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From the Faculty Center for Teaching Excellence

WESTERN CAROLINA UNIVERSITY Vol. 2, No. 1

CULLOWHEE, NORTH CAROLINA August 15, 1989

Add Your Voice and Multiply the Results

As we did last year, we begin this new year of Faculty Forum with an invitation to all faculty to send us opinion pieces for monthly publication. We have two opinion pieces in the polishing stages, with one on "Designing an Effective System of Evaluation" to lead off in September, but we are looking for opinion pieces for each month through May; here is your chance to share your point of view with your colleagues, the university community of scholars.

Do you have opinions on any aspect of classroom practice or on any administrative issues that impinge directly on teaching and research? Do you have an opinion on the nature of the student as learner or on the characteristics of excellent teachers or scholars? Any topic related to instruction will be suitable and all points of view will be respected. Start today to put your thoughts together. You don't have to send us polished prose; give us a rough draft and we will work with you to put it in the most effective form possible for presentation to the faculty at large.

If we haven't heard your voice yet it is only because you haven't spoken up. The Faculty Forum does not champion any particular ideology. It is simply a sounding board for the academic community. If you think the Forum is missing a point of view, let us know; write it out and we will print it. You may recall that in our initial issue last year we announced that our main goal was "to spark a lively dialogue about college teaching." If several pieces seem to take a similar stand, it is only because no dissenting opinion has been submitted. The Forum belongs to the faculty; as editor, I exist only to facilitate the dialogue.

Before you rush off to your word processors, however, let me remind you about the Teaching Tips section of Faculty Forum. At the onset of our publication last year, a number of faculty suggested the inclusion of specific and practical teaching tips in the publication of responses on the 15th of the month. We were able last year to publish a number of these and the response to them was generally quite positive. If you want us to continue publishing Teaching Tips, send us one this semester, even this week if you can. Send a brief outline of a specific problem met in teaching a course and how to solve it. Last year we had tips on how to remember student names, how to prepare students for reading assignments, and how to design effective research paper assignments,

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among others. Teaching Tips do not need to be in prose form; they can be presented in a single page in outline form. As with the opinion pieces, send them to Terry at the Center and we will help you polish them if you wish.

Welcome back. I look forward with excitement, anticipation, and confidence to another successful year of the Faculty Forum. If you want to help make WCU a better place to work, a better place to educate young people, and a place with a strong sense of academic community, add your voice to the dialogue. If we don't hear from you, you lose an opportunity to make an impact and the sense of community falls that much shorter of its potential. I look forward to hearing from YOU.

Terry Nienhuis, Editor



From the Faculty Center for Teaching Excellence

WESTERN CAROLINA UNIVERSITY Vol. 2, No. 2

CULLOWHEE, NORTH CAROLINA September 1, 1989

Designing an Effective System of Evaluation

One of the most difficult tasks for any teacher is designing an effective system of evaluation. An evaluation of a student's performance is not simply an act at the end of a term or grading period. It is something which should play an integral part in the learning process. I suspect that for most of us, the method we use to evaluate our students is our greatest shortcoming as educators. Here are some questions I think we need to consider whenever we are designing a system for evaluating student performance.

- (1) Does our system emphasize the completion of the course objectives by the end of the course or does it emphasize completing course objectives before some arbitrary date, such as the first or second exam? Imagine that a student eventually completes an objective on the final exam but failed to complete the objective on an earlier exam. Is the earlier score valid? Has the student failed or simply failed to complete the objective according to an implied timetable? As I ask my students, if a cake recipe calls for 4 eggs and you use one rotten egg, can you throw away 1/4 of the cake when you are finished? If you average grades to arrive at a final course grade, does this mean that one of the scores in your evaluation is invalid? If so, then probably so too is your final evaluation. Students learn at different rates and these differences are probably legitimate. If students are working hard and just need more time to learn, shouldn't we give them the extra time? It's difficult, of course, to know when students are working hard enough to fulfill their end of the bargain, but it's not impossible to ascertain their level of effort. This makes our evaluation process more complex and difficult, but it also makes it more fair and probably more effective as a stimulation of the students' learning.
- (2) What role does luck play in our evaluation systems? Each semester I administer a "blind" 10 question T/F exam to my education majors, asking only for 10 T/F answers, without providing the questions. Invariably, some student will get 8, 9, or even 10 answers correct. A multiple choice question in which there is only one good distractor is no better than a T/F exam. Would we all agree that luck should not play a significant role in our evaluation systems?

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- (3) If we analyzed our last exam would we find that the bulk of our questions address memorization skills instead of higher forms of human thinking? The students can memorize fairly well when they want to or they probably would not be in college. To be successful in our disciplines in the real world, does one need more than memorization skills? To what extent and in what ways does one need to be able to use higher forms of thought and reasoning in the world of work after formal schooling? Shouldn't our evaluation systems reward higher order thinking much more than memorization? Here we run into a problem of time. An evaluation system that measures simple mastery of a finite set of information bits is easy to construct because we only need to score and add up numbers. An evaluation system that measures the student's ability to think is much more complicated and requires much more time for construction and grading [see Hanna and Cashin (1987), "Matching Instructional Objectives, Subject Matter, Tests, and Score Interpretations," available from Ben Ward at the Center].
- (4) When we determine a student's final grade do we let the calculator do the thinking, or is the calculated average merely the starting point in our analysis? We know that the "mean score" is but one measure of central tendency and not always the best measure, but how often do we put this belief into practice when we create a letter grade for a student's final evaluation? Students learn best when they feel that our grading is fair and rational rather than arbitrary and capriciously subjective. Isn't it our job to convince them that they can trust our grading?

I believe that if we examine the situation, almost everything we do to make our evaluations easier for us, such as administering short answer exams and using the mean score exclusively, is performed to the detriment of a valid evaluation. Determining what a person understands should be one of the most difficult and complicated tasks that we face. Steps we take to make it easier and less complicated may only serve to invalidate our efforts to educate effectively.

Charles Mitchell, Mathematics

Editor's note: Charles Mitchell taught at WCU from 1986 through 1989. He is now teaching at Western Illinois University



From the Faculty Center for Teaching Excellence

WESTERN CAROLINA UNIVERSITY

CULLOWHEE, NORTH CAROLINA

Vol. 2, No. 3

September 15, 1989

Responses to Charles Mitchell's September Forum on evaluation were meaty and thought provoking, although not numerous. The three faculty who put their thoughts on paper seem to share an important insight: test results may reveal something about teaching effectiveness as well as student achievement.

What do you suppose the low number of responses implies? Could it be a sign of sheepishness on the part of some who feel guilty about grading for personal convenience more than for precise evaluations? Naah, surely not. Perhaps widespread agreement just leaves little more to say. Is it possible?

Faculty Responses

Good thoughts . . . especially for total final grades in mathematics. However, for subjects with a b_ig^ui_ty, the instructor should have many evaluative techniques at his/her disposal, ones other than quizzes or exams.

For example,

"hands on" projects comparing quality of work at the of the course and at the end beginning should be considered along with written papers, etc. on topics discussed within the course. That way the total pupil is involved, not just mastery of facts, although that is important also.

I have tried an idea on my exams that works well and students seem to appreciate. For any multiple choice test question that more than 1/3 of the class miss, I add the number of points for those questions to each student's exam. This eliminates a "curve" and keeps me on my toes to produce wellworded test questions. Also, if I failed to teach a particular segment of the material well, that will be shown in pupil response to questions.

