SC EDUCATION OVERSIGHT COMMITTEE

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AGENDA

Academic Standards and Assessments Subcommittee Meeting
Tuesday, January 22, 2008
10:00 AM
Room 215, Blatt Building

I.	Welcome and Introductions	Mr. Tom DeLoach
II.	Approval of the September 17, 2007 Meeting Minutes	Mr. Tom DeLoach
III.	Action: Response of the SC Department of Education to the Review of the SC-Alternative ELA and Mathematics Field Tests	Mr. David Potter
IV.	Action: Response of the SC Department of Education to the Review of the US History and the Constitution End of Course Field Test	Mr. David Potter
V.	Information: Evaluation of the Accountability System	Dr. Jo Anne Anderson
VI.	Other Business	Mr. Tom DeLoach
Adjournment		Mr. Tom DeLoach

<u>Academic Standards and Assessments Subcommittee Members:</u>
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Buffy Murphy
Joe Neal
Bob Walker
Kristi Woodall

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Jo Anne Anderson
EXECUTIVE DIRECTOR

SOUTH CAROLINA EDUCATION OVERSIGHT COMMITTEE
Subcommittee on Academic Standards and Assessments

Minutes of the Meeting
September 17, 2007
10:00 AM, Room 215 Blatt Building

Subcommittee Members Present:	Tom DeLoach, Kristi Woodall
Staff Present:	Jo Anne Anderson, David Potter
SC Department of Education Staff:	Elizabeth Jones

Welcome and Introductions
Mr. DeLoach welcomed members and guests to the meeting.

Minutes
The minutes from the May 21, 2007 meeting were approved as written.

Action: Review of US History End of Course Test
David Potter presented an EOC staff memorandum to Subcommittee members regarding the results of a survey of US History and the Constitution teachers. The purpose of the survey was to identify teachers' understanding and use of the US History and the Constitution high school course standards. A total of 633 teachers were surveyed, and 312 (49.3%) responded. The results of the survey were presented and discussed at a meeting of the Instructional Leaders' Roundtable. The teachers and administrators identified strengths of the course standards, but generally raised concerns that there was poor alignment between the course standards and daily classroom instruction.

Based on the study results, staff proposed the following recommendations:

1. The State Department of Education (SDE) should take actions to improve the alignment among the U.S. History and the Constitution course standards, the instruction of those standards, and the End of Course test. Prior to EOC approval the SDE should provide evidence for the enactment of those actions to the EOC. The actions to improve the alignment may include, in addition to other possible activities:
    - ✓ Examine the course standards and End of Course test to identify or affirm the essential content to be learned and tested;
    - ✓ Complete the development of the Teacher's Guide, including guides for effectively pacing instruction, to the U.S. History and the Constitution course standards and End of Course test.
2. Continue the administration of the U.S. History and the Constitution End of Course test as a field test and provide feedback to schools and districts on the performance of their students.
3. The actions undertaken to improve the alignment among the standards, instruction, and the test should be accomplished by June 2008 to allow for professional development activities with teachers during Summer 2008.

Following discussion, the Subcommittee members forwarded the recommendations to the full EOC for consideration.

Action: Review of the SC-Alternative ELA and Mathematics Assessments
David Potter presented the results of the review of the assessments intended to replace the current PACT-Alt and HSAP-Alt assessments intended for administration to students having

severe disabilities such that they cannot participate in the regular PACT and HSAP assessments even with accommodations and modifications. Two sets of studies were analyzed for the review of the SC-Alt ELA and Mathematics field tests:

- studies of the alignment between the SC-Alt ELA and Mathematics assessments and the state academic standards conducted by University of North Carolina-Charlotte and Western Carolina University professors of curriculum and special education, in cooperation with the South Carolina State Department of Education (SDE) and the National Alternate Assessment Center (Flowers, Browder, Wakeman, & Karvonen, April 2006);
- a technical review of the task and item data from the 2007 test administration conducted by a professor of educational research and assessment at the University of South Carolina.

In addition, EOC staff reviewed and analyzed information and documentation provided by the SDE about the SC-Alt ELA and Mathematics tests.

Based on the findings from the studies, EOC staff recommended that the SC-Alternate ELA and Mathematics assessments be approved with the following recommendations:

1. The South Carolina State Department of Education (SDE) should review the SC-Alt ELA and Mathematics items which were "flagged" for their statistical values, especially those items flagged for Differential Item Functioning, to identify reasons for the statistical aberrations observed and to identify the need to revise or eliminate the items from the assessments.
2. The SDE should develop and disseminate updated professional development guides and materials related to the Assessment Standards and Measurement Guidelines and the SC-Alt assessments, including information to assist teachers to align their instruction with the Assessment Standards and Measurement Guidelines.

Following discussion of the assessments and their use in the accountability system, the Subcommittee forwarded the recommendations to the full EOC for consideration.

<u>Continued Discussion: Cyclical Review of PACT ELA and Mathematics Assessments</u>

As it does for curriculum standards, the EAA in Section 59-18-360 (A) also establishes a cyclical review at least every seven years of the standards based assessments. At the May 21 ASA Subcommittee meeting David Potter presented the results and recommendations from the cyclical review of the PACT ELA and Mathematics assessments conducted by EOC and SCDE staff. At that time the Subcommittee took no action on the recommendations. At the September meeting the Subcommittee further discussed the results and proposed recommendations from the cyclical review with Elizabeth Jones, Interim Director of the Office of Assessment at the SCDE, but took no action.

There being no further business, the subcommittee adjourned.

