachers take the applied notion too strong; all you do is role playing in some courses
- curriculum not consistent between community colleges and UNC SPCO department. They use different assessment measures in the two sets of institutions. There are lots of transfer students here from community colleges
- cannot synthesize the course information until the Capstone course
- how does a person who does well in every class fail a test in the Capstone course?
- need more required computer courses
- leadership course very applicable
- what is tested in the Capstone course isn't necessarily tested in the particular course
- developing skills not emphasized, we learned the titles of concepts and their theory, but we couldn't apply them



- conflict class was good very practical
- more skills need to be developed
- applying concepts was done well in the department
- more of an emphasis needs to be placed on inter cultural communication
- these are invaluable life skills we are learning
- more skills need to be emphasized
- speech courses are too easy; a minimal effort is all that is needed to earn a "B"
- speech classes thought around campus as "G.P.A. boosters"
- the interaction in the classes is good, students are allowed to be as extroverted as they feel comfortable
- conflict management needs a lot more emphasis
- what do you do with this degree? There is no direction given by the faculty
- why don't we have a career board like the Journalism department?
- speech communication internships don't exist. There is too much red tape. You have to go out on your own to find an internship
- Career services have no idea what to do with a speech major
- speech department has a good reputation within the UNC community. Business majors think the speech major is too easy
- more general education courses needed
- not enough public speaking is emphasized in the department
- it was good to learn the different facets of communication
- feels like I have the skills to prepare a speech
- need to apply the knowledge; you can analyze conflict but you can't "fix it"
- department has given her the confidence to speak in public.

 Most freshmen are shy when they enter the department
- more emphasis needs to be placed on written communication
- not enough writing skills are emphasized. We all took the bare minimum of English courses
- I am graduating with too general a degree. I need more application with specific skills
- need to apply the class content to future student goals
- need more public speaking
- can't apply the public speaking outside of the department (she used the example of Toastmasters)
- we learned theories three years ago, but we don't remember them now



TOPIC: INFORMAL REPORTS FROM

EVALUATOR TO PROJECT DIRECTOR



DISCUSSION

Evaluation of the project included External Evaluator interviews with Speech, Chemistry, and Spanish professors involved with the project. These are three of the five UNC departments working to establish standards, capstone courses, and standards-based assessment procedures. The quality of the involvement of these departments is integral to the project's realization of its goals and objectives pertaining to the establishment of SBE on the UNC campus. Informal reports sent to the Project Director by the Evaluator follow.



June 9, 1994

TO: DR. JERRY GRIFFITH

FROM: ROSE SHAW

RE: DISCUSSION ROSE HAD WITH DR. RICH SCHWENZ REGARDING PROJECT

SPAN ON JUNE 9, 1994.

The ETS Exam has been taken by the department's seniors since 1988. Prior to 1994, there was little motivation for the seniors taking the test to excel. The test has not been a requirement. Students volunteer to take the ETS Exam. This year motivation was higher for the seniors because the department announced that each student would have a folder which <u>could</u> include the ETS scores. Some of the students studied for the test which, as far as Rich knows, has never happened before spring 1994.

In Physical Chemistry, the seniors were given a rubric for grading one of their experiments. The students said they liked the "contract grading" scheme and modified their plans to conform to the rubric. Unfortunately severe senioritis set in the final weeks of the semester and the reports they wrote were not as good as they probably could have been. The PC students do give oral reports; no one reported on the rubric-driven lab.

I asked Rich what he thought the department might be concentrating on in the fall as far as standards-based education is concerned. He indicated that he hasn't thought this through but that the department needs to resolve the dichotomy between normative-based testing (ETS and ACS) and standards-based education so he expects this is what they will be concentrating on during the fall 1994.

On February 25th, Rich gave a department seminar about standards-based education and SPAN. All the department faculty and graduate students attended. There were also two faculty members present from Earth Sciences. The department faculty members are beginning to realize that HB1313 is going to have an effect on them.

I asked Rich for his suggestions for informing faculty members about SPAN. He indicated that he thought department chairs should be targeted on a one-to-one basis especially those heavily involved in teacher education. He thinks the contacts with faculty members and department chairs should be done by faculty members rather than by someone from administration. Rich volunteered to talk to the chairs in Ross Hall. I told him you would be in contact with him about doing just that.