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The idea that we should weigh performance near the end of a learning process more than earlier performance makes good sense. Also, the need to teach to, then evaluate higher levels of thinking is important. I would add three other comments:

- 1. Charles' piece focused on exams, but it is important that we evaluate students in many different ways;
- 2. Too often, instructors take the results of exams to be absolute and fail to consider the multiple sources of error in their tests. We fail to consider fatigue (tests that are too long); poorly written questions (e.g., ambiguous items); scoring error;

the confounding of skill deficits (e.g., writing ability) with content or process knowledge. A related problem is the failure to consider what test scores might indicate about inadequate instruction. When everyone scores at low levels on an exam, poor student preparation may be at fault, but so might be poor teaching or poor testing procedure.

3. Finally, I would caution against <u>not</u> letting the calculator do our thinking when it comes to a <u>final</u> grade. If evaluation has been carried out thoughtfully during a semester, adjustments for the concerns listed above have been made, and weighting has been planned appropriately, then we must be careful not to let feelings about an individual student guide the "creation" of final grades.

We need to recognize that at some point, any grading system has arbitrary features. If 90% is the decided-upon cutoff for an A, then giving an A to the person with an 89 means that the person with an 88 is just one point from an A. If we make allowances in such circumstances, we must do so in a way that is fair to all students and not linked to special treatment.

Bruce Henderson, Psychology

As pointed out by Charles Mitchell, the designing of an effective evaluation system is, indeed, an integral part of the <u>learning</u> process. But it is, also, an integral part of the instructional process. That is, an effective evaluation system should not only assess students' progress and learning performance but also guide and improve instructional decisions as well. If progress is to be made in the development of higher order thinking, as Mitchell maintains it should, we must formulate new strategies to teach process not product. As it stands now, we are not sure how to do this. "Determining what a [student] understands" may be more a function of instructional strategies, not test or learning strategies.

William Chovan, Psychology



From the Faculty Center for Teaching Excellence

WESTERN CAROLINA UNIVERSITY

CULLOWHEE, NORTH CAROLINA

Vol. 2, No. 4

October 1, 1989

The Elusive Search for Teachable Aspects of Thinking

One of the first problems we have when we attempt to teach thinking is knowing what we are trying to teach. It is generally easier to say what we are NOT teaching. The teaching of facts--such as names and dates of history, tables in math or chemistry, or foreign-language vocabulary--is not the same as teaching students how to think. This is not to suggest that the teaching of fact is unimportant, only that we consider it as something different from teaching students how to think. The distinction is necessary because in practice many of our classrooms seem to focus to a large extent on information retrieval, with little or no emphasis on the teaching of higher order intellectual processes.

Teaching thinking is also different from teaching students what to think. What students must learn is how to think better rather than any particular content or point of view.

We come closer to teaching thinking when we teach students good thinking strategies, but this is still not the same as teaching thinking. However, it is tempting to stop here because it seems like we are teaching thinking since we can describe it so accurately and because it is infinitely easier to describe good thinking strategies to students than it is to create situations where they will discover and experience it themselves. I admit that there have been times when I have been very much aware, as I lecture to the Thinking, Reasoning, and Expressing classes, that they were not paying the slightest attention to what I was saying; rather, they were studying me and the manner in which I rambled on about mnemonic techniques or the retrieval strategies I found so instructional in the literature. Few would disagree that I am teaching about thinking but the activity is still different from engaging students in the act of thinking.

Obviously, when we teach thinking we are instead creating for the students the *experience* of effective thinking. There exists a long and persuasive argument in the literature reflecting the position that the only effective way to effectively teach students to think is to engage them in the thinking process. Dewey's classic <u>How We Think</u> (1910) certainly reflects this view, as does Binet's 1911/1962 series of exercises called "mental orthopedics." In 1936, Symonds wrote in <u>Education and Psychology of Thinking</u> that "In order to learn to think one must practice thinking in the situation in which it is to be used" (pp. 235-236). In 1961, the National Education Association reported that "the learner must be encouraged in his early effort to grapple with problems that engage his rational abilities" (p.17). Given this notable consistency in

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philosophy within the literature, it is striking to discover that there exists very few empirical studies that show us how to do it (Kuhn, et al, 1988). Instead, in the last decade, emphasis has been placed on teaching students about thinking.

However, even if we agree that our goal is to create the experience of good thinking, we seem to disagree on what this experience might be. We have instructors at WCU who advocate that we ought to "promote logical thinking and reasoning." We have others who say we ought to "enhance cognitive and memory strategies," while still others assert that we ought to stimulate thought on issues that illustrate the logic and history of a specific discipline, like history or biology. Finally, there are those who feel that a "focus on oral communication" will accomplish the goal of teaching students to think effectively. Are logical thinking, reasoning, cognitive strategies, mnemonic techniques, and the logic or history of a specific discipline the same thing? And how do they relate to oral communication skills?

The development of effective thinking—at least in the sense that Dewey had in mind—ostensibly involves a major shift in the way the student looks at things. It is not simply a skill or set of skills that can be taught in the way Biology or algebra or history are taught. For us at the university level, the essential question still remains: how do we teach thinking so that seniors think more effectively than freshmen? The initial step may be to help students see the quality of their thinking as something under their <u>own</u> control (Wilson and Linville, 1985). The implications for such an approach are most telling: to focus more on the process than the product, to emphasize student efforts and personal standards over normative standards for success, and to stimulate achievement through intrinsic rather than extrinsic means.

William Chovan, Psychology

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From the Faculty Center for Teaching Excellence

WESTERN CAROLINA UNIVERSITY

CULLOWHEE, NORTH CAROLINA

Vol. 2, No. 5

October 15, 1989

Once again, the number of responses continues to dwindle. This month we received only one response to William Chovan's opinion piece on the problems of teaching thinking. Luckily, it is a very thoughtful and penetrating response, adding significantly to the dialogue the Forum tries to generate. Next month the response sheet will give you a chance to indicate whether you want the response format to be continued.

Faculty Response

In response to Dr. Chovan, I would like to suggest that good thinking can be improved, taught, and evaluated quite simply by teaching good writing skills. Writing, after all, is God's way of showing us what sloppy thinkers we are.

We can **discuss** the poor quality of our students' thinking until the cows come home and we won't solve a thing. Talk is cheap and the solution may demand more of us than we are willing to give. Teaching writing requires faculty to spend more time reading papers, to put more thought into their grading process, and even to face the challenge of becoming better writers themselves.

If we are willing to give the necessary time and commitment, we must first teach our students that writing is important. Most complain that writing is just for English classes and that all they need to do to learn is retrieve information. All too often I have been flattered or impressed by my students' ability to regurgitate all that I have said in class. Of course, it is very tempting to give them A's and consider my job done. But there is more to teaching thinking than inspiring or threatening your students into being able to recite all that you have said in class.

If we can convince students that writing is necessary, we must next teach them that it is perfectly acceptable for them to be ignorant or confused about a subject. The most basic obstacle to good writing (and good thinking) is the fear factor. It may be that a student had poor handwriting as a grade-schooler and teachers in the early stages focused solely on the fact that a paper was sloppy. From that instant a student responds to the fear of criticism by concerning himself only with the prettiness of the written assignment. Later, this same paradigm might be repeated with grammar, punctuation, and spelling, with the student learning to equate good writing (and good thinking) with avoiding errors. Even later, a teacher might instill reticence by objecting to the frankness of a student's language, his subject matter, or the sloppiness of his adherence to a research format. You see the

point. As teachers, we are growing up with our students. We know that good thinking is more important than all these tangential issues, but how do we communicate that to the students?

But now that we know that we can get good thinking through good writing, what does it look like on the page? The answer sounds simple, but once again it will be deceptively difficult to recognize, reward, and encourage. Good thinking is first and foremost HONEST. That means that the students don't try to impress with what they know or can remember from lectures and they don't try to hide their ignorance with officious (rhymes with suspicious) writing. Good thinking and good writing is candid and straightforward, not rambling or unnecessarily repetitive, and definitely not overworked or contrived. Good thinking will not try to hide behind one or two facts that a student may have in control but will openly discuss things a student is confused about or even doesn't understand at all. When and if you are lucky or skillful enough to get students to disclose this kind of information on paper, you will be well on the way to teaching good thinking.

