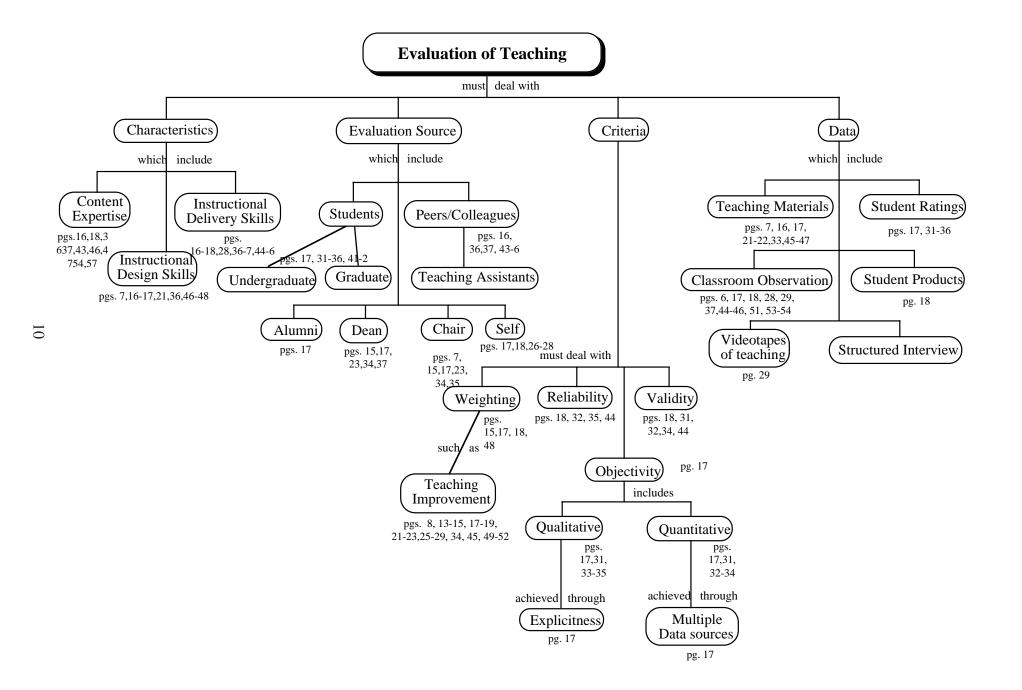
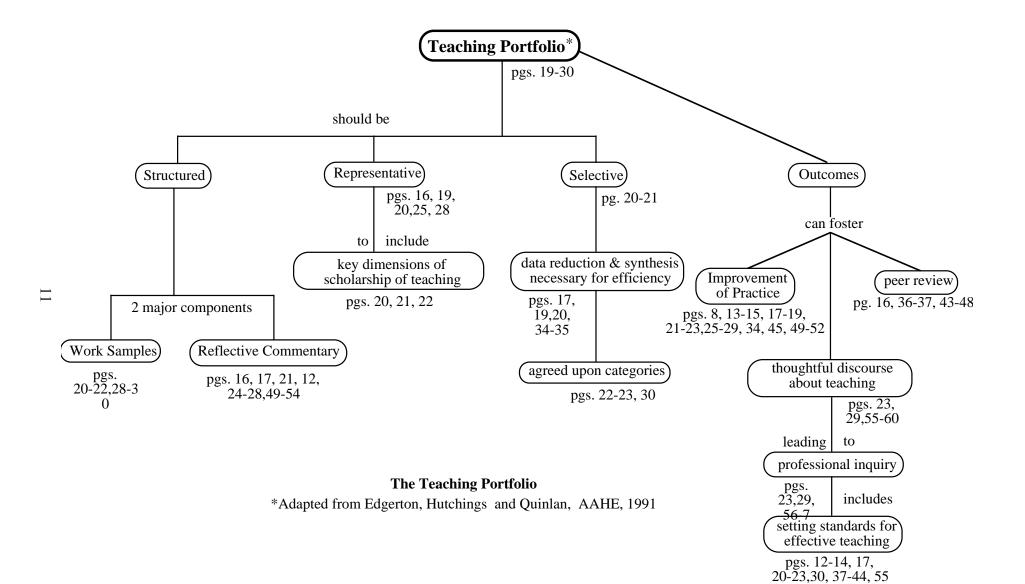


Framework for Tenure File Contents





Chapter I—Conceptual Overview

During the last 30 years research on teaching effectiveness has shifted away from behavioral and psychological approaches. This shift has grown out of the gradual recognition that teaching is a sufficiently complex human endeavor that its effectiveness cannot be accounted for in purely behavioral terms. The research traditions prevalent in psychology and education 30 years ago, which produced many experimental studies, proved less fruitful than was hoped because methodological constraints limited (and probably trivialized) research contributions to a better understanding of how students reach comprehension and application of the knowledge taught to them. The focus on *behaviors* (rather than the richer and more powerful realm of teachers' and students'*thinking*) and the reduction of teaching to a set of technical skills has been partly responsible for faculty mistrust and skepticism about a meaningful and practical body of knowledge about teaching effectiveness in higher education.

