#2 Executive Summary: undergraduate Program Assessment: Student Outcomes

To be completed by Departments and submitted by the Department Chair to the Assessment Blackboard Site.

Department: Education Date: June 1, 2015

Members involved with the analysis of artifacts: Dr. Bernard Tonjes (Assessment lead), Dr. Ron Bork (Head of Teacher Education), Prof. Beth Pester, Prof. Annette Oliver, Prof. Amanda Geidel, Prof.

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See #1 Undergraduate Program Assessment Plan: Student Outcomes for: A) Student Outcomes; B) Background; C) Questions; D) Methodology.

Analysis of Artifacts: 1) Performance Criteria\* How was data analyzed? (Attach rubrics/scoring tools if used.)

In our interim report, questions were raised about inter-item reliability (IRR) and applicability of the task to some of the students included in the study. (See Executive Summary submitted Jan. 15, 2015)

“We have come to the conclusion that formal lesson planning is a developmental skill taught to teacher candidates to help them learn to THINK like teachers. A college instructor uses the formal lesson plan as a tool to see what a candidate is thinking about as he or she plans the lessons they may someday teach. There is no way that every candidate can actually teach a lesson in each of the classes which address lesson planning, and even if they could, teaching to a peer group is unrelated to the reality of an early childhood, elementary, middle or high school classroom. It is also true that when student teaching, some candidates are faced with as many as five or six different lessons per day. To expect them to write formal lesson plans that conform to standards used in their now-completed education classes would be burdensome and impractical.

However, the single most important value determined in evaluating the data was the correlation for Inter-rater Reliability (r=.27, *p>.90)*. The low correlation value and lack of statistical significance of that item calls all of the results of this process into question. This means that there is at least a one-in-ten possibility that the values obtained are due to chance meaning that any analysis of values can only be very tentative.”

To resolve these methodological problems, three significant changes were made in the procedures for the second semester:

1. Lesson plans submitted as part of the Student Teachers’ “Teacher Work Sample” were *not* included in the samples evaluated for the reasons cited above. This resulted in a restatement of our first assessment question: “Upon program completion ~~(Student Teaching),~~ can students write an effective lesson plan that includes standards, learning goals and instructional objectives?” We now considered completion of EDUC 461: Literacy Instruction or EDUC470: Content Area Literacy to be “program completion.”
2. The scoring rubric was changed. A subcommittee of Education faculty (Tonjes, Opfer, Uffelman, and Anderson) assisted by Dr. Judy Preuss from the graduate program, met to revise the scoring rubric. One existing criterion (#3 from the original list) was subdivided to allow

more differentiation in assessing separate planning skills. The descriptors for all lesson plan criteria were more explicitly described. The new rubric is attached.

1. The scoring process was changed:
	1. Fewer lesson plans were scored. A random sample of 10 lesson plans each chosen from novice (EDPS210: Educational Psychology), intermediate (EDUC424: Instructional Diversity and EDUC425A: English as a Second Language Instruction) and advanced (EDUC461: Literacy Instruction and EDUC470 Content Area Literacy) courses were used for a total sample size of 30. This represents approximately 17% of the plans submitted. The original specification of 30% (50 plans) was found to take too much time using the new methodology. This would have caused fragmentation of the group requiring multiple meetings resulting in irregular attendance leading to inconsistency in scoring which was a specific problem experienced in the first assessment session in Semester 1.
	2. The faculty members in attendance were divided into two groups. Each group was asked to use the new, more precisely defined rubric to *independently* assess the lesson plan of a given student at the same time. As the plans were assessed, a score-keeper recorded data and any discrepancies in score were brought to the attention of the group and resolved via discussion until consensus on a specific score was reached. Discrepancies of one point were found in only 11 of 240 different scores (<5%) and four of those discrepancies occurred on the second plan examined, resulting in extensive discussion of the application of the new rubric criteria. There were no score discrepancies greater than one point.

Data Analysis: Using Excel for Microsoft Office, data was entered into a spreadsheet and the average score for all 8 criterion scores disaggregated into Novice, Intermediate and Advanced group

according to course enrollment. Unlike the Semester 1 data set, there were no score discrepancies recorded as all discrepancies were resolved during the scoring process.

Data files are attached as “EDdata2 Summary of Results:

1) Restate the assessment question(s) (from the assessment plan.)

Upon program completion, can students write an effective lesson plan that includes standards, learning goals and instructional objectives?

Are students in the Education Program making developmental progress in this skill as they proceed through their course of study?

2. Summarize the Assessment results. A narrative summary is required. Charts, tables or graphs are encouraged but optional.

Scores were disaggregated by the courses that produced the lesson plan. Those average scores are presented in the table and graph below.