Stephen Ayers, Speech and Theatre Arts



From the Faculty Center for Teaching Excellence

WESTERN CAROLINA UNIVERSITY Vol. 2, No. 6 CULLOWHEE, NORTH CAROLINA November 1, 1989

To Essay or Not To Essay

It was the end of the semester and Professor Able was busy constructing the final exam for Modern Culture 100. She had an outstanding group of students and she wanted to challenge them with the final. At the same time, she wanted to give them the opportunity to pull together all they had learned. After a great deal of thought, she developed the following exam:

Final Exam: Modern Culture 100

Drawing on the topics we have covered in class, write a well-organized essay about

Santa Claus

You have 1 1/2 hours to complete your essay. Use your time wisely.

Professor Able felt that students needed to address the following key issues:

- a. interpretation of the cultural significance of the Santa tradition in modern day America
- b. the economic significance of the Santa tradition
- c. examples of efforts to establish Santa-type traditions at times other than Christmas
- d. speculations about the cultural and economic difference if there were no Santa tradition

When the exam was distributed, one-third of the class started writing immediately, one-third stared blankly out the window, and the other third puzzled over the question. The collective thoughts of this latter group centered upon trying to figure out which issues to address in the essay. Some approaches which crossed students' minds were the following:

- a. trace the development of the concept of Santa Claus from the legend of Saint Nicholas
- b. cross cultural comparison of the concept of Santa Claus in the modern world
- c. economic ramifications of the Santa Claus concept
- d. cultural forces which produced modern variations of the original Santa Claus concept

The general feeling of these students was that any of these four areas was sufficient for a 1 1/2 hour essay. The choice then became one of trying to guess which one Professor Able had in mind or to give "skimpy" coverage to all four topics. Each student made her/his decision and ultimately the A's, B's, C's, D's, and F's were dispensed.

Professor Able was well-intentioned in her efforts to provide an exam question which would challenge the students and offer sufficient flexibility to tap each student's skills, but she failed to recognize that every student would not interpret her question in the manner she desired, even though most had the necessary level of understanding to respond adequately. This oversight

produced several dilemmas. One student wrote an extremely good essay on the development of the Santa Claus concept but did not mention any of the issues Professor Able was expecting. The next paper was not nearly as well-organized nor well-written but it correctly addressed each of the areas Professor Able wanted the students to cover. In scoring the former paper higher than the latter, Professor Able established either that writing ability was the major academic skill being assessed or that the scope of an acceptable response could be expanded dependent upon the quality of the writing. In either case, the original purpose of the question was modified and the situation then became a variation of the childhood "make up the rules as you go."

To resolve this situation, Professor Able should consider the following points regarding the use and construction of essay exam questions:

- 1. Use essay questions to address only organizational and analytical skills; compared to objective items, good essay questions limit the breadth of content which can be tested.
- 2. In constructing essay questions, make certain that the task is adequately structured; after reading an essay question, a student should know exactly which issues are to be addressed.
- 3. Before presenting the questions to students, write the perfect answer; after doing this, look at the question to determine if it is the proper stimulus for the desired response.
- 4. If a student's organizational and writing skills are to be reflected in the grade, indicate this in the directions for the question.
- 5. A point value, time limit, or page limit can be indicated to help students plan responses better.
- 6. If an essay exam has more than one question to which students are to respond, grade all the answers to one question before scoring the answers to any other questions.

Here is an alternative wording for Professor Able's final exam:

Final Exam: Modern Culture 100

There are many traditions reflected in the practices of the modern day American. One of these is the Santa Claus tradition. Drawing upon the topics we have covered in the course, write a well-organized essay on the Santa Claus tradition in the United States. Your essay may be as expansive as you desire, but it must address the following areas:

- 1. the cultural significance of the Santa tradition in current America
- 2. the economic significance of the Santa tradition
- 3. examples of efforts to establish Santa-type traditions at times other than Christmas
- 4. speculation about cultural and economic differences if there were no Santa tradition (justification for these must be provided)

Your essay should be more than a long paragraph dedicated to each of the above areas. Rather, it should have some theme or principle which is developed using the above as guides. You have 1 1/2 hours. The essay is worth 60 points. Ten points of your score will be based upon the quality of the organization and presentation of your essay's theme. Forty points will be based upon the development of each of the enumerated areas, and ten points will be dependent upon the quality of the supplemental issues which are incorporated into the essay.



From the Faculty Center for Teaching Excellence

WESTERN CAROLINA UNIVERSITY

CULLOWHEE, NORTH CAROLINA

Vol. 2, No. 7

November 15, 1989

This month we received many thoughtful responses to our poll and to Robbie Pittman's opinion piece. It seems clear that the faculty would like the Response issue continued, even if it doesn't materialize every month. We thank you for your feedback.

Faculty Responses

Terrific! Having just written a final exam with essay items at the analysis, synthesis, and evaluation levels, I find Robbie's suggestions "right on." I would only add that reviewing the questions orally with the students and asking if they have any questions about what is expected of them is a helpful way to test your ability to communicate in an essay question.

Judy Stillion, Academic Affairs/Psychology

I hope all of the English faculty read Robbie's piece. Ironically, some of us who create essay topics on a weekly basis have the least expertise when doing so-experience <u>isn't</u> always the best teacher.

Jim Nicholl, English

Though the number of responses may have declined, the quality of those responses remains high. They intrigue me and I read them carefully.

Carol Hill, Nursing

The lack of <u>written</u> response to the issues presented in Faculty Forum does not necessarily indicate a lack of <u>interest</u>. I find the items informative, provocative, or interesting for the most part, and certainly helpful. Keep the response issue coming through flood, fire, <u>and</u> drought! Robbie's "Essay" piece is <u>most</u> helpful and I will integrate some of the hints into my exam structure.

Jeff Neff, Geosciences/Anthropology

(7108)

Iane Perlmutter

. Wilburn Havden I would like to respond to Robbie Pittman's "To Essay or Not To Essay" by making two points:

- l. Robbie's good advice on essay questions can also be applied to research papers. Assignments such as "Write a 20-page paper on_____" (e.g. computers, Antarctica, or the history of psychoanalysis) will also leave the student guessing about what the instructor wants if no additional instructions are given.
- 2. (and perhaps most important) The grading of essay questions and research papers is infinitely easier when instructions, expectations, and the basis for evaluation is clearly and specifically stated.

Sandra B. Oldendorf, Psychology

Excellent suggestions by Robbie. The only qualification I would make is that <u>less</u> structure is necessary if one of the things you want to test is the student's ability to <u>select</u> what is important. To expand on Robbie's suggestions, I have found it useful to provide a 45-minute period between handing out the test question and handing out the answer sheets (obviously, this is in 3-hour night classes or final exam periods). When students are not permitted to begin writing immediately, they are more likely to take some time to organize their responses. I have seen an increase in the quality of answers as a result of using this procedure.

Anonymous

I applaud the teaching tips which Nell Holtzclaw suggested for our international students. Just as we provide special services for our physically handicapped, our learning disabled, and our minority students, we should also be alert to the special needs of our foreign-born students. Ideally, our special services should be extended not only to the classroom but to many other aspects of the international students' lives in Cullowhee.

Natalie Haberland, Library-Reference

Since students sometimes interpret my essay questions in a way I had not intended, I usually read the set of exams through once before I set up the grading system. Another way I have gotten around this problem is to give the students 10-20 study questions from which I choose a few for the test. The students have an opportunity to discuss these questions before the exam.