EDUCATION OVERSIGHT COMMITTEE

Subcommittee: Academic Standards and Assessments

Date: January 22, 2008

REPORT/RECOMMENDATION

Responses by the South Carolina Department of Education to Review of the SC-Alternate ELA and Math Assessments and to Review of the U.S. History and the Constitution End of Course Field Test

PURPOSE/AUTHORITY

Section 59-18-320. (A) After the first statewide field test of the assessment program in each of the four academic areas, and after the field tests of the end of course assessments of benchmark courses, the Education Oversight Committee, established in Section 59-6-10, will review the state assessment program and the course assessments for alignment with the state standards, level of difficulty and validity, and for the ability to differentiate levels of achievement, and will make recommendations for needed changes, if any. The review will be provided to the State Board of Education, the State Department of Education, the Governor, the Senate Education Committee, and the House Education and Public Works Committee as soon as feasible after the field tests. The Department of Education will then report to the Education Oversight Committee no later than one month after receiving the reports on the changes made to the assessments to comply with the recommendations.
Section 59-18-320 (C). After review and approval by the Education Oversight Committee, the end of course assessments of benchmark courses will be administered to all public school students as they complete each benchmark course.

CRITICAL FACTS

The SC-Alternate ELA and Mathematics field tests were first administered Spring 2006 and revised for the Spring 2007 administration, and the U.S. History and the Constitution end of course field test was administered Spring 2006. The assessments were reviewed by the EOC and recommendations were adopted and forwarded to the South Carolina Department of Education (SCDE) in October 2007. Recommendations regarding the test must be communicated to the SCDE, which must respond within one month; those responses are attached. State assessments must be reviewed and approved by the Education Oversight Committee.

TIMELINE/REVIEW PROCESS

The U.S. History and the Constitution field test was reviewed by the EOC in December 2006 and recommended that the test continue as a field test and that teachers be surveyed regarding their coverage of the course standards in instruction. The survey results indicated that teachers did not have sufficient time to cover all the standards adequately and were not teaching all of the standards. The SC-Alternate ELA and Mathematics field tests were reviewed and recommendations to address technical issues and teacher support materials were adopted in October 2007.

ECONOMIC IMPACT

Cost:

Fund/Source:

ACTION REQUEST

☒ **For approval** ☐ **For information**

ACTION TAKEN

☐ **Approved** ☐ **Amended**

☐ **Not Approved** ☐ **Action deferred (explain)**

South Carolina
Department of Education
Together, we can.

November 19, 2007

Dr. Jo Anne Anderson
Education Oversight Committee
Room 227, Blatt Building
Columbia, S C 29211

Dear Dr. Anderson:

On behalf of the South Carolina Department of Education (SCDE), I would like to thank the Education Oversight Committee (EOC) for its review of the End-of-Course United States History and the Constitution (USHC) test and the South Carolina Alternate Assessment (SC-Alt). The conduct of these reviews required a commitment by many educators in South Carolina, the staff of the Accountability Division, and the staff of the SCDE. I appreciate the dedication and time each of these individuals devoted.

The remainder of this letter addresses your recommendations.

The End-of-Course United States History and the Constitution test

Recommendation 1: The State Department of Education (SDE) should take actions to improve the alignment among the U.S. History and Constitution course standards, the instruction of those standards, and the End of Course test. Prior to EOC approval the SDE should provide evidence for the enactment of those actions to the EOC. The actions to improve the alignment may include, in addition to other possible activities:

- Examine the course standards and End of Course test to identify or affirm the essential content to be learned and tested;
- Complete the development of the Teacher's Guide, including guides for effectively pacing instruction, to the U.S. History and the Constitution course standards and End-of-Course test.

SCDE Response to Recommendation 1: Efforts to address the issue regarding the identification of essential content to be learned and tested is underway.

In October 2006, the EOC conducted an independent committee review of the EOCEP USHC test forms. The EOC report, dated December 11, 2006, stated that the EOCEP USHC test was "... well aligned with the academic standards, provides cognitive challenges at the levels specified in the standards document, and addresses at least some of the social science literacy elements assessed earlier in the Palmetto Achievement Challenge

Tests (PACT) testing program as well as those associated specifically with high level learning activities." Therefore the SCDE will focus attention on producing an Enhanced Standards Support Document and assisting districts and schools in aligning instruction with the curriculum standards through a series of regional Standards Support Institutes and other professional development offerings.

In September 2007, the SCDE conducted a study of the USHC test results from 2006–07. The EOC staff and the subcommittee on Standards and Assessment requested to see the results of this study. Details of this study are included in this memo as Attachment A. The data show, not surprisingly, that students who indicated that they were enrolled in Advanced Placement and International Baccalaureate courses scored higher on the USHC test than students who coded that they were enrolled in United States History and the Constitution or college prep. A second comparison showed no significant difference in scores for students who were enrolled in year-long and semester-long courses. Additionally, rescaling the test after removing the final two standards (The Cold War and the Modern Era) made little appreciable difference in student scores.

Assistance for teachers in aligning the USHC curriculum and instructional practice continues to be a need articulated in many forms. The SCDE remains committed to meeting these needs and, in turn, those of South Carolina students. Continued staff development to districts and the completion of the Enhanced Standards Support Document will proceed as planned. In addition to the ten USHC items that were released as part of the USHC Teacher's Guide (one per standard), the Office of Assessment will release additional test items to include one item from each specific indicator, bringing the total to forty-four released items.

<u>Recommendation 2: Continue the administration of the US History and Constitution End of Course test as a field test and provide feedback to schools and districts on the performance of all their students.</u>

SCDE Response to Recommendation 2: The SCDE is notifying districts that the EOCEP USHC test will be administered as an implementation test for the 2007–08 school year. The SCDE uses the term implementation for the EOCEP program when the test is administered to the designated population but the scores are not required to count as twenty percent of the student's grade. Students will receive their USHC scores for the 2007–08 school year (including summer 2008) at the same time as the schedule established for the other EOCEP tests.

