

Assessment #5 (Required)

Assessment of candidate effect on student learning

The Impact on Student Learning Project is a required assignment in HED 427 – Student Teaching in Health Education. Candidates develop, implement and analyze a pre-post test for an instructional unit. The purpose of this task is for candidates to make informed instructional decisions, as well as to gauge the impact of the unit.

Candidates practice Standard I Key Element C when they gather information directly from students regarding student's knowledge of a particular unit focus. Candidates practice Standard IV Key Element C when they interpret pre-and post-test results. They organize and analyze data to gain a picture of student knowledge both before and after instruction. Candidates practice Standard IV Key Element D when they make instructional decisions for the unit based on the pre-test results. Furthermore, they use the results to improve unit instruction in the future.

The Impact on Student Learning Project truly focuses on the *impact on* and *effect of* instruction on student learning. Prior to 2007, the project assessed candidate's ability to design a pre-post test, and lacked the focus that the project does today, which is to determine *how much students change* from pre-test to post-test. Candidates are instructed to design, as well as implement and evaluate, a measurement of student health knowledge.

Interpretation of Data:

The data shows the number of student teaching placements each semester. It also shows the average improvement from the pre-test to the post-test. The pre-test is administered prior to the unit. The post-test is administered at the conclusion of the unit. Students gather data and plot it on graphs, along with commentary, and this is included in their unit plan of their exit portfolio. The rubric measures how well they collect, analyze, present and interpret the pre-post tests. Part of this assignment is to present the difference from pre-to post-test, and that is what represents "Effect on Student Learning". The mean of those differences for each semester is presented in the data table. There was a range of 27-50 point average increase in test scores between Fall 2007 and Spring 2010. For example, the instruction from candidates helped students improve between 27 to 50 points. The results indicate a realistic and positive impact on student learning. RIC candidates are assisting students in improving their health knowledge. The candidates are delivering worthwhile instruction and utilizing strategies that show a definite effect.

As will be discussed further in Section V of this report, improvements can be made in Standards and Key Elements related to this Assessment. In brief, candidates show a need for more training in constructing valid pre- post-tests. Adjustments to the curriculum are currently being designed and implemented.

Impact on Student Learning – Project Description

When providing instruction to students it is important for the educator to teach with the end in mind: What is the desired outcome of this instructional unit? How should students change as a result of participating in this unit? How will I know what students have learned a result of participating in this unit?

Careful planning and effective assessment strategies will assist the teacher in finding the answers to the critical questions. However, it is important to remember that many factors may be influencing students'

knowledge, attitudes, and skills about a particular topic. A teacher should assess students prior to instruction to ensure that participation in the unit results in change.

Consider this example: A teacher plans and implements a unit on nutrition for 9th grade students. At the end of the unit, the students participate in a performance assessment that helps to show if they can meet the instructional goals of the unit. The work is scored and the students have met with great success! It is easy to conclude that the teacher has done a fabulous job in planning and implementing quality instruction, however, it is also possible that the students already possessed the knowledge and skills prior to the start of the unit. If this is the case, the time spent on teaching this particular unit may have been a waste of time.

The Student Teacher's Task: In connection to the implemented unit plan artifacts, a detailed description of how the instructor intends to determine the impact that of participation in the unit has on student learning must be included. Most typically, this involves pre- and post-testing.

- The instructor must design and implement a pre-test for students who would be participating in an upcoming instructional unit. The pre-test is commonly a written test measuring cognitive skills, but tasks measuring psychomotor skills and attitudes related to the topic may also be appropriate. This addresses **AAHE Standard 1C and IV A and B**. The tests should be scored and the resulting data should be analyzed. **This addresses AAHE Standard IV C**. The student teacher should prepare a summary of the data and the analysis including a description of how the data will impact future instruction. **This addresses AAHE Standard IVD**. To make the most of this tool, the student teacher should implement the pre-test before planning the details of an instructional unit, as the analysis should be considered when planning lessons.

Note: The score earned by students on the pre-test should not count towards their grade in the class.

