Assessment Project for Candidates in the B.Ed. in Primary Education, the B.Ed. in Secondary Education, the Diploma in Primary Education, and the Diploma in Secondary Education

Description of the assessment and its use in the program

This assessment project is part of the evaluation of candidates and is administered during their internship. It helps to assess the candidates' abilities to measure the impact of their teaching on student learning.

This tool requires teacher candidates to administer a pre- and post-assessment to evaluate their students' progress after teaching a unit that is a set of three to five daily lessons on the same topic or concept. Candidates design an assessment that reflects what they think students should know, understand, and be able to do at the end of the set of lessons. They administer the assessment before and record students' success or lack of success for each item, as well as the total score. After teaching the lessons, they administer the same assessment, scoring and recording it in the same way as the pre-assessment.

After they administer the pre- and post-tests, candidates analyze their students' scores using Excel. They are also required to see which items addressed individual levels of Bloom's Taxonomy. The next stage is to analyze the data they have collected and display the results in a chart, graph, or table format. This chart/table is used to interpret the data results and reflect on what the results mean.

Candidates also design an informal assessment and compare results in the informal and formal assessment and reflect on the tasks considering if and how much learning has taken place, and thinking about ways to improve their instruction in order to foster better learning.

As a final task, candidates have to consider the implications of the results they obtained. They need to focus on what the comparison of the mean, median, and mode of the pre- and post-tests might indicate. They have to find out whether the group of items with the most correct responses got smaller, stayed the same, or got bigger, and what that indicates. When comparing the items from the pre-test to the same items on the post-test, they have to consider what it means if fewer students answered correctly after the instruction, what it means if more students answered correctly after the instruction, if there were items that showed no change in score from pre- to post-test, and what conclusions they might draw. Finally, they focus on the implications of the analysis of the assessment items distributed on Bloom's taxonomy, paying particular attention to which level of the taxonomy had the most questions, and which level of questions had the most correct responses.

Candidates are also required to conduct a content analysis by considering which items were related to the same content, which content items were aligned with which level of Bloom's taxonomy, and how many correct responses were associated to each of the items of the same or similar content.

In the last stage of this assignment, candidates have to write a reflection on how helpful it was to display the results in a table, graph, or chart; on what they learned about student learning from doing this activity; and how they would use this information in planning future lessons so that they help their students learn better.

Description of the assessment

Instructions for "Assessment Analysis"

1. Select a set of 3-5 daily lessons on the same topic or concept.
2. Design an assessment that reflects what you think students should know, understand, and be able to do at the end of the set of lessons.

3. Have your students complete the assessment **before** you begin teaching and record their marks on a spreadsheet. Use "1" if an answer is correct, use "0" if the answer is wrong.
4. Record their scores for each item, as well as their total score. When you have completed the lessons, have the students take the same assessment, scoring and recording it in the same way as the pre-assessment.

When you have both sets of scores for each student on each item, the following questions will be helpful in the analysis and reflection.

Data collection

1. Calculate the mean, median, and mode for both pre-and post-assessment.
2. Calculate the total for each of the items of both assessments. This tells us which items had the most correct responses. (Frequency distribution)
3. Calculate the mean for each of the items. (Item analysis)
4. Determine which items addressed individual levels of Bloom's Taxonomy.

Analysis

1. Mean, median, and mode for both pre-and post-test
   a. How do they compare?
   b. What does this tell you about the results?
2. Items with the most correct responses or highest points
   a. In the pre-test, what does this mean?
   b. In the post-test what does this mean?
3. The frequency of correct responses to an individual item
   a. Did it change or stay the same?
   b. Was the change positive or negative?
4. Items addressing individual levels of Bloom's Taxonomy
   a. What type of question appeared most often?
   b. How do these items compare to the frequency distribution you did for #2 in the data collection?

Display the Results

1. Use the chart function of the spreadsheet program to make a chart or figure of your data or arrange the data in a table.
2. Use the table or figure you created in reflecting on the results.

Implications

1. When comparing the mean, median, and mode of the pre- and post-tests, what might this indicate?
2. Did the group of items with the most correct responses get smaller, stay the same, or get bigger? What does this indicate?
3. When comparing the items from the pre-assessment to the same items on the post-assessment:
   a. What does it mean if fewer students answered correctly after the instruction?
   b. What does it mean if more students answered correctly after the instruction?
   c. If there were items that showed no change in score from pre- to post-test, what might you conclude?
4. What are some implications of the analysis of the test items distributed on Bloom's taxonomy?
   a. Which level of the taxonomy levels had the most questions?
   b. Which level of questions had the most correct responses?

Extended analysis

1. Use the spreadsheet array to do a content analysis.

a. Which items are related to the same content?
b. Which content items were aligned with which level of Bloom's taxonomy?
c. How many correct responses were associated to each of the items of the same or similar content?

