Spring 3-1-2006

Impact of an Exit Examination on English Teachers' Instructional Practices

Kenneth E. Vogler
University of South Carolina

Impact of an Exit Examination on English Teachers' Instructional Practices

Kenneth E. Vogler
University of South Carolina

Abstract

The purpose of this study was to determine if a high school exit examination influences instructional practices. Data were obtained from a survey instrument given to a stratified random sample of Tennessee English teachers who teach the same content tested on their state's exit examination. An analysis showed teachers using a balance of student-centered and teacher-centered practices including writing assignments, textbook-based assignments, supplementary materials, and open-response questions. Also, although no relationship was found between the type of instructional practice used and time spent on test preparation, over 90% of teachers spending the most amount of time preparing students for the examination felt that "personal desire," "belief these are the best practices," and an "interest in helping my students attain examination scores that will allow them to graduate high school" were factors influencing their use of instructional practices.

Introduction

> My curriculum and my student's interests and needs are my priorities. The Gateway (Tennessee's high school exit examination) is a challenge for me to show that all of my students can earn advanced scores. Lessons all semester are attached to an English Gateway objective. I examine the lesson I want to teach and find the Gateway objective that I can emphasize within my literature or grammar lesson. Then, the month before the Gateway, we really target mechanics, homophones, sentence-combining again along with practice tests in order to ace the test.
> --*A Tennessee High School English Teacher*

The high school English teacher's comments show the focus on and importance of test results in today's era of standards and accountability. The high-stakes attached to state-mandated test results have included consequences such as public reporting of test results, prevention of grade-to-grade promotion, and possible takeover of schools that continue to demonstrate low levels of student performance. But, the pressure to produce at least adequate student test results, although felt in varying degrees by all teachers, may be the greatest for those who teach the same content tested on their state's exit examination (otherwise known as a high school graduation examination). If these teachers do not prepare their students for the examination then there is a distinct possibility their students may fail the examination, not graduate from high school, and thereby have limited life opportunities.

The impact of accountability tests such as high school exit examinations on teachers' instructional practices is a very relevant concern, with, as of yet, no clear consensus as to what the impact is. Although researchers such as Barksdale-Ladd and Thomas (2000), Jones and Johnston (2002), McNeil (2000), Vogler (2002), and Yarbrough (1999) have found that teachers changed their instructional practices in response to accountability testing, there is still considerable ambiguity about the nature and intensity of this relationship (Firestone et al., 2002; Grant, 2001). Factors such as subject and grade level taught, personal beliefs, type of assessment, and professional development all have the potential to impact this relationship in varying degrees (see Cimbricz, 2002; Jones, Jones, & Hargrove, 2003).

The purpose of this study is to explore further the impact of accountability examinations on teachers' instructional practices. Its focus is on the instructional practices used and factors influencing their use by Tennessee English teachers who teach the same content tested under their state's high school exit examination. Employing a state-wide teacher survey, I designed the study to answer the following questions:
Central question:
> In what manner does a high school exit examination influence instructional practices?

Additional questions include the following:
> 1. What instructional practices do teachers use?
> 2. How often do teachers use these instructional practices?
> 3. What factors have influenced their use?

I begin with a brief review of opinions regarding testing and accountability systems and information about Tennessee's high school exit examinations. Then I describe the research method and examine the results of the study's central question and three additional questions.

Opinions Regarding Testing and Accountability Systems

According to Firestone et al. (2002), proponents of testing and accountability systems generally fall into two camps. The first group focuses on the accountability of testing programs. This group believes that the way to improve education is to test and use the results to hold teachers and students accountable for their actions. The form of the assessment is not as important as the rewards or sanctions attached to the test results (National Alliance of Business, 2001).

The second camp also believes that the use of testing and accountability systems is a sure way to improve education. But for this group, the key to improving education is not the rewards or sanctions attached to the test results, but the tests themselves. They contend that tests can serve as "powerful curricular magnets" (Popham, 1987, p. 680), and that standardized assessments can guide the educational system to be more productive and effective (Popham, 1987). This group believes that the use of assessment

systems such as portfolios, performance assessments, and other forms of authentic tasks will spur teachers to focus on more than just facts and procedures and help students construct knowledge and developing higher level thinking skills (Baron & Wolf, 1996; Bracey, 1987a, 1987b; Newmann & Associates, 1996; Resnick & Resnick, 1992; Rothman, 1995).

Opponents of testing and assessment systems believe that contrary to the idea of promoting constructivist teaching and high level thinking, state-level assessments force teachers to focus on facts and procedures without meaning or context (Firestone et al., 2002; McNeil, 2000). They argue that these high-stakes assessment systems create negative side effects such as narrowing and dumbing down the curriculum, de-skilling teachers, pushing students out of school, and generally inciting fear and anxiety among both students and educators (Darling-Hammond & Wise, 1985; Gilman & Reynolds, 1991; Jones & Whitford, 1997; Madaus, 1988a, 1988b; McNeil, 2000; Shepard, 1989). Position statements of professional organization such as the National Council of Teachers of English, the International Reading Association, and the American Educational Research Association have denounced the use of high-stakes tests as educationally unsound and unethical. According to opponents, the side effects associated with high-stakes testing outweigh any possible benefits of measurement-driven reform.

Between the proponents and opponents of testing and accountability systems lies a third, more moderate position. According to advocates of this position or perspective, the effects of testing and assessment systems depend not on the tests themselves but on factors relating to their implementation (Firestone et al., 2002; Grant 2003). These factors include how tests are interpreted by teachers and administrators, the content knowledge assessed, and the opportunities afforded to teachers to learn about and to try out instructional practices which will help prepare students for the testing and assessment system (Borko & Putnam, 1995; Cohen & Hill, 1998; McLaughlin, 1990; Saxe, Franke, Gearhart, Howard, & Michele, 1997; Supovitz, Mayer, & Kahle, 2000).