Knowledge about what constitutes teaching effectiveness has therefore not had much influence on teaching practice in higher education until recently. The practice of teaching in higher education strongly reflects the educational system that prepares and qualifies its teachers during their graduate education. Teachers in higher education are, for the most part, educated to be justifiable authorities on the subjects they teach, but only indirectly are they educated in how to teach those subjects. Exceptions include those faculty members who were fortunate enough to be exposed to individuals who stimulated a broader range of teaching practices and experimentation, and who were more likely to adopt those stimulating approaches themselves. There seems to be a consensus that there is too much lecturing and not enough critical thinking going on in higher education classrooms. We must begin to do things differently if we desire different results.

Over the last 10 years, concern about the training of graduate teaching assistants has increased significantly, more attention has been placed on the relative importance of undergraduate education, and strong criticism has been levied at the degree to which research has become almost obsessively dominant. All of these factors have contributed to creating an atmosphere in which the central administration at Cornell University has supported an in-depth analysis of the tenure system and the way teaching is evaluated and rewarded.

Some Basic Definitions and Assumptions

In the literature on the evaluation of teaching, there has been a tradition of distinguishing two forms of evaluation: *summative* evaluation—made for personnel decisions like tenure and promotion—and *formative* evaluation—conducted for the improvement of practice.¹ This tradition has maintained that these two evaluative practices be conducted separate from each other. There are strong arguments for this separation. One is that summative evaluation serves the purposes of administrators and is a public

¹ M. Scriven (1981). "Summative Teacher Evaluation. " In *Handbook of Teacher Evaluation*, ed., J. Millman. (Beverly Hills: Sage Publications), 244.

process, while formative evaluation serves the individual teacher and is therefore confidential. If a tenure candidate cannot trust that the consultation provided for improving practice is confidential, the candidate may not seek out that consultation because the implication available publicly is that his or her teaching is substandard. Another argument is that the consultant has a conflict of interest between serving the needs of the teacher and serving the needs of the administration.

There is a price to be paid, however, for treating these two evaluation functions separately: the summative evaluation process may become too oriented toward comparing faculty with each other as a way of defining teaching effectiveness, while an individual's achievements in the improvement of teaching practice (the objective of formative evaluation) may be overlooked. When the primary method of evaluating an individual's teaching is based on comparing his or her mean scores on several indices with an aggregate set of scores computed by lumping all faculty in a department or school into a common formula, it is possible to lose sight of significant differences in improvement achieved on an individual level. Regardless of relative experience and skill, everyone has the potential to improve. In fact, a truly scholarly approach to teaching would imply that one is never finished learning about it, just as one never comes to fully understand a phenomenon under investigation in research.

Another important argument for not separating summative and formative evaluations has to do with efficiency and cost. All the effort, care, and time expended on documenting and evaluating teaching can be used most efficiently if it serves two functions simultaneously rather than just one. It is extremely important that any added emphasis of the evaluation of teaching for summative purposes be carried out as efficiently as possible so that it does not become a major burden to all those involved. This can be achieved if evaluating teaching within the tenure process is thought of as informing and supporting the ongoing improvement of teaching practice.

To achieve efficiency in the evaluation of teaching, specific procedures must be adopted and carried out by everyone involved. Procedural roles must be defined to avoid duplication of work and to ensure the highest standards are maintained. In addition, considerations of confidentiality—*what* is confidential and *when* during the tenure period—are important in defining roles. Time availability and evaluative expertise are other factors in determining efficiency. Summative evaluation should be conducted by peers. Faculty peers, however, may not always feel they have the expertise or time necessary to properly conduct formative evaluations of teaching.

It is possible to achieve evaluation efficiency without costing anyone in the process significantly more time. If we acknowledge that improvement of teaching practice is an expectation that all faculty, both tenured and untenured, must continually demonstrate, and that it is also an important value that faculty hold, just as they value and expect research quality and results to continually evolve, then there already exists a basic motivating force to encourage efforts at improvement on an individual, ongoing basis. This places the burden of proof on each faculty member from the moment he or she is hired. Monitoring of instructional quality and effectiveness, strategizing and experimenting with activities aimed at improvement, and the documentation of those activities and their measured results are all responsibilities that can be expected of a tenure candidate starting from day one. These expectations should be communicated to faculty members when they are hired so they can begin preparing for them right away.

The individual faculty member is not without resources, however, to help fulfill these goals and responsibilities. The fourth recommendation of the Dean of Faculty Committee's report suggests, "that all departments (or other appropriate unit) establish *a standing committee on teaching*. Committee members would be responsible for overseeing peer evaluation of a tenure candidate's teaching." In this case "peer evaluation" is not limited to classroom observation but is meant to encompass the entire range of data gathered, from student and alumni letters to course teaching materials and measures of student learning. It is the intention that this committee establish and maintain guidelines and criteria for the evaluation of teaching, establish procedures to be followed, and set standards. Colleagues should be available to assist the tenure candidate in making his or her case for quality teaching. Where faculty colleagues do not have the time or expertise to assist in these areas, instructional development services are available through the Office of Instructional Support.

The Question of Defining Excellence in Teaching

A frequently raised question both in the literature on the evaluation of teaching and in conversations with Cornell faculty members is "How can we define excellence in teaching?" It would seem this question must be answered before one can proceed with any kind of evaluation. The problem with this question is that it may not be answerable in *absolute* terms. A major reason there has not been a useful and practical definition of excellence in teaching is that teaching may be too broad a concept to be limited by a single definition. Teaching undergraduates will involve different criteria than teaching graduate students. The criteria for excellence in teaching to be considered for promotion to full professor will be necessarily different from those for consideration at the associate professor level. Excellence in teaching will vary by discipline, course design and level of experience. A more useful way of thinking about excellence in teaching is in *relative* terms: to what degree has improvement in practice revealed an individual's capacity for continual growth and development and intrinsic instructional worth to the department and college?