Table 1: Group Average Scores on Assessment Criteria.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Curric**  | **Obj**  | **Lesson**  | **Hook**  | **Transition**  | **Closure**  | **Assmt.**  | **Mod/Adapt**  |
|  |  |  | **Org**  |  |  |  |  |  |
| **Adv. (461/470)**  | 2.6  | 2.5  | 3.1  | 3.4  | 3.5  | 2.1  | 2.6  | 1.8  |
| **Mid (425/425A)**  | 3.5  | 2.5  | 3  | 3  | 2.6  | 2.3  | 2.7  | 3.4  |
| **Early (210)**  | 1.9  | 2.8  | 2.5  | 2.4  | 2.3  | 2.2  | 2.3  |   |

Novice Group: Average overall scores for plans in the Novice group were lower than both the Intermediate group (*p < .05)* and the Advanced group (*p < .10).* On average, the Novice group did not attain the minimum standard (3.0) on any of the individual criteria, falling to 1.9 (below “Developing”, 2.0) on criterion #1 . Because modification of instruction for special needs was intentionally excluded from the EDPS 210 course, no scores were given for criterion #8.

Intermediate Group: In general, scores for the Intermediate group were the highest when averaged across all criteria, although the difference between them and the Advanced group was not statistically significant (*p < .10).* They students in these classes had scores in four different criteria (#1, 3,4, and 8) in which the average score exceeded the minimum acceptable standard of 3.0. None of the average scores fell below 2.3.

Advanced Group: The overall average for the Advanced group was only .08 lower than that of the Intermediate group which is not statistically significant. (*p < .10).* The Advanced group exceeded the minimum acceptable standard (3.0) on three different criteria (#3,4, & 5). However, the Advanced group averaged only 1.8 on criterion #8.

Graph 1: Group average scores on assessment criteria.

4

3.5

3

2.5

2

1.5

1

0.5

0

Adv. (461/470)

Mid (425/425A) Early (210)

Scoring Reliability.

One of the significant questions addressed in this second semester’s assessment task was whether or not changes in the scoring procedure would result in more reliable data. Changes that were made include 1) eliminating lesson plans from Student Teachers, 2) a smaller number of plans in the sample, decreased

from 50 (30%) to 30 (17%), and a scoring process which resolved score discrepancies as part of the active scoring process.

Data from Semester 1 is included in the table below. Scoring criteria were expanded going into second semester. The relationship between Semester 1 and Semester 2 Criteria are:

Semester 1 Criterion Semester 2 Criterion S/G (Standard & Goal) #1 Curriculum

OBJ #2 Objective

LES Expanded to #3 Organization, #4 Hook, #5 Transitions, #6 Closure.

Assmt #7 Assessment

Mod #8 Modification and Adaptations.

Specific definitions for each Criterion are included in the Semester 1 Scoring Rubric. Table 2: Semester 1 Group Average Scores on Assessment Data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **S/G** | **Obj** | **Les** | **Assmt** | **Mod** |
| **Adv. ED461/470** | 3.3 | 2.9 | 3.5 | 3.1 | 1.9 |
| **Int. ED424** | 2.7 | 2.8 | 2.6 | 2.5 | 2.8 |
| **Novice EDPS210** | 2.9 | 3 | 2.7 | 2.4 |  |

Initial review indicates that there are several similarities between data collected first semester and the data taken during the second semester. A review of the graphs of the data demonstrates the similarities even more clearly.

In both data sets, the Novice students in EDPS210 (Green) have better scores on writing objectives. There are general similarities in that the Advanced students (Blue) generally have better scores the primary elements of a lesson (Sem1: Les, Sem 2 Lesson, Hook Transition and Closure) Finally, the Intermediate students (Red) show higher scores on lesson Modifications and Adaptations. These differences are consistent with the various emphases that occur in each class.

This similarity in data profiles across the two semesters indicates that the differences portrayed in the data from both semesters is reliable in spite of the variations in methodology. This means that valid initial conclusions can be derived from the data and used to guide instructional changes.

*(next page)*

Semester 1 Data

4

3.5

3

2.5

2

1.5

1

0.5

0

ED461/470

ED424 EDPS210

S/G Obj Les Assmt Mod

Semester 2 Data

4

3.5

3

2.5

2

1.5

1

Adv. (461/470)

Mid (425/425A)

Early (210)

0.5

0

Interpretation: Discuss how the results answer the assessment question.

*Are students in the Education Program making developmental progress in this skill as they proceed through their course of study?*

The results of the assessment indicate a clear developmental progression as students move from Novice to Advanced status. However, this is not true in all criteria and the deviations represent some challenges which can be addressed.

