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Evaluating the growth of preservice teaching in the United States: a systematic approach

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INTRODUCTION
This paper describes a two-pronged system of evaluating future teachers in a graduate-level teacher licensure program in the state of Ohio in the United States. The program integrates both external (state-required, federally recommended) modes of assessments as well as internal, program assessments to bring about positive teacher growth.

EXTERNAL ASSESSMENT
The external assessments rely on the Praxis Series of Professional assessments for Beginning Teachers, developed by the Educational Testing Service (ETS) in Princeton, New Jersey. The three categories of assessments in The Praxis Series correspond to the three levels in teacher development: (1) entering a teacher training program, Praxis I assesses academic skills (reading, writing, and mathematics skills); (2) licensure for entering the profession, Praxis II assesses subject areas (knowledge of the subjects candiates will teach, general and subject-specific pedagogical skills and knowledge, pedagogy, and the principles of teaching and learning), and; (3) in the first year of teaching, Praxis III assesses Classroom performance. (the skills of beginning teachers in classroom settings). For a list of Praxis Series examinations, and for the requirements for the state of Ohio for 2004-5, see http://www.ets.org/praxis/prxoh.html.

DESCRIPTIVE OVERVIEW OF HOW EXTERNAL ASSESSMENT IS CONDUCTED
Praxis I (Academic Skills Assessments) is designed to be taken early in a student's undergraduate experience. Students at The Ohio State University at Mansfield (OSU-M), however, follow a slightly different path in academic skills assessment. In place of of Praxis I, they take the Graduate Record Exam (GRE) at the end of their undergraduate experience. Nevertheless, both tests measure reading, writing, and mathematics skills, and are made available by the ETS through either a paper-based or computer-based format. Examples of the Praxis I and GRE tests for 2004-5 can be found at ETS website and at http://www.ets.org/praxis/prxtest.html#ppst.
Praxis II (Subject Assessments) measures candidates' knowledge of the subjects they will teach, and general and subject-specific pedagogical skills and knowledge. Students in the OSU at Mansfield take the Praxis II exams after they have been accepted in to the M.Ed. program, and during the third or fourth quarters of the six quarter teacher licensure program. This timing insures that they have completed the relevant undergraduate course work in the subjects they will teach (Science, English, Social Studies, Math, and related subjects), as well as the general and subject specific pedagogy courses in the licensure program. ETS makes Praxis II available as a paper-based test. Examples of the Praxis II tests for 2004-5 can be found at http://www.ets.org/praxis/prxtest.html#ppst. OSU-M faculty are kept abreast of how students are faring on the Praxi II exam. In most cohorts more than 90% of the students pass the assessment on their first try, and all pass before they exit the program.

OSU-M students who complete the M.Ed. licensure program and pass Praxis II are granted an entry year provisional teaching license that is valid for two years. During that time they are required by the state of Ohio to pass the Praxis III exam. Praxis III (Classroom Performance Assessments) assess the skills of beginning teachers in classroom settings. The framework of knowledge and skills for a beginning teacher consists of 19 assessment criteria in four interrelated domains. See Appendix A. These domains embrace the teaching and learning experiences of the beginning teacher, including instructional planning, creating a learning environment, instruction, and teacher professionalism. Praxis III aims to recognize the centrality of the teaching context as well as the many diverse forms that excellent teaching can take. The Praxis III exam uses three means of assessment: (1) direct observation of classroom practice; (2) review of documentation prepared by the teacher; (3) and interviews. OSU-M provides support for Praxis III to its OSU-M M.Ed. students when they are in the program through the activites and assessments mentioned above. OSU-M also provides informal support for Praxis III to its OSU-M M.Ed. graduates once they are in their teaching positions.

