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AUTHOR Morton, Claudette

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ABSTRACT

This comparative study was conducted in preparation for selecting a successor to the National Teachers Examination (NTE) for initial certification of Montana educators. The paper begins by discussing the background of using teacher competency tests in Montana, and examining demographic data on Montana students and certified teachers. Then, the Basic Skills and Pedagogy Tests of the Content Mastery Examination for Educator (CMEE), offered by National Computer Systems, and two versions of Praxis J Academic Skills Assessments and Pre-Professional Skills Tests (PPST) offered by the Educational Testing Service, are compared. The two sets of tests are examined in terms of five questions: (1) the knowledge, skills, and concepts the tests measure; (2) cost to new teachers; (3) whether these tests should be offered on computers and how would that impact costs; (4) what must be done to validate and implement the new test; and (5) why Montana is mandating a teacher competency test. A concern expressed is the need to include American Indians in the development and validation of the tests. The findings of the comparison indicate that there is more reliance on tests that demonstrate utilization of knowledge, such as essays to assess writing, and less reliance on tests with discrete bits of knowledge. Only one company offers a multiple choice pedagogy test, but with the caveat that there is no assurance that the person who passes the test will be a good teacher. Based on the concept that a teacher's performance will have to be evaluated when he/she is actually teaching, the Praxis Series has added a performance test to assess teaching ability. Finally, since the ETS has removed all deadlines associated with phasing out any NTE tests, the results of the study suggest that Montana keep the NTE Core Battery in place while continuing to evaluate the Praxis Series. (Contains 13 references.) (ND)



A COMPARISON OF THE **CONTENT MASTERY EXAMINATION FOR EDUCATORS (CMEE)** and the PRAXIS I ACADEMIC SKILLS ASSESSMENTS for **INITIAL CERTIFICATION OF MONTANA EDUCATORS**

by Claudette Morton, Ed.D.

October, 1994

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A Comparison of the
Content Mastery Examination for Educators (CMEE)
and the
Praxis I Academic Skills Assessments
for
Initial Certification of Montana Educators
by
Claudette Morton, Ed.D.

Background:

Educational reform efforts in the 1980s brought into existence a new form of testing--teacher competency tests. While Montana often resists jumping on national bandwagons, with regard to teacher testing, this was the exception. In the mid-eighties the Board of Public Education held hearings on the need to have such a test. The arguments for a test were mainly that if all the other states had a test and Montana didn't. teachers who couldn't pass tests in other states would come to Montana to get certification. Some felt having a test would improve the image of teachers, since other professions, i.e., law, medicine and accounting, require a test for licensure. All felt it would provide a threshold of knowledge which all beginning teachers should have. The professional groups supported the idea of a test as long as their current members were grand-fathered in. John Kohl, then Dean of Education at Montana State University--Bozeman, made a compelling argument in support of the National Teachers Examination. even though the Office of Public Instruction (OPI) had recommended another test to the The Board ultimately adopted, at the request of Dean Kohl, the National Board. Teachers Examination (NTE) Core Battery from the Educational Testing Service (ETS). In the rules that the State Board adopted, they grand-fathered in current practicing educators except for those who changed class of certificates. In other words, if teachers became administrators, moving from a Class II to a Class III certificate, then they had to take the test, but if they stayed in the classroom for the next twenty years they did not. However, if an educator allowed his or her certificate to lapse, then part of reinstatement included successful passage of the NTE.

How did the state of Montana know what successful passage was, or what would be the qualifying scores? The state conducted a validation study directed by Dr. Alan Zetler, former Dean of Education at Western Montana College. Dr. Zetler's design for validation followed an accepted format (3) and is sighted in national studies of teacher test validation (Popham 287). With input and direction from an advisory forum, he convened a statistically representative sample of the then current teaching force and asked them to examine the test battery to determine (a) content review: the degree to which there was a valid match of items with those components of teacher preparation programs in Montana. (b) job relevance: the pertinence of the items to the job of a beginning teacher, and (c) knowledge estimation: the establishment of recommended cut



scores for each of the three tests in the battery (Zetler 13). Based on this validation study, the qualifying scores were set for Montana. They were as they are today: 648 in communication skills, 644 in general knowledge, and 648 in professional knowledge (Board of Public Education, 10-838).

