



**2000-2001
College Wide
Assessment Data**

Office of Institutional Assessment and Planning

The 2000-2001 College-Wide Assessment Data packet contains data gained from CAAP, Work Keys, and the Writing Rubric. This data goes back five years with CAAP, two years with Work Keys, and covers four writing rubric-scoring sessions.

The data is presented in graph form where possible for ease of comparison of the data. The CAAP data is provided for the test score summaries in Writing, Math, Reading, and Critical Thinking. It is also provided for each of the sub-tests for these assessment areas if a sub-test was administered. The CAAP data displays the national mean scaled score and Southern's mean scaled score for each year the tests were administered. Page 32 provides additional information including the national standard deviation and Southern's Z-score for each of the test score summaries. Pages 2 through 7 contain information on what each CAAP test is designed to measure. The full range of the scaled scores on the test summaries is 40 to 80 and on the sub-tests is 5 to 25.

The Writing rubric scores come from four rating sessions. Session 1 is shown separately from sessions 2, 3, and 4 because the Assessment Committee changed the rubric after session 1 in order to provide more information. Session 3 and 4 diagnostics are also provided. Pages 11 and 12 contain the rubric used in the rating process.

Page 29 provides comparisons of the 2000 and 2001 Work Keys scores on the Reading for Information and Applied Math Assessments. There is no national data comparison as these are criterion referenced while the CAAP data is norm referenced. Pages 25 through 28 provide information on the knowledge and skills required for each Work Keys level. These levels run from 3 to 7.

A brief observation and analysis of the data follows along with some recommendations to be considered. Each division should look at the data from its own assessment program along with this data to determine a course of action, if any, that should be followed to improve student learning.

When looking at the graphs do not allow the slope of the lines and distance between points to influence the way you view the data. Sometimes the difference in Southern's mean and the national mean will be in tenths of a point but the line may show a sharp slope. Look at the numbers each point represents to get the meaning of the data.

COLLEGIATE ASSESSMENT OF ACADEMIC PROFICIENCY

CAAP (COLLEGIATE ASSESSMENT OF ACADEMIC PROFICIENCY) is a standardized, user-normed assessment of academic achievement. CAAP consists of 1 essay and 5 objective tests. Since its development, CAAP has been administered by over 500 two- and four-year post secondary institutions to measure individual and group achievement in foundational skills, typically at the end of the sophomore year. The CAAP tests are curriculum-based for the most part and measure higher order skills beyond the mere recall of facts. These skills are considered critical for functioning well in the workplace. Each of the tests is described below.

WRITING SKILLS TEST

Assesses understanding of standard written English usage/mechanics (punctuation, grammar, sentence structure), and rhetorical skills (strategy, organization, style). Spelling, vocabulary, and rote recall of rules of grammar are not tested.

READING TEST

Assesses reading comprehension; the student is required to derive meaning from several texts by 1) referring to what is explicitly stated; 2) reasoning to determine implicit meanings; 3) drawing conclusions, comparisons and generalizations. Selected passages include topics from fiction, the humanities, social sciences and natural sciences.

WRITING ESSAY TEST

Assesses ability to take and support a position about a given issue; the student is tested on the ability to formulate an assertion, support that assertion with appropriate evidence, organize and connect major ideas, and to communicate their position using good writing skills in areas such as mechanics, sentence structure, and command of the language.

SCIENCE REASONING TEST

Assesses abilities in scientific reasoning. The content is drawn from biology, chemistry, physics, and the physical sciences. Emphasis is on scientific reasoning skills, rather than recall of scientific content, or a high level of skill in math or reading ability.

MATHEMATICS TEST

Assesses mathematical reasoning ability with an emphasis on solving math problems across a range of post secondary curricula; emphasizes quantitative reasoning rather than the memorization of formulas.

CRITICAL THINKING TEST

Assesses the ability to clarify, analyze, evaluate and extend arguments, which are defined as a sequence of statements including a claim that the conclusion follows from the other statements. Formats include case studies, debates, dialogues, overlapping positions, statistical arguments, experimental results, or editorials.

PLEASE NOTE: Not all students at an institution will have taken all 6 CAAP tests. Therefore, if the student's certificate lists only one or two tests, it is possible that the student did not take any other tests. On the other hand, it is also possible that more tests were taken and the scores did not warrant inclusion on the certificate. Questions about the actual name and number of tests taken should be addressed to the certificate holder.

Since most standardized tests only assess a limited number of outcomes at one point in time, no binding assumptions can be made about a particular individual's predicted performance on related tasks. However, the CAAP tests have proven to be valid and reliable over time. For more information about the CAAP tests and their use in post secondary institutions, please contact ACT at 319-337-1053, or visit our Web site at www.act.org.

COLLEGIATE ASSESSMENT OF ACADEMIC PROFICIENCY (CAAP)

Student Report Interpretive Guidelines

The Collegiate Assessment of Academic Proficiency (CAAP) is an academic test designed to measure general education foundational skills typically attained in the first two years of college. Your CAAP test scores, which are listed on the attached student report, provide one way to estimate your level of educational development.

CAAP Multiple-Choice Test Scores

Scores for the objective tests (Writing Skills, Mathematics, Reading, Critical Thinking, and Science Reasoning) are reported on a scale that ranges from approximately 40 (low) to 80 (high) for the total test score and 5 (low) to 25 (high) for the subtest scores.

CAAP Writing Test Scores

Scores for the Writing (Essay) Test are reported on a scale that ranges from 1 (low) to 6 (high). Guidelines for the interpretation of the six score points for each of the two individual essays in the Writing Test are provided on the reverse of this sheet. The Composite score is reported on the same score scale (1 to 6) as the two individual essays. Because the Composite score represents your average performance on the two individual essays, it is not directly linked to the descriptive guidelines on the reverse.

Interpreting Your Scores

To facilitate comparison of your performance with that of other examinees, two types of normative information are provided. One type is based on the CAAP scores of students at your institution (see column labeled "% of local students at or below score"). The other type is based on the CAAP scores of sophomores from similar institutions nationwide (see column labeled "User Norms"). The normative information is reported as the percentage of examinees scoring at or below each of your scores. Both types of information (local and national) may be interpreted in the same manner. For example, if you earned a score of 64 on the Writing Skills test and this score corresponds to 59% at or below (reported in the User Norms column), then this means that 59% of the sophomores nationwide who took the Writing Skills test received a score of 64 or lower.

CAAP Writing (Essay) Interpretive Guidelines

UPPER-RANGE PAPERS. These papers clearly engage the issue identified in the prompt and demonstrate superior skill in organizing, developing, and conveying in standard written English the writer's ideas about the topic.

- 6 Exceptional.** These papers take a position on the issue defined in the prompt and support that position with extensive elaboration. Organization is unified and coherent. While there may be a few errors in mechanics, usage, or sentence structure, outstanding command of the language is apparent.
- 5 Superior.** These papers take a position on the issue defined in the prompt and support that position with moderate elaboration. Organization is unified and coherent. While there may be a few errors in mechanics, usage, or sentence structure, command of the language is apparent.

MID-RANGE PAPERS. Papers in the middle range demonstrate engagement with the issue identified in the prompt but do not demonstrate the evidence of writing skill that would mark them as outstanding.

- 4 Competent.** These papers take a position on the issue defined in the prompt and support that position with some elaboration or explanation. Organization is generally clear. A competency with language is apparent, even though there may be some errors in mechanics, usage, or sentence structure.
- 3 Adequate.** These papers take a position on the issue defined in the prompt and support that position, but with only a little elaboration or explanation. Organization is clear enough to follow without difficulty. A control of the language is apparent, even though there may be numerous errors in mechanics, usage, or sentence structure.

LOWER-RANGE PAPERS. Papers in the lower range fail in some way to demonstrate proficiency in language use, clarity of organization, or engagement of the issue identified in the prompt.

- 2 Weak.** While these papers take a position on the issue defined in the prompt, they may show significant problems in one or more of several areas, making the writer's ideas often difficult to follow—support may be extremely minimal; organization may lack clear movement or connectedness; or there may be a pattern of errors in mechanics, usage, or sentence structure that significantly interferes with understanding the writer's ideas.
- 1 Inadequate.** These papers show a failed attempt to engage the issue defined in the prompt, lack support, or the problems with organization or language are so severe as to make the writer's ideas very difficult to follow.

Contents of the CAAP Tests

CAAP – Collegiate Assessment of Academic Proficiency

Writing Skills Test

The Writing Skills Test measures students' understanding of the following conventions of standard written English:

Punctuation Items in this category test the use and placement of commas, colons, semicolons, dashes, parentheses, apostrophes, and quotation, question, and exclamation marks.

Grammar Items in this category examine the use of adjectives, adverbs, and conjunctions, and test the agreement between subject and verb, and between pronouns and their antecedents.

Sentence Structure Items in this category test relationships between/among clauses, the placement of modifiers, and shifts in construction.

Organization Items in this category test the organization of ideas and the relevance of statements in context (order, coherence, unity)

Strategy Items in this category examine the appropriateness of expression in relation to audience and purpose, the strengthening of writing with appropriate supporting material, and the effective choice of statements of theme and purpose.

Style Items in this category test precision and appropriateness in the choice of words and images, rhetorically effective management of sentence elements, avoidance of ambiguous pronoun references, and economy in writing.

Mathematics Test

The Mathematics Test measures students' mathematical reasoning abilities. It emphasizes quantitative reasoning rather than the memorization of formulas.

Pre-algebra and elementary algebra Items in this category are based on integers and algebraic expressions. Students may be required to solve linear equations.

Intermediate algebra and coordinate geometry Items in this category are based on graphing in the standard coordinate plane, or may involve operations with integer exponents, radical and rational expressions, the quadratic formula, linear inequalities in one variable, and systems of two linear equations in two variables.

Advanced algebra Items in this category are based on rational exponents, exponential and logarithmic functions, complex numbers, matrices, inverses of functions, and domains and ranges.