JUSTIFICATION OF THE INSTRUMENTS USED IN THE EXTERNAL ASSESSMENT
ETS acknowledges that the Praxis Series for teacher licensure is a gateway to the profession and thus a form of high stakes testing. Failing any part of the series results in the delay or termination of one's career choice. Nevertheless, ETS maintains that its tests conform to the Standards for Educational and Psychological Testing (American Educational Research Association, 1999), have been developed with state-of-the-art techniques, and are thus valid. For more on this see Validity of Licensing Tests at http://ftp.ets.org/pub/tandl/validity.pdf

INTERNAL ASSESSMENTS
The internal assessments are specific to the integrated teacher education program at OSU-M. OSU-M offers the future teacher a highly-ranked and innovative teacher education program leading to a Master of Education (M.Ed.) and preparation for an entry provisional 2-year state license in Early Childhood (Grades PreK-3) or Middle Childhood (Grades 4-9). The OSU-M Department of Teaching and Learning staff consists of eight faculty members. The OSU-M mission is the preparation of professionals who are have a deep knowledge of subject matter, pedagogy, and of teaching diverse and special populations. The program also stresses curricular integration, and teaching in ways that are reflective, student-centered and developmentally appropriate. Working together, OSU-M faculty and students create a community of learners whose varied interests and concerns continually advance both personal and professional knowledge regarding how best to educate all children. Program themes include: (1) developmental issues in teaching and learning; (2) varied meaning and implications of integrated curriculum; (3) sociocultural issues in teaching and learning; (4)

classroom-based inquiry in teacher professional development, and: (5) issues of diversity and equity in education. A sixth theme in the program entailed the integration of the 19 Praxis criteria.

Students accepted into the M.Ed. licensure program arrive with a four-year bachelor's degree and have completed the requisite subject matter courses in their areas of concentration (science, mathematics, social studies, language arts). Typically 25-30 students make up a cohort. The program requires a full-time commitment, with students beginning in September and, over a period of six 10-week quarters, completing the program in 17 months. Throughout the program the faculty works closely with each other as well as with the students to nurture and assess each candidate's growth as a teacher.

Internal assessments in the M.Ed. include: (1) an admission process that requires personal knowledge of each candidate (sources of this knowledge come from interviews, written recommendations, and faculty interactions in earlier undergraduate course work); (2) faculty and peer collaboration and assessment while in the program; (3) an electronic reflection of teaching that captures footage of classroom teaching during the methods blocs (and asks candidates to critique their performances); (4) close school-site field supervision in all three of the "methods" quarters; (5) extensive full-time 10-week student teaching experience with continuous faculty supervision; and (6) a capstone project that includes: (a.) an electronic portfolio that documents the candidate's growth in the program, and; (b.) a comprehensive literature review of an approved teaching and learning research topic. Examples of internal assessments can be found in the Appendices. Along with the external assessments, the program is an illustration of a systematic approach to how the two modes are integrated into a meaningful whole.

Students in OSU-M's undergraduate non-licensure education major get early exposure to the external assessments. In an undergraduate course entitled "Advanced Field Experience in School Settings" they observe and document two practicing teachers implementing the 19 Praxis criteria. This field exercise helps them identify and see the criteria in operation in real time. In the same course students review the Praxis testing procedures, relevant forms and the Praxis scoring.

EXAMPLES OF LEARNING ACTIVITIES CONDUCTED AS PART OF THE INTERNAL ASSESSMENT

As stated above, the internal assessment includes: (1) collecting front-end knowledge of each candidate; (2) peer collaboration and assessment while the candidate is in the program; (3) an electronic reflection of teaching (ERT); (4) methods bloc and student teaching supervision; and (5) a capstone experience that consists of an electronic portfolio and a review of the literature on a teaching and learning topic.

To be considered for the program, M.Ed. candidates must have a four-year bachelor's degree and the subject matter course work appropriate for their areas of concentration. Additionally, candidates take the GRE, and must have an undergraduate grade point average (GPA) of 3.0 or better. In order to gain knowledge of each applicant, OSU-M faculty members review the file of each candidate. When necessary, an interview is conducted to collection additional information. At this point the faculty attempts to ascertain how committed the applicant is to becoming a teacher.