It is interesting to note as one looks at the administrative rule which put the NTE in place that no rationale or explanation for this rule is given. Administrative rule 10.57.211 simply begins:

(1) Effective July 1, 1986, all new applicants for initial class 1, 2 or 3 certification must provide evidence of having completed the national teacher examination core battery with a minimum score established by the board (10-837).

It then goes on to require those who allow their certificates to lapse to have to meet this new standard, to grandfather in the existing educators and to give the qualifying scores. This is in strong contrast to the other administrative rules regarding student assessment. 10 ^ 101 Student Assessment (10.811) and 10.55.603 Curriculum Development and Assessment (10-773), in which the first part of each rule provides a rationale for the State Board enacting the rule. Perhaps, by omission, what is unspoken, but clear and verified by talking with those who were involved in the implementation of the NTE, was that requiring passage of the NTE Core Battery was by no means viewed as a measurement of one's ability to teach, nor does ETS, the test publisher, make that claim. It was instead viewed somewhat politically and, as has been previously stated, was put in place as a threshold of knowledge which all beginning teachers should have.

Since then, at least five of the education programs at Montana's institutions of higher learning have incorporated the communication skills and the general knowledge tests from the Core Battery into their teacher education program admission standards. Currently, the NTE is given three times a year, at nine Montana sites.

In 1989 the Certification Standards and Practices Advisory Council of the Board of Public Education began a study to examine the impact of the NTE on American Indian teacher education students. Drs. Gerald Bekker of Montana State University--Northern and Harry Lee of Montana State University--Billings worked with OPI's then Director of Teacher Education and Certification, Dr. John Voorhis, and the author to determine why American Indian teacher education students were having more difficulty passing the NTE than their White counterparts. Special tests were administered to American Indian students at the two institutions. The results were analyzed through an item analysis to pinpoint the kinds of knowledge on which Native Americans did well and knowledge areas with which they had difficulty. Based on that work and later study, the Board of Public Education ultimately adopted amendments to the original administrative rule on teacher testing to allow an exception for educators who had difficulty passing certain parts of the test. The exception allowed the substitution of an adequate grade in an appropriate college course for a qualifying test score. This was a realization by the State Board that no single test score should ever be a closed gate to state licensure.



Generally, since the implementation of the test, the National Teachers Examination Core Battery has done its job. The problem is that the Educational Testing Service informed the Board that it was phasing out the NTE and moving to a series of new tests-The Praxis Series. Because this is a new assessment, its implementation, along with alternatives, must be examined. However, in an examination of alternatives, it is important to note that the field of assessment has become much less isolated. No longer should the determination of a test be made without taking into consideration why it is given and to whom. Therefore, in order to examine the alternative tests and give an appropriate evaluation, it is important to look at the teaching force in Montana and the student body of Montana Public Schools.

Montana Information:

In the 1993-94 school year, according to the Office of Public Instruction statistics. there were 163,020 students enrolled in Montana's public schools. Of that number 88 percent were White, 10 percent were American Indian, 0.8 percent were Asian, 1.4 percent were Hispanic, and 0.5 percent were Black. [See Table 1.] With regard to how well Montana students do, the traditional measurement has been how well do they pass tests, and again according to the Office of Public Instruction Facts about Montana Education, they do very well. Montana students were first in the nation on the Armed Services Vocational Aptitude Battery (ASVAB); this test measures both practical vocational and academic skills for those who wish to pursue military service and receive technical training by the armed services; and Montana students were first on the eighth grade National Assessment of Educational Progress Mathematics test (2). According to an article in the September/October issue of Montana Schools, Montana students' scores on the SAT were nine percent above the national average, and the one percent of Montana American Indian students who took the SAT test had average scores 17 points higher in verbal and 28 points higher in mathematics than the national average for American Indian students (6). Those Montana students taking the ACT, about three times as many as took the SAT, were five percent higher than the national average (6). Clearly by traditional measures of success on standardized tests, Montana students are doing well.