Trigonometry Items in this category are based on right triangle trigonometry, graphs of the trigonometric functions, and basic trigonometric identities.

Introductory calculus Items in this category are based on limits, continuity, derivatives, and integrals.

Reading Test

The Reading Test measures reading comprehension as a product of skill in referring, reasoning, and generalizing. The test consists of passages selected from fiction, the humanities, and the social and natural sciences.

Students are required to derive meaning from the passages by:

*referring to what is explicitly stated

*reasoning to determine implicit meanings

*drawing conclusions, comparisons, and generalizations beyond the text

Critical Thinking Test

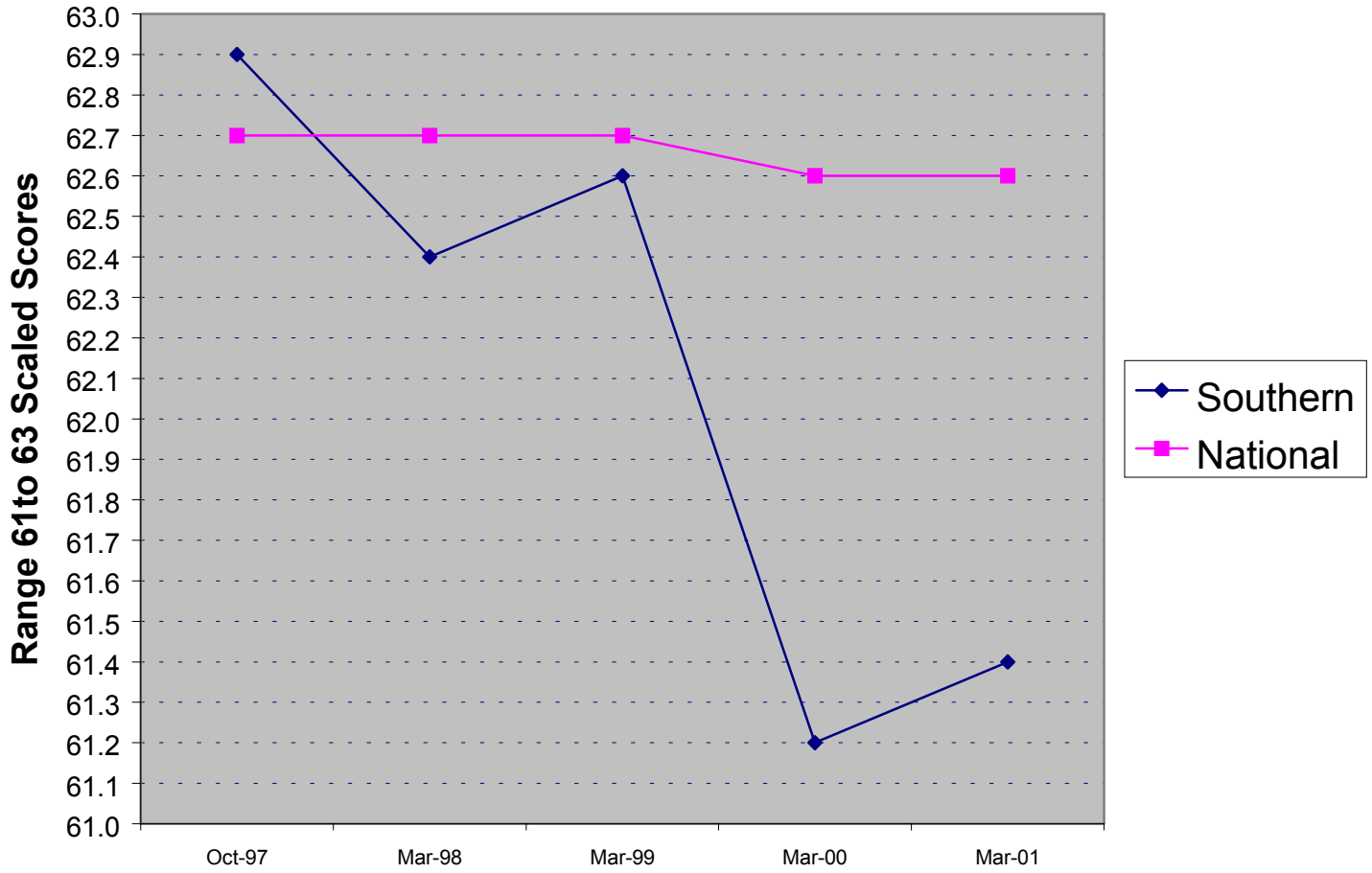
The Critical Thinking Test consists of passages that present one or more arguments in a variety of formats, including case studies, debates, dialogues, overlapping positions, statistical arguments, experimental results, and editorials. The test measures students' skills in the following areas:

*clarifying and analyzing the elements of an argument

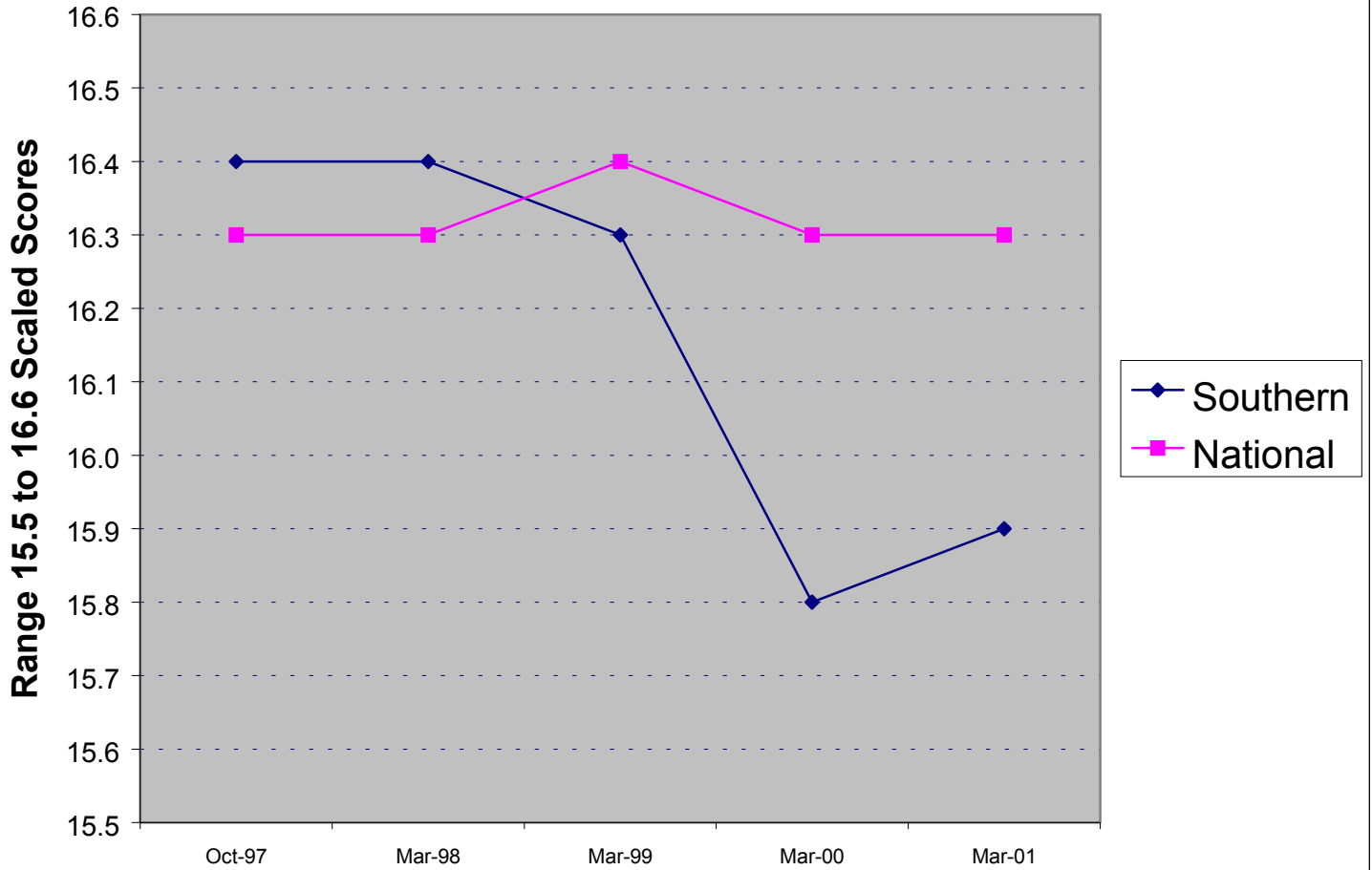
*evaluating an argument

*extending and argument

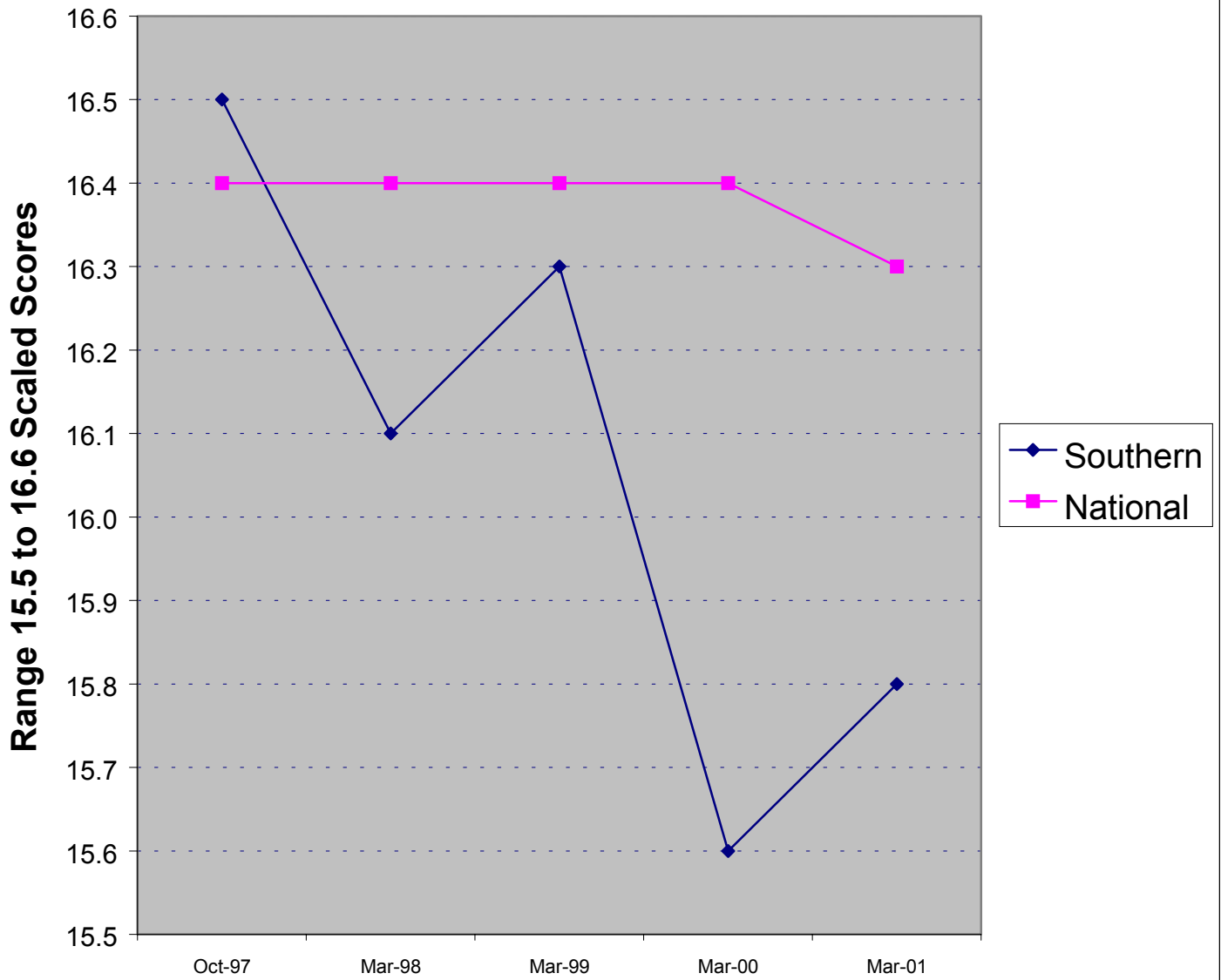
CAAP Writing Test Score Summary



CAAP Writing Sub-Test, Usage/Mechanics



CAAP Writing Sub-Test, Rhetorical Skills



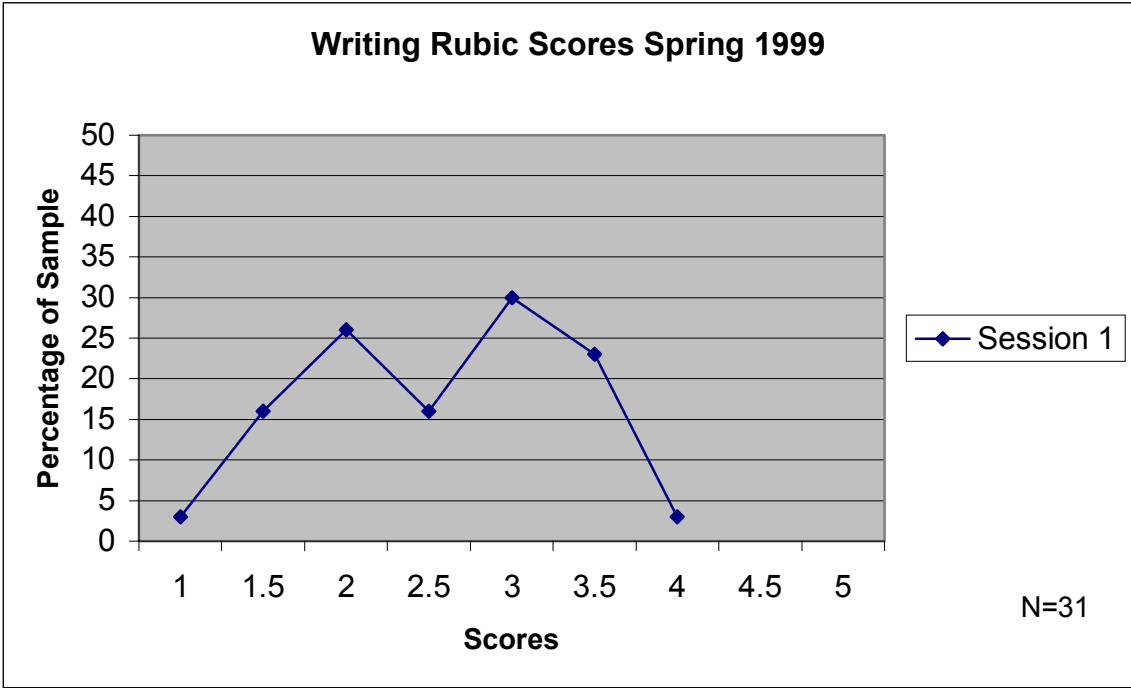
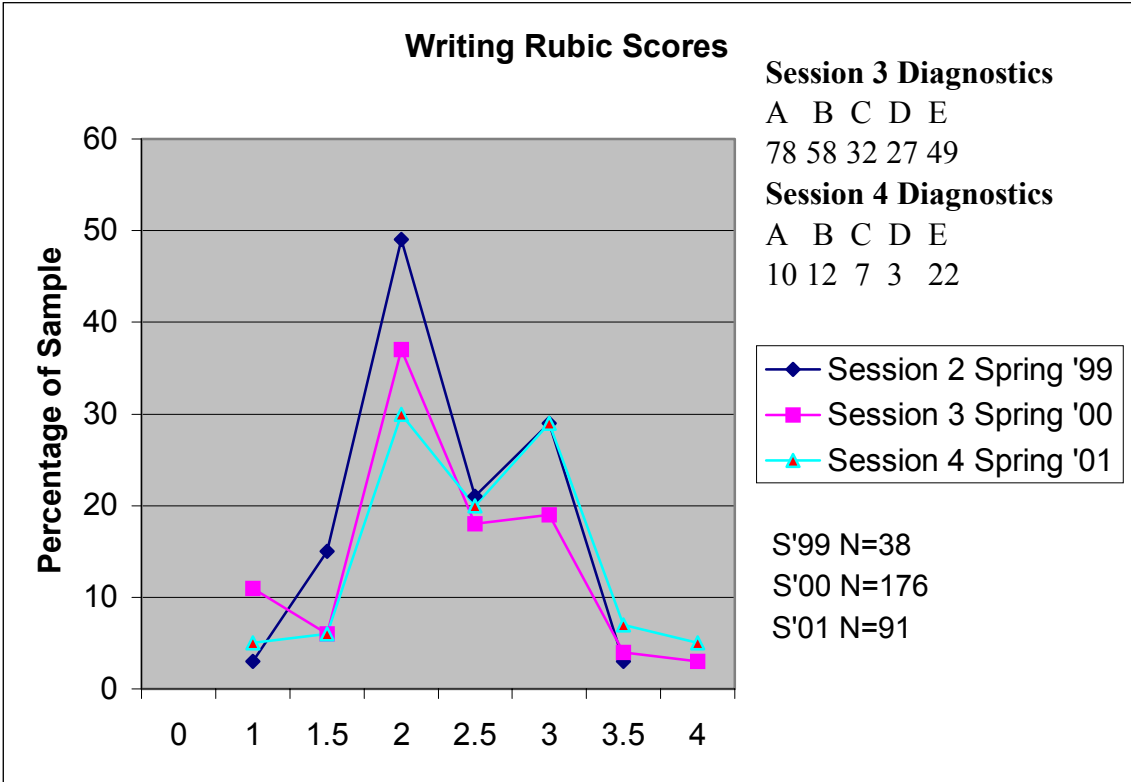
**SOUTHERN WEST VIRGINIA COMMUNITY AND TECHNICAL COLLEGE
WRITING ASSESSMENT
MODIFIED HOLISTIC SCORING CRITERIA**

1	4	3	2	1	ANALYTICS
	The composition has a beginning, middle, and end.	The composition has a beginning, middle and end.	The composition may lack a beginning, middle or end.	The composition is disorganized and difficult to follow.	A – Organization
	The composition is focused, coherent, and has a clear and logical progression of ideas.	The composition is focused and coherent.	The composition may lack focus and coherence.	The composition lacks focus and coherence.	A- Organization
	There is evidence of smooth transition.	There is some evidence of transition.	The composition may lack transition.	The composition lacks transition.	A - Organization
	The composition addresses the assigned topic.	The composition addresses the assigned topic.	The composition addresses the assigned topic.	The composition attempts to address the assigned topic.	B - Development
	The composition contains specific, relevant details.	The composition contains specific, relevant details.	The composition may lack specific, relevant details.	The composition lacks specific, relevant details.	B - Development
	The sentences are complete, varied, and economical.	There are complete sentences with some degree of variety.	There may be incomplete and fused sentences.	The composition contains incomplete or fused sentences.	C – Sentence Formation
	The diction is vivid, precise, and economical.	The diction is precise and economical.	The diction may be wordy, repetitive, or inadequate.	The diction is vague, wordy, inadequate, or inappropriate.	D – Word Usage
	Errors in Standard Written English may occur but do not detract from the overall impression of the composition.	Errors in Standard Written English do not substantially detract from the overall impression of the composition.	Errors in Standard Written English are frequent and serious enough to detract from the overall impression of the composition.	There are serious and consistent violations of the conventions of Standard Written English.	E - Mechanics

N PAPER

ANALYTICS

The composition is coherent or	B
The composition is illegible or	C
The composition contains an insufficient amount of writing or	D
The student refused to take the test	E



Writing

The largest difference between Southern's scores and the national scores has been in the last 2 years. The Z-score for each of the past 2 sessions has been

-0.3. This is a small distance below the national mean being only three tenths of a standard deviation unit below the mean. This places us very close to the national mean on this assessment measure. The significance of this data is the drop in Southern's score from 3/99 to 3/00 with only a small increase from 3/00 to 3/01. This bears examination and consideration and should be combined with the writing rubric assessment data and data from division assessment programs to get a more complete overall picture of the situation.