Hint: Scoring the pre-tests can quickly become unmanageable. When creating the tool, select the most meaningful components of the unit to assess. For the purposes of this course, the pre-test does not need to be extensive.

- At the conclusion of the unit, the students will participate in a post-test. The questions / tasks should be the same as the pre-test. Scoring and analysis of the data will allow the teacher to determine learning that has occurred as a result of participation in this unit. **Note:** the score earned by students on the post-test may be considered towards their grade in the class.
- The exit portfolio will contain an example of the pre-post testing tool, examples of student work, a written analysis of the findings, and an explanation of how the findings impacted instruction. See related rubric for more information.

Impact on Student Learning: Scoring Rubric

Student: _____ Semester: _____

EXCEEDS STANDARDS (STRENGTH)	MEETS STANDARDS (COMPETENCE)	ALMOST MEETS STANDARDS (DEVELOPING)	WELL BELOW STANDARD (WEAKNESS)
<p>• The student demonstrates strong competence in all categories of this artifact earning a 4 for each indicator.</p> <p>AND</p> <p>• The process to determine impact on student learning is clearly explained, feasible, and includes more than one domain of learning. (+2) AAHE IC, IVAB</p> <p>OR</p> <p>• The analysis of the data is particularly detailed and insightful. (+2) AAHE IVC</p> <p>OR</p> <p>• Detailed, rich explanations of how the data impacted instructional decisions are included. The explanations serve as a valuable guide to future planning as well. (+2) AAHE IVD</p>	<p>• An effective process to determine impact on student learning is clearly described and examples of the pre- & post-assessment tools are included. (3-4) AAHE IC, IVAB</p> <p>• Examples of student work that represent high, moderate, and low change are included. (3-4)</p> <p>• The data from the pre-test and post-test are organized in tables &/or charts (3-4)</p> <p>• A well-written analysis of the data is provided. (3-4) AAHE IVC</p> <p>• An explanation of how the findings of the pre-test impacted instructional decision-making of the unit is included. (3-4) AAHE IVD</p> <p>• An explanation of the how the findings of the post-test could impact future planning and instruction is included. (3-4) AAHE IVD</p>	<p>• Process to determine the impact on student learning is appropriate but not effective. (1-2) AAHE IC, IVAB</p> <p>• Examples of student work are included but representation is not identified. (1-2)</p> <p>• The data from the pre-test and post-test are included in a disorganized fashion that is challenging for the reader to navigate. (1-2)</p> <p>• A superficial analysis of the data is provided. (1-2) AAHE IVC</p> <p>• A superficial explanation of how the findings of the pre-test impacted instructional decision-making of the unit is included. (1-2) AAHE IVD</p> <p>• A superficial explanation of how the findings of the post-test would impact future planning and instruction is included. (1-2) AAHE IVD</p>	<p>• Process to determine the impact on student learning is omitted, incomplete, unclear, or inappropriate. (0) AAHE IC, IVAB</p> <p>• Examples of student work are absent. (0)</p> <p>• The data from the pre-test and post-test are missing. (0)</p> <p>• A written analysis of the data is missing. (0) AAHE IVC</p> <p>• An explanation of how the findings of the pre-test impacted instructional decision-making of the unit is missing. (0) AAHE IVD</p> <p>• An explanation of how the findings of the post-test would impact future planning and instruction is missing. (0) AAHE IVD</p> <div style="border: 1px solid black; padding: 10px; margin-top: 20px;"> <p style="text-align: center;">Scoring Guide:</p> <p style="text-align: center;">Strength: 26</p> <p style="text-align: center;">Competence: 16-24</p> <p style="text-align: center;">Developing: 6 – 15</p> </div>

Faculty Signature: _____ Rating: _____ Score: _____

Impact on Student Learning

Date	Student Teaching Placements	Mean Point Improvement Pre-Post Test
Fall 2007	1	50
Spring 2008	12	35
Fall 2008	2	27
Spring 2009	16	30
Fall 2009	5	49
Spring 2010	10	43