How does the teaching force compare to the student body? For the 1993-94 school year, according to research conducted by Dr. Dori Nielson, analyst at OPI, there have been 3,125 initial teaching certificates granted in Montana in the last eight years (from 1986 the year the NTE was put in place, to 1994). Of that number 96.4 percent have been given to White teachers, 3.0 percent have been given to American Indian teachers, 0.4 percent to Asian teachers, 0.1 percent to Hispanic teachers and 0.3 percent to Black teachers. As can be seen from Table 1, there are some discrepancies in the certified staff of Montana's schools mirroring the student body.

TABLE 1

Montana Student Body and Certified Teaching Force

		Percent of Total				
	TOTAL	White	Am Ind	Asian	Hispanic	Black
Students	163.020	88%	10%	0.8°∕₃	1.4%	0.5°°
Certified Staff*	3.125	96.4%	3.0%	0.4%	0.1%	0.3°°
Prov. Cert - Need NTE	175	87.4%	11%	••		••

^{*1993-94} Certified Staff - initial Montana Certification in past 8 years.

Also, according to Dr. Nielson's analysis, still using the teaching force initially certified over the last eight years, there are 175 Montana educators with provisional certification who have not successfully passed the NTE. Of that total, 87.4 percent are White and 11 percent are American Indian. The other 1.6 percent is not accounted for.

Further comparison of the teaching force to the student body of Montana, again using Dr. Nielson's work, reveals that 48 percent of all Montana students are female and 52 percent are male. However, the teaching force is 67 percent female and 33 percent male. Of that total 66 percent of all White teachers are female and 34 percent are male, but 73 percent of American Indian trachers are female and only 27 percent male. [See Table 2.] Looking at the further analysis of Montana's student body, according to the enrollment data for 1993-94, the American Indian student body exactly mirrors the total Montana student body with regard to gender (Keenan 5). The reader may be concerned that these figures for teachers only represent the last eight years of certification. However, when one looks at Dr. Nielson's work analyzing those initially certified over the last eighteen years, which is more representative of the total teaching force, then the percentages are exactly the same for the total certified staff by gender and the White staff mirrors that total exactly, but the female American Indian staff increases to 73 percent and the male American Indian staff decreases to 27 percent. Clearly, if modeling is important in education, then this is an issue to be examined further.



TABLE 2
Certified Staif in Montana by Gender

	Percent		
	Female	Male	
Total Certified Staff*	67%	33%	
White	67%	33%	
Ameriçan Indian	69%	31%	
Students	48%	52°°	

^{*1993-94} Certified Staff - initial Montana Certification in past 8 years.

In any examination of the success rate of a test, it is important to know how many teachers came from in-state and how many from out-of-state. According to Dr. Nielsen's work, of those who received initial certification in the past eight years, 67 percent came from in-state and 33 percent came from out-of-state. Further breakdown shows that the White teachers almost mirrored this figure: 66 percent came from in-state, with 34 percent from out-of-state, but many more of the American Indian teachers came from in-state. [See Table 3.]

TABLE 3
Source of Degrees of Certified Staff

	Recei	Received BA		
	In-State	Out-of-State		
Total Certified Staff*	67%	33%		
White	66%	34%		
American Indian	84%	16%		

^{*1993-94} Certified Staff - initial Montana certification in past 8 years.

Finally, it would seem appropriate to know how Montana teaching candidates have done on the NTE. Based on results sent to OPI from ETS for Montana first time test



takers between October 1992 and Summer 1993, it can be seen [Table 4] that the failure rate is generally low or in an acceptable range except in regard to American Indian test takers. It should be emphasized that these are first time test takers, and the percentages do not reflect the final passage rate.

Failure Rates of First Time Test Takers. Oct 92 to Summer 93

	All Scores Sent to MT OPI	American Indian Scores to MT OPI	All Examinees Tested in State
Communication Skills	8.6%	39.2%	11.6%
General Knowledge	5.0%	28.6%	6.7%
Professional Knowledge	9.6%	40.0%	12.7%

Given this information it would appear that any analysis and comparison or study of teacher competency tests to replace the NTE must examine how the new tests have dealt with or utilized American Indians in their development and/or validation.