<u>Recommendation 3: The actions undertaken to improve the alignment among the standards, instruction, and the test should be accomplished by June 2008 to allow for professional development activities with teachers during summer 2008.</u>

SCDE Response to Recommendation 3: Teachers began using the 2005 content standards and the accompanying Standards Support document for the first time during the 05–06 school year. The USHC EOCEP Teacher's Guide was released in October 2006. At the request of educators, in March 2007, the Office of Academic Standards began creating the Enhanced Standards Support Document in a format akin to the recently developed Standards Support Document for science. The enhanced document will include information to assist teachers with providing instruction on all the standards. Drafts of the new sections of the document will be posted to the SCDE Web site in January 2008. Other sections will be posted as they are completed throughout the remainder of the school year. The document will be completed by June 2008 in compliance with EOC recommendations.

South Carolina Alternate Assessment

Recommendation 1: The South Carolina State Department of Education (SCDE) should review the SC-Alt ELA and Mathematics items which were "flagged" for their statistical values, especially those items flagged for Differential Item Functioning, to identify reasons for the statistical aberrations observed and to identify the need to revise or eliminate the items from the assessments.

SCDE Response to Recommendation 1: The evaluation of the psychometric characteristics of the items of the SC-Alt was a multi-step process. The ELA and mathematics items were field tested in the spring of 2006 and a comprehensive review of the item data was conducted July 10–11, 2006. The field test item data review committee included members of the psychometric staff of the American Institutes of Research (AIR) and members of the alternate assessment unit, the psychometric unit, content specialists, a low incidence special education specialist, and an ELL specialist from the SCDE. The committee followed accepted practices for item data reviews by carefully reviewing every item which had reached the level of a statistical flag. The review included studying the item text and the scoring procedure for the item, a review of the test administrator comments for the item and task, and a consideration of whether the item's performance may have been the result of a lack of instruction. The content of items that were flagged in the differential item functioning (DIF) analyses was carefully examined to determine if content or stimulus materials could be the reasons that performance on the item might have favored a particular reference group. The review of the content of the items to detect possible item bias was the second review for this purpose, since all items selected for field testing had been reviewed for bias and subgroup sensitivity previously.

The DIF analyses of the items on the SC-Alt provided for a statistical evaluation of the functioning of the items for the Black versus White, and Female versus Male subgroups. Information on the analyses used for DIF and the interpretation of item DIF flags is presented in Attachment B. Many items and some whole tasks were rejected after the field test item data review based on the findings of the committee. These items were therefore not

considered for use in the spring 2007 operational form. Most of these items and tasks were determined to have multiple problems. This was the case for many items flagged for DIF in the field test data. Most items flagged for DIF in the field test data were not selected for inclusion on the operational forms. A few of the DIF flagged items were included on the operational forms when the committee could not determine a likely content reason for the item to favor a black–white or gender subgroup.

Documentation on all items flagged for DIF in the field test data and the resulting disposition of the items (i.e., use or non-use in the operational forms) is provided in Attachment C, Tables 1 and 2 for ELA and mathematics, respectively. The tables also provide the results of the 2007 operational DIF analyses for all items that were included in the operational forms.

As indicated in the tables, very few of the items flagged for DIF in the 2006 data that were selected for inclusion on the operational forms were flagged for DIF in the 2007 analyses. Of the three items flagged for DIF in the 2007 data (one for ELA and two for math), only one item had a pattern of DIF results consistent with the 2006 indices.

All items receiving classical and IRT item statistic flags from the 2007 operational administration were reviewed by AIR and SCDE staff following item scoring and prior to standard setting. The purpose of the review was to further evaluate the items to determine if there was evidence that flawed items had been included in the operational forms. Since all the 2007 items had been reviewed previously with data from the 2006 field test, there would need to be strong evidence for a significant item flaw, confirmed by review of item content, before the item would be considered for elimination from operational scoring.

The review of the 2007 item data was conducted by two staff members of the special education unit in the Office of Assessment. All items flagged for any statistical criteria were reviewed, but particular attention was given to items flagged for DIF. The review of items flagged for DIF consisted of examining the field test item data for each item to determine if the item had been flagged for DIF in a consistent way in the 2006 data and examining the content and stimulus materials for each. Documentation on all items flagged for DIF in the 2007 data is provided in Attachment C, Tables 3 and 4 for ELA and mathematics, respectively.

Seven ELA items out of a total of 197 items used on the three operational forms were flagged for DIF in the 2007 data. Only one of the 2007 items had been flagged for DIF in the 2006 data with consistent results (i.e., favoring the same subgroup). This item was ITS ID 331, which was flagged for DIF differential performance favoring males. This item was used on both the elementary and middle school forms and was flagged for DIF only on the middle school form. The content and stimulus materials of all ELA items flagged for DIF were reviewed, and there were no content findings that could

be reasoned to be suggestive of supporting the DIF statistic for all items except one.

Nine mathematics items out of a total of 168 items used on the three operational forms were flagged for DIF in the 2007 data. Only one of the 2007 DIF flagged items had been flagged for DIF in the 2006 data with consistent results. This item was ITS ID 317, which was flagged for DIF suggesting differential performance favoring black students. The content and stimulus materials of all mathematics items flagged for DIF were reviewed, and there were no content findings that could be reasoned to be suggestive of supporting the DIF statistic for all items except one.

The review of the 2006 item data and item content for each of the flagged 2007 items did not yield substantial evidence for item bias for any of the items. Based on this review, the decision was made to retain all items in the operational scoring for 2007 and for inclusion in the 2008 assessment, but to conduct a follow-up review of the data for these items from the 2008 administration

<u>Recommendation 2: The SDE should develop and disseminate updated professional development guides and materials related to the Assessment Standards and Measurement Guidelines and the SC-Alt assessments, including information to assist teachers to align their instruction with the Assessment Standards and Measurement Guidelines.</u>

SCDE Response to Recommendation 2: The SCDE has begun the process of developing a guidance document to accompany the Assessment Standards and Measurement Guidelines. This document is scheduled for completion prior to the beginning of the 2008 school year.

Guidance Documents

A committee of special educators, content specialists, and parents met July 23–25, 2007 to begin developing the document based on the revised ELA and math standards. Dr. Diane Browder, a nationally recognized expert on access to the general education curriculum for students with significant cognitive disabilities provided professional development and guidance to this group.

