



## GUIDELINES FOR EQUIVALENCE STUDIES CONDUCTED FOR CAEP STANDARD 3, COMPONENT 3.2 ACADEMIC PROFICIENCY MEASURES

The Guidelines that follow are addressed to testing companies, states and any other potential sponsors of assessments that are proposed as eligible academic proficiency measures for Standard 3, Component 3.2. The Guidelines describe the contents of studies demonstrating that assessment results are “substantially equivalent” to those from a nationally normed test recognized by CAEP. Following the Guidelines, CAEP review procedures are described and templates for CAEP reviewers of sponsor studies are displayed.

### GUIDELINES FOR EQUIVALENCE STUDIES SUBMITTED FOR REVIEW

Potential sponsors of assessments to meet the academic achievement criteria of CAEP Standard 3, Component 3.2, must submit documentation that the alternative test and test score proposed are “substantially equivalent” to a nationally-normed test recognized by CAEP. The Guidelines for submitters follow:

Please review the introductory descriptions about academic achievement measures and “substantial equivalence” found in [CAEP Standard 3, Component 3.2 measures of academic proficiency](#). That paper contains a table indicating currently recognized assessments for reading, mathematics and writing achievement, as well as a table listing assessments with conforming domain frameworks. These tables will be amended as additional assessments are recognized by CAEP as providing substantially equivalent results.

In the table below, select the rows that apply and complete the table for the rows selected:

	We are proposing an average score of...	On the test...	As substantially equivalent under CAEP Standard 3, Component 3.2 for the domain...
<input type="checkbox"/>	1		Mathematical achievement
<input type="checkbox"/>	2		Reading achievement
<input type="checkbox"/>	3		Writing achievement

For each row selected and completed, evidence of substantial equivalence must be provided. The evidence should support the specific claims of substantial equivalence. Please complete one table below for each row you selected above, by listing documents and page numbers to support the specific claims listed.

For “conforming framework” and “intended reference group,” refer to the definition of substantial equivalence in the “Terminology and Concepts” section of [CAEP Standard 3, Component 3.2 measures of academic proficiency](#).

Claim – Mathematical Achievement	Evidence Document(s) and page numbers
<p><b>Requirement 1</b> The test is comparable to a conforming framework for mathematical achievement.</p> <p><b>OR</b> The test is appropriate as a measure of mathematical achievement, and strongly supported as such by validity argument and supporting research.</p>	
<p><b>Requirement 2</b> The test is sufficiently reliable, fair, and free from bias for any subgroup.</p>	
<p><b>Requirement 3</b> Percentiles for scores on the test are available for the population of college-bound 11<sup>th</sup> and 12<sup>th</sup> graders or an acceptable proxy, either directly or through a linking study. If the latter, an equivalence table is provided.</p>	
<p><b>Requirement 4</b> The test adheres to the latest edition of the <i>Standards for Educational and Psychological Testing</i>.</p>	

Claim – Reading Achievement	Evidence Document(s) and page numbers
<p><b>Requirement 1</b> The test is comparable to a conforming framework for reading achievement.</p> <p><b>OR</b> The test is appropriate as a measure of reading achievement, and strongly supported as such by validity argument and supporting research.</p>	
<p><b>Requirement 2</b> The test is sufficiently reliable, fair, and free from bias for any subgroup.</p>	
<p><b>Requirement 3</b> Percentiles for scores on the test are available for the population of college-bound 11<sup>th</sup> and 12<sup>th</sup> graders or an acceptable proxy, either directly or through a linking study. If the latter, an equivalence table is provided.</p>	
<p><b>Requirement 4</b> The test adheres to the latest edition of the <i>Standards for Educational and Psychological Testing</i>.</p>	

Claim – Writing Achievement	Evidence Document(s) and page numbers
<p><b>Requirement 1</b> The test is comparable to a conforming framework for writing achievement.</p> <p><b>OR</b> The test is appropriate as a measure of writing achievement, and strongly supported as such by validity argument and supporting research.</p>	
<p><b>Requirement 2</b> The test is sufficiently reliable, fair, and free from bias for any subgroup.</p>	
<p><b>Requirement 3</b> Percentiles for scores on the test are available for the population of college-bound 11<sup>th</sup> and 12<sup>th</sup> graders or an acceptable proxy such as ACT test-takers in 2016 either directly or through a linking study. If the latter, an equivalence table is provided.</p>	
<p><b>Requirement 4</b> The test adheres to the latest edition of the <i>Standards for Educational and Psychological Testing</i>.</p>	

## PROTOCOLS FOR REVIEWING EQUIVALENCE STUDIES

Upon receipt of a study review request from a sponsoring entity, CAEP staff will verify that the review form has been completed properly and that the documents referenced in the form have been submitted.