Tennessee's High School Exit Examinations

In 1998, under Education Policy TCA 49-1-608 and TCA 49-6-600, the Tennessee Department of Education accepted the recommendation of the High School Testing Advisory Committee to develop and phase in, beginning with the 9th grade in 2001-2002 school year, high school exit examinations for three courses—Algebra I, Biology I, and English II. These high school exit examinations (later called the Gateway Examinations) were designed to: (a) improve student learning in core content areas, (b) prepare students for further learning, (c) provide diagnostic information, (d) be part of school and program improvement, (e) provide school and school system accountability (Tennessee Department of Education, 2005a). Also, the policy mandated that the testing program would be fully implemented by the 2004-2005 school year (Tennessee Department of Education, 2005b). Students now must pass the English II Gateway Examination as a requirement to graduate high school.

Method

A survey instrument (see Appendix A) was used to answer the research questions. It covers three broad categories: Part I contains items pertaining to instructional practices used and the extent to which they are used: Part II contains items pertaining to factors influencing instructional practices used: and Part III contains items pertaining to demographic information. Also, a section is included asking if and how much instructional time is spent preparing students for the high school exit examination. Finally, there is a section called "Comments" which offers respondents an opportunity to provide more information about the instructional practices they use to prepare students for the high school exit examination.

Survey Instrument's Validity and Reliability

I took two approaches to ascertain the validity and reliability of the survey instrument. First, evidence was sought for the content validity of the 54 items on the initial draft of the survey instrument. Because this study is part of a larger study about the impact of state-mandated examinations on English, science, mathematics, and social studies teachers' instructional practices, 36 high school teachers (nine English, nine science, nine mathematics, and nine social studies) reviewed the items on the survey instrument for clarity and completeness in coverage the instructional practices used and possible influences. Using their recommendations, the number of items on the survey instrument was reduced to 48.

Second, 34 different high school teachers (nine English, seven science, nine mathematics, and nine social studies) completed the revised 48-item survey instrument. These same 34 teachers completed the revised survey instrument again following a three-week interval. Reliability was assessed by comparing each teacher's responses. Sixty-four percent (64%) of the teachers had exact matches for all items; 88% of the matches were within one point on the six point scale, and 92% of the matches were within one point on the five point scale.

Sample Selection

I created a stratified random sample of high school English II teachers using geographic region and past student success on the Gateway Examinations. First, school systems were grouped according to geographic region: East, Middle, and West Tennessee. Second, the school systems in each region were ranked according to student success on the (2002-2003) Gateway Examinations. Quartiles were generated using this ranking. At least four, but no more than six school systems from each quartile participated in the study.

A total of 53 school systems agreed to participate in the study. All high school English teachers teaching English II from each participating school system were given the survey instrument by their principals. The content covered in this English course, according to the Tennessee State Framework, is the same English content tested on the English II Gateway Examination. One hundred and sixty-nine teachers, or 63.2% of the total population surveyed, completed and returned the survey instrument to me.

Comparison of Survey Sample and State Teaching Population

I compared survey respondents with the state's teaching population using data obtained from Part III of the survey instrument and the Tennessee Department of Education. Table 1 is a comparison of the frequency distribution between the survey response sample and the Tennessee high school English II teacher population for gender.

Table 1
Comparison of Survey Response Sample and Tennessee High School English II Teacher Population for Gender

| | Tennessee High School English II Teacher | | | |
| | Survey Response Sample | | State Population | |
Gender	%	n	%	n
Female	88.8	150	81.7	362
Male	11.2	019	18.3	081

The demographic variable highest education level obtained was compared in Table 2.

Table 2
Comparison of Survey Response Sample and Tennessee High School English II Teacher Population for Highest Education Level Obtained

| | Tennessee High School English II Teacher | | | |
| | Survey Response Sample | | State Population | |
Education	%	n	%	n
Bachelor's	45.6	77	36.3	161
Master's	50.8	86	60.0	266
Specialist's	01.8	03	02.7	012
Doctorate	01.8	03	01.0	004

With the exception of slightly higher percentages of female teachers and teachers with a Bachelor's degree, and a slightly lower percentage of teachers with a Master's degree, Tables 1 and 2 show that participants in this study are representative of the Tennessee high school English II teaching population in terms of gender and highest level of education attained. Unfortunately, the Tennessee Department of Education had no information about the state's teaching population in terms of teaching experience.

Results

I begin this section with a preview of the study's most interesting results. First, in what I conclude as using a balance of student-centered and teacher-centered practices, teachers report that they most often use teacher-centered practices such as textbooks, textbook-based assignments, supplementary materials, modeling, and multiple-choice questions, as well student-centered practices such as writing assignments, creative/critical thinking questions, open-response questions, and discussion groups. But, teachers report they least use student-centered instructional practices or tools such as role playing, group projects, project-based assignments, and interdisciplinary instruction. Second, in what I describe as the lack of a relationship between the type of instructional practice used (either teacher-centered or student-centered) and time spent on test preparation, 134 teachers, or 79.3% of the total sample, acknowledged spending class time preparing students for the high school exit examination, teachers spending over 3 months preparing students for the exit examination are more likely to use the student centered practice rubrics and scoring guides than those spending no time or 1 day to 3 months preparing students for the examination. And, teachers spending no time preparing students for the graduation examination are more likely to use teacher-centered-practices such textbooks, textbook-based assignments, lecturing, modeling, and worksheets as well as student-centered practices such as writing assignments, inquiry/investigation, and cooperative learning/group work than those spending 1 day to 3 months or over 3 months preparing students for the examination. Third, in what I call the powerful influence of testing on instruction, over 90% of teachers spending the most amount of time preparing students for the examination felt that "personal desire," "belief these are the best practices," an "interest in helping my students attain test scores that will allow them to graduate high school," and an "interest in helping my school improve high school graduation examinations scores" were factors influencing their use of instructional practices. Whereas in comparison, only 85.7% of the teachers spending no time preparing students for the high school exit examination felt that an "interest in helping my students attain test scores that will allow them to graduate high school," and only 71.4% said that "belief these are the best instructional practices" influence the instructional practices they use.