The two writing sub-tests follow the same pattern as the writing summary.

Writing Rubrics

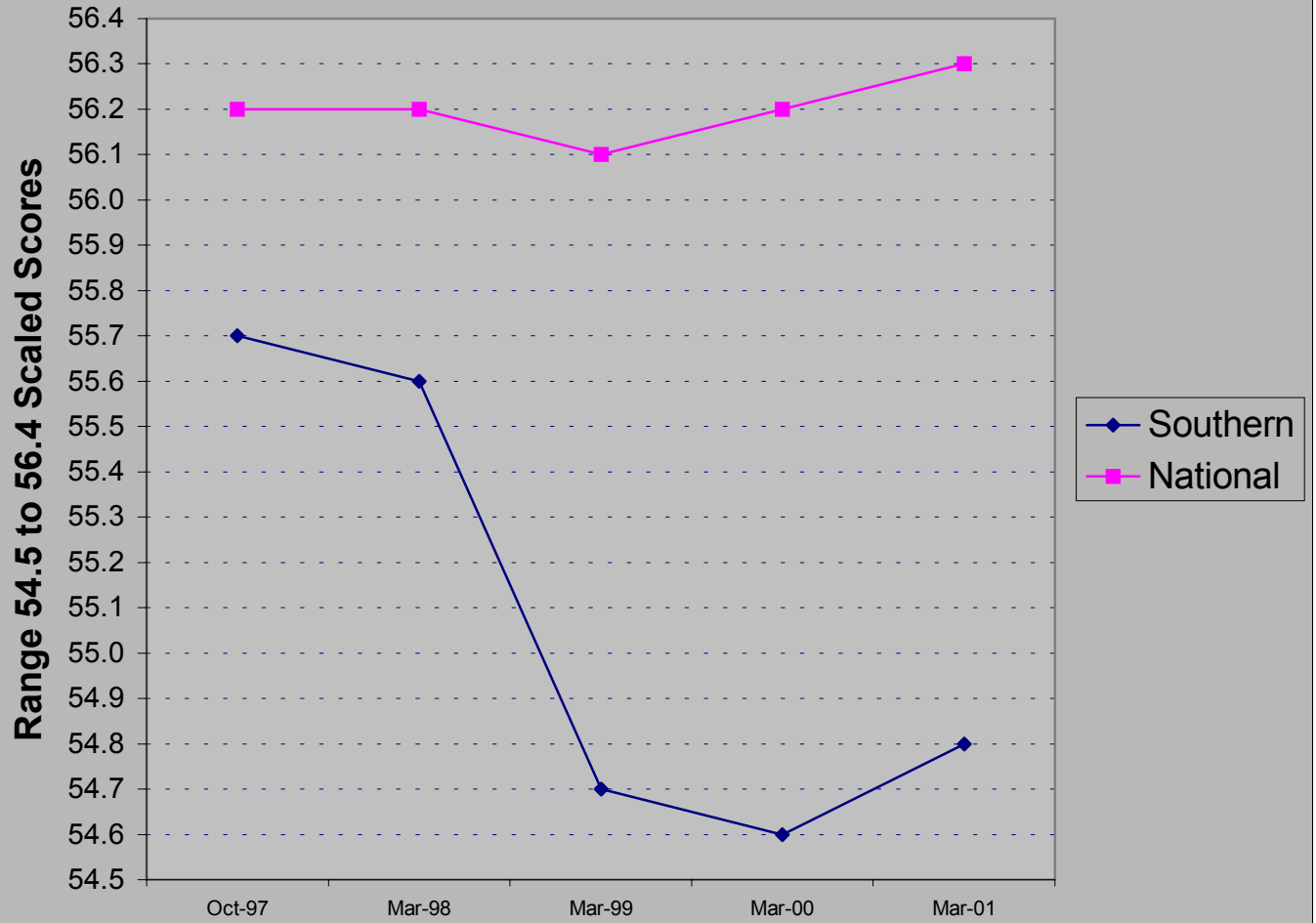
Focusing on only sessions 2, 3, and 4 a definite pattern of scores has emerged.

The majority of scores on the rubric have been less than 3. Scores of 3 and above have been considered acceptable scores on samples rated. Samples with a score of less than 3 have also been assigned one or more diagnostic notes by the rubric committee. The majority of diagnostic notes have been in the areas of organization (A), development (B), and mechanics (E). A very consistent pattern of scores has emerged. The percentage of students receiving a score less than 3 is significant.

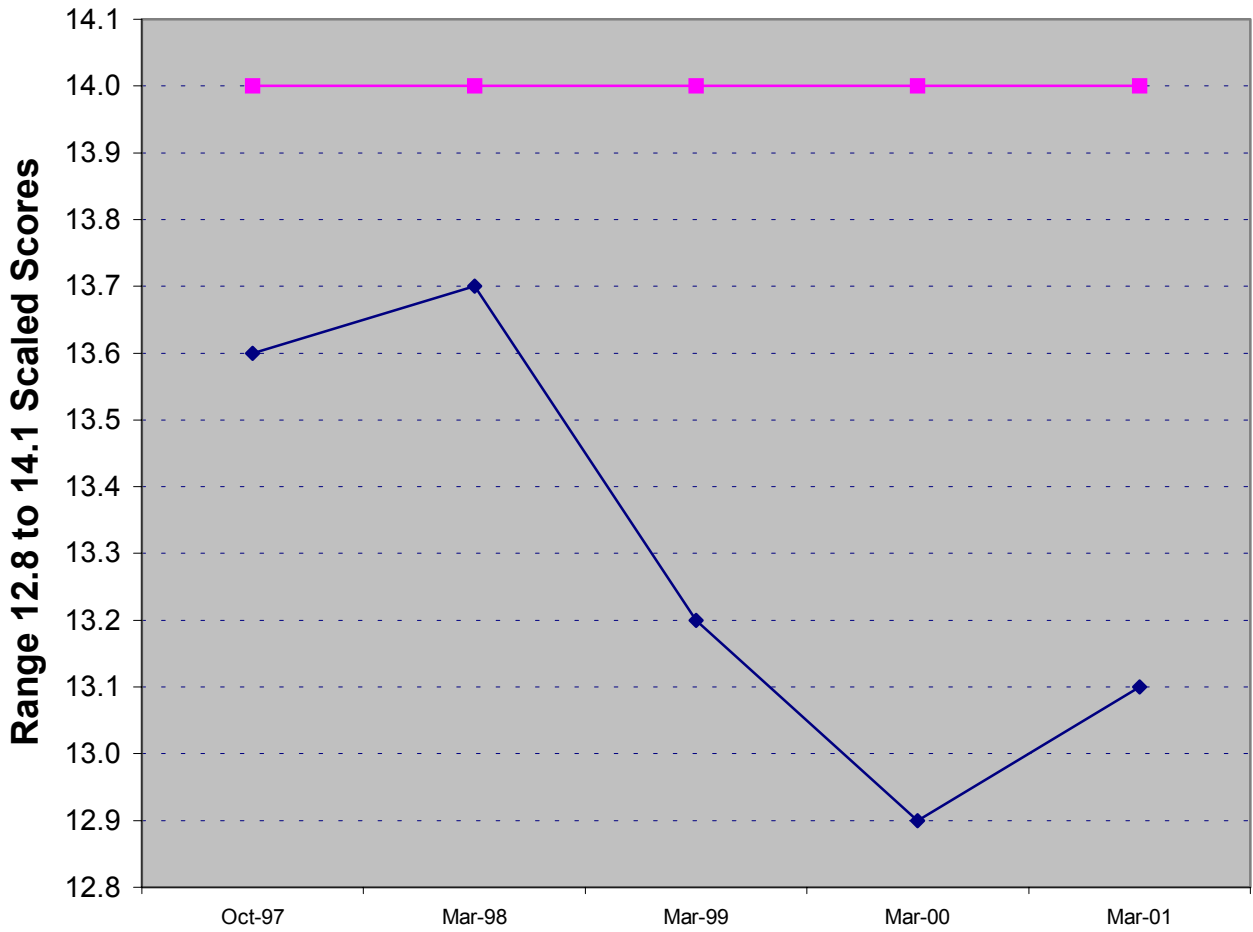
Recommendations

1. Examine course content to determine if adequate time is spent on organization, development, and mechanics.
2. Examine the content of the CAAP tests closely to determine if there is agreement between what is taught and learned and what is tested. If there is not agreement, should there be?
3. Develop a measurement tool to determine if students write the same way for a non-English composition course as they do for an English composition course.
4. If it is determined that change(s) should occur to improve student learning-develop a plan to formulate, implement, assess, and evaluate the change(s).