 Once the applicant is accepted into the program, she or he is assigned a faculty advisor and undertakes coursework. Each course stresses reflection and asks students to assess their preparation as a teacher in light of their own experiences as a former pupil in the schools. Students study child development and are asked to reflect on what constitutes developmentally appropriate instruction. They are also asked how issues of race, class, and gender affect school opportunities. Consequently they are encouraged to offer all of their future pupils the best opportunities for learning possible. Students in the methods bloc courses (math, science, social studies and language arts) collaborate on crafting an integrated unit of lessons that they will each teach during their two week full-time field placements near the end of the methods bloc quarters. OSU faculty members who teach the methods courses, a faculty member who is a generalist, and two graduate

teaching assistants observe students implementing their lessons in the field. Students receive immediate feedback (written and/or oral) at the end of the teaching day. Students are also encouraged by these supervisors to collect evidence that correlates with the 19 Praxis criteria. While in the field students make use of digital video cameras and capture footage of many of their lessons. From this footage they choose one lesson to analyze in great detail, using a guide provided by the faculty bloc instructors (see Appendix C). This electronic reflection of teaching (ERT) occurs at the end of each methods bloc.

The student teaching experience is the most intense and demanding quarter for students in the program. Unlike earlier field experiences, students are placed individually in the field. The student spends most of the 10 weeks assuming all of the teacher's duties including but not limited to lesson preparation, classroom instruction, and pupil assessment. During this experience student teachers collect evidence and documents that they are meeting all 19 Praxis criteria. Their cooperating teachers also evaluate them with an instrument that aligns with the 19 Praxis criteria.

The capstone experience takes place in the quarter after student teaching and during students' final quarter in the program. Programmed as a course, it meets once a week and provides students with an end-of-program opportunity to reflect on their preparation and to investigate in some detail an educational topic of their choice that is relevant to their future work.

The electronic portfolio is the vehicle for reflection. It is a compilation of scanned documents that evidence the M.Ed. student's learning accomplishments in the program and sets new learning goals for his or her work as a teacher. Over the course of the 17-month program students collect work, and when compiling the portfolio, choose what they want to include in the portfolio. The evidence is often organized around a theme (i.e. "Becoming a Middles School Science and Math Teacher") and correlated with the 19 Praxis domains. A major part of the portfolio is self-evaluation. Later the portfolio is submitted for peers and faculty to inspect. An example of the rubric used to evaluate the portfolio is in Appendix D. The capstone investigation takes the form of a 15-25 page written paper. The topic usually relates to M.Ed. themes from across the whole program as identified by members of the cohort. This paper is a synthesis of relevant information on the topic and is written in a scholarly format. This paper is not exhaustive, but includes sufficient depth and breadth (within parameters established by the student and his/her advisor) to support the position taken on the topic. A more detailed description of the paper is in Appendix C.

EXTERNAL AND INTERNAL ASSESSMENTS AND THEIR CONTRIBUTION TO TEACHER GROWTH

This paper explains a two-pronged system of evaluating preservice teachers in the U.S. that uses both external and internal modes of assessment. In doing so, it provides an example of how one educational environment is organized to systematically assess the learning process in teacher education. The external assessments (Praxis Series) incorporate best practice that is borne out by years of teacher and teacher education research. Students apply the criteria to practicing teachers and then to themselves while they teach in the school setting. They also receive continuous feedback on the criteria from their cooperating teachers and the education faculty. The internal assessments are integrated with the external assessments throughout the program. Moreover the internal assessments go beyond the 19 criteria by creating a community of learners, and stressing reflection, integration, developmentally appropriate instruction, and attention to diversity. All in all, the systematic approach at OSU-M contributes in observable and positive ways to each teacher's professional development.