General Comparisons of CMEE and Praxis I Assessments:

The purpose of this section is to compare the Basic Skills and Pedagogy Tests of the Content Mastery Examination for Educators (CMEE) offered by National Computer Systems (NCS) with the two versions of Praxis I Academic Skills Assessments: Computer Based Academic Skills Assessments and Pre-Professional Skills Tests (PPST) offered by the Educational Testing Service (ETS).

In terms of general psychometric features, it is this author's opinion that Dr. Ernest Rose, your other testing consultant, did an excellent job in his analysis for the Certification Standards and Practices Advisory Council and the Board of Public Education. In general this author concurs with Dr. Rose's findings and would just like to reiterate some of those. Both tests are criterion referenced, though ETS prefers to use the term "objective-referenced." In the general breakdown of standardized tests on a continuum from norm referenced to criterion referenced both CMEE and Praxis I fall into the latter category. In other words, both tests do not base scores on how groups of students have done as in the case of a norm referenced test, but determine acceptable scores on the concept of mastery at a certain level of a body of knowledge determined to be important to the



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field. While both companies have good rationale for strong content validity, neither claims any predictive validity. That is, the successful passage of the tests is not an indicator of how successful the test taker will be as a teacher. Both tests have quite acceptable reliability according to material provided by the tests' manufacturers, and both were created by acceptable methods used in the development of large scale assessments.

In order to truly analyze these tests as a replacement for the NTE Core Battery there are a variety of issues to be examined. In order to know to whom and for whom the test is being given, the portrait of the Montana student body and current teaching force has already been drawn. Other considerations to be explored include:

- I. What knowledge, skills and concepts do CMEE and Praxis I: Computer-Based or PPST measure?
- II. What will the cost of the new test be to prospective new teachers?
- III. Does Montana want to move its teacher testing into a new format and offer the test on computer? If so, how much will this add to the costs and can the current testing centers accommodate computer testing?
- IV. Do the tests take into consideration the cultural differences in Montana's teaching force and public schools' student body?
- V. What must be done to validate and implement the new test in Montana?
- VI. Finally, why is the state mandating a teacher competency test?

At this point it would seem appropriate to take the key questions one by one and respond to them.

I. What Do the Tests Measure?

Praxis I measures proficiency in reading, writing and mathematics. The Content Mastery Examinations for Educators also has a Basic Skills Test which measures reading, writing and mathematics. In addition, CMEE offers a multiple-choice test on pedagogy. Neither PST nor Praxis I includes this component. (It should be noted that the Educational Testing Service has developed a pedagogical test as part of the Praxis series, although it is not a multiple choice test, but rather a performance type of assessment to be given to student teachers or practicing teachers. There are also optional subject-specific pedagogy modules in the Praxis II assessment and ETS is in the



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process of developing a pedagogical test which might be suitable for Montana's purposes, but it will not be available until March 1995. (However, there will be no further discussion of these assessments because it was agreed that this analysis would be confined to preprofessional general instruments.) The CMEE Basic Skills test is one test composed of 40 reading items. 20 writing items plus an essay and 40 mathematics items. The CMEE Basic Skills Test requires three to three and one/half hours for completion. The time limit is optional and can be set by each state. Praxis I, the computer version, is made up of three separate tests. The Reading test has 36 items and takes 90 minutes to complete, the writing test has 35 computer-delivered questions and one essay question and takes 66 minutes to complete, and the mathematics test has 29 questions and takes 55 minutes to complete. Praxis I PPST includes three separate basic skills tests. The Reading Test has 40 items and is given in a 60-minute time period, the Writing Test has 45 multiple-choice questions and one essay question given in 60 minutes, and the Mathematics Test includes 40 items given in 60 minutes. [See Table 5.]