CAAP Math Test Score Summary



CAAP Math Sub-Test, Algebra



Math

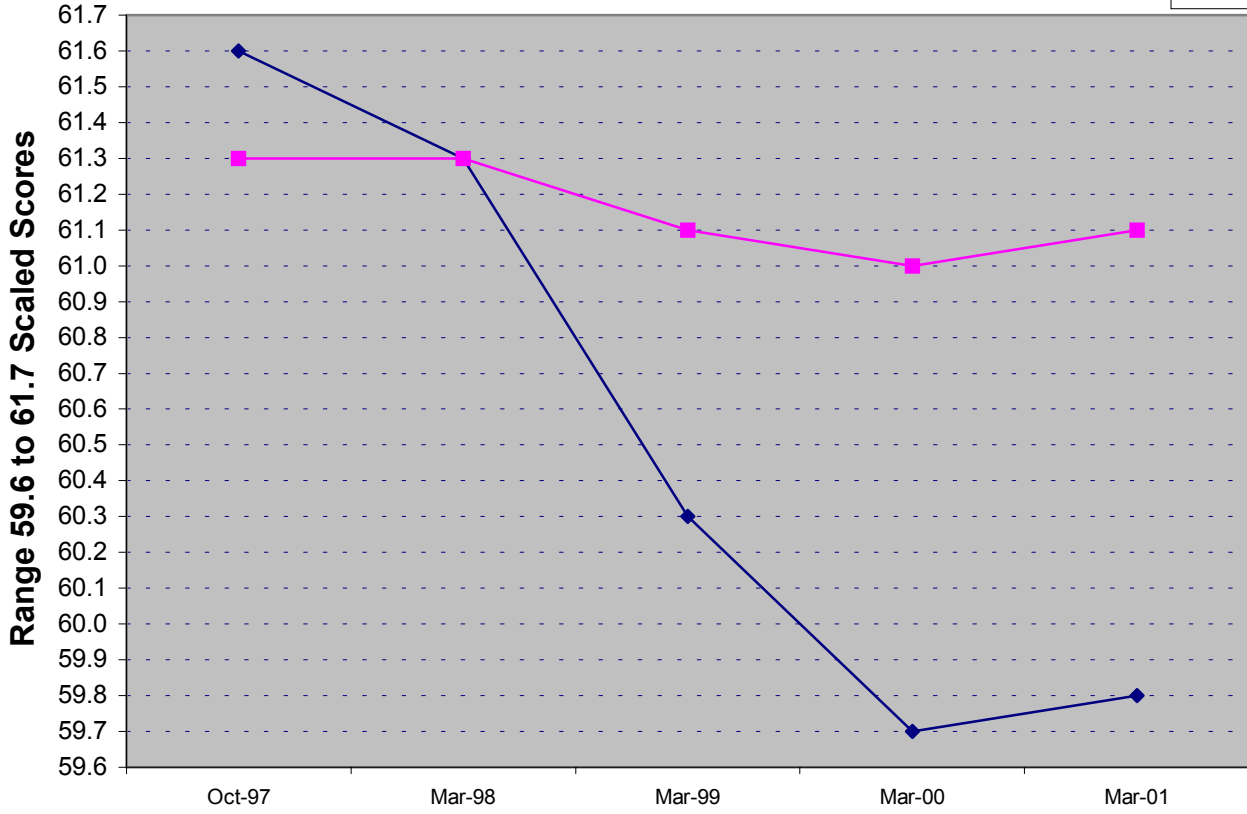
Southern's mean scaled score on the math assessment usually has a larger negative Z-score than the scaled score on the other CAAP assessment measures.

The Z-scores for the past 2 sessions are -0.5 and -0.4 . There was a substantial drop in Southern's scaled score from 3/98 to 3/99 and the score has not recovered from that point.

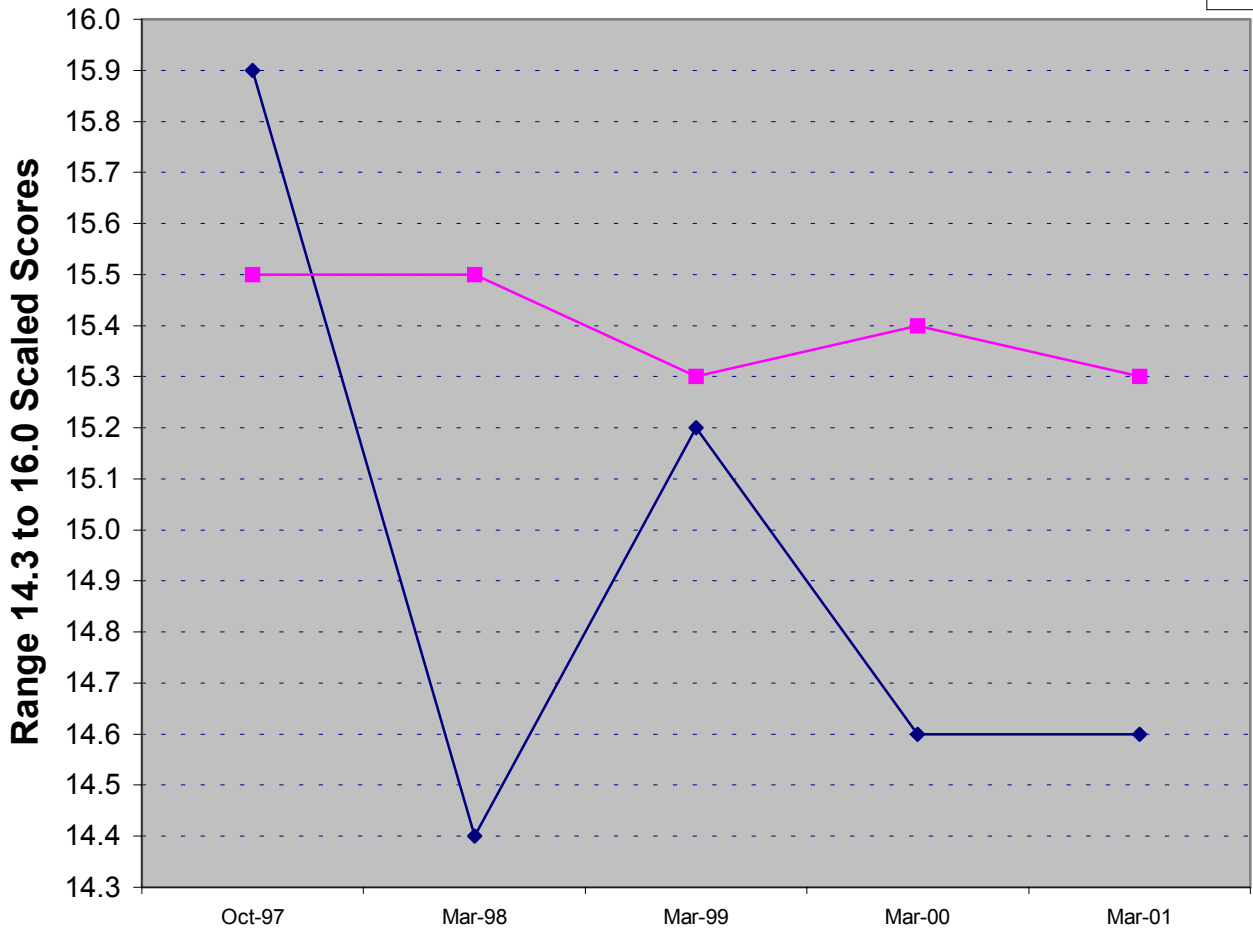
Recommendations

1. Examine the required math course(s) in University Parallel programs to determine if the required course(s) are appropriate. What do we value as learning in math for our University Parallel students and is it contained in the math course(s) we require as part of the program of study?
2. Examine the content of the CAAP test closely to determine if there is agreement between what is taught and learned and what is tested. If there is not agreement, should there be?
3. Develop an internal measurement tool to use as an additional assessment measure, which uses as its basis what we value as learning. The math rubric has never been used because of a lack of samples submitted to be scored or rated.
4. If it is determined that change(s) should occur to improve student learning-develop a plan to formulate, implement, assess, and evaluate the change(s).