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APPENDIX A

PRAXIS III ASSESSMENT CRITERIA	
	DOMAIN A-ORGANIZING CONTENT KNOWLEDGE FOR STUDENT LEARNING
Al:	Becoming familiar with relevant aspects of students background knowledge and experiences.
A2:	Articulating clear learning goals for the lesson that are appropriate for the students.
A3:	Demonstrating an understanding of the connections between the content that was learned previously, the current content, and the content that remains to be learned in the future.
A4:	Creating or selecting teaching methods, learning activities, and instructional materials or other resources that are appropriate for the students and that are aligned with the goals of the lesson.
A5:	Creating or selecting evaluation strategies that are appropriate for the students and that are aligned with the goals of the lesson.
	DOMAIN B-CREATING AN ENVIRONMENT FOR STUDENT LEARNING
B1:	Creating a climate that promotes fairness.
B2:	Establishing and maintaining rapport with students.
B3:	Communicating challenging learning expectations to each student.
B4:	Establishing and maintaining consistent standards of classroom behavior.
B5:	Making the physical environment as safe and conducive to learning as possible.
	DOMAIN C-TEACHING FOR STUDENT LEARNING:
Cl:	Making learning goals and instructional procedures clear to students.
C2:	Making content comprehensible to students.
C3:	Encouraging students to extend their thinking.
C4:	Monitoring students' understanding of content through a variety of means, providing feedback to students to assist learning, and adjusting learning activities as the situation demands.
C5:	Using instructional time effectively.
	DOMAIN D-TEACHER PROFESSIONALISM
Dl:	Reflecting on the extent to which the learning goals were met.
D2:	Demonstrating a sense of efficacy.
D3:	Building professional relationships with colleagues to share teaching insights and to coordinate learning activities for students.
D4:	Communicating with parents or guardians about student learning.

APPENDIX B

Electronic Reflection on Teaching (ERT)
The Electronic Reflection on Teaching (ERT) Project was developed during 2002 by the Teacher Education faculty at OSU-M.

This project is designed to help you reflect on your practice and use of technology as a tool for professional growth. The project will start winter quarter 2004 and will run over the course of the M.Ed. program. We envision that parts of the ERT will be incorporated into your final M.Ed. Electronic Portfolio.
T&L Ed. 702 and T&L Ed. 737 will be the first block of courses where you will work on the ERT. For 702 and 737 the ERT project contains two components: a videotaping of one or more integrated lessons, and a power point presentation. Below are the specifics of the two components of this work.

• First, when you are in the field, you will arrange to have a video recording of a lesson that integrates your two areas of study for this quarter (Language Arts and Social Studies). (There may be more than one lesson included in the ERT, and lessons may integrate more content areas if appropriate.) The lesson(s) will be videotaped on a digital recorder provided by the department.

• The power point presentation component of this work will occur during exam week. It will be comprised of the following four parts:
1. Summary of the lesson (s):
Textual representation of objectives and lesson overview (For all your power point slides that use text, please use phrases rather than whole sentences.)
  • Social Studies and Language Arts Content standards addressed in the lesson(s) (Use the standards from the state of Ohio.)
  • Rationale for selected method (Why did you teach this lesson this way?)

  • Rationale for assessment component (How will you assess whether pupil learning occurred?)
  • Indicate any interdisciplinary integration (What were ways in which you integrated Language Arts and Social Studies?)
  • Video evidence of lesson(s).

2. Self assessment of strengths and concerns of the lesson(s):
  • Identify the strengths of the lesson(s).
  • Provide video evidence of the strengths and concerns

3. Modification and Justification:
  • Identify actions you would take to either
    1) Improve your lesson(s)
    2) Allow you to ensure the positive effects of your lesson(s)

4. Application:
  • Indicate implications of your reflection for general instruction. More specifically, how can you use what you've learned from this experience to enhance your teaching in the future?

Your presentation will be graded with a rubric provided during the quarter. You are required to submit a hard copy of the presentation and lesson plans (i.e. A handout of the power point slides and a copy of your lesson plans) to both instructors on the day of your presentation.
This presentation will be 20% of your final grade in 702 and 20% of your final grade in 737.

APPENDIX C

M.Ed. Capstone Position Paper
The purpose of this paper is for you to closely examine the different perspectives and take a position on a topic or issue in teaching and learning. The topic will be related to M.Ed. themes from across your whole program, as identified by the class and will relate *explicitly* to your portfolio. This paper should synthesize relevant information on the topic and should be written in a scholarly format. This paper will not be comprehensive, but it should include sufficient depth and breadth (within parameters established by you and your advisor) to support the position you take on the topic.
This paper should be 15-20 double-spaced, typewritten pages, using APA style. Please use the following format for your paper.