From the Faculty Center for Teaching Excellence

WESTERN CAROLINA UNIVERSITY

CULLOWHEE, NORTH CAROLINA

Vol. 2, No. 8

December 1, 1989

Thinking Critically About Bloom's Taxonomy

Benjamin Bloom's taxonomy of educational objectives (1956) has been used at WCU in an attempt to provide a theoretical basis for the Foundation 3 section of general education and the critical thinking component in other courses. I want to present very briefly some reasons why Bloom's taxonomy is seriously flawed and, furthermore, simply irrelevant to the purposes of general education.

Bloom identifies six educational objectives which he believes to be common to all disciplines. The objectives are ordered hierarchically with each objective itself described as a hierarchy of subgoals. The six main objectives and their ranking from simple to complex are as follows:

- (1) Knowledge (or Memorizing), (2) Comprehension, (3) Application,
- (4) Analysis, (5) Synthesis, and (6) Evaluation.

One of the problems with the taxonomy is its ambiguity. In our discussions here at WCU it has been assumed that the names of the objectives refer to kinds and levels of thought, but Bloom usually uses the terms to refer to kinds and levels of behavior. Bloom's book is thoroughly behavioristic. But when Bloom gives examples illustrating how to use the taxonomy, he classifies not behaviors but test questions. This is confusing since Bloom himself admits that a person's behavior relative to a test question will vary as a function of the person's educational background. Is the taxonomy, then, a scheme for classifying thought, behavior, or test questions? It is not clear.

A second problem is the nature of the taxonomy's structure. The taxonomy orders behavior into a unidirectional hierarchy of increasingly complex behavior such that behavior at a lower level does not include higher level behaviors, although a higher level includes lower levels. Thus a student at the lowest level (Knowledge) would be expected to memorize items without meaningfully relating them to one another (Synthesis) and without assessing their value (Evaluation). Memory thus separated from synthesis and evaluation is emasculated. It is little wonder, then, that memory has been so denigrated in the pedagogical articles we have read and in our discussions about critical thinking. Human memory requires a more adequate treatment than this. The same basic problem arises between other

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levels of the taxonomy. A student behaving (thinking?) at the third level of Application would be unable to analyze and synthesize. Students do not learn this way. Even Bloom was unable to find a learning theory which correlated with the taxonomy.

A third problem is Bloom's claim that the taxonomy is value neutral and descriptive instead of prescriptive. The taxonomy's hierarchical form belies these claims since the simple to complex order of behaviors is correlated with a developmental sequence. Students are <u>supposed to progress</u> from lower to higher levels. The taxonomy does represent an educational philosophy, it is value laden and prescriptive, and it has been so understood here at WCU. Why the pretense to value neutrality?

A final problem is that the taxonomy is irrelevant to what should be our major concern in general education. Instead of discussing the taxonomy we should be considering what specific critical thinking skills should be taught and how we should teach them. For example, should students in a F3 course learn how to distinguish between arguments and pseudoarguments, such as sheerly emotional forms of persuasion? An issue such as that can be considered independently of Bloom's taxonomy or any other formal theory of education.

Michael Jones, Philosophy

Benjamin Bloom, ed. <u>Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook I: Cognitive Domain</u>. New York: David McKay Co., 1956.

Editor's note: Bloom's book is available in Hunter Library, and related materials are available at the Center's Resource Library.



From the Faculty Center for Teaching Excellence

WESTERN CAROLINA UNIVERSITY

CULLOWHEE, NORTH CAROLINA

Vol. 2, No. 9

January 15, 1990

We received three responses to Mike Jones's opinion piece on Bloom's taxonomy. A number of faculty have responded in casual conversation, but those responses will unfortunately not reach the wider audience the FORUM was designed for. Please don't be shy. Write your responses down and send them in to share with the rest of the faculty!

Faculty Responses

Michael Jones has raised a level of concern about our General Education program, particularly F-3, that should not go unnoticed. He reminds us that little or no effort has been given to refining concepts relevant to higher-ordered thinking. To simply adopt Bloom's taxonomy for F-3 will not do for reasons that Jones so aptly points out. Higher-ordered thinking skills should be defined as those requiring cognitive processes beyond the knowledge base defined by Bloom's taxonomy. What is missing from the taxonomy is self-knowledge--the capacity to think about our own metacognitive thoughts.

William Chovan, Psychology

My discipline, the study of literature, automatically requires analysis, synthesis, and evaluation. It's what we do constantly; it's how we teach and what we teach. Although I have not concerned myself much about Bloom's taxonomy as such, I was looking over a student's rough draft recently when I found myself face to face with a curious gap. The taxonomy clarified the problem for me. The student was describing all the relevant data but was not going on to draw conclusions and tell me what it all meant. I am beginning to wonder whether I could help students learn the discipline and write better papers by articulating more clearly the need to synthesize and evaluate--teaching these "secrets" explicitly rather than implicitly in the way I handle a poem or story in class. I could do this, at least in part, by structuring assignments differently, perhaps along the lines Robbie Pittman suggested for essay text questions. But I think it would take more explicit modeling as well. The taxonomy might be a useful construct to aid in that process. Mike's argument is well taken, but I don't think I'll throw Bloom's baby out yet.

Elizabeth Addison, English/FCTE

Mike Jones raises some interesting questions concerning Bloom's taxonomy and our general education discussions. While discussions of Bloom's taxonomy entered the conversation after the new general education program had been in place several years, it is possible that we have reified the metaphor. There are, however, several points to be made as we continue the discussion.

First, as Mike points out, Bloom advanced a taxonomy, not a theory. Taxonomies are constructed in the earliest stages of theory development and are attempts to classify the phenomenon in question. Theory development proceeds after the classification. In the behaviorial sciences, for example, we have made many theories but no laws comparable to Boyle's gas laws. The suggestion is made that we are treating Bloom's relatively crude taxonomy as a law, when I would argue that it is being used as a heuristic. In using behavioral science theory to explain and predict we are always in a hypothesis testing mode as we are dealing with theories as opposed to laws. As we use Bloom's taxonomy as a heuristic to temporarily resolve ambiguity we must keep in mind that the taxonomy or theory may be nonsense. However, the heuristic allows us to make sense of the phenomenon for the time being and as we proceed we might learn enough to cast aside the original device and put in its place some new development. In the current state of development of behavioral science theory the best that we can do is to go forward using what is available, but always being cautious since what we are using is still in the testing stage.

The second point is that since Bloom's 1956 work there has been a considerable amount of work concerned with the issue of learning and some of this has been included in our ongoing discussion. While we are not using much from the psychometric approach we are using pieces from the developmental, behaviorist, and cognitive approaches. Bloom provides a framework and a language on which to hang the more recent work and we may be using Bloom's taxonomy in ways that he never intended. But that is precisely the power of using Bloom's taxonomy as a heuristic. We can advance our understanding of students' learning, on a trial and error basis, "cutting and pasting" as different pieces of different theories "seem to make sense." This incremental process may eventually lead us to a new, integrated theory or even a law, and then again we may end up in a cul-de-sac. But that is the nature of the process.

Bill Kane, Management/Marketing

Editor's Note: At the end of February I will be reading a paper at the National Conference on Successful Teaching in Orlando, Florida. My topic is "Sustaining the Institutional Zest for Teaching" and I am reporting on the extent to which the Faculty Forum has helped (or not helped) to sustain the zest for teaching at WCU. I need from you quotes that assess the Forum's impact at Western. Please don't be shy if your assessment is negative. I need all the anecdotal evidence you can provide. Please send a sentence or two to me c/o either the English Department or the FCTE. Thank you.