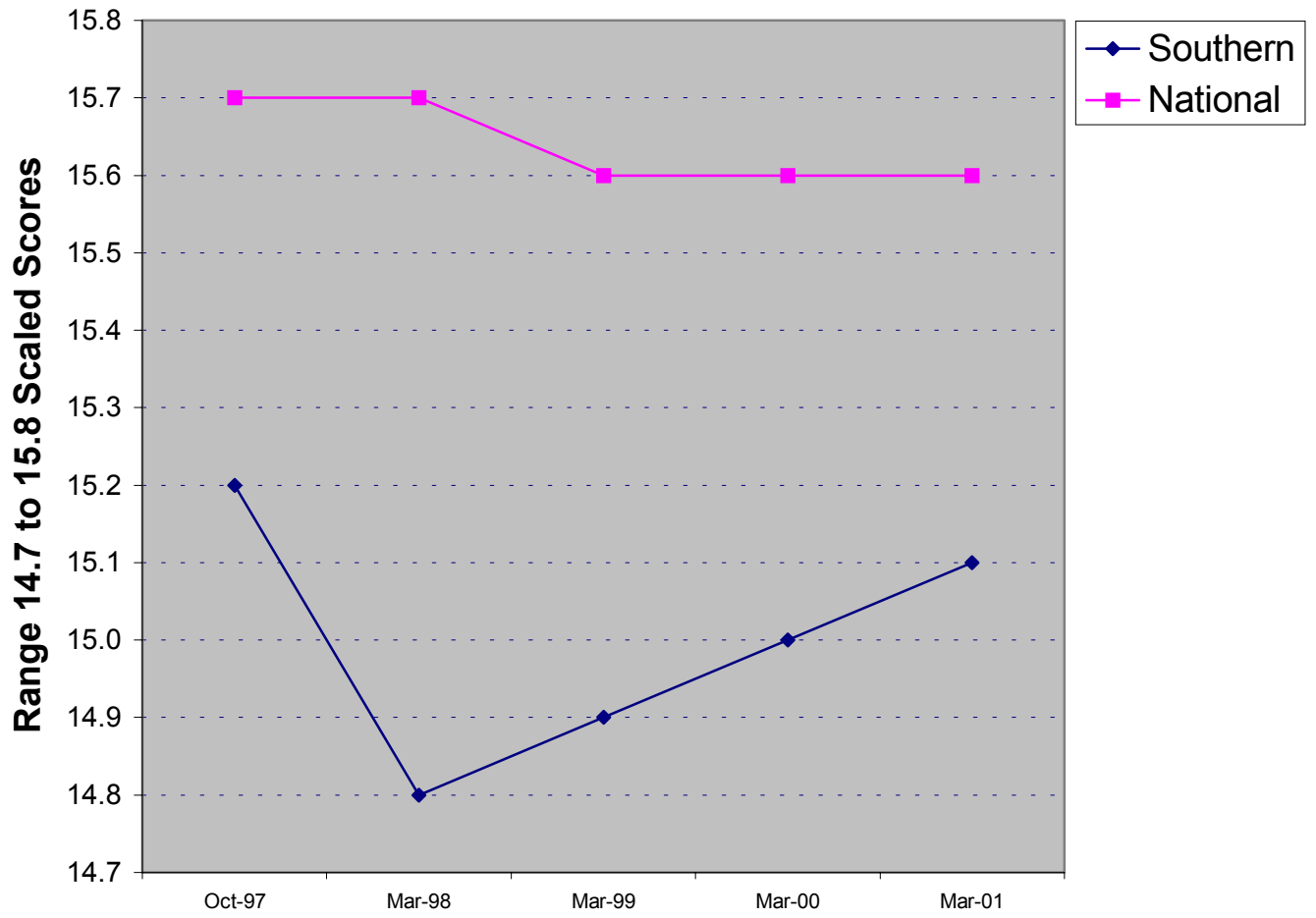
CAAP Reading Test Score Summary



CAAP Reading Sub-Test, Arts/Literature



CAAP Reading Sub-Test, Social Studies



Reading

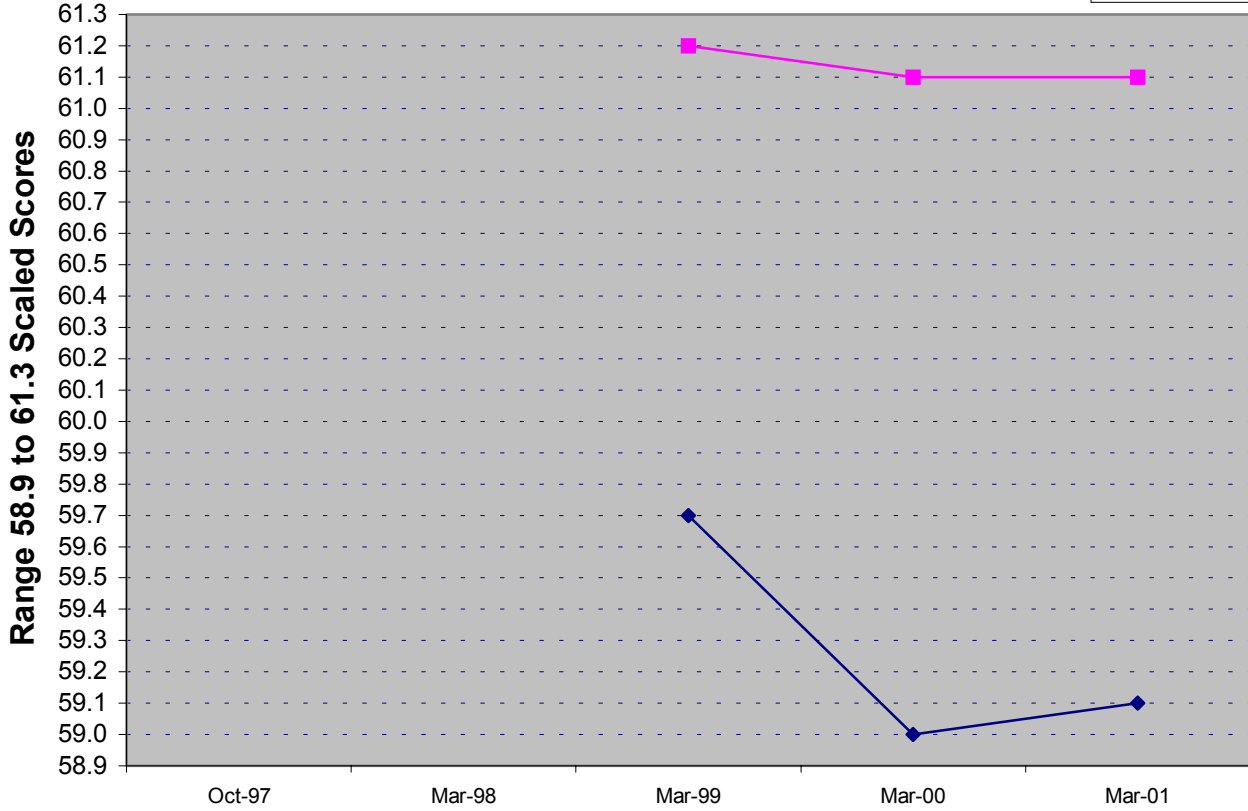
The reading test score summaries indicate Southern's scores are very close to the national mean scores. The most noticeable aspect of Southern's scores is the drop from the 3/98 scores. The pattern of the data on the sub-tests in reading is different from the patterns in the other test areas and bears examination.

Southern does not specifically teach reading courses except in the area of transitional studies. Efforts to improve student learning in this area can be dealt with in all courses and this area should not be difficult to address.

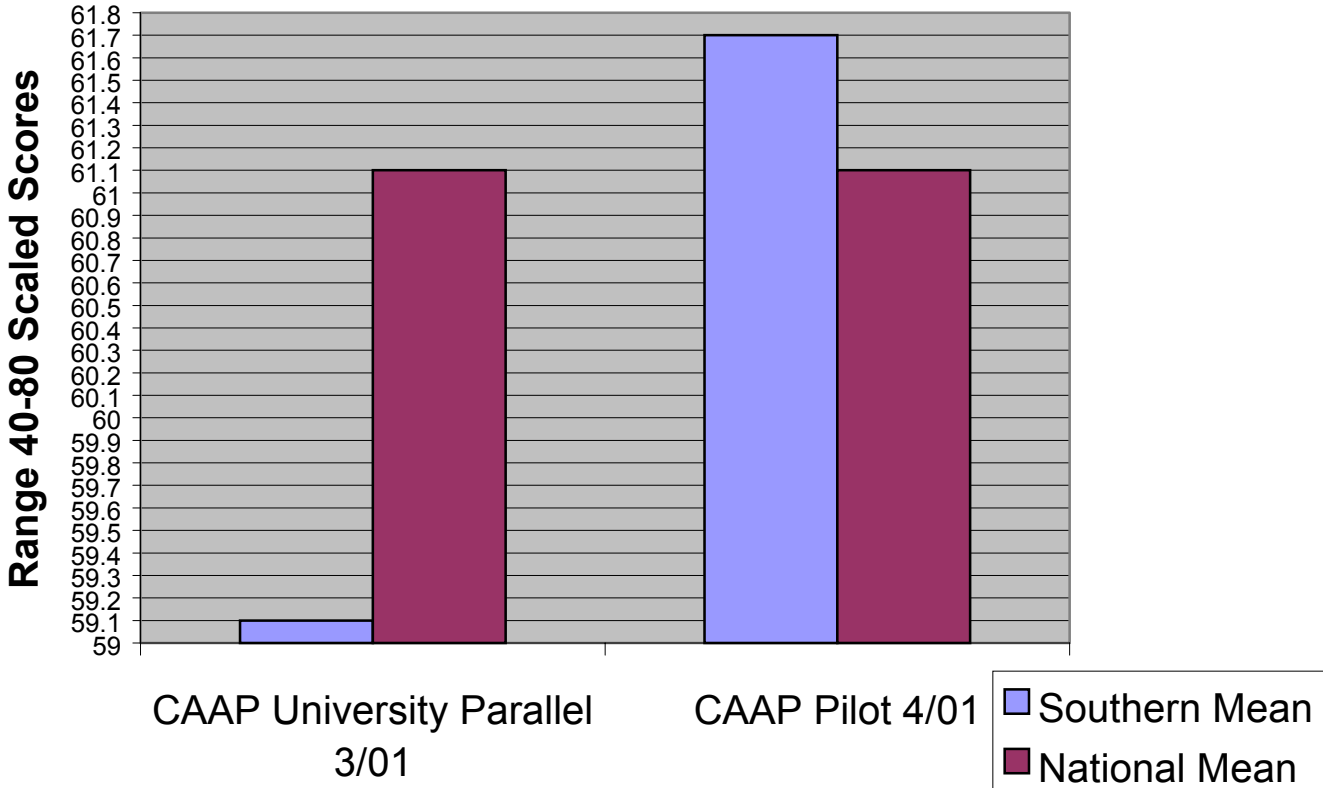
Recommendations

1. Examine the contents of the CAAP test in the reading area and determine if there is agreement in what is valued as learning in this area and what CAAP is measuring. If there is not agreement, should there be?
2. If it is determined that change(s) should occur to improve student learning-develop a plan to formulate, implement, assess, and evaluate the change(s). This could include a plan that would require students in all classes to read more and incorporate this directly into the learning process of the class.

CAAP Critical Thinking Test Score Summary



CAAP Critical Thinking Comparison Spring 2001



Critical Thinking

This area on the CAAP tests is the area Southern seems to fall about one-half a standard deviation unit below the mean on a fairly consistent basis. Southern's university parallel students scored 2 scaled score points below the national average during the 3/01 testing session. Does Southern consciously consider the teaching and learning of critical thinking or problem solving skills as an integral part of the courses of study that lead to degrees or certificates?

A comparison of scores for the university parallel students who took the CAAP during the 3/01 session and the CAAP pilot scores from the 4/01 session show a considerable difference in scores. The 4/01 pilot consisted of students in career/technical programs of study. Page 23 displays the comparison data.

Recommendations

1. Look at all programs of study to determine if critical thinking skills are being taught and if any mechanism is in place to assess them. Where in the program are these skills based? Identify the critical thinking skills in particular courses.
2. Look at the contents of the CAAP testing in the critical thinking area and determine if there is agreement in what is valued as learning and what CAAP is measuring. If there is not agreement-should there be?
3. If it is determined that change(s) should occur to improve student learning in this area-develop a plan to formulate, implement, assess, and evaluate the change(s).
4. Establish a critical thinking skills committee charged with the responsibility of examining the area of critical thinking and making recommendations that are designed to improve these skills in Southern's students.