Dr. Browder, with the University of North Carolina at Charlotte (UNCC) is author of the book *Teaching Language Arts, Math and Science to Students with Significant Cognitive Disabilities* and principal investigator of the *Reading Accommodations and Interventions for Students with Emergent Literacy (RAISE*), a program to accelerate reading development and promote access to the general reading curriculum for students with moderate to severe mental disabilities. She and her team at UNCC have undertaken a series of studies aimed at finding ways to teach academic content standards linked to grade level content standards to students with significant cognitive disabilities.

Following the training, Dr. Browder and her colleagues facilitated the process of identifying how standards can be addressed for students with varying levels of communication ability, from pre-symbolic to symbolic. The group considered each math and ELA standard and indicator and determined three levels of communication access: symbolic, concrete, and pre-symbolic for each indicator.

A follow up meeting was held on November 6 to continue the work on the document to support grade level instruction for students with the most significant cognitive disabilities. At the completion of the guide for ELA and math, the group will design a similar document for the science and social studies Assessment Standards and Measurement Guidelines. It is anticipated that this work will continue through the summer of 2008 and that the documents will be ready for dissemination for the 2008 school year.

Professional Development
Additionally, Dr. Browder has conducted three state wide training sessions on access to the general education curriculum in ELA, math, and science for teachers of students with moderate to severe disabilities. The Offices of Assessment and Exceptional Children are collaborating on developing going training for teachers on access to the general education curriculum and use of the guidance documents.

These measures are designed to ensure that students participating in the alternate assessment have access to instruction based on grade level academic standards. These initiatives should enhance understanding for teachers of ways to provide meaningful access to instruction for students with significant cognitive disabilities.

Very truly yours,

Elizabeth Jones, Interim Director
Office of Assessment

EAJ/jsh

cc: Jim Rex, State Superintendent, SCDE
Teri Siskind, Deputy Superintendent, SCDE

Attachment A
Student Results by Type of Course

Students Coded as Advanced Placement (AP) or International Baccalaureate (IB)

Letter Grade Equivalent	AP	IB	AP + IB	Percent
A	12	247	259	9.01
B	23	665	688	23.92
C	58	880	938	32.61
D	33	583	616	21.41
F	27	348	375	13.03
Total	153	2723	2876	

Students Coded as U.S. History (USH) or College Prep (CP)

Letter Grade Equivalent	USH	CP	USH + CP	Percent
A	119	55	174	0.46
B	607	139	746	1.99
C	2520	623	3143	8.37
D	5406	1436	6842	18.23
F	22091	4543	26634	70.95
Total	30743	6796	37539	

Students coded as Advanced Placement (AP) or International Baccalaureate (IB) scored substantially better than students coded as U. S. History (USH) or College Prep (CP).

The SCDE was notified that a group of students in one local high school (supposedly IB students but coded as AP) protested the USHC test and darkened bubbles so that their answer sheets looked like a Christmas tree. Out of the thirty-nine students in the group, only one passed; all the others had chance-level scores. This group was removed from the analyses reported above. The correction, without these students, reduces slightly the percentage of AP and IB students failing the test (from 14.17 to 13.03 percent).

Most students in the file were coded as USH or CP. These two groups were quite similar in performance: the CP group had a less than one percentage point advantage in As, Bs, and Cs; about five percentage points fewer CP students received Fs. Neither group did nearly as well as the AP/IB group.

Results from Students Enrolled in Semester-long and Year-long Courses

There was no indication in the data file indicating whether students were in a semester or year-long course. The SCDE assumed that, except for AP/IB courses, schools do not offer both semester and year-long courses during the same year. Schools with fall test results were assumed to be offering semester courses only. Schools with only spring scores were assumed to have only year-long courses. This breakdown was consistent with survey data on course length.

Looking at all students (via ANOVA), the year-long group scored slightly higher.

Type	Mean Scale Score	F	P
Semester	66.814	10.23	0.0014
Year-long	67.122		(Sig.)

However, all AP/IB courses are year-long. Since they are the higher scoring group and therefore, were only included in the spring results, including their scores bias the data. Without the AP/IB student's scores, there is no significant difference in results from students taking semester and year-long courses.

Type	Mean Scale Score	F	P
Semester	65.913	0.00	0.9913
Year-long	65.914		(N. S.)

Therefore, taking a semester or year-long course doesn't have a significant effect on the EOCEP scores. Even including the AP/IB students, a mean difference of 0.31 scale score points may not have much practical significance.

Re-scaling the test without the last two standards

This is the most substantive of the analyses. The Rasch difficulties for the items were taken from the data bank. The contractor's original scaling of the fall 2006 and spring 2007 test forms was duplicated. The SCDE and contractor's thetas matched exactly to two decimal places, with the SCDE thetas occasionally differing by one in the third decimal place. This can easily be attributed to rounding. The raw to scale score conversion difference affected only one score. That score was well within the failing range, and therefore had no practical significance. The eleven items assessing the final two standards (standards nine and ten) were removed from both the fall and spring forms. Next, the shortened forms were calibrated using the forty-four remaining items and scale scores were assigned, based on the new thetas. The adjusted scales scores from the shortened forms were assigned to all students in the dataset. The results from a dependent t-test (shown in the

tables below) were used to compare the students' original and adjusted scale scores for the spring and fall forms.

Fall Administration (with AP/IB students included)

Test	Mean Scale Score	t	P
Original	65.912	9.61	<.0001
Adjusted	65.739		(Sig.)

Spring Administration (with AP/IB students included)

Test	Mean Scale Score	t	P
Original	67.339	1.78	.0749
Adjusted	67.319		(N. S.)

The students scored slightly better on the original, full length form than they did on the adjusted, shortened form. The AP/IB students were removed and the tests were repeated.

Fall Administration (without AP/IB students included)

Test	Mean Scale Score	t	P
Original	65.681	10.99	<.0001
Adjusted	65.483		(Sig.)