TABLE 5

Comparison of Number of Items and Time Requirements

	CMEE		Computer-Based		PPST	
	# Items	Time	# Items	Time	# Items	Time
Reading	40	3 to 3½ hours	36	90 min	40	60 min
Writing	20 & 1 Essay		35 + 1 essay	66 min	45 + 1 essay	60 min
Math	40		29	55 min	40	60 min

Each of these tests, as their names imply, measures basic skills in reading, writing and mathematics that beginning teachers should have at their command. For a more complete examination of the skills, concepts and knowledge covered by each test see Table 7. It is important to examine and compare these content outlines. At this point it might be instructive to explain that there is a high correlation among the SAT, the ACT and all basic skills teacher competency tests. The reader may well be wondering why not just use the scores from the college entrance tests. The indication here is that both the CMEE and Praxis I have undergone significant work both in their design and their validations to determine basic skills that beginning teachers need. The underlined phrase is the critical language. There has been no standard setting process nor any content validity work done on the SAT or the ACT as teacher competency tests and there could be legal problems using them for this purpose.

II. What Will Be the Cost of the New Tests?

According to information provided by both test publishers, the tests vary somewhat. See Table 6 for a complete comparison. As can be seen from the table CMEE's Basic Skills Test is the least expensive and Praxis I: Computer-Based Academic Assessments the most expensive. While this author would not encourage that a decision about which test to give be based on cost to the new teachers, the issue of cost to a profession where last year teachers in state were paid as little as \$11,309 (Morton 1) should not be excluded.

TABLE 6
Cost Comparison of Tests

	CMEE		PRAXIS I	
	Basic Skills Test	Pedagogy Test	CBT	PPST
1 Test	\$50.00*	\$50.00	\$65.00	\$45.00
2 Tests			\$85.00	\$65.00
3 Tests			\$105.00	\$85.00

^{*}All 3 parts

III. Does Montana Want to Move Its Teacher Testing into a Different Format?

Both CMEE and the Praxis I: PPST are offered in the multiple-choice with four foils (options) format. This is the traditional model of test taking. Both include an essay question to assess writing which must be answered in the student's own handwriting and language. The Praxis I Computer-Based tests utilize a variety of test taking formats. These assessments include a diversity of items: traditional multiple choice with four foils, modified multiple-choice items, i.e., choosing two from a list of ten, ordering and even some open-ended items. In addition, the test is given, as its name implies, on a dedicated computer. The change in the format of the items on this third test makes it appealing to those who wish to see assessment alternatives and who believe that the field of education should reflect the latest thinking in this field in its own assessments.

There is, of course, another issue. It is often said that what we test is what we value, and there is an effort as part of the reform movement in American education to integrate technology. If all this is true, then it would seem appropriate to have prospective teachers take the test on the computer. The concerns with requiring the test be taken by computer are not small. Do the current test centers have the space and the



equipment needed? According to ETS. Montana already has two centers, in Billings and Helena, where the computer version of Praxis I can be taken. Upon further investigation it was found that these two centers are not at college campuses, but at Sylvan Learning Centers. Given that the testing centers have generally been located on college campuses, where budgets have been tight for the last several years, the additional expense must be considered. It might be possible to dedicate some funds from teacher certification fees to be used to assist the campus testing centers in obtaining the necessary hardware. According to Stanley J. Kalisch, Jr., the ETS Field Marketing Representative, ETS can fund the necessary items and have a pay back system. To offer the Computer-Based Praxis I, a test center needs to have a dedicated room, specific carrels, and a minimum of four or five dedicated 486 computers tied to a server. These are all aspects to be considered seriously.

What if someone is not computer literate? Can alternatives be provided? Can the PPST be substituted for the Computer-Based test? Is this something to be phased in over a certain time period? These questions were asked as part of a structured interview with Mr. Kalisch of ETS. Mr. Kalisch responded that first, the Computer-Based test has a tutorial with it, so people need not have many computer skills. Second, the PPST can be substituted for the Computer-Based version so the computerized test can be phased in. Given the complexity of adopting the Computer-Based version, it is still important to point out that it is a more open format which is more state of the art in assessment circles. Finally, if this is a test to be given to improve the professional image of educators and if technology is a significant tool of American education, then should it be ignored in assessment?

IV. Do the Tests Take into Consideration the Cultural Differences in Montana's Teaching Force and Public Schools' Student Body?