Work Keys Content by Level

Applied Mathematics

The Applied Mathematics assessment measures the examinee's skill in applying reasoning to work-related problems. The test questions require the examinee to set up and solve the types of problems and do the types of calculations that actually occur in the workplace. This test is designed to be taken with a calculator. As on the job, the calculator serves as a tool for problem solving. A formula sheet that includes all formulas required for the assessment is provided.

This assessment contains questions at five levels of complexity, with Level 3 being the least complex and Level 7 being the most complex. The levels build on each other, each incorporating the skills assessed at the preceding levels. Examinees are given 45 minutes to solve 33 multiple-choice problems.*

Level 3

Problems at Level 3 measure the examinee's skill in performing basic mathematical operations (addition, subtraction, multiplication, and division) and conversions from one form to another using whole numbers, fractions, decimals, or percentages. Solutions to problems at Level 3 are straightforward, involving a single type of mathematical operation. For example the examinee might be required to add several numbers or to calculate the correct change in a simple financial transaction.

Problems at this level translate easily from a verbal setup to a mathematical equation. All the information needed to solve the problems is provided in a logical order and no unrelated information is included. Problem setups may include units of measurement. However, with the exception of dollars and cents, these units function solely as labels and are not involved in actual calculations.

Level 4

Problems at Level 4 measure the examinee's skill in performing one or two mathematical operations, such as addition, subtraction, or multiplication, on several positive or negative numbers. (Division of negative numbers is not covered until Level 5.) Problems may require adding commonly known fractions, decimals, or percentages (e.g. $\frac{1}{2}$, .75, 25%), or adding three fractions that share a common denominator. At this level, the examinee is also required to calculate averages, simple ratios, proportions, and rates, using whole numbers and decimals.

Problems at this level require the examinee to reorder verbal information before performing calculations. The examinee must read the entire problem carefully to determine which operation(s) to perform and in what order. For some problems, examinees must read a simple chart or graph to obtain the information needed to solve the problem.

Level 5

Problems at Level 5 require the examinee to look up and calculate single-step conversions within English or non-English systems of measurement (e.g., converting from ounces to pounds or from centimeters to meters) or between systems of measurement (e.g., converting from centimeters to inches). These problems also require calculations using mixed units (e.g., hours and minutes).

Problems at this level contain several steps of logic and calculation. The examinee must determine what information, calculations, and unit conversions are needed to find a solution. For example, the examinee might be asked to calculate perimeters and areas of basic shapes, to calculate percent discounts or markups, or to complete a balance sheet or order form.

Level 6

Problems at Level 6 measure the examinee's skill in using negative numbers, fractions, ratios, percentages, and mixed numbers in calculations. For example, the examinee might be required to calculate multiple rates, to find areas of rectangles or circles and volumes of rectangular solids, to solve problems that compare production rates and pricing schemes. The examinee might need to transpose a formula before calculation or to look up and use two formulas in conversions within a system of measurement. Level 6 problems may also involve identifying and correcting errors in calculations.

Problems at Level 6 may require considerable translation from verbal form to mathematical expression. They generally require considerable setup and involve multiple-step calculations or conversions.

Level 7

Problems at Level 7 require multiple steps of logic and calculation. For example, the examinee may be required to convert between systems of measurement that involve fractions, mixed numbers, decimals, or percentages; to calculate multiple areas and volumes of spheres, cylinders and cones; to setup and manipulate complex ratios and proportions; or to determine the better economic value of several alternatives. Problems may involve more than one unknown, nonlinear functions, and applications of basic statistical concepts (e.g., error of measurement). The examinee may be required to locate errors in multiple-step calculations.

At this level, problem content or format may be unusual, and the information presented may be incomplete or implicit, requiring the examinee to derive the information needed to solve the problem from the setup.

* A small number of questions are included for developmental purposes. Answers to these developmental questions do not count toward the examinee's score.

Reading for Information

The Reading for Information assessment measures an examinee's skill in reading and understanding work-related instructions and policies. The reading passages and questions in the assessment are based on the actual demands of the workplace. Passages take the form of memos, bulletins, notices, letters, policy manuals, and governmental regulations. Such materials differ from the expository and narrative texts used in most reading instructions, which are usually written to facilitate reading. Workplace communication is not necessarily well-written or targeted to the appropriate audience. Because the Reading for Information assessment uses workplace texts, the assessment is more reflective of actual workplace conditions.

The reading materials and related multiple-choice questions comprise five levels of complexity, with Level 3 being the least complex and Level 7 the most complex. Although Level 3 is the least complex, the questions require a level of reading skill well above simple decoding. The levels build on each other, each incorporating the skills assessed at the preceding levels. Examinees are given 45 minutes to answer 33 multiple-choice questions.

Level 3

Questions at Level 3 measure the examinee's skill in reading short, uncomplicated passages which use elementary vocabulary. The reading materials include basic company policies, procedures, and announcements. All of the information needed to answer the questions is stated clearly in the reading materials, and the questions focus on

the main points of the passages. At this level, the wording of the questions and answers is similar or identical to the wording used in the reading materials.

Questions at Level 3 require the examinee to

- identify uncomplicated key concepts and simple details;
- recognize the proper placement of a step in a sequence of events, or the proper time to perform a task;
- identify the meaning of a word that is defined within the passage;
- identify the meaning of a simple word that is not defined within the passage and;
- recognize the application of instructions given in the passage to situations that are also described in the passage.

Level 4

At Level 4, the reading passages are slightly more complex than those at Level 3. They contain more detail and describe procedures which involve a greater number of steps. Some passages describe policies and procedures with a variety of factors which must be considered in order to decide on appropriate behavior. The vocabulary, while elementary, includes words that are more difficult than those at Level 3. For example, the word "immediately" may be used at this level, whereas at Level 3 the phrase "right away" would be used. At this level, the questions and answers are paraphrased from the passage.

In addition to the skills tested at the preceding level, questions at Level 4 require the examinee to

- identify important details that are less obvious than those in Level 3;
- recognize the application of more complex instructions, some of which involve several steps, to describe situations;
- recognize cause-effect relationships; and
- determine the meaning of words that are not defined in the reading material.

Level 5

Passages at Level 5 are more detailed, more complicated, and cover broader topics than those at Level 4. Words and phrases may be specialized (e.g., jargon and technical terms), and some words may have multiple meanings. Questions at this level typically call for applying information given in the passage to a situation that is not specifically described in the passage. All of the information needed to answer the questions is stated clearly in the passages, but the examinee may need to take several considerations into account in order to choose the correct responses.

In addition to the skills tested at the preceding levels, questions at Level 5 require the examinee to

- identify the paraphrased definition of a technical term or jargon that is defined in the passage;
- recognize the application of technical terms or jargon to stated situations;
- recognize, the definition of an acronym that is defined in the passage;
- identify the appropriate definition of a word with multiple meaning;
- recognize the application of instructions from the passage to new situations that are similar to those described in the reading materials; and
- recognize the application of more complex instructions to described situations, including conditionals and procedures with multiple steps.

Level 6

Passages at Level 6 are significantly more difficult than those at the previous level. The presentation of the information is more complex; passages may include excerpts from regulatory and legal documents. The procedures and concepts described are more elaborate. Advanced vocabulary, jargon, and technical terms are used. Most information needed to answer the questions correctly is not clearly stated in the passages. The questions at this level require examinees to generalize beyond the stated situation, to recognize implied details, and to recognize the probable rationale behind policies and procedures.

In addition to the skills tested at the preceding levels, questions at Level 6 require the examinee to

- recognize the application of jargon or technical terms to new situations;
- recognize the application of complex instructions to new situations;
- recognize, from context, the less common meaning of a word with multiple meanings;
- generalize from the passage to situations not described in the passage;
- identify implied details;
- explain the rationale behind a procedure, policy, or communication; and
- generalize from the passage to a somewhat similar situation.

Level 7

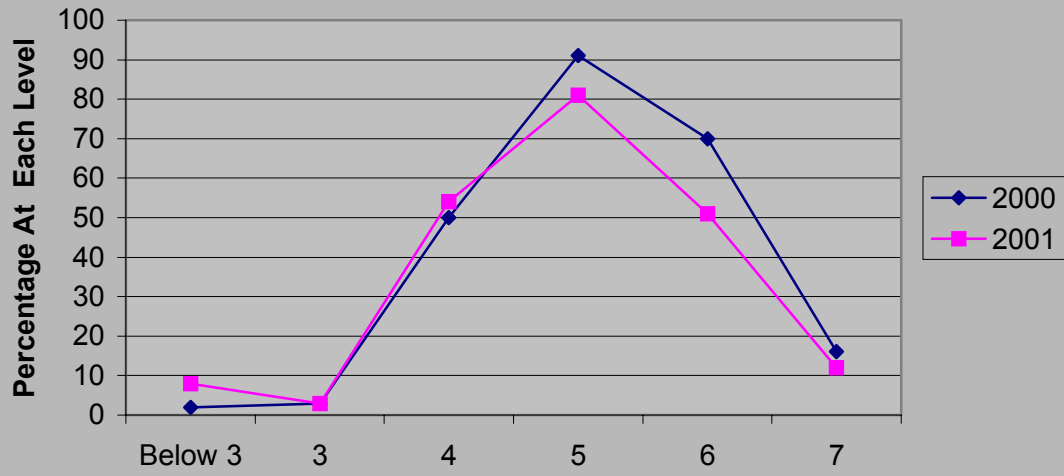
The questions at Level 7 are similar to those a Level 6 in that they require the examinee to generalize beyond the stated situation, to recognize implied details, and to recognize the probable rationale behind policies and procedures. However, the passages are more difficult: the density of information is higher, the concepts are more complex, and the vocabulary is more difficult. Passages include jargon and technical terms whose definitions must be derived from context.

