

TEAC Research Plan

Claim #1: *Students demonstrate knowledge of subject matter.*

Research Team: Tim Hall (Chair, HST/CHSBS), Mike Libbee (GEO/CST), Denny St. John (MTH/CST), Sue Nottingham (CHP)

Planning Notes:

- This claim must be substantiated for all areas of endorsement on campus. Considering the magnitude of the charge and the number of departments that have programs leading to teacher certification, the research team decided to focus on data that were readily available. In most cases these data were collected using instruments that were already deemed reliable and valid. In addition, data will be available for previous years if we utilize established instruments.
- All data will be reported for the past three academic years: 2006-07, 2007-08, 2008-09.
- We will substantiate this claim of knowledge in the subject matter from several point of view answering the following questions:

Research Questions and Data Sources:

1. *What is the performance of CMU students on the Michigan Test for Teacher Certification (MTTC) in their area of certification?*

Assumptions:

- a) That the MTTC assesses student content knowledge as needed to be an effective classroom teacher.
- b) The cumulative test score is the best measure of teacher competence.
- c) Students take the subject matter test after they have completed the coursework in their major or minor.
- d) Students who list CMU as their institution are enrolled in CMU programs taking the courses recommended for teacher certification.

Data source: MTTC results reported by Michigan Department of Education (MDE) to Central Michigan University (CMU): Michigan Test for Teacher Certification Three-Year Summary of State Results: Initial & Cumulative Initial Test Attempt and Cumulative Test Attempt of Eligible, First-Time Test Takers Program Years: 2005-2008, supplemented by 2009 report if it becomes available.

Reporting and analysis:

- a) Data will be reported for each certification area.
- b) Performance of CMU students will be compared to students at similar teacher preparation institutions (WMU, NMU, EMU, SVSU, GVSU).

2. *At the conclusion of student teaching, do CMU students feel that they were well prepared in their content area?*

Data source: MDE Teacher Exit Survey Efficacy Scores (given to student teachers at the end of student teaching).

Reporting and analysis: The following survey items will be used as indicators of content preparation as reported by students at the conclusion of student teaching:

- #10. In ELEMENTARY CERT, how much do you agree with the following statements: I am well prepared to...
 - teach Mathematics.
 - teach Social Studies.
 - teach Science.
 - teach Language Arts.
 - teach Reading (including oral reading).
 - teach Writing in a variety of genres.
 - #12. If your focus is a SECONDARY CERT, how much do you agree with the following: I am well prepared to...
 - teach my major content area(s).
 - teach my minor content area(s).
 - #20. For the following statements, how much do you agree with each regarding your KNOWLEDGE OF SUBJECT MATTER: I am well prepared to...
 - teach the core concepts of my content major.
 - relate classroom learning in my content area(s) to the real world.
 - integrate my subject matter with other content areas.
 - help students think critically (e.g. analyze, solve problems, make decisions.)
 - #21. How much did your Teacher Preparation Institution contribute to your ability to...
 - teach the core concepts of your main content area?
 - relate classroom learning in your content area(s) to the real world?
3. ***At the conclusion of student teaching, does the CMU supervising teacher feel that the student teacher was well prepared in their content area?***

Data source: MDE Supervisor Survey Efficacy Score (given to CMU student teaching supervisors at the end of student teaching).

Reporting and analysis: The following survey items will be used as indicators of content preparation as reported by students at the conclusion of student teaching:

Please consider the following aspects of the student teacher's/intern's ability regarding/to...

8. SUBJECT MATTER KNOWLEDGE.

4. ***Do CMU graduates who are now teaching, feel that they were well prepared in the content area?***

Data source: CMU Alumni Survey sent to CMU students at the end of their first and third years of teaching (two data sets).

Reporting and analysis: The following survey items will be used as indicators of content preparation as reported by alumni who are teaching:

- #5. Content Knowledge – How well prepared were you to:
 - Teach content in your discipline (major/minor)
 - Incorporate curriculum standards
 - Develop curriculum
 - Align curriculum goals with state academic standards
- #12. Overall, how well prepared were you to teach?

5. *Do the employers of CMU graduates feel that they were well prepared in the content area?*

Data source: CMU Principal Survey sent to the principals who employed CMU graduates as teachers. This survey replaced that described in item #5, CMU Employer Survey.

Reporting and analysis: The following survey items will be used as indicators of content preparation as reported by employing principals.

- #5. Subject Matter – How well did CMU prepare the alumni to:
 - Teach content in their discipline (major/minor)
 - Connect across content areas in developing appropriate instruction.
 - Incorporate curriculum standards
 - Develop curriculum
 - Establish appropriate learning goals for students
 - Plan effective instruction.

6. *Do the grade point averages (GPA) of students who graduate with teacher certification differ from students who do not get teacher certification for each major area?*

Data source: CMU OIR graduation data sorted by major into those with teacher certification and those without.

7. *Do students receiving teacher certification demonstrate content knowledge on assessments specific to a major area?*

Data source: CMU Departmental data as supplied by departments. We need validity and reliability of the instruments, three years of data, and an N value > 10 (?)

Chemistry, Physics/Physical Science, Foreign Language