Spring Administration (without AP/IB students included)

Test	Mean Scale Score	t	P
Original	66.016	0.94	.3478
Adjusted	66.027		(N. S.)

The results are mixed, when the AP and IB students are not included. Students scored significantly better on the original fall form. However, on the spring forms, students scored slightly, but not significantly, better on the adjusted form. In both cases, the size of the mean difference was small.

For both fall and spring, the percentage of students receiving an A is slightly higher on the adjusted form (by less than one half of a percentage point).

The bank difficulties for the items aligned to standards nine and ten do not appear to be exceptionally difficult based on a review of the bank. Most are of above-average difficulty (more so on the fall form than on the spring form), but both forms have some items aligned to standards nine and ten that are relatively easy. For both forms, the very hardest item is not aligned to standards nine or ten.

Therefore, the data indicate that removing items aligned to standards nine and ten would not substantially improve performance on the test. However, removing the final two standards could affect instruction, in that many teachers may not continue their instruction up to the present day.

Attachment B

American Institute for Research employs a design consistent Mantel-Haenszel procedure (Holland, 1985; Holland & Thayer, 1988) to conduct DIF analyses. The total score is divided into five intervals to compute the Mantel-Haenszel (MH) chi-square DIF statistics. The analysis program computes the MH chi-square value, the log-odds ratio, the standard error of the log-odds ratio, and the MH-delta for the MC items; the MH chi-square, the standardized mean difference (SMD), and the standard error of the SMD for the CR items. The purification method described by Holland and Thayer (1986) is included in the DIF procedure. Items are classified into three categories (A, B, or C) ranging from no DIF to mild DIF to severe DIF according to the DIF classification convention. Items are also categorized as positive DIF (i.e., +A, +B, or +C) signifying the item favors the focal group, or negative DIF (i.e., –A, –B, or –C) signifying the item favors the reference group.

We modified the typical Mantel-Haenszel procedure to be consistent with our stratified random sample design. Complex sample designs violate the assumptions on which the simple random sample test statistics are based.

Items are classified into three categories ranging from no DIF to mild DIF to severe DIF according to common DIF classification conventions according to the following rules. If the p-value of $MH\chi^2$ value is < .05 then the DIF indicator is either "B" or "C"

Dichotomous Items	
Category	Rule
C	$MH\chi^2$ is significant and $\lvert \hat{\Delta}_{MH} \rvert \geq 1.5$
B	$MH\chi^2$ is significant and $\lvert \hat{\Delta}_{MH} \rvert < 1.5$
A	$MH\chi^2$ is not significant.
Polytomous Items	
Category	Rule
C	$MH\chi^2$ is significant and $\lvert SMD \rvert / \lvert SD \rvert \geq .25$.
B	$MH\chi^2$ is significant and $\lvert SMD \rvert / \lvert SD \rvert < .25$.
A	$MH\chi^2$ is not significant.

Attachment C
Table 1
ELA Items Flagged for DIF on 2006 Field Test Forms and DIF Status on the 2007 Operational Forms

ITS ID	Task	2006 Field Test			2007 Operational		
		Items Flagged for DIF			Included/ Form	DIF Results	
		Number of Forms	B-W	F-M		B-W	F-M
50	Animals in the Yard	1 of 6	-C	-A	ES	-A	+A
55	Animals in the Yard	1 of 6	-A	-C	ES	-A	-A
65	I'll Share	1 of 1	+B	-C	Not Included		
134	Pete is Tired	1 of 6	-A	+C	ES	+A	+A
135	Pete is Tired	1 of 6	+C	+A	ES	+A	+A
182	Today's Weather	1 of 1	+C	+A	MS	+A	+A
					HS	+A	-A
278	Hand Washing	1 of 1	+C	+A	Not Included		
284	Today's Weather	1 of 1	+C	-A	Not Included		
355	Favorite Things	1 of 3	+A	-C	ES	-A	+A
					MS	+A	+A
433	Getting Ready for Bed	1 of 1	+C	-A	HS	+A	-B
436	Getting Ready for Bed	1 of 1	+A	-C	HS	-A	+A
440	School Signs	1 of 3	-A	-C	MS	+A	-A
					HS	-A	-A
441	School Signs	1 of 3	+A	-C	MS	+A	-A
					HS	+A	-A
467	Setting the Table	1 of 1	+C	+A	Not Included		
508	Making a Job Chart	1 of 6	+A	-C	Not included		
509	Making a Job Chart	1 of 6	+C	-C	Not Included		
524	Sale Ads	1 of 3	+C	-A	HS	+A	+A
525	Sale Ads	1 of 3	+C	-A	HS	+A	+A
526	Sale Ads	1 of 3	+A	-C	HS	+A	-A
527	Sale Ads	1 of 3	+A	-C	HS	+A	-A
527	Sale Ads	1 of 3	-A	-C			
552	Pet Poem	1 of 1	+C	-C	ES	+A	+A
564	Two Stories	1 of 3	+C	+A	HS	+A	-A
568	Word Study	1 of 1	-C	-A	Not Included		
569	Word Study	1 of 1	-C	-A	Not Included		
628	Manatees	1 of 1	-C	+A	HS	+C	+A
676	Making a Job Chart	1 of 6	+A	-C	Not Included		
684	Setting the Table	1 of 1	+C	-A	Not Included		

Table 2
Mathematics Items Flagged for DIF on 2006 Field Test Forms
and DIF Status on the 2007 Operational Forms