Attention to writing clear objectives is a point of significant emphasis in EDPS 210, but this skill seems to languish in subsequent semesters. Likewise, Intermediate students receive extensive instruction and

practice in modification of lessons to benefit students with special learning needs. The skill is not addressed in classes for the Novice students, so no score is reported. The score for the Intermediate students shows considerable success in those classes (EDUC424: Instructional Diversity and EDUC425A: ELL Instruction) as diversification in instruction is THE major concept guiding those courses. There is a considerable drop off in scores for Modification and Adjustment for the Advanced students in EDUC461 and EDUC470 indicating less success at what is considered to be a very important skill.

*Upon program completion (Student Teaching), can students write an effective lesson plan that includes standards, learning goals and instructional objectives?*

The data seem to indicate that, in general, this question can be answered in the affirmative, but that there are apparent gaps in the skills of the students. Those gaps seem to be in linking curriculum standards to well-written objectives, providing effective closure to a lesson, and most importantly in describing modifications which could be used for students with significant learning differences.

Sharing of Results:

When were the results shared ? Discussed in Education Program meeting on May 15, 2015 (Bork, Tonjes, Opfer, Geidel, Pester, Oliver, Uffelman, Anderson,) and May 19, 2015 ((Bork, Tonjes, Opfer, Geidel, Pester, Oliver,, Anderson,) Draft report shared via email on June 3, 2015, Revised final report shared via email on June 10, 2015)

Discussion of results: ACTION- Summarize your conclusions including:

1. *How will what the department learned from the assessment POTENTIALLY impact the teaching/learning process in your department starting the next academic year?*

Curriculum changes caused by the development of a class in classroom management have caused instruction in the Novice condition to be moved to EDUC201: Introduction to Education. This change, and the results of this assessment have caused the members of the department to review all aspects of instruction related to lesson planning. We are all much more aware of the topics and instructional process used to teach lesson planning in our various classes. We are already aware that for greater instructional success we need to be more consistent in definitions of terms used and in the standards for successful completion that we set for our students. Related questions have been raised about our teaching of early childhood lesson plans. It is possible that a review of that process will be included in our activities for next year.

1. *How will the program POTENTIALLY use the results to improve student achievement of the learning outcome in the next academic year?*

In the coming term, instruction in lesson planning will be characterized by a more consistent use in terms and their definitions (e.g., “Objectives must contain statements of Condition, Performance and Criteria.”) Likewise, additional emphasis will be placed on making certain concepts and skills learned in earlier classes salient in the minds of the intermediate and advanced students.

We also plan to develop a list of descriptions for a variety of special needs “students” which can be used to give our students specific practice at planning for the differences which they will find in their own classrooms. We feel that the advanced students are not paying adequate attention to issues of diversity in their lesson planning because of the lack of specificity in the assignment. When students are

instructed to make sure they plan for diversity but have no idea of the specific differences they will encounter, their planning becomes vague and general. Creating specific “students” with well-defined characteristics that can be assigned at random to a teacher candidate’s “class” will give that candidate specific targets for the needed accommodations. Our task is to create enough “students” so that students are required to respond to the needs of specific individuals rather than simple rote repetition of something that was done for an earlier class.

*If action is taken – it is recommended that the same plan be used for a second assessment cycle.*

FEEDBACK\* - Reassess outcomes if ACTION\* has been taken.

Between first and second semester, scoring procedures and criteria were revised to develop a more reliable way of assessing student lesson planning skills. Analysis indicates that the adjustments made have improved the reliability of the data.

Heading into the next semester, we expect that we will work to develop even more consistent definitions and processes for creating and planning lessons. We also expect that the creation of a set of special needs “students” will allow students to demonstrate the skills that we think they have when it comes to creating lessons that meet the needs of diverse student populations.

*What assessment questions related to the learning outcome would the program like to investigate in the future?*

In the next year, we will replicate the assessment process used in this semester. Our questions:

* 1. Upon program completion, do students have adequate skills in developing lesson plans that include clear relationships between curriculum, objectives and assessment?
	2. Does the use of standard student profiles allow students to demonstrate skills they already possess regarding modification and adaptation of instruction, or are these skills truly waning in the final semesters of a student’s education.

|  |
| --- |
| *3.* **BUDGET IMPLICATIONS** – *Indicate budget requirements necessary for the successful implementation of the* **ACTION\*** (i.e. an additional staff person, new equipment, additional sections of a course). None |
|  |
| **Submitted by: Bernie Tonjes Reviewed by the Assessment Committee (date): 7/15** |
| **Department Chair notified/additional action needed: notified** **BUDGET IMPLICATIONS – Assessment Committee Chair notified appropriate Dean: na** **Approved & Posted to Assessment site: 7/15** |