From the Faculty Center for Teaching Excellence

WESTERN CAROLINA UNIVERSITY

CULLOWHEE, NORTH CAROLINA

Vol. 2, No. 10

February 1, 1990

Encouraging Student Risk-Taking By Balancing Challenge and Support

One of the trickiest aspects of teaching is finding that precarious balance between adequately challenging students and providing sufficient support so that students will take exploratory risks. But how well do we as teachers provide a responsive, "secure base" for risky learning?

In many ways, the early parent-child relationship provides a model for teaching and learning. For example, toddlers are quite willing to take the risk of exploring unknown environments because they know that a trusted parent is available for assistance if any real trouble occurs. A good parent provides a "secure base" from which risky exploratory sorties can be undertaken. When there are problems in the parent-child relationship, the result often is that the child will not explore and thus will learn less about the environment.

Most of us would like to see our students behave like the secure young child, actively taking chances and exploring new ideas and creating new products. But for our students to become risk-taking learners, two conditions must be met: (1) there must be a novel, challenging, stimulating environment in which risk-taking behavior can lead to meaningful learning; and (2) the student must feel that adequate support is available so that if risk-taking leads to trouble, help will be available.

I do not want to downplay the importance and difficulty of providing demanding, challenging environments for learning. Certainly we would all profit from discussions of how to challenge students better. There is substantial evidence (e.g., student self-reports of time spent on school work) that we are not demanding enough reading, writing and thinking of our students. But in this opinion piece, I want to focus on three general ways we can improve the support available to our students when we do make demands.

1. Availability: Availability to students takes two independent forms: physical and psychological. We can be more available physically by simply keeping more office hours when students are not likely to be in class. Being in one's office will not automatically bring students; not even engraved invitations will bring in some students. But in too many hallways the presence of faculty members after 3:00 p.m. is a rare sight indeed. Perhaps more important than physical availability is psychological availability. The forbidding mien and unassailable intellectual superiority of John Houseman's Kingsfield makes for good theater, but it does not provide a good model for supporting student exploration and learning. It is also easy for us to send the message that our research, committee meetings, and off-campus activities are more important than dealing with students. How well our students have learned to preface their requests with "I'm sorry to bother you," "Is there sometime I could talk to you," and "I hate to interrupt you." We can do a better job of conveying approachability when we have displayed our humanity through: (1) appropriate (not condescending) humor; (2) genuine interest in students' academic problems; (3) being willing to say "I don't know, but let's find out;" and (4) using students' names.

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- 2. Teaching styles: Deep in the mythology of teaching is the notion that you must be tough with students or they will take advantage of you. Unfortunately, an authoritative teaching style that stresses high expectations, firmness about standards, and two-way communication about requirements and performance can become an authoritarian style when we are not mindful of the difference. We can be more authoritative than authoritarian when we: (1) communicate availability; (2) avoid the use of arbitrarily difficult exams or unnecessary or inflexible rules; (3) take care not to belittle student questions or contributions; (4) sacrifice "covering the material" for dealing with issues in depth and allowing students time to learn from each other and on their own; (5) abandon our need to retain our reputations for toughness and aim for a reputation for making difficult ideas interesting and understandable; (6) are as concerned with rewarding the development of intellect as we are with its demonstration; and (7) model appropriate ways for dealing with intellectual challenge without intimidating the novice learner with demonstrations of expertise or use of unnecessary jargon. Supportive teachers communicate; they don't impress.
- 3. Room for Error: Somewhere in American education (it may be the fault of psychologists, I fear), we got the idea that there is such a thing as errorless learning. We expect students to somehow get it right the first time on tests and papers. No leeway is provided for the process of trial and error. In addition, we want our students to be intrinsically motivated. But we grade everything. Our students have learned from us well; they see what we practice, they don't hear what we preach. They have come to believe that feedback on errors is prima facie evidence of a lack of ability, not a lack of quantity or quality of effort. If we want our students to take risks that lead to learning, we must find ways to provide an atmosphere in which errors are not only permitted, but encouraged as a means to an end. Some possibilities include: (1) "practice" tests; (2) use of more cooperative learning activities with peers in which students can "safely" be wrong; (3) more use of first (or even second) drafts prior to final evaluations; (4) development of learning aids such as study questions or guides; and (5) careful, gentle handling of student questions and contributions as students struggle with new ideas. Grades, as outcome feedback, need to be subordinated to informational feedback directed at the learning process.

In short, if we want our students to take risks, to be learning-oriented rather than grade-oriented, to be active rather than passive, we will need to be more learning-oriented ourselves. We control the opportunities for risk taking and we determine the level of support students will receive when they take risks. If we are willing to invest the time, we can provide a secure base for our students' explorations.

Bruce Henderson, Psychology



From the Faculty Center for Teaching Excellence

WESTERN CAROLINA UNIVERSITY

CULLOWHEE, NORTH CAROLINA

Vol. 2, No. 11

February 15, 1990

Every month many faculty respond verbally and informally to the FORUM, and with Bruce Henderson's opinion piece this kind of response was very enthusiastic. For example, within the first week after its publication, Bruce received 10 notes from faculty commenting on his opinion piece! However, we still need more responses to share with our colleagues, and as you can see from the responses we did receive, the continuing dialogue is very valuable. Don't be shy. Write your responses down and share them with the rest of the faculty! If you have any concern about making your writing public, remember that it is my responsibility to edit the responses carefully. If anything is ever misspelled or inelegant, it is my fault, not yours.

Faculty Responses

Bruce Henderson's "Encouraging Student Risk-Taking By Balancing Challenge and Support" was an excellent article! In my opinion, it emphasizes the reason universities exist-to help students grow and become learning oriented.

Davia Allen, Home Economics

Dr. Henderson again presents a thought-provoking challenge to WCU faculty: how to allow students to learn heuristically and actively, free to make and learn from errors.

I was particularly struck by his suggestion that we ought to emulate parental support of young children. The ability of young children to learn quickly in many different kinds of situations has always impressed me, particularly in the light of how slowly adults learn similar skills. One example might be languages. I have always assumed that children learn languages more quickly than adults because they have a better "ear," but Dr. Henderson points out a more convincing causation: that young children often have a far better support environment than most adults have even in universities, which are professionally dedicated to provide optimum support for learning.

I often tell my students that the majority of "real" learning takes place outside the classroom, resulting from the interaction with the friends one associates with most closely and the level of commitment a student is willing to make to learning in those more informal situations. Stimulated by Dr. Henderson's article, I can now see that the good friends and acquaintances are providing support for active learning.

But Dr. Henderson has also restored my faith that such support can be more consistently generated by professors. I have already discovered, by trial and error, some of what Dr. Henderson presents under his three points (Availability, Teaching Styles, and Room for Error). Small-group learning, journal writing, and frequent one-on-one conferences have been marvelously helpful in encouraging many of my students to do better work. This article, however, encourages me to try to expand this effect further in my classrooms. Thank you for another stimulating and encouraging article!