1. Title page.

2. Introduction: identify and summarize the theme/issue selected for your topic; discuss why you selected it; explain how it fits within/relates to your portfolio. (approximately 1-2 pages)

4. Review of relevant theoretical and research literature related to topic: identify and critically analyze multiple perspectives on the topic/issue with respect to education. (approximately 6-8 pages)

5. Articulation of your position on the topic/issue: clearly defend your position with theory and research cited above and your own classroom-based experiences. (approximately 3-4 pages)

6. Classroom application: analyze and evaluate how your teaching and professional behavior has been and will be affected by your knowledge of and position on this topic; include specific examples from your field experiences/student teaching to demonstrate your understanding of how to apply theory and research in your teaching practice and/or provide plans for future teaching. (approximately 3-4 pages)

7. Conclusion: summarize your main points and the importance of this theme/issue for education and for you as a future teacher. (approximately 1-2 pages)

8. Bibliography of sources cited in the paper, using APA style. (Emphasize scholarly and professional journals and books, not popular articles or books from non-academic presses.)

A complete draft of your paper is due to your Master's committee on XXX. A summary of the paper will be presented at your peer group round tables on XXX. Final papers are due XXX.

APPENDIX D

M.Ed. Capstone Portfolio Rubric.01 –draft 2—	Criteria not met 1	Criteria met, but with some weaknesses 2	Met criteria in a satisfactory fashion 3	Strongly met criteria 4	Met criteria in an outstanding fashion 5
Is there evidence of reflection and self-evaluation?	Little or no evidence of reflection in introduction. Little or no evidence of reflection throughout portfolio. Most artifacts are unlabeled.	A satisfactory 1-2 page reflection in introduction of portfolio. Less than half artifacts are labeled with descriptions.	A satisfactory 1-2 page reflection in front of portfolio. Most artifacts are labeled with short, concise descriptions.	A high quality 2-page reflection at the front of portfolio. Each artifact is labeled with a short, concise description of why it's included.	A superb 2-page reflection in introduction of portfolio. Each artifact is labeled with a short, concise description of why it's included.
Are artifacts comprehensive? Do artifacts reflect program variety and professional growth? Do artifacts attend to the entire M. Ed. program? Are multiple courses, grade levels, subjects represented?	Artifacts from one course or quarter, or few (less than 10) artifacts. No connection to growth or progression toward teaching readiness evident.	Artifacts from half the program (one year's worth, or less than 20 artifacts). Minimal connection to growth or progression toward teaching readiness.	More than 20 organized artifacts from many courses (most of program), that reflect teaching potential and readiness to enter the classroom as a beginning teacher at least at developmental one level.	More than 20 artifacts, nicely organized/ sequenced, from most of program. All artifacts clearly reflect the major program themes and one's growth as a competent novice teacher at two or more developmental levels.	More than 20 artifacts, nicely organized/ sequenced, from the entire program, that reflect and integrate program themes and one's growth as a reflective, creative, and thoughtful, novice teacher at three or more developmental levels.
Does the portfolio creator pay attention to and comprehend Praxis III Criteria?	Little or no evidence of Praxis III criteria is evident.	Some evidence of Praxis III criteria is evident. Three of four domains are mentioned in reflection or in artifact labels.	Solid evidence of Praxis III criteria is evident. All four domains are mentioned in reflection and reflected in artifact labels.	Strong evidence of Praxis III criteria is evident. All four domains are mentioned in reflection and all 19 criteria are reflected in artifact labels.	Strong evidence of all four domains is evident. A discussion of all four domains is integrated into reflection and all 19 criteria are reflected in artifact labels.
Is the portfolio organized around a theme, or does it make effective use of a structured format?	No apparent theme or format is evident.	A theme or format is put to use in this portfolio, but the theme or format does little to make it readable. The theme or format is a scheme that reflects parts of the program's ideas.	A theme or format is put to use in this portfolio in ways that make it readable. Moreover, the theme or format is an organizational scheme that reflects one or more of the program's major ideas.	A theme or format unifies this portfolio in ways that make it "reader friendly." Moreover, the theme or format is an organizational scheme that reflects the core values of the program.	A theme or format unifies this portfolio in ways that make it "reader friendly." Moreover, the theme or format is an organizational scheme that reflects the essence of the individual and the program.
Does portfolio reflect an understanding of the relationship between theory and practice?	No or little understanding of the relationship between theory and practice is evident.	Some understanding of the linkage between theory and practice evident, but relationship is disjointed or not clearly articulated. Some artifacts, for example, reflect applied theory, but not in a way that is fully evident to the reader.	Solid understanding of the relationship between theory and practice evident. The portfolio creator demonstrates that practice is more than an assortment of technical skills (a "bag of tricks") that teachers put to use on students in a classroom.	Strong understanding of the relationship between theory and practice evident at key places in portfolio. This might show up in reflection, on labeled artifacts and/or in the overall organization of the portfolio.	Exemplary understanding of the relationship between theory and practice evident throughout entire portfolio. The theory-practice linkage gives the reader a clear sense of why this person has chosen to teach, and how this person will operate professionally as a teacher.
How is the portfolio organized? How does it appear?	Papers, artifacts out of order, or are likely to fall out. this portfolio requires the reader to organize it into something meaningful.	Lacking. After spending 20 minutes with this portfolio the reader will learn about some of the student's work in the M.Ed. program. The reader may also read something about the rationale for that work. This portfolio could have used another two or three hours of "polish."	Satisfactory. After spending 10 minutes with this portfolio the reader will learn about key aspects of the student's work in the M.Ed. program, and the rationale for that work in the M.Ed. program. This portfolio may not be technically polished, but it reflects consistency, and integrity over most of the program.	Impressive. Reader can open at any place and learn something about the student's work and the rationale for that work in the M.Ed. program. The creator has been dutiful in the presentation of his/her growth.	Inviting/Attractive. Reader can easily open portfolio at any place and learn something about the M.Ed. program *and* learn something distinctive about this person as an exemplary novice teacher. Reader *wants* to spend time perusing this portfolio.