June 15, 1994

TO: DR. JERRY GRIFFITH

FROM: ROSE SHAW

RE: REPORT ON DISCUSSION WITH DR. LYNN SANDSTEDT REGARDING PROJECT SPAN on June 15, 1994.

Dr. Sandstedt indicated that he never was able to get the members of his department to cooperate on the plans they had for testing, etc. as SPAN participants. He hopes to have better participation in the fall.

I wonder if it would help Dr. Sandstedt's faculty to become more committed if a faculty member (how about Rich Schwenz) could speak at one of the early fall Hispanic Studies Department meetings. Perhaps if he told the members of that department how important SPAN is and how it connects to HB1313, etc. that Dr. Sandstedt's faculty would be a little more cooperative. Perhaps you might suggest this to Lynn. I did not suggest anything. As the evaluator I simply listened and am reporting our conversation to you.



July 6, 1994

TO: Dr. Jerry Griffith Project SPAN

FROM: A. Rose Shaw

Project Evaluator

RE: Meeting with Dr. Pat Arneson regarding Capstone course - UNC's Department of Speech Communication

Today I met with Dr. Pat Arneson in her office in Candelaria Hall on the UNC campus. We talked in length about the Capstone course in the Speech Communication Department. As you know, she has been the professor in the department teaching that course since 1990. I was impressed with the commitment Pat and the Department have made to designing, implementing, and constantly

improving the Capstone course.

Their majors know where they stand right from the beginning. The Department has carefully documented what students should learn in each Speech Communication course and professors teaching the courses are suppose to teach to the document. This, of course, runs into trouble spots especially since the department relies on temporary instructors to teach many of the freshman-level courses. The department has learned that there are many details that need to be taken care of such as informing their majors when they are freshmen that they need to keep the books they used in their Speech Communication classes because they'll need them again when they enroll in the Capstone course as seniors. This is an example of the kind of detail that is unique to departments and areas of emphasis and are often revealed as programs and courses are implemented.

The seniors in the Capstone course must demonstrate competency in three areas: (1) Interpersonal communication Small group communication, and (3) Communication and influence. The seniors are tested in each of these areas both quantitatively (written tests) and qualitatively (behavioral performance). department publishes a student handbook so the seniors know exactly what is expected of them and how they will be evaluated. The handbook includes a list of 17 possible techniques for assessment including argumentation/debate, case study, journals, presentations, video tape assignments, and games. There are advanced standard, essential standard, and inthree standards: If a student receives three items of "1", progress standard. then that student participates in an "Extended Learning Opportunity."

Students need a C or better in the Capstone course to graduate. At this time no student has been kept from graduating

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but Pat said the course is known as a rigorous course and the students work very hard in it. The three compentency areas account for 30% of the class grade and material. The department has designed this course to include integration of new information as well as recall of old information.

During the week of final exams, the seniors in this course participate in an exit interview where they offer their perceptions of the department including the strengths and weaknesses of their program of study.

I asked Pat if their plans for this fall include any changes in the Capstone course. She indicated that her plans for the course include

(a) Providing more specific, refined rubrics,

(b) Having one professor other than herself grade each set of

tests in each of the areas of competency, and
(c) Breaking the course into three 4-week segments so that she can devote one month to each of the three competency areas.

The enrollment in the Capstone course is usually about 30 to 35 although they had only 17 students in the course last fall. Pat found the smaller class size much easier to teach and the students said they liked the small class size. But a class of only 17 accounted for low F.T.E. in the department so small classes are not possible because of the need to produce F.T.E.

Pat did acknowledge, after I asked her, that teaching the Capstone is very time consuming, in part, because of the time it takes to do authentic assessment. She estimated that teaching the Capstone course is equivalent to teaching two regular classes. It has helped her to have other professors grade the written exams but teaching the course still takes a great deal of time. For example, Pat estimates that it takes two weeks for her to do authentic assessment in one area.

It is my impression that teaching the Capstone course is not easy because it's a hard course for students, they probably feel threatened, scared, and more than a little "put upon". The course appears to be a big challenge for both the teacher and the students. But at the end, when the seniors have passed the course, they can say with pride, "I know I am a competent communicator." That is probably one of the most rewarding outcomes of the Speech Communication Department's Capstone course.