Reflection

1. How helpful was it to display the results in a table, graph, or chart?
2. What did you learn about student learning from doing this activity?
3. How would you use this information in planning future lessons?

Scoring Rubric

	Beginning	**Emerging**	**Meets Expectations**	**Exceeds Expectations**
Assessment Design	Assessment not appropriate to developmental level of students or to content area; does not provide meaningful feedback.	Assessment is somewhat useful in providing feedback.	Assessment is appropriate to developmental level of students and provides meaningful feedback.	Assessment is appropriate to developmental level of students and to content area; provides meaningful feedback on all objectives for all students.
	Category: National Professional Standards for Teachers (SEC, 2007) **Standard:** 7. Assess and report on student learning **Standard:** 12. Reflect on, evaluate and improve professional practice **International- Qatar University CED Standards- Bachelor or Diploma in Education (2013)** **PLO:** PI 2c. Assess student learning. **PLO:** **USA- ACEI- Association for Childhood Education International Program Standards for Elementary Teacher Preparation** **Domain:** DEVELOPMENT, LEARNING AND MOTIVATION **Standard 1:** Development, Learning and Motivation--Candidates know, understand, and use the major concepts, principles, theories, and research related to development of children and young adolescents to construct learning opportunities that support individual students' development, acquisition of knowledge, and motivation.			
Data collection	Data are collected but show no clear representation of student performance.	Data represent student performance, but may not be clear.	Data validly and reliably represent student performance	Data validly and reliably are extremely helpful, representing student performance clearly and

	Beginning	Emerging	Meets Expectations	Exceeds Expectations
				meaningfully.
	Standards **International- Qatar University CED Standards- Bachelor or Diploma in Education (2013)** **PLO:** PLO 3. Use current and emerging technologies in instructionally powerful ways.			
Data display	Data are recorded and displayed, but analysis and interpretation are difficult or impossible.	Data are recorded and displayed, and minimally facilitates analysis or interpretations.	Data are appropriately and adequately recorded and/or displayed to facilitate analysis and interpretation.	Data are recorded and displayed in such a way that analysis and interpretation are clear, logical, and obvious.
	Standards **International- Qatar University CED Standards- Bachelor or Diploma in Education (2013)** **PLO:** PLO 3. Use current and emerging technologies in instructionally powerful ways.			
Data analysis	Minimal processes are applied to the data, and analysis is disconnected from the actual data processes.	Processes are applied to the data, but they may be inconsistent and/or inconclusive.	Appropriate and accurate processes are applied to the data.	Data is thoroughly analyzed using the most appropriate means.
Data interpretation	Interpretations and/or conclusions are disjointed from the data.	Processes are applied to the data, but they may be inconsistent and/or inconclusive. Interpretations and/or conclusions are drawn from the data, but the evidence supporting them is not provided.	Interpretations and/or conclusions are logical, and are appropriately supported by evidence from the data analysis.	Interpretations and conclusions clearly emerge from the data analysis and are presented in a professional, concise, and thorough manner.
	Standards **International- Qatar National Professional Standards for Teachers and School Leaders (2011)** **Category:** National Professional Standards for Teachers (SEC, 2007) **Standard:**			

	Beginning	Emerging	Meets Expectations	Exceeds Expectations
	7. Assess and report on student learning **International- Qatar University CED Standards- Bachelor or Diploma in Education (2013)** **PLO:** PLO 5. Arrive at data-informed decisions by systematically examining a variety of factors and resources. **USA- ACEI- Association for Childhood Education International Program Standards for Elementary Teacher Preparation** **Domain:** ASSESSMENT **Standard 4:** Assessment for instruction--Candidates know, understand, and use formal and informal assessment strategies to plan, evaluate and strengthen instruction that will promote continuous intellectual, social, emotional, and physical development of each elementary student.			
Implications for instruction	Implications are not supported by the data and are not appropriate to the students, content, or teaching/learning situation.	Implications are somewhat related to the data, but my not be clearly supported by it. Stated implications may not be appropriate to identified students, content, and teaching/learning situation.	Implications are supported by the data and are appropriate to the identified students, content, and teaching/learning situation.	Multiple implications are clearly supported by the data, and are appropriate to the identified students, content, and teaching/learning situation.
	Standards **International- Qatar National Professional Standards for Teachers and School Leaders (2011)** **Category:** National Professional Standards for Teachers (SEC, 2007) **Standard:** 7. Assess and report on student learning **Standard:** 12. Reflect on, evaluate and improve professional practice **International- Qatar University CED Standards- Bachelor or Diploma in Education (2013)** **PLO:** PI 2a. Design instructional plans to maximize student learning. **PLO:** PLO 8: Lead positive change in education. **USA- ACEI- Association for Childhood Education International Program Standards for Elementary Teacher Preparation** **Domain:** INSTRUCTION **Standard 3.1:** Integrating and applying knowledge for instruction--Candidates plan and implement instruction based on knowledge of students, learning theory, subject matter, curricular goals, and community;			