Difference Between Student-Centered and Teacher-Centered Practices

Before I discuss my analysis of the instructional practices used (Part I of the survey instrument), I think it best to first have an understanding of the teaching methods most understood to be most effective for student learning. Researchers have identified two general methods or approaches to teaching—student-centered and teacher-centered (Airasian & Walsh, 1977; Eggen & Kauchak, 2001).

Student-centered teaching can be thought of as an application of a constructivist theory of student learning. Constructivists believe that students actively construct their knowledge through interacting with their physical and social environments (Piaget, 1973; Vygotsky, 1978), rather than act as empty vessels into which knowledge is poured. The other approach to teaching is called teacher-centered. This approach places the teacher at the center of all activities during instruction (Jones, Jones, & Hargrove, 2003). Typically,

this method of instruction includes the frequent use of practices such as lecture, lecture and discussion, and direct instruction (Eggen & Kauchak, 2001). The survey data support the finding that respondents are using a combination of teacher-centered and student-centered instructional practices.

Using a Balance of Student-Centered and Teacher-Centered Practices

Tables 3 and 4 show the instructional practices and tools being used and not being used by the survey respondents.[1] Table 3 represents those practices respondents reported using regularly or often. Table 4 represents those practices that teachers reported using less often or not at all.[2]

Table 3
Regularly and Mostly Use Instructional Practice or Tool

Instructional Practice or Tool	Mean	SE	SD	% Reg. Use	% Mostly Use	Total % Reg. and Mostly Use
Textbooks	4.11	.05	0.75	58.1	28.7	86.8
Writing Assignments	4.05	.04	0.60	70.4	18.3	78.7
Supplementary Materials	4.01	.04	0.63	68.5	17.3	85.8
Creative/Critical Thinking Quest.	3.96	.05	0.69	58.9	19.6	78.5
Textbook-based Assignments	3.91	.06	0.78	57.4	20.1	77.5
Modeling	3.83	.05	0.66	60.1	12.5	72.6
Open-response Questions	3.79	.05	0.67	61.5	10.7	72.2
Multiple-choice Questions	3.71	.06	0.84	52.4	14.3	66.7
Visual Aids	3.61	.05	0.75	43.8	11.2	55.0
Discussion Groups	3.56	.06	0.89	40.2	13.6	53.8
Inquiry/Investigation	3.55	.06	0.85	39.3	12.5	51.8
Lecturing	3.53	.06	0.83	48.5	08.3	56.8
Audiovisual Materials	3.49	.05	0.72	46.2	05.3	51.5

Table 4
Occasionally, Rarely and Don't Use Instructional Practice or Tool

Instructional Practice or Tool	Mean	SE	SD	% Occas. Use	% Rarely Use	% Don't Use	Total % Occas., Rarely and Don't Use
Rubrics or Scoring Guides	3.47	.07	0.92	36.5	13.2	01.2	50.9
Coop Learning/Group Work	3.44	.06	0.83	39.1	10.7	01.2	51.0
Problem-solving Activities	3.42	.06	0.89	36.4	15.2	00.6	52.2
Worksheets	3.39	.06	0.87	37.5	14.3	01.2	53.0
Computers/Internet	3.32	.06	0.87	42.8	09.0	04.2	56.0
Project-based Assignments	3.31	.06	0.83	49.1	11.2	01.8	62.1
Charts/Webs/Outlines	3.22	.06	0.85	47.0	13.7	03.0	63.7
Response Journals	3.17	.09	1.17	26.8	19.0	10.1	55.9
Computers/Ed Software	3.13	.07	0.96	42.2	12.7	07.8	62.7

Lessons Based on Curr. Events	3.09	.06	0.78	52.1	19.5	01.2	72.8
Group Projects	3.08	.06	0.83	51.5	17.8	03.0	72.3
Interdisciplinary Instruction	3.08	.06	0.87	45.5	17.0	04.8	67.3
Newspapers/Magazines	2.96	.06	0.88	44.6	25.0	04.2	73.8
True-false Questions	2.96	.07	0.99	32.7	25.6	07.7	66.0
Role Playing	2.65	.06	0.83	43.5	34.5	07.7	85.7

The data in Tables 3 and 4, by implication, provide information about which teaching approach, student-centered or teacher-centered, is more often used by Tennessee high school English II teachers.[3] An analysis of the data supports the conclusion that survey respondents are using a balance of student-centered and teacher-centered practices. First, teachers (86.8%) reported that textbooks was the most commonly used instructional practice or tool. This was closely followed by instructional practices or tools such as supplementary materials (85.8%), writing assignments (78.7%), creative/critical thinking questions (78.5%), and textbook-based assignments (77.5%). Three of these practices and tools are instruction typical of a teacher-centered approach; the other two practices are more typical of a student-centered approach. In fact, of the first twelve instructional practices or tools respondents reported using the most, seven are of a teacher-centered nature and five can be considered instruction more in line with a student-centered approach. But Table 4, the practices respondents reported using less often or not at all, presents a different picture. Respondents reported spending the least amount of instructional time using student-centered instructional practices such as role playing (85.7%), newspapers/magazines (73.8%), lessons based on current events (72.8%), group projects (72.3%), and interdisciplinary instruction (67.3%). In fact, of the fifteen instructional practices and tools respondents acknowledge using occasionally, rarely, and don't use, thirteen are student-centered approaches.