Much has been written on the need to have role models for children and the importance of their having teachers with whom they can relate. Eighty-eight percent of Montana's children are White and they can easily relate to their 96.4 percent White teachers. It's true that we could wish for a better balance between male and female teachers so that our boys could see more examples of men in education as well as women, but that is improving. However, what about the ten percent of the American Indian students who see only three percent of their teachers who look like themselves? That is an issue. In the background of this paper, I began with the description of the student body and the teaching force in this state. It was pointed out that there was a special study done in regard to American Indian students' passage of the current teacher competency test which resulted in alternatives being allowed to substitute for successful passage of the test. Still, it is important to see how the test makers in the creation of these various instruments which are the subject of this comparison utilized American Indians in the development and the validation of these tests. Also, it would seem of interest to note if any Montana educators or a rural category was used in the test development or validity studies.

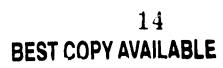


TABLE 7

Content Outlines

		Praxis I		
	CMEE Basic Skills	Computer Based	PPST	
Mathematics				
	Number Concepts & Operations	Number Sense & Operation Sense	Conceptual Knowledge	
	Measurement	Mathematical Relationships	Procedural Knowledge	
	Geometry	Geometry & Measurement	Measurement & Informal Geometry	
	Statistics	Data Interpretation	Representations of Quantifiable Info.	
		Reasoning	Formal Mathematical Reasoning	
Reading				
	Comprehension	Comprehension	Literal Comprehension	
	Reference Selection & Usage	Analysis & Application	Critical & Inferential Comprehension	
	Vocabulary/Word Recognition			
Writing				
	Knowledge of Basic Rules of Grammar, Punctuation & Spelling	Error Recognition in structure, word choice & mechanics	Usage	
	Essay - Clarity; Organization, Continuity & coherence; Correctness of grammar, punctuation & capitalization;	Essay - State or clearly imply writer's thesis; Develop & organize ideaa logically; Support ideas with reasons, examples and/or detaila; Demonstrate effective sentence variety; Display facility in use of language; Demonstrate writing generally free from grammar and mechanical errors	Essay - Provide & sustain a focus or thesis: Use supporting reasons, examples & details; Vary sentence structure: Demonstrate facility in use of language: Construct effective sentences generally free of errors in standard, written English	







With regard to the development of the content determination for CMEE, no Montanans were used in either the Basic Skills Test (Information Services Division 20) or the Pedagogy Test (21). As far as minority representation, American Indians were not identified as a specific group so this author assumed they were included as "Other" in that area. According to NCS, there was one "Other" on the content-determination panel for the Basic Skills test and no "Other" on the Pedagogy test (20-21). On the bias review, no American Indians were even mentioned in the discussion (29); however, in giving the results of the national field test American Indians were shown to have been 1.8 percent (35). No data were reported specifically to them. There was no mention of any sort of a breakdown in review among rural, suburban and urban educators. However, educators were broken down by regions for the item appraisal procedures (31).

In terms of the effort by ETS to include a rural component, Montanans and American Indians in the development and validation of their new Praxis Series, these elements were present. To determine what the content should be of the new tests, a survey was sent to 6000 random educators and specifically to 1,500 Black and Hispanic educators. Additional surveys were sent to professional organizations. ETS received almost 3000 useable surveys (Rosenfeld & Tannenbaum 7). On the survey to include a skill or concept the item had to receive a rating of 3.5 or higher on a 5 point scale by all groups (9). One of the groups included was a rural component (19). In a later multistate study of aspects of validity and faimess of items, six Montanans were on the panel (only Colorado had more and they had seven) (The ETS Validity Subcommittee IV-6). In that same study there were four American Indians on the mathematics test, two on the reading test and three on the writing test of the Praxis I series (IV-5). In fact, six percent of all panelists for this latter study were American Indians.