Steve Eberly, English

STEERING COMMITTEE: FACULTY CENTER FOR TEACHING EXCELLENCE

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J.C. Alexander, Jr. (7436) Mary Anne Nixon (7401) Carol Stephens (7113)

Judith Clauss (7295) Rita Noel (7401) Jim Wallace (7244)

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Ben Ward, Director (7196)
Lee Minor, Faculty Fellow
Terry Nienhuis, Faculty Fellow
Charles Stevens, Faculty Fellow

I applaud Bruce Henderson's comments on students, teaching, and risk taking. I wish more students would explore. I find that large classes restrict both my ability to communicate well and the students' willingness to go out on a limb (in any form). However, Bruce Henderson's comments are somewhat of a motivator to try other methods with a large group.

anonymous

I enjoyed Bruce Henderson's piece on encouraging risk-taking in the classroom, and it occurred to me that what he said had very clear applications to the creative writing classes I've been teaching here at Western. Last semester the students in my introductory creative writing class seemed to produce one-act plays of unusually high quality. When I discussed this phenomenon with visiting actor and playwright John Maxwell (Oh, Mr. Faulkner, Do You Write), he asked me what I did in assigning the one-act project. I recalled how distinctively open-ended the assignment had been. I had pointed out the plays in our text, suggesting that I didn't think they were all that great, and I told the students that I sincerely thought they could write one-acts as good or better. I emphasized having fun and profiting from the feedback they would get from fellow students and visiting writers who would respond to their plays in class. Then the assignment was simply to create a one-act play, in any style, using any subject.

Maxwell suggested that it was probably the supportive environment that produced so much success. The students were comfortable taking risks because they were confident of success. There was criticism, of course, but it was seen as constructive and not intimidating. Often I have found that students simply go through the motions with challenging writing assignments, but these students had surpassed even their own expectations. At first I was confused and even a little guilty about the students' success. What had I done to deserve such results? I guess what I discovered was the power of a

supportive atmosphere.

Philip Paradis, English



From the Faculty Center for Teaching Excellence

WESTERN CAROLINA UNIVERSITY Vol. 2, No. 12

CULLOWHEE, NORTH CAROLINA March 1, 1990

The Evaluation of Teaching Effectiveness

Teaching effectiveness has received an increasing degree of attention in recent years at WCU. However, there seems to have been little notice paid to its corollary, the evaluation of teaching effectiveness.

Institutional rewards are tied to the evaluation of teaching effectiveness, but I am not convinced that teaching is highly valued in personnel decisions here at Western, even though, of the three areas of faculty performance, teaching is the stated priority. Often teaching makes a difference in personnel decisions only if the faculty member in question is at either end of the scale, being either inadequate or excellent. For faculty who fall somewhere in between, teaching is a "given" and the areas of scholarship and service are more the deciding factors.

This state of affairs makes sense given its context: we have not operationally defined that which we say we are evaluating, we do not have a system for weighing any AFE/TPR criteria, and we have no systematic way of determining levels of quality (to which to tie corresponding rewards). However, blame for the inadequacies of the system cannot be simply placed at the feet of department heads and deans. On the contrary, they are in the unenviable position of having to evaluate faculty with an inadequate system. Faculty have a major role in determining evaluation procedure, and I am afraid we have not been very thorough with our share of the responsibility. However, we can take that opportunity if we choose to.

A number of issues beg for discussion. For example, consider the assumption that teaching effectiveness is totally quantifiable. The use of numbers carries a certain respectability and an air of authority. However, there is no necessary relationship between the use of numbers and the quantification of anything. Additionally, we assume that all we need for purely objective decision making is reliable data, but there are sources of personal bias even when reliable and valid instruments are used to collect excellent data. Furthermore, we tend to assume that once we have a summation of our data, the data takes on validity by its mere rock-like reality. However, the single score for a course evaluation obtained from the use of the Purdue instrument is meaningless unless it is known how that score was derived and how it is being interpreted. The question becomes, "What do the numbers really mean?"

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CENTER STAFF Ben Ward, Director (7196) Lee Minor, Faculty Fellow Terry Nienhuis, Faculty Fellow Charles Stevens, Faculty Fellow I believe teaching effectiveness is not totally quantifiable and that the best evaluation systems include both qualitative and quantitative data. However, in order to avoid randomness and/or subjectivity in an evaluation system using both kinds of data, it is essential to have clearly stated standards as well as the development of a systematic procedure. If qualitative data are not collected according to a systematic procedure, the data are subject to selectivity and bias. The same is true, on the other hand, of quantitative data, even with valid data, particularly if there is an over-reliance on a single data source. For example, if student evaluations of faculty are the only data source identified in the evaluation process, it is likely that other data will also influence the outcome. For example, the other data might be general impressions or selected comments of students. The critical point is that we cannot afford random or subjective evaluation procedures nor can we afford our major career decisions being based on inadequate data.

For the sake of discussion, an initial list of questions related to the evaluation of teaching effectiveness might include the following:

- •How will we define teaching effectiveness?
- •How can we develop systematic standards for determining levels of teaching quality?
- •What kinds of data need to be collected, who should collect them, and how does the data need to be interpreted and weighed?
- •Should developmental data be kept separate from evaluative data?
- How can effective teaching be appropriately rewarded?
- Are the stated AFE/TPR criteria the ones which are actually used in evaluating teaching?
- •How can we develop a procedure which would be more systematic yet allow for individual creativity and diversity?

I believe that it is possible to have an effective, systematic, and humane process for the evaluation of teaching at WCU. It is possible to have a system which does not curtail creativity or diversity and which does not cost too much in terms of resources or human relationships. In order to get there, we have to take the issues out of the closet. First we have to talk.

Carol Stephens, Nursing



From the Faculty Center for Teaching Excellence

WESTERN CAROLINA UNIVERSITY Vol. 2, No. 13

CULLOWHEE, NORTH CAROLINA March 15, 1990

Faculty Responses

Ms. Carol Stephens raises some vital issues in her Forum opinion piece. One that strikes me particularly is the effort to quantify teaching effectiveness. From an administrative perspective, devising an accurate number-scale for rating teachers--much as we try to do with students--would seem far more desirable than the collection of vague, subjective indicators we seem to use now: "seems well prepared in class," "gets along well with students," "makes himself available to students outside of class."

But numbers without careful, logical design for the means of evaluation can be worse than meaningless. When Ms. Stephens asks, "what do the numbers really mean?" she is asking a question which might also be asked of our attempts to quantify our students' work and the state of the students work and the state of skill levels. The answer seems to depend partly on how well-designed the whole system of evaluation is. When a student makes a grade less than he is satisfied with--particularly early on in the term--I provide an opportunity for him to revise his work. Yet when the course winds down, I am forced to let the accumulated numbers represent my evaluation of his work and skills relative to the course goals and objectives. The key issue is how clear are those goals and objectives?

For this reason, I applaud Ms. Stephens' point that "we cannot afford random or subjective evaluation procedures nor can we afford our major career decision being based on inadequate data." The first step, as she points out, is to define precise goals and objectives within each department and unit and to discuss how to evaluate these fairly, with the primary goal being to help one another improve the quality of our teaching.

Steve Eberly, English

The simplistic misuse of student evaluations is ubiquitous on this campus. Most shocking is the coromon reliance in AFE/TPR evaluations on a single item from an evaluation form (usually something like "this is one of the best instructors I have ever had"). Psychometrically, it is empirically impossible for a single item of any kind to be reliable or valid. Almost as outrageous is the use of meaningless averages summed across different types of evaluation items (the infamous fruit cocktail recipe involving the combination of apples and oranges). In either case, teaching is too complex to be described by such methods. An unfortunate corollary to this procedure is the rank ordering of faculty by these magic numbers without attention to the fact that contiguous ranks are based on numbers that are not statistically (or meaningfully) different from one another. Tenured faculty members should yell and scream in protest and do something. Untenured faculty members should worry a lot and pray for change.

Carol's opinion piece also leads me to raise another issue related to student evaluations: faculty members should be aware of and discuss the problems associated with the effect of student complaints on the evaluation of teaching. Cognitive psychologists have pointed out

J.C. Alexander

the powerfully disproportionate effects on decision making of negative information that is available and recent. Complaints from a very small, unrepresentative sample of students can often have a major impact on how administrators and members of TPR committees view faculty effectiveness. Faculty members who demand a great deal from students, who use innovative teaching or grading methods, or who frequently disagree with their supervisors on any matter do so at great risk. The cognitive research suggests that it would take an unusually wise evaluator to overcome the pitfalls in any decision-making process.