Minimal Demographic Differences in Instructional Preferences

Next, a number of crosstabulations and chi square analyses were conducted to determine if there were any significant differences in the instructional practices used or not used among demographic categories listed in Part III of the survey instrument. Categories were "collapsed"[4] to meet the statistical requirements for a chi square analysis. Results of these analyses only showed a few statistically significant differences: 73.3% of females regularly or mostly used modeling compared to 50% of males, 74.3% of teachers with 0-6 years of experience regularly or mostly used interdisciplinary instruction compared to 28.2% of teachers with 7-14 years of experience; 53.8% of teachers with 15-24 years of experience regularly or mostly used computers/educational software compared to 25.7% of teachers with 0-6 years of experience; 59.6% of teachers with 15-24 years of experience regularly or mostly used computers/internet compared to 31.4% of teachers with 0-6 years of experience; 37.2% of teachers with a Master's degree regularly or mostly used lessons on current events compared to 15.6% of teachers with a Bachelor's degree; but the effect for each of these differences was minimal.

An analysis of Part I of the survey instrument has shown two things. First, teachers are using a balance of student-centered and teacher-centered instructional practices and tools. Second, there are no real differences in the use of instructional practices or tools used or not used by any demographic category listed in Part III of the survey instrument.

Lack of a Relationship Between the Type of Instructional Practice Used and Time Spent on Test Preparation

Questions #31 and #32 in the survey instrument ask about preparing students for the high school graduation examination (see Appendix A). One hundred and thirty-four respondents, or 79.3% of the total sample acknowledged spending instructional time preparing students for the high school exit examination. But, rather than just dividing respondents into two groups, those that did and didn't prepare students for the examination, I also wanted to see if there were differences in respondents based on the amount of instructional time spent preparing students for the examination.[5] Table 5 is a comparison of the instructional practices and tools mostly used by respondents spending no, 1 day to 3 months, and over 3 months of instructional time preparing students for the high school exit examination.

Table 5
Comparison of Regularly and Mostly Use Instructional Practice or Tool by Respondents'
Instructional Time Spent Preparing Students for Exam

Instructional Practice or Tool	Total % Regularly and Mostly Use Time Preparing Students for Exam		
	None[a]	1 Day to 3 Months[b]	Over 3 Months[c]
Writing Assignments	94.3	87.3	87.3
Textbooks	94.3	90.9	80.5
Textbook-based Assignments	85.7	78.2	73.4
Supplementary Materials	82.9	89.1	84.6
Lecturing	77.1	56.4	48.1
Modeling	77.1	72.2	70.9
Creative/Critical Thinking Quest.	76.5	81.8	77.2
Open Response Questions	74.3	80.0	65.8
Charts/Webs/Outlines	73.5	56.4	64.6
Multiple-choice Questions	65.7	67.3	66.7
Inquiry/Investigation	55.9	49.1	51.9
Visual Aids	54.3	63.6	49.1
Coop Learning/Group Work	51.4	50.9	46.8
Worksheets	51.4	50.9	46.2
Rubrics or Scoring Guides	50.0	43.6	52.6

Note. [a]n = 35. [b]n = 55. [c]n = 79.

Table 6 is a comparison of the instructional practices and tools least used by survey respondents spending no, 1 day to 3 months, and over 3 months of instructional time preparing students for the high school exit examination.

Table 6
Comparison of Occasionally, Rarely and Don't Use Instructional Practice or Tool by Respondents' Instructional Time Spent Preparing Students for Exam

Instructional Practice or Tool	Total % Occasionally, Rarely and Don't Use Time Preparing Students for Exam		
	None[a]	1 Day to 3 Months[b]	Over 3 Months[c]
Role Playing	91.4	81.5	86.5
Group Projects	74.3	69.1	73.4
Project-based Assignments	77.1	61.8	55.7
Newspaper/Magazines	73.5	80.0	69.6
Interdisciplinary Instruction	71.9	68.5	64.6
Computers/Educational Software	64.7	70.9	55.8
Lessons based on Current Events	62.9	80.0	72.2
Audiovisual Materials	62.9	43.6	45.6
True-false Questions	57.1	61.8	73.1
Problem-solving Activities	54.3	49.1	53.2
Discussion Groups	54.3	45.7	43.0
Computers/Internet	51.4	61.8	53.9
Response Journals	50.0	61.8	54.4

Note. [a]n = 35. [b]n = 55. [c]n = 79.

Table 5 shows that teachers spending no, 1 day to 3 months, and over 3 months of instructional time preparing students for the high school examination are using instructional practices and tools in line with both a student-centered as well as a teacher-centered learning approach. In fact, as shown in Table 5, of the fifteen instructional practices or tools used most often, eight are student-centered and seven are teacher-centered learning approaches. Looking more closely, it appears that there is no relationship between the type of instructional practice used (either teacher-centered or student-centered) and time spent on test preparation. Table 5 shows that teachers spending over 3 months preparing their students for the high school graduation

examination use a greater percentage of the student-centered instructional practice rubrics or scoring guides (52.6%) than teachers spending no time or 1 day to 3 months preparing their students for the examination. But, teachers spending no time preparing their students for the high school graduation examination use a greater percentage of teacher-centered instructional practices and tools such as textbooks (94.3%), textbook-based assignments (85.7%), lecturing (77.1%), modeling (77.1%), and worksheets (51.4%), as well as student-centered instructional practices and tools such as writing assignments (94.3%), charts/webs/outlines (73.5%), inquiry/investigation, and cooperative learning/group work (51.4%) than teachers spending 1 day to 3 months or over 3 months preparing their students for the examination. And teachers spending 1 day to 3 months preparing their students for the high school graduation examination use a greater percentage of teacher-centered instructional practices and tools such as multiple-choice questions (67.3%) and visual aids (63.6%), as well as student-centered instructional practices and tools such as supplementary materials (89.1%), creative/critical thinking questions (81.8%), and open response questions (80%) than teachers spending no time or over 3 months preparing their students for the examination.