Because of Montana's past history with the NTE and its American Indian students. this author specifically asked representatives of each company, in the structured interview, what they were prepared to do to accommodate American Indian test takers. In a phone interview with Darcy Thomas of NCS on October 24, she said that there had not been a statistically significant American Indian population in the development of the CMEE Basic Skills or Pedagogy Test. However, these tests are criterion-referenced and represent mastery of content knowledge and skills important for beginning teachers. She suggested that we could do a pilot test with teacher education students from that population. She also advised that with the CMEE tests, the state can determine the time allowed for each test. NCS recommends between three to three and one/half hours for each test, but the determination of a time limit and what it would be is up to the individual state. She said that they have developed a comprehensive study guide which expands the content guide, provides a study test, and goes through why the answers are right or wrong. She felt that both of these features, the test time flexibility and the new study guide, would be of great assistance to improving the success of the American Indian students.

In a similarly structured phone interview with Stanley Kalisch of ETS in regard to this issue, he responded that ETS has determined that beginning January 1, individuals who have English-as-a-second-language will be able to apply for fifty percent extended time on all ETS tests. They will have to submit documentation at the time of application to take the test, but they will be accommodated in a special test.

V. What Must Be Done to Validate and Implement the New Test in Montana?

Again this was part of the structured interview with officials from NCS and ETS. According to Ms. Thomas of NCS she said that because there has already been a national validation of CMEE, there would be no need to do a specific validation in-state. It is critical, of course, that the state do its own standard setting, in other words determine its cut score in a legally defensible manner. NCS would assist the State Board to help them bring together a panel of twelve to fifteen appropriate experts, including practicing teachers, from Montana to do this. As far as the actual implementation, NCS would work with the state to determine the appropriate number of test centers looking at a balance between the number of sites and the number of people being tested at each site. If the state were to adopt CMEE for its teacher competency test, individual administration schedules are set up with each state. Ms. Thomas said that NCS would create a registration bulletin for the state of Montana with specific information on Montana's testing policy and how it might fit with teacher education requirements. She concluded that the whole process could be done and the new CMEE test could be "up and running in a short time."

According to Stanley Kalisch of ETS when asked about validation of the Praxis I. he said that because Montana has had the NTE, Montana would be considered a transition state. Since this is the case, ETS would pay for the standard setting study for the PPST. There would not need to be a separate study for the computer version of Praxis I because ETS has a concordance table to translate the PPST scores into appropriate ones for the Computer-Based assessment. The standard setting study would consist of convening for one day a group of professionals, the majority of whom would be practicing teachers. Mr. Kalisch said that it would be important for the panel to represent not only Montana's ethnic and gender diversity, but also diversity in teaching fields and levels and he believed that the number would be about thirty for a good panel. During that day long meeting which ETS would manage, the participants would judge the validity and set the qualifying scores including determining sample writing scores. If the state wished to set a compensatory model, that is a total score where students could do better on some of the tests and worse on others but still come out with an acceptable total, then the meeting would have to continue into the next day. Mr. Kalisch said that there were definite pros and cons on utilizing this latter version of qualifying scores. He concluded that ETS would write up the report from this state study and have it back to Montana within two months.



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As far as implementation is concerned. PPST is given seven times a year and could be given in existing testing centers, though probably not all the centers would use all the testing dates. The computer version can be given anytime.

VI. Why Is the State Mandating a Teacher Competency Test

This question has been initially answered in the background section of this paper. Still, it is a question which this author would like to invite the Council and the Board to reconsider. When the NTE Core Battery was implemented in Montana, it was with three reasons in mind:

- a. To improve the image of the field of teaching as a profession;
- b. To protect Montana's public schools from becoming a dumping ground of inadequately educated teachers who could not pass a teacher test elsewhere;
- c. To set a threshold of knowledge which all beginning teachers should have.

It is very difficult to determine if the image of Montana's educators has improved in the last eight years; their pay hasn't. Montana teachers were ranked forty-second in pay in 1991-92 (Morton 10). Perhaps that is not a fair measure, but short of a survey of public attitudes, it is the only measure we have. However, this author would submit that having only a test of basic skills for teacher licensure would not only be unprofessional. it would be demeaning.