CAEP will then commission reviews, to be conducted by persons with suitable backgrounds (such as psychometricians) who can ascertain that they were not involved with conduct of the substantial equivalence study and are not affiliated with an entity that would benefit financially from either a positive or negative review outcome. CAEP, in consultation with the sponsor, will determine if any administrative fees will be applied to this review by CAEP. The reviewers would receive all materials provided to CAEP by the sponsoring entity and instructions for the review task.

### Instructions

[Sponsoring Entity] has provided materials to CAEP in support of education preparation providers' use of [Test] for evidence for meeting the assessment portion of CAEP's Standard 3, Component 3.2. (See box below.)

Reference: Text of CAEP Standard 3, Component 3.2

#### Candidates Demonstrate Academic Achievement

**3.2 REQUIRED COMPONENT:** The provider meets CAEP minimum criteria or the state's minimum criteria for academic achievement, whichever are higher, and gathers

disaggregated data on the enrolled candidates whose preparation begins during an academic year.

The CAEP minimum criteria are a grade point average of 3.0 and a group average performance on nationally normed assessments or substantially equivalent state-normed assessments of mathematical, reading, and writing achievement in the top 50 percent of those assessed. An EPP may develop and use a valid and reliable substantially equivalent alternative assessment of academic achievement. The 50th percentile standard for writing will be implemented in 2021.

Starting in academic year 2016-2017, the CAEP minimum criteria apply to the group average of enrolled candidates whose preparation begins during an academic year. The provider determines whether the CAEP minimum criteria will be measured (1) at admissions, OR (2) at some other time prior to candidate completion.

In all cases, EPPs must demonstrate academic quality for the group average of each year's enrolled candidates. In addition, EPPs must continuously monitor disaggregated evidence of academic quality for each branch campus (if any), mode of delivery, and individual preparation programs, identifying differences, trends, and patterns that should be addressed under component 3.1, Plan for recruitment of diverse candidates who meet employment needs.

CAEP will work with states and providers to designate, and will periodically publish, appropriate "top 50 percent" proficiency scores on a range of nationally or state normed assessments and other substantially equivalent academic achievement measures, with advice from an expert panel.

Alternative arrangements for meeting the purposes of this component will be approved only under special circumstances and in collaboration with one or more states. The CAEP President will report to the Board and the public annually on actions taken under this provision.

[Sponsoring Entity] makes one or more claims of substantial equivalence with respect to [Test], as detailed in their submission form. (See submission form.)

Your task is to determine if the claims are justified based on the evidence presented. Guiding questions are presented for each claim area. Use this form to complete your review. (Complete one form for each domain for which evidence was presented.)

## GUIDELINES FOR REVIEWERS

<u>Claim –</u> <u>                  Achievement</u>	<u>Evidence</u> <u>Document(s)</u> <u>&amp; page</u> <u>numbers</u>	<u>Guiding Questions</u> <u>NOTE to reviewers: Each of the stated questions must receive an affirmative</u> <u>answer for the sponsor’s claim is to be approved. Your professional judgement</u> <u>about the degree or nature of your affirmation, or your disagreement, is the</u> <u>deciding factor in your review.</u>	<u>Notes &amp; Review Results</u>
<p><b>Requirement 1:</b> The test is comparable to a conforming framework for _____ achievement.</p> <p><b>OR</b> The test is appropriate as a measure of _____ achievement, and strongly supported as such by validity argument and supporting research.</p>		<p>(The tests described in the conforming frameworks differ in the way they assess the target domain. However, they are all considered as vetted or legitimate measures of the target domain, despite their differences.)</p> <p>Does the submitted test assess the domain with sufficient <b>breadth</b> and <b>depth</b> to be considered a legitimate measure of the target domain?</p> <p>Are the test items predominantly related to skill or knowledge appropriate to the target domain?</p> <p>Is the submitted test targeted to the appropriate population (individuals completing high school or in college, having diverse ethnic/racial background)?</p> <p>Is the submitted test of comparable format (types of test items) and length to those tests described by the conforming frameworks?</p> <p style="padding-left: 40px;">If the format or length of the test differs markedly from the tests described by the conforming frameworks, is evidence presented in support of the claim that it is a measure of _____ achievement?</p> <p style="padding-left: 80px;">If such evidence is presented, is it sufficient to support the claim that the test is a measure of _____ achievement?</p>	