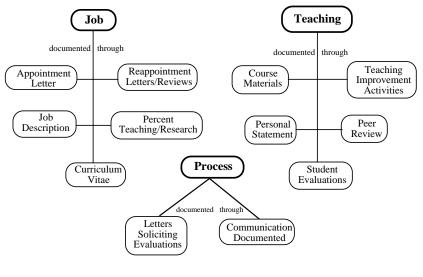
It will be far more difficult to agree upon and evaluate an absolute definition of excellence in teaching than a relative one. Assuming that adequate and appropriate standards of merit have been applied in hiring a candidate, his or her continual worth to the unit will be closely related to the capacity for improvement in performance. The fact that the candidate has been hired to teach at this particular institution sets the level of standards by which he or she will be evaluated. The task now becomes one of determining how capable the individual is of improvement based upon a sufficiently broad range of criteria and data sources. Some people may not require much improvement to function at an exemplary

level, yet because of their particular capabilities, they may exceed established expectations. Others will show an even greater degree of improvement, but still not measure up to expectation—in which case they probably should not have been hired in the first place.

Documentation of Teaching within the Tenure File

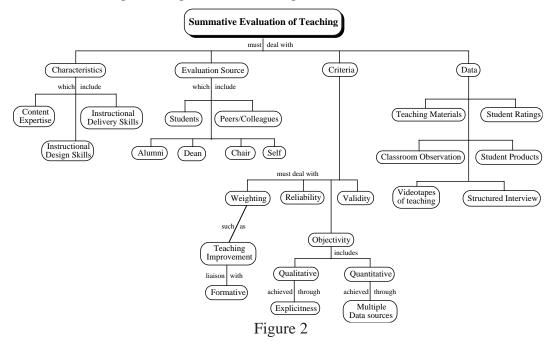
All colleges and schools have guidelines for evaluating faculty members for tenure. These guidelines should include explicit instructions for gathering data to document teaching. It is extremely important that explicit criteria for evaluating teaching be established and communicated, through these college guidelines, to the candidate upon hiring. The relative weight of all criteria and data sources should be explained and periodically discussed among the faculty. The roles of everyone involved in a tenure case should be known and spelled out (chairs, *ad hoc* committee members, students, colleagues, dean, chief academic officer).

Tenure and promotion files should document contracts between the department, the chair and the candidate upon hiring through the inclusion of appointment and reappointment letters. A possible framework for documenting teaching appears in Figure 1 below:



Framework for Tenure File Contents Figure 1

This framework focuses on three major areas of *documentation*, 1) **Job**—how was the position originally described during the search, how did the parameters of the position change once the position was filled? What were the teaching and content area background of the person hired? What relative weight was given to teaching responsibilities and did that weight (percentage of time commitment) change over time during annual reviews? 2) **Process**—was the evaluation process itself documented? Did reviewers, both students and peers, receive explicit instructions and criteria to help them carry out their evaluations? A simple letter specifying to reviewers the criteria to be used in evaluating classroom performance, course design and materials makes everyone's job easier. This includes both internal and external reviewers and administrators reviewing the documentation: department chairs and deans. 3) **Teaching**—is there a balance in data between the various components of teaching and data sources? Does peer review adequately cover the range of teaching activities peers are capable of evaluating? Are student evaluations reported in a way that development of effectiveness over time can be determined? Were course materials reviewed? Does the documentation include a reflective personal statement by the candidate that explicates his or her efforts at improving teaching effectiveness?



A framework for evaluating teaching is included in figure 2 below:

This framework focuses on four major categories of the summative *evaluation* process: the range of characteristics of teaching that are evaluated, the range of evaluation sources available to supply data, the criteria by which the data on teaching are evaluated, and the range of data types available to be evaluated. The first category includes three basic characteristics and responsibilities of teachers: content expertise, instructional design skills, and instructional delivery skills. Because these are all primary skills of teaching, it is necessary that all be discretely evaluated. Content expertise is the most obvious link to the candidate's educational and professional background and to his or her research expertise. Instructional design skills are necessary for effective course design, development, and planning. Included in this are the skills necessary to effectively evaluate student learning as evidenced in examinations, paper and project assignments, and grading schemas. Instructional delivery skills are those that are evident in the classroom and in interactions with students during office conferences and advising.

Given this range of characteristics of teaching, an equivalent range of evaluation sources is necessary because no single source will be qualified to evaluate all aspects of teaching. Content expertise must be evaluated by peers in the discipline and faculty colleagues in the department. Instructional design skills are best evaluated by peers both within the candidate's department and discipline and outside of it. A balanced *ad hoc* committee will include peers throughout the candidate's own institution and outside of it. Peers who are acclaimed not only for their knowledge of course design but also for effectively teaching the content are important in evaluating course design skills. Students have proven to be effective evaluation sources for instructional delivery skills and, to a certain degree, course design skill (Abrami, 1986; Cashin, 1990; Centra, 1973; Cohen, 1981, 1986; Costin, Greenough & Menges, 1971; Marsh, 1987; Orpen, 1980). The weighting attributed to student contributions in evaluating instructional and course design skill is an important consideration.