Table 6 shows that 11 of the 13 instructional practices and tools used least by teachers spending no, 1 day to 3 months, and over 3 months of instructional time preparing students for the high school examination are student-centered approaches. Moreover, according to Table 6, there is no relationship between the type of instructional practice being used the least (either student-centered or teacher-centered) and time spent on test preparation. For example, student-centered instructional practices such as role playing, group projects, project-based assignments, interdisciplinary instruction, problem-solving activities, and discussion groups are being used the least by teachers spending no time preparing their students for the high school graduation examination when compared to teachers spending 1 day to 3 months and over 3 months preparing students for the examination. Teachers spending 1 day to 3 months preparing students for the high school graduation examination are using the student-centered instructional practices newspapers/magazines, computers/educational software, lessons based on current events, computer/internet, and response journals less than teachers spending no time and over 3 months preparing students for the examination. And, the teacher-centered instructional practice of using true-false questions is being used the least by teachers spending over three months preparing their students for the high school graduation examination when compared to teachers spending no time and 1 day to 3 months preparing students for the examination.

The Powerful Influence of Testing on Instruction

Table 7 shows an analysis of Part II of the survey instrument, the factors influencing the instructional practices and tools respondents report using.[6]

Table 7
Influence Factors

Item	Mean	SE	SD	% Agree	% Strongly Agree	Total % Agree
37. Interest in helping my students attain test scores that will allow them to graduate high school	4.49	.05	0.65	41.4	55.0	96.4
36. Interest in helping my school improve high school graduation examination scores	4.28	.05	0.76	48.2	42.0	90.2
34. Belief these are the best instructional practices	4.15	.05	0.71	57.4	30.2	87.6
33. Personal desire	3.99	.06	0.77	67.5	20.1	87.6
35. Format of the high school graduation examination	3.69	.07	0.96	46.2	18.9	65.1
41. Interactions with colleagues	3.69	.07	0.98	56.2	15.4	71.6
42. Staff development in which I have participated	3.60	.08	1.12	50.3	17.8	68.1

38. Interest in avoiding sanctions at my school	3.39	.09	1.22	31.4	20.7	52.1
40. Interaction with school principal(s)	3.07	.08	1.15	33.1	08.3	41.4
43. Interactions with parents	2.86	.08	1.11	30.2	04.1	34.3
39. Interest in obtaining a monetary award for my school	2.42	.09	1.20	13.6	06.5	20.1

A cursory examination of Table 7 reveals that 96.4% of respondents agreed that "interest in helping my students attain test scores that will allow them to graduate high school" and an "interest in helping my school improve high school graduation examination scores" (90.2%) had the most influence on the instructional practices they use. These factors were followed by "belief these are the best instructional practices" (87.6%), "personal desire" (87.6%), "interactions with colleagues" (71.6%), "staff development in which I have participated" (68.1%), and "format of the high school graduation examination" (65.1%). The factors least influencing teachers' use of instructional practices and tools were "interactions with school principal (s)" (41.4%), "interactions with parents" (34.3%), and an "interest in obtaining a monetary award for my school" (20.1%).

Comparisons were made between influence factors and respondents spending no, 1 day to 3 months, and over 3 months of instructional time preparing their students for the high school graduation examination. Table 8 shows the results of these comparisons.

Table 8

Comparison of Influence Factors by Respondents' Instructional Time Spent Preparing Students for Exam

	Total % Agree		
	Time Preparing Students for Exam		
Item	None[a]	1 Day to 3 Months[b]	Over 3 Months[c]
37. Interest in helping my students attain test scores that will allow them to graduate high school	85.7	98.2	100.0
33. Personal desire	85.7	81.8	92.4
36. Interest in helping my school improve high school graduation examination scores	74.5	90.9	97.5
34. Belief these are the best instructional practices	71.4	92.7	91.1
41. Interactions with colleagues	68.6	72.7	72.2
42. Staff development in which I have participated	62.9	69.1	69.6
43. Interactions with parents	45.7	32.7	30.4

38. Interest in avoiding sanctions at my school	40.0	50.9	58.2
40. Interaction with school principal(s)	31.4	40.0	46.8
35. Format of the graduation examination	28.2	70.9	77.2
39. Interest in obtaining a monetary award for my school	25.7	12.7	22.8

Note. [a]n = 35. [b]n = 55. [c]n = 79.

Respondents who spend no time preparing students for the high school graduation examination said an "interest in helping my students attain test scores that will allow them to graduate high school" (87.5%), "personal desire" (87.5%), and an "interest in helping my school improve high school graduation examination scores" (74.5%) were the most influential factors. Those teachers spending 1 day to 3 months preparing students for the high school graduation examination indicated that an "interest in helping my students attain test scores that will allow them to graduate high school" (98.2%), "belief these are the best instructional practices" (92.7%), and an "interest in helping my school improve high school graduation examination scores" (90.9%) had the most influence on their instructional practices. And, respondents who spend over 3 months preparing students for the high school graduation examination said that an "interest in helping my students attain test scores that will allow them to graduate high school" (100%), an "interest in helping my school improve high school graduation examination scores" (97.5%), "personal desire" (92.4%), and "belief these are the best instructional practices" (91.1%) were factors most influencing their instructional practices.