We must work much harder than we have to date to find ways to evaluate the scholarship of what we do, not only in teaching but in research and service. It will not be easy, but it won't happen at all if we don't try.

anonymous

Carol Stephens has written a very incisive article on evaluating teaching effectiveness. She has asked the right questions concerning the human elements in the process and the institutional systems that are created when a procedure like this is codified. Her opinion piece gives us a sound basis for developing an effective system for evaluating teaching effectiveness.

James Syphers, Social Work

Everyone is so excited about creating exquisite assessment tools but no one has stopped to realize how impossible it will be. Assessment without subjectivity is impossible and we cannot assess quality in the university any more than we can in the real world; any attempt to do so will founder on our complete lack of confidence in subjective judgment. Is there rational assessment of quality anywhere in our culture? No! And if we try to do it here, there will be so much blood on the walls it will make the St. Valentines Day Massacre look like a church picnic. Forget all attempts at rational assessment! Create a bogus and mechanical assessment system for teaching like we already have for publications: count 'em up, no matter what they are; assert that some are more valuable than others; but don't attempt to really assess anything. Imagine what would happen if we applied theroughly rational assessment criteria to publications. Clearly, it's not done and never can be done. The same barriers (and more!) apply to assessing teaching.

anonymous

To Carol Stephens' editorial on the evaluation of teaching I offer a voice of qualified support. A great deal of literature exists regarding the evaluation of teaching. In particular, evaluating teaching solely on the basis of student evaluation seems quite inappropriate.

But clearly, research on the use of student evaluations is contradictory and cluttered. Some research indicates that students in their major courses and in small classes tend to rate the instructor at a higher level. Other literature indicates that student ratings are more valid when collected over several years and not from semester to semester. Still more studies indicate that teacher ratings are raised if one is prone to flattery and praise prior to administrating the evaluation form. Of course, there are other thoughts, beliefs, and research findings, but most seem to be consonant with Ms. Stephens' views and questions. Are we collecting the appropriate data in the appropriate manner to really provide adequate feedback regarding the evaluation of our teaching skills?

Susan Brown, Sport Management



From the Faculty Center for Teaching Excellence

WESTERN CAROLINA UNIVERSITY

CULLOWHEE, NORTH CAROLINA

Vol. 2, No. 14

April 1, 1990

Research and Teaching

There seems to be an anti-research attitude among some faculty members, particularly those who contribute to the **Forum**. The thesis has been advanced that research (interpreted broadly as scholarship, publication, and creative endeavors not immediately linked to classroom teaching) does not contribute and may detract from the teaching mission of the university. That is, the critics seem to be saying that faculty members engaged in research should instead be putting that effort into teaching, which the critics believe is the near-exclusive role of a university like Western Carolina.

I would like to offer an opposing viewpoint. My frame of reference is the natural sciences, but the argument should have general application. First, let us admit that learning involves both the advancement of knowledge and its transmission to succeeding generations. The university is our society's principal institution for higher learning. According to criteria established by the State of North Carolina, Western Carolina is in fact a university. Thus it follows that research and scholarship are appropriate functions of our institution. It should not be necessary to keep saying these things, but apparently it is.

Does research enhance teaching? In general, I think it does. Research is a strong incentive for keeping abreast of current thinking and the current literature in one's field of study, and for maintaining enthusiasm for the discipline. Those opposed to research argue that most research areas are so narrow that there is little that carries over into the classroom, particularly in introductory courses. For example, if Professor X's specialty is the classification of fungus beetles, how often does she or he have the opportunity to utilize that knowledge in the classroom? This sort of reasoning is deceptive. Faculty members engaged in research, who read the current literature in their own specialty, are drawn to related disciplines and to the more general literature. I expect that Professor X would read not only the Coleopterists' Bulletin, but also Systematic Zoology and Evolution, and Science and Nature as well. Such efforts would be expected to inform and enhance the professor's performance in the classroom as well as at the laboratory bench.

In the sciences it is difficult over the long run for faculty members who are not doing research to maintain a level of competency needed for university teaching in the sciences. The stimulation and encouragement provided by the larger professional discipline are absent. The motivation to "keep up" is lacking. Of course, there are exceptional individuals at Western Carolina, and it is not my intent to malign their accomplishments in teaching. In most cases, however, no matter what the pedagogic skills or classroom charisma, one simply cannot be a complete science teacher at the university level without familiarity with current developments, and without continued practice in doing real science. At WCU several faculty members involved in research encourage participation by undergraduate students.

The reasoning presented above should apply to fields other than the sciences, though I realize that "research" is not always the right word. The idea is simply that a faculty member should pursue scholarly interests appropriate to the discipline, which, though separate from his/her formal teaching responsibilities, will serve in the long run to better the individual's performance as a teacher.

In our graduate programs, some of the graduate degrees require a thesis based on original research and scholarship. Directing the thesis research of graduate students is a form of teaching and requires continuing research experience on the part of the thesis supervisor. This is a serious problem in some departments where there is a division between non-researchers and researchers. The result is that some important areas of the discipline are not represented in the graduate program.

How can the teaching-research problem be resolved? It may be helpful to consider the advice given some years ago by the great Yale scholar, G. Evelyn Hutchinson. In commenting on the antithesis between teaching and research, Hutchinson suggested that the University be "regarded primarily as a place of learning, and not as a place of teaching." He went on to propose that "there is no antithesis between learning and research, because if the teacher is not learning himself, he can never teach by example." This, to me, is the essence of the argument.

Richard C. Bruce, Biology

Hutchinson, G. E. 1943. A note on the function of a university. Reprinted in Hutchinson, G. E. 1970, The itinerant ivory tower: scientific and literary essays. Books for Libraries Press.



From the Faculty Center for Teaching Excellence

WESTERN CAROLINA UNIVERSITY

CULLOWHEE, NORTH CAROLINA

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April 15, 1990

Faculty Responses

Thank God someone finally spoke up for this side, and Dick Bruce did it very well. But how many of the scientists who do a lot of research teach a 12-hour load like the humanists (and many other proletariat) do? Has anyone done a study of teaching load vis a vis research productivity?

an unidentified humanist (not necessarily secular, though)

Thanks for sharing with us the thoughts of Richard Bruce. I think he is correct in stating the need for research at our university, or any university. He is also apparently correct in recognizing the need to restate this position. The anti-research sentiments expressed in the **Faculty Forum** and elsewhere on campus are not shared by all the faculty. To what extent they are shared is difficult to determine and probably not worth speculating on, except where the effects can be felt, such as in the lack of support for research.

I do not resent the **Forum** statements and agree that teaching deserves publicity; I try to remember that the Faculty Forum is published in the Faculty Center for Teaching Excellence. Scholarship in the form of research enjoys a natural outlet in our professional literature, and teaching excellence does not often have the same outlet. We have provided a publication to do so and in this way we have added to the dimensions of scholarship.

It is my opinion that research is essential for the quality of teaching and I appreciate Richard Bruce's contribution to the dialogue.

Dale Carpenter, Human Services

Dick Bruce correctly indicates that the Faculty Forum gives the impression that the University values teaching above all else. However, conversations with colleagues associated with the tenure and promotion process leads me to a quite different conclusion about the reality of the situation. The "grapevine" has it that minimally competent teaching coupled with a good research record usually leads to tenure, whereas good, even outstanding teaching without a research program leads ultimately to either the Chronicle "want ads" or permanent associate professor status. Thus, while we pay lip service to the holy trinity of Teaching, Research, and Service, Research is the most highly rewarded, assuming that one has passable teaching skills.