ITS ID	Task	2006 Field Test			2007 Operational		
		Items Flagged for DIF			Included/ Form	DIF Results	
		Number of Forms	B-W	F-M		B-W	F-M
13	One, Two, More, Less	1 of 1	+A	-C	ES	+A	+A
					MS	+A	+A
					HS	+A	+A
104	Ranking by Size	1 of 6	-A	-C	Not Included		
118	Ranking by Size	1 of 6	+C	-A	Not Included		
149	Describing locations #2	1 of 1	-A	-C	Not Included		
152	Describing Locations #2	1 of 1	+A	-C	Not Included		
317	Patterns with Objects	1 of 6	+C	-A	MS	-A	-A
317	Patterns with Objects	1 of 6	+C	+A	HS	+C	-A
321	Patterns with Objects	1 of 6	+C	+A	MS	-A	+A
321	Patterns with Objects	1 of 6	-A	-C	HS	-A	-A
322	Patterns with Objects	1 of 6	+C	+A	MS	+A	-A
					HS	+A	-A
352	Sort and Classify Objects	1 of 1	+C	-A	ES	+A	+A
					MS	+A	-A
364	Calendar	1 of 1	-A	-C	Not Included		
371	Tom's and Susan's Pencils	1 of 3	+A	-C	Not Included		
382	Adding and Subtracting to Tell a Story	1 of 1	+C	+A	Not Included		
383	Adding and Subtracting to Tell a Story	1 of 1	+A	+C	Not Included		
385	Adding and Subtracting to Tell a Story	1 of 1	+C	-A	Not Included		
416	What's the Sign?	1 of 1	+C	-A	Not Included		
461	Bus/Car Graph	1 of 1	+A	-C	MS	-A	+A
					HS	+A	-A
528	Paper Clip Graph	1 of 1	+C	-A	HS	+A	-A
639	Measurement Readiness	1 of 1	+A	+C	ES	-A	-A
					MS	+A	+A
					HS	+C	+A
641	Same/Different Readiness	1 of 3	+A	+C	ES	+A	+A
					MS	+A	-A
					HS	+A	+A
643	Same/Different Number	1 of 1	+C	-A	Not Included		
645	Same/Different Readiness	1 of 3	+A	+C	ES	-A	-A
					MS	-A	+A
					HS	+A	+A
674	Same/Different Readiness	1 of 3	+C	+A	ES	-A	+A
					MS	+A	+A
					HS	-A	+A

Table 3
ELA Items Flagged for DIF on the 2007 Operational Forms and DIF Status on the 2006 Field Test

ITS ID	Task	2006 Field Test			2007 Operational		
		Number of Forms	DIF Results		Form	DIF Results	
			B-W	F-M		B-W	F-M
331	Favorite Things	1 of 3	-A	+A	ES	-A	+A
		1 of 3	+A	-B	MS	-A	-C
		1 of 3	+A	-A			
437	Getting Ready for Bed	1 of 1	+A	-A	HS	+C	-A
449	Movie Schedule	1 of 1	-A	+A	HS	+C	-A
526	Sale Ads	1 of 3	-A	-A	HS	+C	-A
		1 of 3	+A	+A			
		1 of 3	+A	-C			
628	Manatees	1 of 1	-C	+A	HS	+C	+A
632	Every Sunday Afternoon	1 of 1	-A	+A	MS	-A	+A
					HS	+C	+A
664	Every Sunday Afternoon	1 of 1	+A	-A	MS	-A	+C
					HS	+C	-A

Table 4
Mathematics Items Flagged for DIF on the 2007 Operational Forms and DIF Status on the 2006 Field Test

ITS ID	Task	2006 Field Test			2007 Operational		
		Items Flagged for DIF			Form	DIF Results	
		Number of Forms	B-W	F-M		B-W	F-M
35	Comparing Numbers	1 of 1	-A	-A	HS	+C	-A
79	Comparing Numbers	1 of 1	+A	-A	HS	+C	-A
126	Describing Locations	1 of 3	-A	+B	EL	+A	+A
		1 of 3	+A	-A	MS	+A	-A
		1 of 3	-A	-A	HS	+C	+A
222	How Likely ?	1 of 1	-A	+A	HS	+C	-C
286	About How Many	1 of 1	+A	-A	HS	+A	-C
287	About How Many	1 of 1	-A	-A	HS	+A	-C
317	Patterns with Objects	1 of 6	+C	-A	MS	-A	-A
		1 of 6	+C	+A	HS	+C	-A
		3 of 6	-A	-A			
		1 of 6	+A	-A			
529	Paper Clip Graph	1 of 1	+A	-A	HS	+C	+C
639	Measurement Readiness	1 of 1	+A	+C	ES	-A	-A
					MS	+A	+A
					HS	+C	+A

EDUCATION OVERSIGHT COMMITTEE

Subcommittee: Academic Standards and Assessments

Date: January 22, 2008

REPORT/RECOMMENDATION

Evaluation of the Accountability System

PURPOSE/AUTHORITY

Section 59-18-110. Objectives. The system is to: (1) use academic achievement standards to push schools and students toward higher performance by aligning the state assessment to those standards and linking policies and criteria for performance standards, accreditation, reporting, school rewards, and targeted assistance; (2) provide an annual report card with a performance indicator system that is logical, reasonable, fair, challenging, and technically defensible which furnishes clear and specific information about school and district academic performance and other performance to parents and the public; (3) require all districts to establish local accountability systems to stimulate quality teaching and learning practices and target assistance to low performing schools; (4) provide resources to strengthen the process of teaching and learning in the classroom to improve student performance and reduce gaps in performance; (5) support professional development as integral to improvement and to the actual work of teachers and school staff; and (6) expand the ability to evaluate the system and to conduct in-depth studies on implementation, efficiency, and the effectiveness of academic improvement efforts.

CRITICAL FACTS

Ten years have passed since the legislative debate over the EAA, and seven annual report cards on schools have been issued since its passage. The EAA affirms multi-stage and cyclical reviews of accountability system components to ensure that the components of the system function effectively and are consistent with current knowledge of practices which work best for improving student academic achievement and system performance.

TIMELINE/REVIEW PROCESS

Reviews or studies of system components have been undertaken by the EOC through staff activities, collaborative studies with the SC Department of Education, and through external contracts over the past two years. Compilation and discussion of the various studies enables an examination of the whole effort to evaluate the accountability system, to understand how the components impact on one another, and to consider potential changes.