The most interesting aspect of Table 8 is the high percentage of agreement that teachers spending the most amount of time preparing students for the high school exit examination have with four of the influence factors. Not only did 100% of the teachers spending over 3 months preparing students for the examination agree that an "interest in helping my students attain test scores that will allow them to graduate high school" was a factor influencing the instruction practices they use, but over 90% of these teachers felt that "personal desire," "belief these are the best practices," and an "interest in helping my school improve high school graduation examinations scores" were factors influencing their use of instructional practices. Whereas in comparison, only 85.7% of the teachers spending no time preparing students for the high school exit examination felt that an "interest in helping my students attain test scores that will allow them to graduate high school," and only 71.4% said that "belief these are the best instructional practices" influence the instructional practices they use. And, of teachers spending 1 day to 3 months for the examination, only 81.8% agreed that "personal desire" influenced the instructional practices used.

Discussion

The purpose of this study was to explore the impact of high school exit examinations on teachers' instructional practices. It focused on the instructional practices used and factors influencing their use by English teachers who teach the same content tested on their state's high school exit examination. From my analysis, three interesting themes emerged: (1) using a balance of student-centered and teacher-centered practices; (2) the lack of a relationship between the type of instructional practice used and time spent on test preparation; (3) the powerful influence of testing on instruction.

Tennessee English teachers are far more likely to use a balance of student-centered and teacher-centered practices. But, what does this mean? If the question is which of these approaches, student-centered or teacher-centered, is most effective, the answer is both. Student-centered methods are more effective for teaching complex objectives and developing higher level thinking skills, and teacher-centered methods are more effective for teaching procedural skills and organizing knowledge to review facts and identify relationships (Good & Brophy, 2000). Effective teachers use both methods, depending upon the needs of their students and objectives of each lesson (Airasian & Walsh, 1997; Pressley, Rankin, & Yokor, 1996; Zemelman, Daniels, & Hyde, 1998).

Although it is impossible to describe the perfect balance between student-centered and teacher-centered instruction due to factors such as subject, grade level, and lesson objectives (Jones, Jones, & Hargrove, 2003), research on best practices (Daniels & Bizar, 1998; Wenglinsky, 2000; Zemelman, Daniels, & Hyde, 1998) and position papers of professional teaching organizations (e.g., National Council of Teachers of Mathematics, National Council of Social Studies, and National Science Teachers Association) have advocated instructional practices more connected to constructivist theory and student-centered methods. So, while educators recognize that both teacher-centered and student-centered approaches are effective for student learning, only student-centered approaches are seen as instruction which allow students to connect new ideas to their previous knowledge and experience, to think critically and creatively, and thereby develop higher-level thinking skills. Teacher-centered approaches, by contrast, are seen as instruction only useful for developing lower level thinking skills such as identifying, memorizing, and listing information.

According to the data, Tennessee high school English II teachers are using instructional practices and tools such as textbooks, writing assignments, supplementary materials, creative/critical thinking questions, textbook-based assignments, modeling, open-response questions, multiple-choice questions, visual aids, discussion groups, and inquiry/investigation. In other words, these respondents are using a balance of student-centered and teacher-centered instructional practices—exactly what is advocated by professional teaching organizations.

Data also indicates that the results of the high school exit examination are tremendously important for Tennessee English teachers. Almost 80% of the total sample acknowledged spending class time preparing students for the high school exit examination, and of those teachers, 58.9% spent over 3 months preparing students for the examination. Comparisons were made among teachers spending no time, 1 day to 3

months, and over 3 months preparing their students for the high school graduation examination. The results of these comparisons lead to the second theme—the lack of a relationship between the type of instructional practice used and time spent on test preparation.

According to the data, teachers, regardless of the amount of instructional time spent preparing students for the high school exit examination, are mostly using a combination of student-centered and teacher-centered approaches. There was no distinction found between the teachers' instructional practices used and the amount of time spent preparing student for the exit examination. Presumably, these teachers feel that using a balance of student-centered and teacher-centered instructional approaches is not only the best way to teach, but it is the best way to prepare their students for the high school exit examination.

This leads to the issue of teachers' instructional decisions, and the last theme—the powerful influence of testing on instruction. Comparisons among respondents reporting no, 1 day to 3 months, and over 3 months preparing students for the high school exit examination and the factors influencing the instructional practices they use yielded interesting results. For each of these groups of respondents, the top four reasons, or influence, for the instructional practices they use were the same: "interest in helping my students attain test scores that will allow them to graduate high school;" "personal desire;" "interest in helping my school improve high school graduation examination scores;" and "belief these are the best instructional practices." What was interesting, besides the fact that the top four influence factors were the same, was the difference in percentage of agreement among each of these groups for these influence factors. Generally, as the amount of time preparing students for the examination was raised so was the percentage of agreement with each of the four influence factors. This pattern culminated with 100% of the teachers spending the most time preparing students for the high school exit examination feeling that an "interest in helping my students attain test scores that will allow them to graduate high school," was a factor influencing their instruction, and over 90% agreeing that "belief these are the best instructional practices," an "interest in helping my school improve high school graduation examination scores," and "personal desire" were also factors influencing their instructional practices. This result confirms the notion that respondents, especially those spending the most amount of time preparing student for the high school exit examination, feel instructional practices that help students to do well on the examination also are the best way to learn.