In addition to the skills tested at the preceding levels, questions at Level 7 require the examinee to

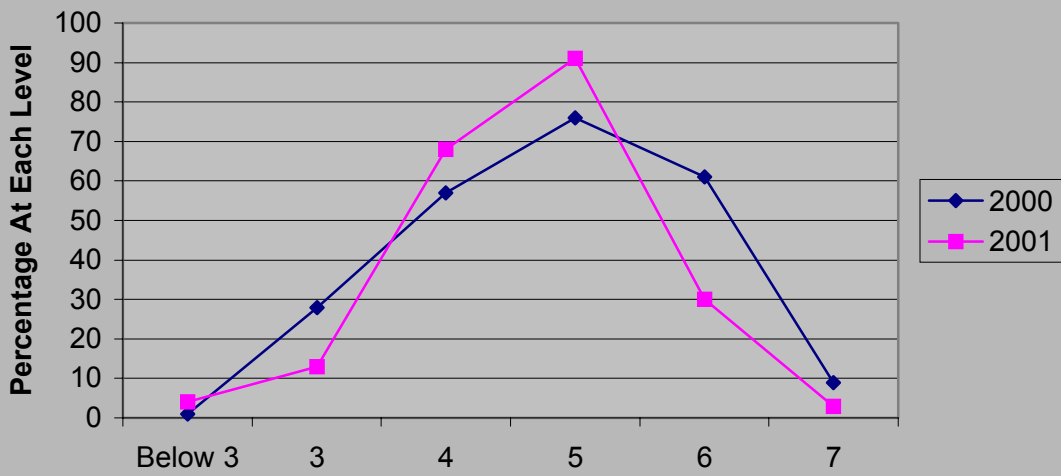
- recognize the definitions of difficult, uncommon jargon or technical terms, based on the context of the reading materials; and
- figure out the general principles underlying described situations and apply them to situations neither described in nor completely similar to those in the passage.

*A small number of questions are included for developmental purposes. Answers to these developmental questions do not count toward the examinee's score.

Reading Information Assessment



Applied Math Assessment



Work Keys Assessments

Work Keys is administered to Southern's students who are finishing career/technical types of certificates and degrees.

Southern's scores on the Work Keys assessments are generally acceptable scores. The majority of students scored 4 or above on the Reading for Information and Applied Math measures. Additional data is provided that indicates the minimum levels on each of the assessment measures by degree programs and how Southern's students scored.

Recommendations

1. Examine the Work Keys Content by Level pages of this document (beginning on page 25) to determine where students in the various career/technical programs of study should be. Determine what courses we offer take students to what level on the Work Keys content pages.
2. Examine the Work Keys Standards by Program sheet (page 33) to determine the minimum levels on the two assessments for the various programs of study involved. If there is not agreement on what is valued as learning in each program and the minimum levels established by Work Keys for that program-should there be?
3. If it is determined that change(s) should occur to improve student learning-develop a plan to formulate, implement, assess, and evaluate the change(s).

Summary

Taken as group data Southern's students all scores within one standard deviation unit of the national mean on the CAAP measures for each year the measures were administered and on each measure used. The vast majority of scores are below the mean but within that great "average".

Notice on the test summaries that when the national mean fell by a tenth or so Southern's mean also fell but by a greater margin.

While the scores are very close to the national mean it is believed Southern should make every effort to raise the scores each year so that our students' scores are above the national mean. We are close now.

With the sole purpose of assessment being to improve student learning we must look at this data to find ways to do this. What do we value as learning for the students who attend our college? Are we doing all we can to see that students are meeting the goals we have set for them? Are these goals communicated to the student? When we determine what learning we want to take place we make teaching it a bit more straightforward. It also makes assessing the increase in student performance and learning easier.

Recommendations

1. Look at what is valued as learning for Southern's students. If we do not know what we value as learning we must first make this important decision.
2. Are we measuring what we value as learning with the assessment measures we are using, not just college-wide but in individual program area programs of assessment?
3. Develop the necessary locally produced assessment measures that will measure what we want measured-what we value as learning for our students.
4. Make changes as indicated by data that must be made in courses or programs of study in an attempt to improve student learning. If we are on track we are on track-but if we are off track in any area we must be willing to make the necessary changes to set things right.
5. Examine the individual programs of study assessment data and combine that information with the college-wide data to provide a broader database on which to make decisions.
6. Improve student learning.

Place Assessment on every division meeting agenda. Accept reports for the division members on the Assessment Committee and make recommendations these members can bring back to the committee.

CAAP Test Score Summary

10/07	Writing	Math	Reading	Critical Thinking
National Mean	62.7	56.2	61.3	No critical thinking administered
Southern Mean	62.9	55.7	61.1	
National s	4.7	3.5	5.2	
Southern z	0.04	-0.1	0.05	

3/98	Writing	Math	Reading	Critical Thinking
National Mean	62.7	56.2	61.3	No critical thinking administered
Southern Mean	62.4	55.6	61.3	
National s	4.7	3.5	5.2	
Southern z	-0.06	-0.2	0	

3/99	Writing	Math	Reading	Critical Thinking
National Mean	62.7	56.1	61.1	61.2
Southern Mean	62.6	54.7	60.3	59.7
National s	4.7	3.4	5.3	5.2
Southern z	-0.02	-0.4	-0.15	-0.2

3/00	Writing	Math	Reading	Critical Thinking
National Mean	62.6	56.2	61.0	61.1
Southern Mean	61.2	54.6	59.7	59.0
National s	4.7	3.5	5.3	5.2
Southern z	-0.3	-0.5	-0.24	-0.4

3/01	Writing	Math	Reading	Critical Thinking
National Mean	62.6	56.3	61.0	61.1
Southern Mean	61.4	54.8	59.8	59.1
National s	4.7	3.6	5.3	5.2
Southern z	-0.3	-0.4	-0.24	-0.4

**State College and University Systems of West Virginia
Community & Technical Colleges**

**Standards and Measures for Perkins Core Indicators
Standards for WorkKeys Assessment by Program**

BUSINESS/MARKETING			
Programs	Applied Math Level	Reading Level	Writing Level
Accounting	4	4	3
Banking and Finance	5	5	4
Business Supervision and Administration	5	5	4
Business Technology	4	4	3
Communications/Technical Communications	4	4	4
Computer/Information Processing	4	5	4
Computer Information Systems/Programming	5	5	4
Computer Science	5	5	4
Culinary Arts	4	4	3
Data Processing	4	4	3
Desk Top Publishing	4	4	3
Merchandising	4	5	4
Food Service Management	5	5	4

General Business	5	5	4
Hospitality, Leisure & Recreation Management	5	5	4
Lodging Operations	5	5	4
Management	5	5	4
Marketing	4	5	4
Merchandising	4	5	4
Medical Records Technology	4	4	4
Office Technology/Administration			
Executive	4	4	4
Legal	4	4	4
Medical	4	4	4
Printing Technology	4	4	3
Small Business Management/Business Management	5	5	4

ENGINEERING/TECHNICAL

Programs	Applied Math Level	Reading Level	Writing Level
Air Conditioning, Refrigeration & Heating Technology	5	5	3
Applied Design	5	5	4
Architectural/Engineering Technology	5	5	4
Architectural Drafting & Construction Technology	5	5	4
Automotive Technology	4	4	3
Aviation Maintenance Technology	4	4	3
Aviation Technology	4	4	3
Avionics Line Maintenance	4	4	3
Avionics Maintenance Technology	4	4	3
Chemical Engineering Technology	5	5	4
Civil Engineering Technology	5	5	4
Computer-Aided Drafting & Design Technology	5	5	4
Drafting and Design Technology	5	5	4
Drafting and Design Engineering Technology	5	5	4
Electrical Engineering Technology	5	5	4
Electromechanical Technology	5	5	4
Electronics Engineering Technology	5	5	4
Electronics Technology	5	5	4

Engineering Technology	5	5	4
Graphics Technology	4	4	4
Industrial Maintenance Technology	4	4	3
Information Systems	5	5	4
Major Appliance Repair	5	5	3
Manufacturing Engineering Technology	5	5	4
Manufacturing/Processes Technology	4	4	3
Mechanical Engineering Technology	5	5	4
Land Surveying Technology	5	5	4
Welding Management Technician	4	4	3
Welding Technology	4	4	3

HEALTH			
Programs	Applied Math Level	Reading Level	Writing Level
Dental Hygiene	5	5	4
Emergency Medical Service/Technology	5	5	4
Health Care Technology	5	5	4
Health Information Technology	4	4	4
Long Term Health Care Professional	4	4	4

Medical Assisting/Medical Assistant Technology	4	4	4
Medical Laboratory Technology	5	5	4
Nuclear Medicine Technology	5	5	4
Nursing	4	4	4
Pharmacy Technology	5	5	4
Physical Therapist Assistant	4	4	4
Radiologic Technology	5	5	4
Respiratory Care Technology	5	5	4
Surgical Technology	5	5	4
Veterinary Technology	5	5	4

HUMAN SERVICES			
Programs	Applied Math Level	Reading Level	Writing Level
Child Care/Geriatric Care	4	5	4
Community Behavioral Health Technology	4	4	4
Corrections	4	5	4
Criminal Justice	4	5	4
Gerontology	4	5	4
Human Services Technology	4	5	4

Journalism	4	5	4
Law Enforcement	4	5	4
Legal Assistant/Paralegal Studies	4	5	4
Police Science	4	5	4
Safety Technology			
Emergency Medical Service	5	5	3
Fire Science Technology	4	4	3
Occupational Safety	4	5	4
Sign Language Interpreter	4	5	4

SCIENCE/NATURAL SCIENCE			
Programs	Applied Math Level	Reading Level	Writing Level
Agricultural Applied Sciences	5	5	4
Aquaculture	5	4	4
Chemical Technology	5	5	4
Environmental Technology	5	5	4
Forest Technology	5	5	4
Horticulture Technology	5	5	4
Interior Design	4	4	4

2001 **Work Keys** Results
Minimum Score Attainment
Southern West Virginia Community and Technical College

Number of Tests

(useable scores) 202

Number Attaining
Minimum Score On
Applied Math 159 78.8%

Number Attaining
Minimum Score On
Reading For Information 170 84.1%

Number Attaining
Minimum Score On
Both Measures 139 68.8%