<p><b>Requirement 2:</b> The test is sufficiently reliable, fair, and free from bias for any subgroup.</p>		<p>Have internal consistency, alternate form, test-retest, or other measures of reliability been presented as evidence of test reliability?</p> <p>If so, are the reliabilities sufficient for the use of school group averages to ascertain adherence to the Standard 3, Component 3.2?</p> <p>Is evidence presented supporting a lack of differential item functioning for test items, across the test scale?</p> <p>Do the subgroups used for DIF calculations include those based on gender and race-ethnicity categories?</p>	
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<p><b>Requirement 3:</b> Percentiles for scores on the test are available for the population of college-bound 11<sup>th</sup> and 12<sup>th</sup> graders or an acceptable proxy, either directly or through a linking study. If the latter, an equivalence table is provided.</p>		<p>(A) If the test was administered to a representative sample of the population of college-bound 11<sup>th</sup> and 12<sup>th</sup> graders (the “CAEP reference group”):</p> <ul style="list-style-type: none"> <li>• Was the sampling adequate and defensible?</li> <li>• Were score distributions provided for the representative group (weighting if necessary), showing distinct scores for a sufficient number of percentile points?</li> </ul> <p>(B) If the test was administered to students not systematically sampled from the CAEP reference group, and the sponsoring entity submitted score distributions for this group to estimate the 50<sup>th</sup> percentile average for Standard 3, Component 3.2:</p> <ul style="list-style-type: none"> <li>• Please describe the group tested.</li> </ul> <p>Are the differences between the CAEP reference group and the group tested less than or comparable to the differences between the CAEP reference group and other reference group proxies - that is, the College Board national user group (for reading and mathematics) or the 2016 ACT national test takers (for writing)?</p> <ul style="list-style-type: none"> <li>• Did the test developers / sponsors weight the group tested to approximate the reference group, in a defensible manner?</li> </ul> <p>Were score distributions provided for the weighted group, showing distinct scores for a sufficient number of percentile points?</p> <p>(C) If the test was administered to students not systematically sampled from the CAEP reference group, and the sponsoring entity submitted the results of a study linking the proposed test to another (anchor) test, the linking should be symmetric (i.e., mapping from the anchor test to the proposed test should be the same as that from the proposed test to the anchor test):</p> <ul style="list-style-type: none"> <li>• (For mathematical achievement): Is the anchor test either the New SAT “Math” or the ACT “Math”?</li> </ul>	
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<p><b>Requirement 4:</b> The test adheres to the latest edition of the <i>Standards for Educational and Psychological Testing</i>.</p>		<p>Does the test adhere to the latest edition of the <i>Standards for Educational and Psychological Testing</i>?</p>	

**Professional Judgement**

The entity submitting this test for substantial equivalence review would like Education Preparation Providers (EPPs) to be free to use this test to demonstrate to their accreditor, the Council for the Accreditation of Education Preparation (CAEP), that each EPP student cohort meets Standard 3, Component 3.2, for the domain(s) of \_\_\_\_\_ achievement.



Mark One:

The evidence presented supports all the claims in the first column above.

OR

The evidence presented does not support all the claims in the first column above. The following additional evidence is needed:

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An instrument is *substantially equivalent* if it passes substantial equivalence review. CAEP would make the final determination, taking into consideration the review provided by the substantial equivalence reviewers.

A substantial equivalence review will result in a yes/no decision for each substantial equivalence claim submitted for review, and a statement regarding the reason or reasons for each “no” decision, specifically the additional evidence required.

The sponsoring entity may resubmit for any claim not passing a substantial equivalence review. The sponsoring agency may request the same reviewer (assuming he or she is able and willing to review and that no conflict of interest has arisen in the interim), or an alternative reviewer, at the sponsoring agency’s discretion. The choice of specific reviewer, however, rests with CAEP.