Conclusion

There is still considerable ambiguity about the impact state testing has on instructional practices (Firestone et al., 2002). But, this study has shown that for Tennessee English teachers who are responsible for teaching the same content tested on their state's high school exit examination, preparing students for the examination means a great deal to them. And this preparation, in conjunction with their personal beliefs and

desires, has resulted in these teachers using a combination of student-centered and teacher-centered instructional practices—exactly the type of instructional combination promoted by professional teaching organizations and hoped for by advocates of high-stakes testing programs.

References

Airasian, P., & Walsh, M. (1997). Constructivist cautions. *Phi Delta Kappan*, *78*(6), 444-449.

Barksdale-Ladd, M. A., & Thomas, K. F. (2000). What's at stake in high-stakes testing: Teachers and parents speak out. *Journal of Teacher Education*, *51*(3), 384-397.

Baron, J. B., & Wolf, D. P. (1996). *Performance-based student assessment: Challenges and possibilities*. Chicago: University of Chicago.

Borko, H., & Putnam, R. T. (1995). Expanding a teacher's knowledge base: A cognitive psychological perspective on professional development. In T. R. Guskey & M. Huberman (Eds.), *Professional development in education* (pp. 35-65). New York: MacMillan.

Bracey, G. W. (1987a). Measurement-driven instruction: Catchy phrase, dangerous practice. *Phi Delta Kappan, 68*(9), 683-686.

Bracey, G. W. (1987b). The muddles of measurement-driven instruction. *Phi Delta Kappan*, *68*(9), 688-689.

Cimbricz, S. (2002). State-mandated testing and teachers' beliefs and practice. *Educational Policy Analysis Archives*, *10*(2). Retrieved August 20, 2004, from http://epaa.asu/epaa/v10n2.html

Cohen, D. K., & Hill, H. C. (1998). Instructional policy and classroom performance: The mathematics reform in California. *Teachers College Record*, *102*(2), 294-343.

Darling-Hammond, L., & Wise A. E. (1985). Beyond standardization: State standards and school improvement. *The Elementary School Journal*, *85*(3), 315-336.

Eggen, P., & Kauchak, D. (2001). *Educational Psychology: Windows on Classrooms*. Upper Saddle River, N.J.: Merrill Prentice Hall.

Firestone, W. A., Monfils, L., Camilli, G., Schorr, R., Hicks, J., & Mayrowetz, D. (2002).
The ambiguity of test preparation: A muiltmethod analysis in one state. *Teachers*

College Record, 104(7*)*, 1485-1523.

Good, T. L., & Brophy, J. E. (2000). *Looking in Classrooms* (8th ed.). New York: Longman.

Grant, S. G. (2001). An uncertain lever: Exploring the influence of state-level testing in New York station teaching social studies. *Teachers College Record, 103*(3), 398-426

Gilman, D. A., & Reynolds, L. A. (1991). The side effects of statewide testing. *Contemporary Education*, *62*(4), 272-278.

Jones, B. D., & Johnson, A. F. (2002). The effects of high-stakes testing on instructional practices. Paper presented at the *Annual Meeting of the American Educational Research Association.* (New Orleans, LA, April 14-18, 2002).

Jones, M. G., Jones, B. D., Hargrove, T. Y. (2003). *The unintended consequences of high-stakes testing.* New York: Rowman and Littlefield.

Jones, K., & Whitford, B. L. (1997). Kentucky's conflicting reform principles: Highstakes school accountability and student performance assessment. *Phi Delta Kappan*, *79*(4), 276-281.

Madaus, G. F. (1988a). The distortion of teaching and testing: High-stakes testing and instruction. *Peabody Journal of Education*, *65*(3), 29-46.

Madaus, G. F. (1988b). The influences of testing on the curriculum. In L.N. Tanner (Ed.), *Critical issues in curriculum: Eighty-seventh yearbook of the national society for the study of education* (p.p. 83-121). Chicago: University of Chicago Press.

McLaughlin, M. W. (1990). The Rand Change Agent study revisited: Macro perspectives and micro realities. *Educational Researcher*, *19*(9), 11-16.

McNeil, L. (2000). *Contradictions of school reform: Educational costs of standardized testing.* New York: Routledge.

National Alliance of Business. (2001). *Improving performance: Competition in American public education.* Washington, DC: Author.

Newmann, F. M., & Associates. (Eds.). (1996). *Authentic achievement: Restructuring schools for intellectual quality.* San Francisco: Jossey-Bass.

Popham, W. J. (1987). The merits of measurement driven instruction. *Phi Delta Kappan*, *68*(9), 679-682.

Piaget, J. (1973). *To Understand is to Invent*. New York: Grossman.

Pressley, M., Rankin, J., & Yokoi, L. (1996). A survey of instructional practice of Primary teachers nominated as effective in promoting literacy. *Elementary School Journal*, *96*(4), 363-384.

Resnick, L. B., & Resnick, D. P. (1992). Assessing the thinking curriculum: New tools for educational reform. In B. R. Gifford & M. C. O'Connor (Eds.), *Changing assessments: Alternative views of aptitude, achievement, and instruction (*pp. 37-75). Boston: Kluwer Academic Publishers.

Rothman, R. (1995). *Measuring up: Standards, assessment, and school reform*. San Francisco, Ca.: Jossey-Bass.

Saxe, G. B., Franke, M. L., Gearhart, M., Howard, S., & Michele, C. (1997). *Teachers' shifting assessment practices in the context of education reform in mathematics* (CSE Technical Report 471). Los Angeles: CRESST.