Some authors in the area of evaluation of teaching suggest that alumni are useful for providing a perspective on a candidate's teaching that no one else can. Students who have graduated and been in the work force for a year or two have the opportunity to reflect on how effective the teaching they received was from a practical point of view. However, alumni evaluators must be enlisted with caution. Alumni are more valid as evaluation sources if they are asked to evaluate an overall course and what they have learned as a result of taking that course, rather than relied upon to evaluate specific aspects of classroom performance after they have left the institution. A major disadvantage in soliciting alumni for teaching evaluations is low response rates.

The role deans and chairs can play in the evaluation process is of a qualitatively different nature than the role of students or peers. A primary responsibility of deans and chairs is to ensure that the tenure file is complete, follows accepted college and departmental guidelines, includes a sufficiently broad range of data, and that appropriate and explicit criteria have been used to evaluate the data. Additionally, administrators are concerned with the candidate's long-time worth to the department or college. Including a broader range of data on teaching in a tenure file will prove more cumbersome to administrators, peers, and the candidate alike if certain guidelines and procedures are not adopted and adhered to in order to reduce that data to a manageable form. The task is to reduce the data in a way that does not distort it. More will be said about data reduction in chapter2.

The candidate is an important evaluation source, especially in terms of instructional development. Hard data by and of themselves cannot tell the complete story of an individual's teaching experience and development. It is not only advantageous but also valid for a candidate to supply some form of reflective, written statement that not only provides a more intimate view of what has transpired, but helps in interpreting abstract data, like numerical student evaluation scores.

A common complaint of the evaluation of teaching is that it is a subjective judgment—objectivity is impossible. Objectivity is possible, however, through both qualitative and quantitative approaches. The *quality* of objectivity can be achieved by the development of *explicit criteria* for evaluating the data collected. To achieve *quantitative* objectivity, data should be collected from *multiple sources* (colleagues, students, advisees, graduate students, alumni) and in various forms (quantitative data from student questionnaires, peer evaluation, classroom observation, course materials, personal statements

from the candidate, qualitative data from students, advisees and alumni in the form of letters and samples of student products).

Reliability and validity are two criteria to be applied to all data provided for tenure and promotion decisions. For example, in the case of classroom visits by peers, if peer observers are untrained in the task, their observations may be less reliable (Centra, 1975). A complete discussion of reliability and validity in relation to student and peer evaluation data will follow in chapters 3 and 4.

Weighting is another important factor in the evaluation of teaching. Its consideration begins with the candidate's job description: what percentage of his or her time has been designated for teaching? Has this percentage changed over time? These factors will govern what overall weight should be given to teaching. Once that has been established other weighting decisions must be made. What relative weight will be given to evaluating the candidate's instructional design skills? What weight will be given to the improvement of teaching practice for this candidate, based upon his or her previous experience and performance and the work load assigned? These matters will be addressed further in chapter 4.

If quantitative objectivity is an important criterion for evaluating teaching, data must be representative of all dimensions of teaching: content expertise, instructional design skills, instructional delivery skills and the capacity for improvement of practice. Data on content expertise will be found in course materials: assigned readings, examples of exams, examples of graded papers and projects, classroom teaching plans, lecture notes and handouts. The focus on content expertise will vary, depending on the candidate's relationship with the course content: to what degree does it overlap with the candidate's field of expertise? The primary consideration in evaluating content expertise will be: is the right stuff being taught? This can only be determined by looking at what was taught as evidenced in course materials and, to a certain degree, by classroom observation.

Instructional design skills will also be evident in course materials: syllabi, assignments, schemas for evaluating what students have learned, handouts, non-print materials such as computer software and the choice of text used. Measuring improvement in practice will require historical data gathered over time. This data must be comparable. For example, if a candidate has been observed in class within the first year and an observation report is included in the tenure file, equivalent observations must be provided for subsequent years to determine instructional development.

The range of data on teaching included in a tenure file and the ways it is evaluated are matters that must be decided at the department and college level. This discussion has brought up some of the major issues that should be considered in setting departmental and college policy. To help make those informed decisions we will look more closely at the documentation and evaluation tasks. The next chapter will present a model developed by the American Association of Higher Education and leading authors in the area of documentation of teaching—the Teaching Portfolio.

Chapter II—The Teaching Portfolio: A Model for Documenting Teaching and Its Improvement

A tenure file should provide thorough documentation of the process whereby the candidate was evaluated, in terms of both research and teaching. Lack of thorough documentation is a liability to the candidate, department, and college on legal, ethical, intellectual and efficiency grounds. Although it is recognized that there is much more to the tenure process than what is, or can be, put in a file, it is the primary document used to make the candidate's argument for tenure. The file should therefore reflect a degree of thoroughness and detail sufficient to stand on its own as a source of evidence.

Inclusiveness and brevity are two competing factors that must be considered in documenting teaching and its development. Inclusiveness has to do with whether there is enough data available to all those who must make a decision and whether that data represents the full range of activities and responsibilities associated with the candidate's teaching. Offsetting inclusiveness is the issue of brevity: has the available data been reduced to a manageable and digestible form without biasing or distorting the facts? Format of the data is another important factor. Different data will require different format guidelines, yet all data are related in various ways and should not be presented in isolation from each other. As suggested in chapter 1, a range of data sources on a candidate's teaching effectiveness improves the quantitative objectivity by which that candidate is evaluated. If improvement of teaching practice is a major criterion, the *candidate* is one of the best sources of data to document *improvement*.