M.Ed. Capstone Portafolio Rubric. 01 -draft 2--	Criteria not met 1	Criteria met, but with some weaknesses 2	Met criteria in a satisfactory fashion 3	Strongly met criteria 4	Met criteria in an outstanding fashion 5
Is there evidece of reflection and self evaluation?					
Are artifacts comprehensive? Do artifacts reflect program variety and professional growth? Do artifacts attend to the entire M.Ed. program? Are multiple courses, grade levels, subjects represented?					
Does the portfolio creator pay attention to and comprehend Praxis III Criteria?					
Is the portfolio organized around a theme, or does it make effective use of a structured format?					
Does portfolio reflect an understanding of the relatioship between theory and practice?					
How is the portfolio organized? How does it appear?					

In-service training as a part of lifelong learning

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Abstract

In today's fastly changing society the conventional school system and conventional learning environments can no longer satisfy all requirements of modern and effective education. This is can be additionally supported by the fact that before the retirement the employee will have to be additionally qualified or even re-qualified two to three times. For these target groups we have to develop the system of internal training. The presented system of internal in-company training with the own trainers gives quick and very good results, since it is target-planned and it is performed strictly in co-operation with the client and uses modern information technologies.

INTRODUCTION

Quality improvement requires a change in attitude-the development of a new management philosophy. This new philosophy of management or attitude significantly changes the culture of organization also in the area of education (Aberšek, 2004).

The pressures for reform that began in the 1980s and continue into 1990s are different in intensity ant duration from previous calls for change. During the early 1980s, educators experienced a wave of reform that demanded that teachers and administrators do *more* of what they had been doing and do it *better* (Aberšek and Goodwin, 2000).

The conventional school system can no longer satisfy all requirements. Adults groups have to be offered education that is:

- strictly target-oriented,
- short and efficient,
- meet the needs of the individuals-employee and employer,
- use modern information technologies and/or active methods (Aberšek and Popov, 2004).

It means that it is necessary to "tear" the employee away from his work for as short time as possible. Therefore:

- the training should take place directly in the working environment to the maximum possible extent so that the work cycle will not suffer too much, if possible, or
- must be organize in such a way that people can learn also at home, and
- the training must be target-oriented and limited in time.

All these requirements can be best met by the system of internal (in-company) training with use of modern educational methods and modern IT such are Outcome-based teaching methods, electronic learning at a distance, interactive multimedia instructional programs, home schooling, and collaborative group work (Aberšek, 1997a).