Is it time to acknowledge that college faculty have different abilities and interests? I find research a major source of personal satisfaction, but some of my colleagues, superb teachers, do not share my enthusiasm for the "paper chase." Some colleges and universities are establishing flexible work loads so that faculty members who find research rewarding can contract to produce a certain number of papers, grant proposals, etc. in a given academic year in trade for reduced course loads. Similarly, faculty who find research a drudge can teach more rather than grinding out articles simply because it is a requirement

for tenure and promotion. Given the multiple missions of the University, the glut of meaningless and trivial "scholarly" papers, and the surprisingly low relationship between publication rates and teacher evaluations, perhaps we should consider a more flexible faculty evaluation system so that people are rewarded for what they do best.

Hal Herzog, Psychology

What a shame that so many regard the "terminal degree" as indeed terminal! As one of the faculty that has yet to achieve the doctorate, I know that my research and study will not terminate with the hood and sheepskin of the Ph.D or the tenure track position in a college or university. I would be less of a teacher if I were to sit back and rest after the dissertation rather than to embark on some new, bold adventure in search of more knowledge in or out of my specialization. However, there are some who need an after-research hiatus, a break from the rigors of scholarship, and these people need the change of pace that can be found in the challenges of the classroom, allowing new experiences and communications to have a field day and make furrows in cogitative soil. When they are ready to sow a new crop of inquiry, there will be fresh nitrogen to fuel the task. I defend both—the researcher for continuing the quest and the instructor for gathering energy from the vital community of students. There is room for both of us.

anonymous

I think the definition of what constitutes "research" is often too narrowly defined by a large number of people, including, in some cases, people who sit on Tenure and Promotion Committees or in other administrative positions. The common definition of "research" would appear in many cases to be limited to work done outside the classroom which leads to publication. Perhaps the problem is that not all kinds of research are easily documentable.

I am a designer and "constructor" of scenery and lighting for theatrical productions as well as being a teacher of these processes. Tremendous amounts of time are spent in studying the text of a play, researching the historical period and/or geographical locale, studying the architecture, considering the psychological aspects of the intended performance, and selecting materials and colors for every production that is mounted. Is this "research"? It resembles much of what is done by other people as research but I have no product to show as a result except for a line in a program or photographs of my work. And how can someone in a far different field know how to evaluate the research that went into my work? I suspect that much the same situation occurs in the Art Department. The curator of an exhibit spends a great deal of time planning an exhibit, selecting the works to be included, assembling them, etc., but is that "research"? How about the musician who spends hours planning his performance--considering correct technique, tone coloring, or phrasing? Is that research?

I would say that it is. But how can it be documented in a form that is comparable to and understood by the traditional researcher/scholar? I would suggest that the only possible solution is to consider carefully what "research" means. If it only means activity leading to traditional publication then we have to consider what impact that definition has on the institution as a whole. I am a designer, but I have the skills to do "traditional" research. I don't do much of it because I spend my research time creating theatre. If this sort of activity is not valued in our community, I can do other things, but I would suggest that in my case (and I suspect in that of many others) my teaching would suffer as a result and so would our community as a whole.



From the Faculty Center for Teaching Excellence

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Last month we had an overflow response to Dick Bruce's opinion piece on research and teaching, so we are continuing the responses in this, our last issue for the academic year. We believe that the Forum has gotten stronger this year and we look forward to making it even better next year. Our goal is to make the Forum a place where important dialogue is regularly initiated and continued, a place where our sense of academic community is nurtured and exemplified. Send us an opinion piece or a teaching tip for the fall and have a good summer!

Faculty Responses

I believe the tension between research and teaching is real; I feel it at a personal level almost daily. Further, I believe the conflict creates an issue our community should continue to debate. There is no easy resolution to the conflict, but some things seem clear to me. First, as indicated in an earlier **Faculty Forum** piece by Bill Kane, there is <u>no</u> empirical evidence of a correlation between research and teaching performance. Second, I know of no <u>evidence</u> to support the assumption that only individuals who regularly publish or obtain grants "keep up" with the literature, maintain a level of competence needed for university teaching in any discipline, or are more motivated scholars.

It is clear to me that research activities can and often do interfere with teaching. The simple fact is that WCU is not funded the way research universities are. Our funding formula has not changed since the days when the "normal" teaching load was set at 12-15 hours per semester. Whenever faculty members have their semester teaching load set at 9, 6, 3, or 0 hours, somebody during that semester has to pick up the slack. This may be done through higher loads in other departments, increased class size, use of graduate assistants in labs, use of part-time faculty, etc. Research also interferes with teaching when faculty members avoid assigning students activities that require more time to set up or grade. Emphasis on research can also become a shield. The rhetoric about research on this campus is sometimes greater than the actual levels of research productivity. Rates of publication and research grant acquisition are sometimes surprisingly low in departments where teaching loads have been reduced in the name of research or graduate teaching.

At least two different underlying problems are reflected in the teaching/research tension. One is the question of status (often confused erroneously with "quality"). A popular distinction is made in higher education between "cosmopolitans" and "locals." Cosmopolitans are heavily involved in activities outside their own campuses-activities such as research for publication, editing, and other disciplinary functions that draw them away from students and the local campus. Locals, on the other hand, are involved more on their own campuses with the education of students, especially undergraduate students. Although the distinction is simplistic, I believe it really does represent and influence the perceptions of administrators, public information

personnel, and faculty members. It is an unfortunate fact of academic life that status accrues to cosmopolitans. Rewards like tenure, promotion, and merit increases come more easily to cosmopolitans. Locals, regardless of the quality of their contributions, are frequently unappreciated, unrecognized, and underpaid despite the fact that they are the backbone of an institution like ours.

The other problem is with the concept of "scholarship." Scholarship is too often equated with "productivity" (i.e., research and publication) when scholarship is an end in itself and not a means to another end. Research and publication can express scholarship, but there are many ways for the reading, thinking, and creativity involved in the processes of scholarship to be expressed. What we need at WCU are active scholars of many kinds. Indeed, we need researchers who work and learn with students. But we also need scholars who do research on how students learn and scholars who put their efforts into challenging students, continually evaluating the content and methods of their teaching.

I am not "anti-research" as anyone who watches how I spend my time would report. But at an institution like Western we cannot afford to endorse a research model without knowing how this model will affect the education of the students we serve.

Bruce Henderson, Psychology

We do not question the value of research as it is broadly interpreted. The problem is that in some schools of the university "research" is narrowly defined as publications in refereed journals.

It is academic curiosity that leads a faculty member to consider a question to be researched, and academic curiosity obviously has a close relationship with teaching effectiveness. What is not obvious is whether the academic curiosity required in teaching is the same as the academic curiosity required in publication, or whether academic curiosity can only be demonstrated by publication.

Furthermore, the implied equation of teaching effectiveness and publication overlooks the concept of labor specialization. In industry, for example, people are not asked to be proficient in design, engineering, manufacturing, and sales. Historically, institutions of higher education have specialized either in research and graduate education on the one hand or in undergraduate teaching on the other. Even at our institution we have a special designation of "graduate faculty." Does this not imply some specialization? Would you not expect specialization to generate greater output for all? The skills required to be a good teacher are not the same as the skills required to publish. Undergraduate teaching requires broadening, synthesizing, integrating, and developing academic curiosity, while to publish one must focus and concentrate efforts on a specialized topic. These are mutually exclusive professional paths. For the publisher, time spent teaching becomes an interruption since large blocks of time and isolation are required for effective work. This is evidenced by the fact that a standard method for increasing publication output is the reduction of contact hours with students. To equate publication and teaching effectiveness violates the sound economic principle of labor specialization.

Harry R. White, R. S. McMahan, Duncan R. Tye, Economics and Finance