ECONOMIC IMPACT

Cost:

Fund/Source:

ACTION REQUEST

☐ **For approval** ☒ **For information**

ACTION TAKEN

☐ **Approved** ☐ **Amended**

☐ **Not Approved** ☐ **Action deferred (explain)**

SC EDUCATION OVERSIGHT COMMITTEE

Reporting facts. Measuring change. Promoting progress.

January 4, 2008

TO: Members, Academic Standards and Assessments Subcommittee
Mr. Tom DeLoach, Chairman
Senator Mike Fair
Senator Wes Hayes
Mrs. Buffy Murphy
Rep. Joe Neal
Rep. Bob Walker
Dr. Kristi Woodall

FROM: Jo Anne Anderson

RE: (1) Review of the Accountability System
(2) Discussion of the South Carolina Department of Education's Proposal to Replace PACT with a New Test: Schedule for Decision-making and Restructuring School Ratings

Harold C. Stowe
CHAIRMAN

Alex Martin
VICE CHAIRMAN

Michael R. Brenan

Bill Cotty

Robert C. Daniel

Thomas O. DeLoach

Dennis Drew

Mike Fair

Barbara B. Hairfield

Robert W. Hayes, Jr.

Buffy Murphy

Joseph H. Neal

Jim Rex

Neil C. Robinson, Jr.

Robert E. Walker

Kent M. Williams

Kristi V. Woodall

Jo Anne Anderson
EXECUTIVE DIRECTOR

Review of the Accountability System

The objectives of the Education Accountability Act (EAA) of 1998 remind us that the purpose of our work is continuous improvement through study and examination of current practices and changes to increase the positive impact of our work:

> Section 59-18-110**.** Objectives.
> The system is to:
> (1) use academic achievement standards to push schools and students toward higher performance by aligning the state assessment to those standards and linking policies and criteria for performance standards, accreditation, reporting, school rewards, and targeted assistance;
> (2) provide an annual report card with a performance indicator system that is logical, reasonable, fair, challenging, and technically defensible which furnishes clear and specific information about school and district academic performance and other performance to parents and the public;

(3) require all districts to establish local accountability systems to stimulate quality teaching and learning practices and target assistance to low performing schools;
(4) provide resources to strengthen the process of teaching and learning in the classroom to improve student performance and reduce gaps in performance;
(5) support professional development as integral to improvement and to the actual work of teachers and school staff; and
(6) expand the ability to evaluate the system and to conduct in-depth studies on implementation, efficiency, and the effectiveness of academic improvement efforts.

The EAA affirms multi-stage and cyclical reviews to ensure that the components of the system function effectively and are current with our knowledge and understanding of the practices that work best. Ten years have passed since the legislative debate over the EAA; the state has issued seven (7) report cards on schools and has considerable experience using the components provided for in the initial legislation.

Over the last two years the Education Oversight Committee (EOC) through staff activities, collaborative work with the South Carolina Department of Education (SCDE) and through external contracts has undertaken an examination of the system components. Most of these projects have been discussed with you as works-in-progress or consistent with a time line for particular action. The purpose of this document and the related discussion is to enable you to examine the "whole" of the effort to study the system, to understand how these impact on one another and to discuss potential changes.

The information in attached table summarizes the studies which are cyclical or focus on improving the components of the accountability system that have been completed and/or in process. Full copies of the completed work can be provided to you and/or our staff team is available to discuss them at length.

Of relevance to actions you may choose to take in March are three activities:

- Changes to the ratings for career-technology centers;
- The inclusion and valuing of graduation rate within high school and district ratings; and
- The use of a more sensitive scale within the absolute rating.

<u>South Carolina Department of Education's Proposal to Replace PACT</u>
The South Carolina Department of Education (SCDE) has informed me of its intent to replace the Palmetto Achievement Challenge Tests in English language arts and in mathematics on the following schedule:

Spring 2008:	Administer PACT–ELA and Math to all students as now done Field test items for the new assessment
Summer 2008:	Initial contractor analyses of field test items By July 31 provide EOC staff field test data for use in approval process
Fall 2008	School ratings issues based upon PACT performance
To be determined:	EOC consideration of recommendations for New Assessment [within 30 days] SCDE response to recommendations EOC approval or disapproval of New Assessment

February 2009	SCDE printing and distribution of New Assessment
Spring 2009	New Assessment administered to all students
Summer/Fall 2009	SCDE establishes student performance levels
To be determined	Notice to schools of performance levels for students EOC comparisons of PACT performance with New Assessment Performance EOC analyses of school performance and simulations of ratings levels Notice to schools of performance levels for schools
Fall 2009	School ratings issued, but with what notice and on what information

Prior to your subcommittee meeting, Dr. Siskind and I are meeting to discuss the issues this schedule raises. I anticipate reporting on that discussion at your January 22 meeting.

I look forward to seeing you soon. Thank you for your commitment to our young people and the schools that serve them.