Shepard, L. A. (1989). Inflated test score gaines: Is it old norms or teaching the test? Effects of testing project. Washington, DC: Office of Educational Research and Improvement. Paper presented at the *Annual Meeting of the American Educational Research Association.* (San Francisco, CA, March 27-31, 1989). (ERIC Document Reproduction Service No. ED334204)

Supovitz, J. A., Mayer, D. P., & Kahle, J. B. (2000). Promoting inquiry-based Instructional practice: The longitudinal impact of professional development in the context of systemic reform. *Educational Policy*, *14*(3), 357-384.

Tennessee Department of Education. (2005a). *Gateway Assessment Program.* Retrieved September 19, 2005, from Tennessee Department of Education, Office of Evaluation and Assessment Web site: http://www.state.tn.us/education/tsgateway.htm

Tennessee Department of Education. (2005b). *Questions for Gateway/End-of-Course Tests.* Retrieved September 19, 2005, from Tennessee Department of Education, Office of Evaluation and Assessment Web site: http://www.state.tn.us/tsgatewayqna.htm.

Vogler, K. E. (2002). The impact of high-stakes, state-mandated student performance assessment on teachers' instructional practices. *Education, 123*(1), 39-55.

Vygotsky, L. (1978). *Mind in Society: The Development of Higher Psychological*

Processes. Cambridge, M.A.: Harvard University Press.

Yarbrough, T. L. (1999). Teacher perceptions on the North Carolina ABC program and the relationship to classroom practice. Ph. D. dissertation, University of North Carolina at Chapel Hill.

Zemelman, S., Daniels, H. & Hyde, A. (1998). *Best practices: New standards for teaching and learning in American's public schools*. (2nd ed.). Portsmith: Heinemann.

Appendix A: The Survey Instrument

Teaching Techniques

	D	R	O	RU	M	NA
18. Interdisciplinary instruction	1	2	3	4	5	6
19. Lecturing	1	2	3	4	5	6
20. Modeling	1	2	3	4	5	6
21. Cooperative learning/ group work	1	2	3	4	5	6

Part I

Please circle the number indicating the extent to which you use each of the following:

Use the following scale:

D = Don't Use
R = Rarely (Average less than 1 day per week)
O = Occasionally (Average 1 day per week)
RU = Regularly (Average 2 to 4 days per week)
M = Mostly (Average 4 to 5 days per week)
NA = Not Applicable (not used in your high school academic program)

Instructional Materials and Tools

	D	R	O	RU	M	NA
22. Textbooks	1	2	3	4	5	6
23. Supplementary materials	1	2	3	4	5	6

Instructional Strategies

Part III

Please mark the responses that describe you.

44. ___Male   ___Female

45. Teaching Experience

___First year   ___15-19 years
___2-6 years   ___20-24 years
___7-9 years   ___25-29 years
___10-14 years   ___30 years or more

46. Education (Highest level attained)

___Bachelor's Degree   ___Master's +45
___Master's   ___Master's +60
___Master's +15   ___C.A.G.S. or Specialist's
___Master's +30   ___Doctorate

47. Teaching Assignment (Primary teaching assignment)

___English   ___Mathematics

___Science   ___Social Studies

48. State (State you teach in)

___Mississippi   ___Tennessee

THANK YOU VERY MUCH FOR YOUR TIME

Comments regarding instructional practices you use to prepare students for the high school graduation examination:

Part II

Please circle the number indicating your responses to the statements below, using the following scale:

SD = Strongly Disagree
D = Disagree
U = Undecided
A = Agree
SA = Strongly Agree

The instructional practices I use have been influenced by the following:

	SD	D	U	A	SA
33. Personal desire	1	2	3	4	5
34. Belief these are the best instructional practices	1	2	3	4	5
35. Format of the high school graduation examination	1	2	3	4	5
36. Interest in helping my school improve high school graduation examination scores	1	2	3	4	5
37. Interest in helping my students attain test scores that will allow them to graduate high school	1	2	3	4	5
38. Interest in avoiding sanctions at my school	1	2	3	4	5
39. Interest in obtaining a monetary award for my school	1	2	3	4	5
40. Interactions with school principal(s)	1	2	3	4	5
41. Interactions with colleagues	1	2	3	4	5
42. Staff development in which I have participated	1	2	3	4	5
43. Interactions with parents	1	2	3	4	5

page 2

Footnotes

[1] Analysis of Part I of the survey instrument begins with an examination of frequency tables and the mean response for each item. The larger the mean of an item, the more respondents used the particular instructional practice or tool.

[2] Instructional practices or tools used regularly and often means respondents either circled "4" for RU (regularly) or "5" for M (mostly) on Part I of the survey instrument. Instructional practices or tools used less often or not at all means respondents either circled "1" for D (don't use), "2" for R (rarely), or "3" for O (occasionally) on Part I of the survey instrument.

[3] Because this study is part of a larger study about the impact of a graduation examination on English, science, mathematics, and social studies teachers' instructional practices, two instructional tools not known to be frequently used by English teachers, lab equipment and calculators, were listed in Part I of the survey instrument. A frequency analysis showed that respondents either said "don't use" or "not applicable" for both items. Because of this finding, the two instructional tools were removed from any further calculations and not discussed.

[4] Some response categories listed in the survey instrument were "collapsed" in order to ensure cell numbers sufficient to meet minimum requirements for a chi square analysis.

[5] After "collapsing" the preparation time categories into "no," "1 day to 3 months," and "over 3 months," crosstabulations and chi square analyses were conducted to determine if there were any significant differences between the instructional practices used or not used and the "collapsed" preparation time categories.

[6] Frequency table provide the mean, standard deviation, and standard error for each item. Any mean over "3.00" would indicate some perceived amount of influence.