This chapter will focus on a tool that can be used by the tenure candidate to document the improvement of teaching—the Teaching Portfolio (Edgerton, Hutchings, Quinlan, 1991; Edgerton, 1991; Seldin 1989, 1991; Millis, 1991). According to Seldin, the teaching portfolio "would enable faculty members to display their teaching accomplishments for examination by others. And, in the process, it would contribute both to sound personnel decisions and to the professional development of individual faculty members. . . . It is a factual description of a professor's major strengths and teaching achievements. It describes documents and materials which collectively suggest the scope and quality of a professor's teaching performance."¹ The Teaching Portfolio has been chosen as a model in this handbook because it connects summative and formative evaluation functions in a single process, it honors teaching as a scholarly activity, it is a practical and efficient way to document teaching and its development over time, and it has been experimented with at several institutions. The construction of a teaching portfolio raises issues and questions that must be considered by the candidate and administrators engaged in the evaluation of teaching. Figure 3 illustrates what a Teaching Portfolio is and can do.

¹P. Seldin (1991). *The Teaching Portfolio—A Practical Guide to Improved Performance and Promotion/Tenure Decisions*. (Bolton, MA.: Anker Publishing Co.), 3.

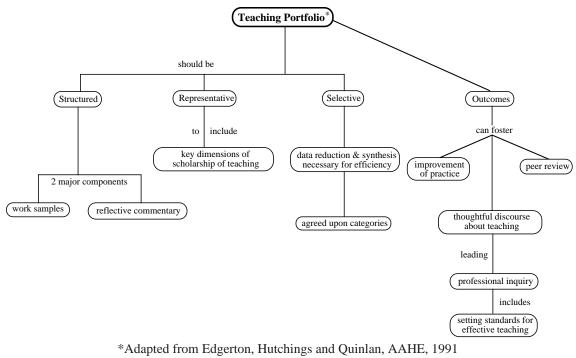


Figure 3

The teaching portfolio should be representative enough that the key dimensions of teaching as a scholarly activity are evident. "When defined as scholarship . . . teaching both educates and entices future scholars. . . . As a scholarly enterprise, teaching begins with what the teacher knows. Those who teach must, above all, be well informed, and steeped in the knowledge of their fields. . . . Teaching is also a dynamic endeavor involving all the analogies, metaphors, and images that build bridges between the teacher's understanding and the student's learning. Pedagogical procedures must be carefully planned, continuously examined, and relate directly to the subject taught. . . . teaching, at its best, means not only transmitting knowledge, but transforming and extending it as well."² When so conceived, teaching encompasses both a logical dimension—in the selection and representation of the subject matter—and a psychological dimension—in the consideration of the process of translating and retranslating that subject matter into a form that is available to students.

At the same time the portfolio has representative breadth, it is also selective. Criteria for inclusiveness must be established that limit the bulk and form of data to a manageable amount. The selection process should preserve the criteria of representativeness of primary teaching responsibilities, yet reduce and transform the available data into a manageable form that ensures efficiency during the subsequent evaluation process. Selectivity is governed by structuring the portfolio into two major components (see figure 4 below): *work samples*, which consist of the details of what was taught and what its impact was on students, and a *reflective commentary*, which extends the meaning of the work samples selected by providing a context in which to comprehend their design and choice from the teacher's own point of view.

² E. Boyer (1990). *Scholarship Reconsidered*. (Princeton, N.J.: Carnegie Foundation for the Advancement of Teaching), 23-24.

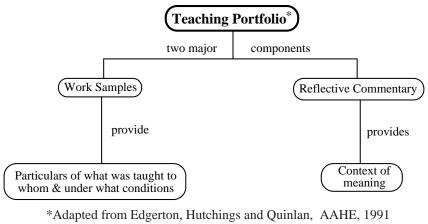
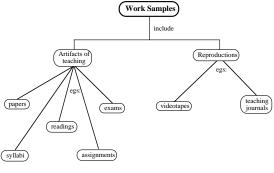


Figure 4

Work samples (see figure 5 below) constitute direct evidence of teaching such as facts, objects, and reproductions of events from daily practice. Work samples should be selected that "highlight what is unique about an individual's approach to teaching."³ Just what samples are selected must be negotiated between the candidate and department. From the candidate's point of view, selection most probably will be governed by an intimate knowledge of what was done, its effect, and how it changed over time. Department decisions about what constitutes adequate sampling will be governed by a consensus of the key scholarly dimensions of teaching in that field.

According to Edgerton, Hutchings and Quinlan (1991), the work samples are artifacts of teaching performance, while the reflective commentary that accompanies each artifact provides the teacher's rationale for using that artifact and an account of its development. The reflective component of the portfolio is a kind of annotation to each sample of work. While teaching consists of both behavioral and cognitive aspects, there are also ethical aspects which somehow must be discussed. These can be documented in the reflective part of the portfolio and include discussions of what ethical principles and values guided the candidate's approach to key decisions made about teaching and its improvement, such as how multicultural and gender factors were dealt with both in course design and in classroom performance.



*Adapted from Edgerton, Hutchings and Quinlan, AAHE, 1991 Figure 5

³ R. Edgerton (1991). "The Teaching Portfolio as a Display of Best Work." Paper presented at the National Conference of the American Association for Higher Education, Washington, D.C.