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TOPIC: OTHER PROJECT ACTIVITIES



INTRODUCTION AND DISCUSSION

Much of the project activity was devoted to planning strategies for institutionalizing the project. These have been time-consuming activities that have not necessarily shown immediate results but are instrumental to the success of this project.

PROJECT ACTIVITIES

Objective: Dissemination. Three graduate students assigned to the project began working on the development of a SPAN brochure. Spring 1994.

Objective: Institutionalization of the project. The Project Director, Dr. Griffith, met with several University faculty and administrators regarding their suggestions about ways to include more faculty in project activities and to familiarize faculty with SBE and performance-based assessment. Dr. Griffith's spring 1994 meeting with Dr. King from the Educational Leadership Department resulted in a plan for linking the project with the newly University's formed Tointon Institute for Educational Change. Dr. Griffith met with the Chair of Speech Communication, the Dean of the College of Arts and Sciences, and the Assistant Vice Provost for Academic Affairs during the summer 1994.

Objective: Writing UNC Commencement Standards and rubrics.

The Project Director met with two Leadership Faculty (Spanish Department) to discuss evaluating standards and rubrics. The agenda for this meeting and the Standards are in Appendix I.



APPENDIX I



Agenda for Meeting with Lynn Sanstedt and Terry Ballman, Friday, July 29, 1994

The standards for the study of culture seem to be: 1.

Geography and Economics

preparie Warld History of Spain and Latin America b.

Artistic and literary contributions (of Spain and Latin America?) c.

Daily customs and routines of social, professional, and technical d. discourse.

Are these accurate?

- We need a descriptor for each standard across each level. For example, 2. there are five descriptors under Novice, four under Intermediate and three under Advanced and Superior.
- What task(s) will the scoring rubric be applied to? Can all standards be 3. assessed within the context of a single task? If not, how many tasks will be needed, what will be their nature and when will they be done?
- What about a standard(s) pertaining to critical thinking or problem-4. solving. What kind of rubric is needed and where and how can these dimensions be evaluated?
- What are some means to obtain feedback about the standards and rubrics 5.
 - Hispanic Studies faculty a.
 - entering majors b.
 - exiting majors c.
 - external parties, including employers of program graduates? d.

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OVERALL STANDARD: College students majoring in Spanish must demonstrate a functional understanding of cultural concepts related to the Spanish-speaking world. Students must demonstrate a level of Advanced for successful

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(level 16) program.	
completion of their (level 16	

NOVICE	INTERMEDIATE	ADVANCED	SUPERIOR
Awareness of general location of countries of Spanish-speaking world	Awareness of specific location of countries of Spanish-speaking world	Knowledge of geographical and economic information on Spanish-speaking countries (e.g., location of major cities and of geographical	Knowledge of detailed information of geography and
Names of nationalities	Knowledge of general historical information of Spain and Latin America (e.g., colonization)	and climatic regions; principle products for import/export)	economics of Hispanic world
Knowledge of general historical facts (e.g., Columbus: war with	Knowledge of general social.	Knowledge of major literary and artistic contributions and	Detailed knowledge of major literary and artistic
Mexico over Southwest, etc.)	educational, political and religious institutions in the Spanish-speaking world	contributors and their role in history of Spanish-speaking world (e.g. Picasso's cubism	contributions and contributors
Knowledge of common daily customs and	(e.g., family structure, role of the Catholic church,	Darío's modernism, etc.)	
routines (e.g., siesta)	etc.)	Demonstrates cultural knowledge, sensitivity and ability to	Demonstrates detailed cultural
Awareness of informal/ formal (tú/Ud.) address	Demonstrates ability to successfully interact from a cultural perspective in simple situations with native speakers (e.g., correct use of formal informal address; appropriate greetings and leave-taking; etc.)	successfully interact with native speakers in a variety of social contexts, both formal (e.g., in a business transaction) and informal (e.g., at a party with peers)	knowledge, including use of regional idioms and technical terminology. Demonstrates an

COMBINED SCORES ON ORAL AND WRITTEN ASSESSMENTS: .

Up to 30%

31-65%

%08-99

81% or higher

professional and social contexts

adeptness in technical,

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