Studies Examining Components of the Accountability System
2005-2007

COMPONENT	ANALYES	RECOMMENDATIONS	STATUS
Standards	Cyclical Review: English Language Arts	The EOC recommended a number of changes including greater specificity and curricular support for teachers	The standards are in field review and revised standards are anticipated before the SBE in February 2008
	Cyclical Review: Mathematics	The EOC recommended a number of changes including a reduction in the dependence on technology and change from instructional to content focus.	Cyclical review concluded with adoption of revised standards in April 2007
	Cyclical Review: Science	The EOC recommended a number of changes including greater specificity, fewer standards and curricular support for teachers.	Cyclical review concluded with adoption of revised standards in June 2006.
	Cyclical Review: Social Studies	The EOC recommended a number of changes including greater specificity, fewer standards and curricular support for teachers.	Cyclical review concluded with the adoption of revised standards in December 2004.
Assessments	Testing Task Force	14 recommendations including Grades 1-2 formative reading measures, a number of changes to PACT, addition of state funding for formative tests in grades 3-8	Adopted by the EOC in February 2005; enacted by General Assembly in 2006
	Computer Based or Computer Adaptive Testing	Study conducted by Data Recognition Corporation outlined plan for costs and phase-in of computer-based testing	June 2007-EOC and SBE agree that the costs and related benefits cannot be supported without full understanding of instructional needs. With the State CIO, the two agencies are defining practical, reasonable vision for computers in instructional and assessment. Report to be presented to EOC in August 2008
	Cyclical Review: Palmetto Achievement Challenge Tests	The two-agency review encompassed technical and performance analyses and raised questions regarding the creditability of PACT in the field (primarily due to limited information) and urged immediate rescaling of the ELA tests	The matter is before the Academic Standards and Assessments Subcommittee; the State Superintendent has propped a new accountability test for students in grades 3-8

COMPONENT	ANALYES	RECOMMENDATIONS	STATUS
Professional Development/Technical Assistance	Retraining Grants	Annual reviews indicated need for closer alignment with the school renewal plan, focusing on a limited number of objectives	Program has concluded because funds are rolled into the technical assistance allocation
	External Review Team Process	Report by Hezel and Associates indicated follow-up visits needed at the schools as well as more concentrated focus on curriculum and instruction and less on policy implementation.	"Understanding the External Review Team Program Impact and Actions" completed by Hezel and Associates in December 2005. System revised to include follow-up visits, less attention to policy implementation and an ERT liaison for each school
	Extended Learning Time (e.g. Homework Centers, After School Programs)	Extended Learning Time report concluded by Learning Point Associates in December 2006. Recommendations focused on providing ways in which multiple funding streams could be reorganized to provide sufficient funds for programs; other recommendations addressed program quality	In 2006 and 2007 EOC supported collapsing multiple technical assistance funding streams into one stream to be used in tight alignment with an approved plan for improvement
	Teacher Specialists on Site Program	Three Year Study completed in June 2005:	Technical assistance program modified; schools may contract for TSOS through SCDE in accordance with their renewal plan; however, shortage of TSOS has limited use
	Triennial Evaluation Model	In June 2007 EOC adopted a model for three-year evaluations to include annual data updates.	January 2008: Recommendations for a number of programs to shift to 3-year rotation before the General Assembly; those within EOC discretion are on 3-year schedule
Public Reporting	Report Card Format	Simplify graphics, eliminate several profile items. Separate NCLB from state data	March 2007-Format changes adopted by SBE and EOC; most incorporated into 2007 report card
	Parent Survey	"Statistical Analysis of SC Report Card Survey" completed by USC in June 2005	

COMPONENT	ANALYES	RECOMMENDATIONS	STATUS
	Absolute Ratings: Career Technology	Align state system more closely to requirements for Perkins Act; changes would eventually remove GPA in core courses out of ratings calculation to performance on licensing and certification exams	Data obtained for about 45 % of CATE centers on licensing and certification exams; simulation of possible rating system to be run in next several weeks.
	Absolute Ratings: Primary Schools	PACT is not administered below grade 3 and PACT data are not available for use in ratings of PK-2 primary schools so other measures are used. New measures for calculating ratings were identified by a committee of educators to improve the accuracy and validity of the primary school ratings. Measures adopted include teacher quality, retention, and professional development; teacher and student time on task (prime instructional time); parent involvement; and external accreditation.	Revisions to ratings adopted in February 2005
	Absolute Ratings: High School Revision	The Subcommittee also considered recommendations regarding revision of the high school ratings beginning with the 2006-2007 school year. In April 2005 the EOC adopted a plan for the use of high school End of Course test results to replace the LIFE scholarship eligibility criterion in the high school ratings beginning with the 2006-2007 school year, and asked that staff in consultation with the High School Ratings Advisory Committee develop recommendations for the revised ratings criteria. Various data simulations based on the End of Course test results for 2004-2005 were provided to the advisory committee at its meeting on	The EOC adopted the recommendation in February 2006.

COMPONENT	ANALYES	RECOMMENDATIONS	STATUS
		January 10, 2005, and the committee made recommendations. The subcommittee forwarded to the EOC the recommendation establishing the ratings criteria and weightings for the calculation of the high school ratings based on longitudinal exit exam passing rates, first attempt HSAP passing rate, percent of students scoring 70 or higher on End of Course Tests, and the four-year graduation rate to begin in 2006-2007.	
	Absolute Ratings: Use of End of Course Tests	The End of Course tests are based on the state high school course academic standards and, as standards-based assessments, are used in the school and district accountability system. The End of Course test results are currently included in the calculation of high school and school district ratings, but are not included in the calculation of middle school ratings. In May 2007 the Subcommittee reviewed and approved four recommendations expanding the use of End of Course test results in the state accountability system. The proposed recommendations were reviewed by educators in the field prior to consideration by the Subcommittee. The adopted recommendations provide for the use of End of Course test data in the middle school Absolute Ratings, clarify the attribution of End of Course test scores from the Virtual High School and dual credit courses for reporting	The adopted recommendations will take effect with the 2007-2008 school year.

COMPONENT	ANALYES	RECOMMENDATIONS	STATUS
		and accountability purposes, and provide for the reporting and use of End of Course test results and school profile data from schools containing grade 9 only.	
	Absolute Ratings: High School graduation rate		In process: Advisory group meeting in January 2008; anticipate recommendations to subcommittee in March 2008
	Absolute Ratings: Increased sensitivity within performance categories		In process: Initial studies completed and recentering project under review; anticipate recommendations to subcommittee in March 2008
	Improvement Ratings: Testing methodologies		In process: Work conducted by Dr. Eugene Kennedy at LSI; anticipate findings and recommendations in August 2008
Rewards and Interventions	Evaluation of the Palmetto Priority Schools Project		In process: initial report to be provided by March 2009