The following is an example of how work samples can be connected to a reflective statement.

Examples of Course Materials⁴ Description of Particularly Effective Teaching Strategies

Dr. Beverly Cameron Department of Economics, University of Manitoba

1990/91: Class syllabus [A copy is included in the dossier.]

Course goals, evaluation procedures (and dates), test(s), office hours, small group feedback sessions, reading assignments and a schedule of lectures are listed. The innovative section of the syllabus includes: (a) expectations that students will develop and use effective thinking skills (See Small Group Problem Sets, and Goals of Small Group Work on p. 2); (b) rationale for small group work on problem sets (see Small Group Problem Sets, Goals of Small Group Work, and Calculation of Problem Set Grades on pp. 2-3); (c) an explanation of effective thinking and problem solving skills (See The Process of Effective Thinking and Problem Solving on pp. 3-4); and (d) purpose of the research project and benefits to students from participation (See The Motivated Strategies for Learning Questionnaires [MSLQ] and the "ordered tree" of concepts on p. 5).

1990/91: Examples of problem sets and answer keys.

Problem sets are designed to give students an opportunity to use their knowledge of economics to solve problems and reach conclusions. Students are specifically asked to follow explicit problem solving steps (e.g., Guided Design steps) which have been shown to be helpful for novice solvers. [Examples are included in the dossier.]

1988 to present: Tests with higher and lower order thinking skill requirements marked to evaluate student learning problems.

All tests questions are indicated as HO, for higher order thinking skills required, or LO, for lower order thinking skills required to reach a correct answer. This technique (a) continues the rationale of naming thinking skills when they are useful and (b) helps students learn how to study in the future. For instance, if students miss LO questions it may mean that they are not reading the text carefully enough. If students miss HO questions it may mean that they are memorizing and not learning how to use their knowledge. If students miss HO questions they are directed to certain areas of the Study Guide and problems which require students to practice using their knowledge. If students miss LO questions it is suggested they read the text assignments more carefully. [Copies are included in the dossier.]

To document teaching on this level will require departments and colleges to agree upon categories and key dimensions that reflect the scholarship of teaching. This, in turn, may require faculty and administrators to examine the roles they play in the summative evaluation of teaching. The candidate must play a very active role in monitoring his or her teaching, while colleagues must play a collaborative role. The collaborative construction of a teaching portfolio by departmental colleagues connects the summative and formative evaluation functions together in a single process, because the decisions made by the candidate and departmental colleagues in determining what is selected for inclusion and how it is struc-

⁴ Carol O'Neil and Alan Wright (1992). *Recording Teaching Accomplishment—A Dalhousie Guide to the Teaching Dossier*, 2d edition. (Dalhousie University, Halifax, Nova Scotia: Office of Instructional Development and Technology), 39.

tured in a portfolio (summative functions) are intended to foster the improvement of practice (formative function). These decisions will of necessity require a thoughtful discourse about teaching between the candidate, his or her peers, chairperson and dean. The intention is that the activity of building a teaching portfolio during the first six years of teaching practice encourages peer consultation and review, resulting in a profile of how the candidate's teaching has developed over that period of time. This can itself lead to a kind of professional inquiry, for after enough candidates have undergone the process it is likely that a clearer set of standards for what constitutes effective teaching may emerge.

The following is an example of what a Teaching Portfolio might consist of, together with a faculty member's rationale for how it was constructed.

Portfolio Outline⁵

Professor Margaret Ackman College of Pharmacy, Dalhousie University

- A. Statement of Teaching Responsibilities
 - 1. Courses Taught
 - 2. Student Advising
 - a. individual students
 - b. student committees
 - 3. Practica: Organized and Supervised
- B. Statement of My Teaching Philosophy and Goals
- C. Efforts to Improve Teaching
 - 1. Formal Courses in Education
 - 2. Conferences Attended
 - 3. Workshops Attended
 - 4. Participation in Peer Consultation
- D. Redevelopment of Existing Courses
 - 1. Addition of tutorials, role-playing, case studies, etc.
 - 2. Incorporation of Writing Skills
 - 3. Incorporation of Oral Presentation Skills
 - 4. Appendix of Representative Course Syllabi and Assignments
- E. Information from Students
 - 1. Summary of Student Ratings
 - 2. Comments from Student Committees Regarding Advising
- G. Service to Teaching
 - 1. Evaluating Term Papers, Chair
 - 2. Faculty Evaluation, Co-Chair
 - 3. Curriculum Committee, Member
 - 4. Lectures to Special Interest Groups of the Public

⁵ *Ibid.*, pp. 66-67.

H. Information from Colleagues

I. Information from Other Sources

- 1. Guest Lectures to Other Faculties
- 2. Continuing Education Lectures for Peers
- 3. Lectures to Special Interest Groups of the Public

J. Future Teaching Goals

Professor Ackman provided the following explanation of her plan to prepare her teaching dossier.

I began my teaching dossier with a statement of my teaching responsibilities. This section would discuss not only the courses which I teach, but also the student advising which I do for both individual students and student committees. Our students are required to complete a variety of practicums [sic] during their undergraduate education. Therefore, my organization and supervision of these practicums would also be included. The second section would be my Statement of Teaching Philosophy and Goals. The rest of the dossier will complement and enhance this statement and provide a framework of how I intend to achieve my goals.