What about the concerns that Montana may be a dumping ground if it doesn't have a test for teacher licensure when so many other states do test teachers? According to information provided in a letter from Catherine Havrilesky of ETS, "45 states now use some form of teacher testing" for prospective candidates. Given that real world information, there may need to be some tempering of the ideal expressed in the previous paragraph. However, what is not known is how the states which don't require teacher testing are screening their candidates for licensure and if they are facing the problem of becoming a dumping ground.

Finally, is there a need for a "threshold of knowledge" assessment? Either of these two tests will serve that purpose. If in fact it is the judgment of the Council and the Board to adopt one of the two tests, then it is the hope of this author that the answers to the questions raised in this paper will provide some guidance for their final determination.



Conclusion:

In the period of time that the author has been working in the field of assessment (sixteen years), there has been a real shift in the purpose of tests. In the world of assessment, there is much less reliance on tests with items of discrete bits of knowledge and more on demonstration of utilization of knowledge; hence, the addition of the essay in all of these test formats to assess writing. There is also generally a belief that assessment, even national standardized assessments, should exhibit some relationship to curriculum. In Montana the curriculum for teacher education is outlined in the *Montana Teacher Education Program Standards*. The instruments which have been evaluated for this report reflect only a very small segment of those standards. The assumption is that students come into the college teacher education programs with those basic skills, and most Montana teacher education programs have admittance requirements which bear out this assumption.

As to the pedagogy test, only one company, NCS, now offers a multiple choice format test. Even with this test, NCS is careful to point out that there is no predictive validity claimed; that is there is no assurance that the person who passes the test will be a good teacher, only that he or she can answer questions correctly about teaching. ETS has made a bold gamble with the development of the Praxis Series and including in it an assessment based on the concept that to determine if a person is going to be a good teacher, that person's performance will have to be evaluated when the person is actually teaching. The reason for this is the same rationale that was used when the test makers went to essays to evaluate writing. It has become very clear since 1974 when the first National Assessment of Educational Progress Writing Assessment was given, that if you want students to learn to write, and you want to evaluate how well they write, then you must ask them to write in an assessment. Now with the move in the assessment world to performance and portfolio assessment, we are beginning to be able to measure how well learners can accomplish other complicated tasks. Whether or not we are at the point of being able to develop a performance assessment which can measure the act of teaching, the field will have to decide, and it is not the purview of this paper. What is clear is that a paper and pencil knowledge test will not tell us whether a music teacher can excite fifty middle school students and open up the world of ensemble work to them; it will not tell us whether a science teacher can help her American Indian students see the relationship between their natural world and the world of chaos theory; nor will it tell us whether or not a first grade teacher can help all the children in his class not only learn to read, but love to read.

There is one bit of new knowledge which the author has just received which should be considered. In a letter from Stanley J. Kalisch, Jr., Field Marketing Representative for the Praxis Program, dated October 18, 1994, in which he encloses a copy of a letter to Peter Donovan, of your staff, he states:



"In response to its clients who have been using the NTE and who are not ready to make changes to newer Praxis tests, ETS has removed all deadlines associated with the phasing out of any NTE tests. Only as client demand ceases for a test, does ETS expect to eliminate a test."

This is welcome news. It gives the Council and the Board time to see how the new Praxis I Computer-Based series works out in other states, and though no comparison was done in this report between CMEE and the NTE Core Battery, it would seem it would not be worthwhile to shift to another test which is so similar to the current one, since any change to a different test will create expense and disruptions. Given this latest information from ETS, my final recommendation is to keep the NTE Core Battery in place. Examine carefully the PRAXIS I Computer-Based Academic Skills Assessment and even consider down the road the PRAXIS III--Performance Assessment when it has had some real world experience. Consider Montana's own alternative to a teacher competency test developed through the wisdom of the Board of Public Education with guidance from the Certification Standards and Practices Advisory Council, the Office of Public Instruction and the teacher education programs at Montana's colleges and universities. Whatever change is ultimately made, if there is a professional test for teacher licensure, it should truly be a professional test.

One Final Author's Note: These conclusions and recommendations may be frustrating because they are not simple and definitive, but any good research on any subject should lead to further questions as well as some answers. I hope I have provided you some answers, but not so comfortably that the Council and the Board will not consider further investigation in this area.

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