This is only my third year of teaching. As a result, I am very conscious of my lack of experience and formal education in teaching. I have spent a great deal of time and effort trying to improve my teaching and learn more about teaching and learning. I feel that this ongoing effort is very important and that my teaching has improved because of it. Therefore, this would be presented as one of the initial sections of my dossier—Efforts to Improve Teaching. I would follow this section with the section on Redevelopment of Existing Courses. For me, this is a very logical progression. When I began teaching, I was presented with an existing course which I did not feel contributed to the goals and objectives of the College. However, it was only after attending a number of workshops and conferences that I was able to begin redesigning the course.

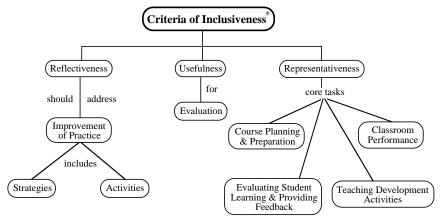
The section, Information from Students, would follow. This would indicate improvement in overall ratings since my initial attempts at teaching. This would relate to Efforts to Improve Teaching and also to Redeveloping of Existing Courses. A section on Student Achievement would be next. This would indicate that my students do reasonably well on both regional and national levels in comparison to their peers.

Service to Teaching would be the next section. This also relates to the section on Efforts to Improve Teaching. As I have become better informed concerning teaching, I have become more involved in the administrative aspects of teaching. This is reflected by the committees which I currently chair or of which I am an active member. Information from Colleagues would fit best at this point in my dossier. My colleagues would be in a position to comment not only on my teaching abilities, but also on my Service to Teaching. Information from Other Sources is a miscellaneous category. It is important because it demonstrates my degree of involvement with the profession and my ability to teach at a variety of levels. However, for evaluative purpose, it should not be given the same weight as student evaluations. Therefore, it would be included near the end.

The final section would be my Future Teaching Goals. This section may actually be one of the most important in my dossier because I am relatively new to teaching. I considered placing this section after My Teaching Philosophy and Goals. However, since it would relate to all of the other material in the dossier, it is only reasonable to conclude with this information. In order to ensure that this section would be given the appropriate consideration, I would refer to it in My Teaching Philosophy and Goals and in other pertinent sections.

Criteria of Inclusiveness

Three criteria for inclusiveness have been suggested for the teaching portfolio: reflectiveness, usefulness and representativeness, as shown in figure 6 below.



*Adapted from Ederton, Hutchings and Quinlan, AAHE, 1991 Figure 6

The simplest and most obvious of these criteria is usefulness: are the data chosen for inclusion—and the way they have been structured and presented—useful for the purposes of evaluation? The framework presented in figure 1, chapter 1, suggests three areas of data useful in documenting the position and how effectively the candidate filled it: *the job*, how it was described and how the candidate's filling the job subsequently shaped it, documentation of *the process* whereby the job was filled by the candidate, and *teaching data*. These kinds of data are useful in providing an overall profile of the relative weights to be attributed to the candidate's research and teaching data.

The second criterion for inclusiveness in a portfolio is reflectiveness: to what degree are artifacts, such as course materials and other abstract data such as student evaluation scores, accompanied by reflective comments by the candidate that ground them in a meaningful context? Reflectiveness helps those who evaluate the portfolio to understand the activities and strategies undertaken by the candidate to improve teaching practice and the data presented to demonstrate that improvement. Reflectiveness on the process of improvement will include statements about what experience has taught the candidate about teaching, what he or she has worked on changing, what experimental actions were taken to effect change, and what change was accomplished, either intentionally or unintentionally. The following two examples contrast a more descriptive personal statement about teaching (Example 1) with a more reflective statement (Example 2).

EXAMPLE 1⁶

Dr. Thomas H. MacRae Department of Biology, Dalhousie University **Teaching Advanced Students**

Eleven honours students, eight of whom were NSERC Undergraduate Scholars, have studied in my laboratory (Appendix 1) and I have served on several other honours committees. Mr. John Apple, who spent two years with me, is a co-author on two papers. Mr. Bill Brown is co-author on two abstracts and three papers now submitted. Ms. Ann Christopher will be co-author on one paper. One other student was co-author of an abstract and another, an NSERC Undergraduate Scholar from McMaster University who worked in my laboratory, is now doing her Ph.D. under my direction. I have supervised several undergraduate students in research and/or writing-based special topics courses. I normally support only one undergraduate application per year for an NSERC Summer Scholarship, although in 1988 I supported three students all of whom received awards. I am very selective of the undergraduates I accept for honours, usually taking only those who can generate sufficient money to allow them to work during the summer. This approach is necessary as the time required to master technical aspects of the projects in my laboratory is usually great. The student thus has the time to undertake a meaningful project, is subject to closer supervision during the initial phase of his/her work since I do not lecture in the summer, and develops a truer appreciation of research as the distraction of course work is lessened.

As my first two years at Dalhousie were on a term appointment, I was not able to supervise graduate students until my third year. Since 1982, two MSc students and one Ph.D student have graduated from my laboratory, while two other graduate students are in progress (Appendix II). Two of the students have held NSERC Graduate Scholarships.

EXAMPLE 2⁷

Dr. Graham J. Fishburne Department of Elementary Education, University of Alberta **Commitment to the Improvement of University Teaching**

At the outset of this report, I attempted to articulate my own philosophy of teaching. I believe that all University Professors are working toward the common goal of educating students in the most effective manner possible. We all possess skills and knowledge that are needed to achieve this common goal. By sharing our skills and knowledge, we will learn from each other and improve the effectiveness of the instruction that we offer to our students.

Since entering into higher education teaching I have spent a great deal of my time in shared and cooperative ventures aimed at improving the quality of University teaching. These activities have been above and beyond my own areas of research and the academic discipline for which I was hired. . . . It would have been easy for me to remain within the domain of the areas of research enquiry that I have established and within the academic discipline for which I was hired; however, because of my commitment to University teaching, I have endeavored throughout my career to share and assist in any way possible my knowledge of

⁶*Ibid.*, p. 41.

⁷ *Ibid.*, pp. 51-52.

teaching and learning with colleagues who are also involved in the world if instruction:

"As a teaching colleague, Dr. Fishburne. . . . (was not only open to new approaches to instruction but also) contributed many creative and innovative ideas. . . . He is an extraordinarily competent, effective teacher. He has been actively involved in departmental affairs, and takes seriously his obligation to be of service to the University, the profession, and the public." Professor of Mathematics Education, 1985.

Since joining the Faculty of Education, I have been involved in the development of integrated courses. This has led to team teaching experiences where several professors team teach and share teaching experiences. Over the years, I have been involved as a team leader in such courses. I have found this experience to be extremely valuable since we must plan and share our various teaching methods as we strive for the most effective learning environment. We engage in a great deal of "reflective practice" and learn much from each other. The teams regularly change which has allowed me the opportunity to play a leading role in peer teaching with many of my colleagues. Due to the shared learning commitment the Faculty enjoys with the Alberts Teachers' Association, we regularly have seconded staff from various school boards involved in our undergraduate program. My leadership role has been that of "mentor" to these people and to new members of staff. Over the years I have team taught with approximately 30-35 University teachers. Feedback on these mentoring experiences has been very positive as the following peer comments attest:

"Dr. Fishburne's teaching is exemplary. Over the years we taught on the same team, I had the unique opportunity to observe and evaluate his teaching as well as his contributions in collaborative program development. His teaching is 'dynamic' He is enthusiastic about his work and demanding in his expectations of students and colleagues. I consider him to be a model of professionalism—one to whom students and colleagues look for strength in the teaching role and for guidance in their own development. His general support and encouragement is always a positive influence on both students and colleagues." Professor of Mathematics Education, 1987.

Over the past few years I have been consistently involved with the University Committee for the Improvement of Teaching and Learning (CITL). I have made regular presentations to University colleagues on issues aimed at supporting campus [sic] who frequently call for advice, research findings, resource material, and general information on effective teaching.

I am also a member of CITL's Peer Consultation Program. This involves working on CITL's Peer Consultation Team with University Professors from Faculties other than my own who have requested some form of help or assistance with their University teaching.

I am constantly involved in Peer Teaching Evaluation. I not only work with colleagues in my own Faculty but I am requested by staff in other Faculties to conduct peer teaching evaluations. I not only offer a perspective on the colleague's teaching but frequently work with the colleague to help improve their teaching. I have performed this voluntary activity for the past 10 years and the feedback from colleagues has suggested that it has been a worthwhile endeavour for improving University teaching. A typical response to my work in this area appears below:

"I have often recommended to professors needing teaching evaluations that they seek out Dr. Fishburne because he is not only quick to render expert judgement but he continues to help professors improve their teaching skills. He shares information and material willingly with colleagues and provides help whenever he can." Chair and Professor, Department of Elementary Education.

Some examples of questions a candidate can provide reflective responses to include:

Discipline and Classroom Approach

Within your discipline, which area do you regard as your strongest? Your weakest?
What is your greatest asset as a classroom teacher? Your greatest shortcoming?
Which teaching approach works best for your discipline? Why?
Do you change methods to meet new classroom situations? Can you give a recent example?
What is your primary goal with respect to your students?
How would you describe the atmosphere in your classroom? Are you satisfied with it?

Knowledge of Subject Matter

In what ways have you tried to stay current in the subjects you teach? How would you judge your knowledge in the subjects you teach? Do you think your colleagues agree with that judgement? What have you done or could you do to broaden and deepen your knowledge of the subject matter?

Questions About Teaching

What is the one thing that you would most like to change about your teaching? What have you done about changing it?

What would you most like your students to remember about you as a teacher ten years from now?

Overall, how effective do you think you are as a teacher? Would your colleagues agree? Your students?

Which courses do you teach most effectively?

In what way has your teaching changed in the last five years? Ten years? Are these changes for the better? Why or why not?

The Stanford Teacher Assessment Project (King, 1990), suggests four core tasks of teaching: a) planning and preparation, b) performance, c) evaluating student learning and providing them feedback on their learning, and d) teaching development activities. Together, these constitute the third criterion of inclusiveness of the portfolio: does the information provided adequately represent the range of activities of a candidate's teaching?

According to Edgerton, Hutchings and Quinlan (1991), course planning and preparation can include such artifacts as course syllabi, a series of assignments given to students, readings and teaching plans. For the reviewer to gain a sense of development in practice, the selection of these planning and preparation artifacts should be governed by how they have changed over time. Thus, all artifacts may not necessarily be exemplary cases but serve to show how the candidate has developed in various areas. The reflective commentary accompanying these artifacts will help the reviewers interpret their relative meaning and value.