

**Annual Program Report
Academic Year 2008-2009
October 15, 2009**

1. Continuous Assessment Results

a. Admission Data

Table 1 provides the average admission test scores and admission grade point averages (GPA) of Mathematics Majors approved by the Professional Education Council (PEC) for admission into initial teacher preparation programs during the 2008-2009 academic year. Before the Office of Teacher Services submits their names for review and approval by the PEC, candidates must meet minimum requirements established by the state and/or the WKU Professional Education Unit.

Table 1: Approved Candidate Test Score Averages by Program

CIP Code	ACT		GRE Composite		Admission GPA	
	<i>N</i>	Mean	<i>N</i>	Mean	<i>N</i>	Mean
270101-Mathematics	16	24	2	1095	18	3.21

b. Course Based Assessment Data

Table 2 provides percentages of candidates scoring at each level of proficiency on critical performances within professional education courses for the 2008-2009 academic year. Proficiency levels are based on the following scale: 1 – Standard Not Met, 2 – Standard Partially Met, 3 – At Standard, and 4 – Above Standard.

Table 2: CP Proficiency Level Percentages

Course	1	2	3	4
EDU-250	0%	0%	44%	56%
EDU-489	0%	0%	50%	50%
EXED-330	0%	0%	0%	100%
PSY-310	0%	6%	13%	81%
SEC-351	0%	0%	53%	47%
SEC-352	0%	0%	74%	26%
SEC-453	0%	10%	37%	53%
SEC-477	0%	0%	0%	100%

Table 3 indicates the level of Mathematics candidate proficiency across critical performances related to the Kentucky Teacher Standards. Candidates receiving an overall of 3 or 4 on a CP are considered to have demonstrated proficiency on the standards associated with the CP. Compared to the unit-wide results Mathematics candidates are typically performing as well or better than average. The exceptions are for Standards 8 and 10 which might need more scrutiny.

Table 3: Percent[†] of Mathematics Candidates scoring Proficient on CPs by Kentucky Teacher Standards

Program	Kentucky Teacher Standards*									
	1	2	3	4	5	6	7	8	9	10
Mathematics	97%	97%	95%	100%	100%	97%	100%	94%	98%	91%
Unit Wide	94%	95%	95%	94%	95%	93%	96%	96%	95%	97%

[†]Percentages based on *all* CPs candidates completed based on their coursework--not just program requirements

*KTS Key: 1 – Content Knowledge, 2 – Designs/Plans Instruction, 3 – Maintains Learning Climate, 4 – Implements/Manages Instruction, 5 – Assessment/Evaluation, 6 – Technology, 7 – Reflection, 8 – Collaboration, 9 – Professional Development, 10 – Leadership

Table 4 indicates the number of Mathematics candidates who have scored 2 or lower (below proficiency) on at least one CP during the 2008-2009 academic year.

Table 4: Mathematics Candidates Scoring below proficient on at least one CP during 2008-2009

WKU ID	Score		Count per Student
	1	2	
800315135	0	4	4
800261409	0	2	2
800297926	0	1	1

c. Clinical Experiences Data

Over the 2008-2009 academic year, 10 Mathematics candidates reported demographic information on 11 field placements with an average of 12% diversity (based on National Center for Education Statistics). This diversity percentage continues to be well above the average 11% diversity of the schools in the 31 counties that represent our service area. Table 5 reveals the percentages of field experiences with various characteristics. Note that candidates could choose all the characteristics that applied for any given experience.

Table 5: Percentages of Field Experiences by Category Types

Working with Students with Special Needs										
Physical Disability	Learning Disability	Mod/Sev	EBD	Gifted	ELL	Visual Impair	Hearing Impair	Develop Delay	Autism	Other
9%	45%	0%	27%	56%	18%	0%	0%	0%	0%	0%
Working with Diverse Students										
African American		Native American		Latino/Hispanic		Asian American		Other		
55%		0%		45%		9%		9%		

Overall, in 64% of their field experiences Mathematics candidates reported working with at least one student with special needs and in 64% field experiences candidates reported working with at least one student from a diverse group.

d. Culminating Assessment Data

Table 6 reports how 2008-2009 Mathematics candidates performed on dispositions as they entered and progressed through their program and during their student teaching experience. Students considered “proficient” who average at 3 or higher on each disposition category.

Table 6: Mathematics Proficiency Rates on Unit-Wide Dispositions

Program	WKU Professional Education Dispositions				
	Values Learning	Values Personal Integrity	Values Diversity	Values Collaboration	Values Professionalism
Prior to Student Teaching	100%	100%	100%	100%	100%
During Student Teaching	100%	100%	100%	100%	100%

As Component 4 of our unit-wide Continuous Assessment Plan (CAP) strategy, all initial preparation candidates complete a culminating assessment of professional and pedagogical knowledge and skills, the Teacher Work Sample (TWS).

Although in spring 2008 the Professional Education Council agreed that candidates who score a holistic score of at least “2 – Developing” are able to exit the program, for program evaluation purposes our goal is that at least 80% of program candidates will achieve “3 – Proficient” or higher. Table 7 represents proficiency rates for the Mathematics candidates.

Table 7: Initial Preparation TWS Proficiency Rates

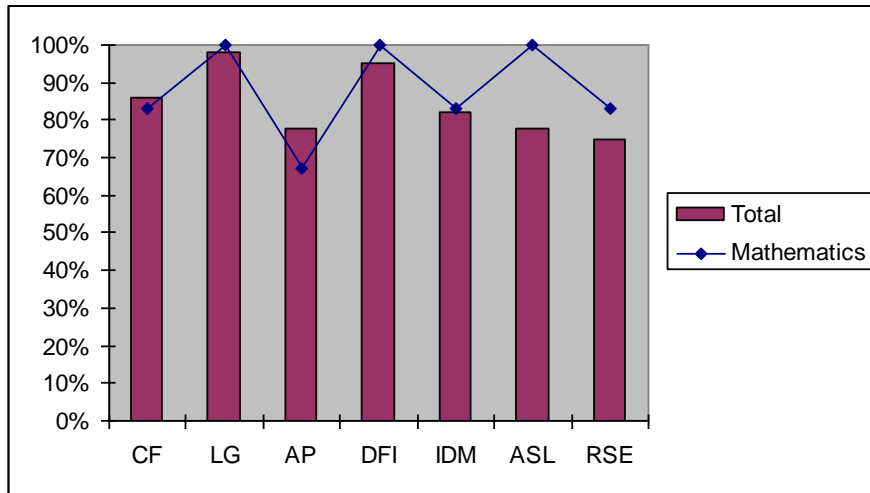
Program Type	2008-09
Mathematics	95%
Secondary Ed.	90%
Unit-Wide	93%

Because faculty also score TWS at the indicator level, we can use their scores to ascertain candidate success in meeting each component of the TWS. For program evaluation purposes, candidates are considered successful who average at least 2.5 on a three-point scale (1 – Not Met, 2 – Partially Met, and 3 – Met) on indicators aligned to a standard. Table 8 and Chart 1 depict the percentage of 8 Mathematics candidates who averaged at least 2.5 on the indicators for each TWS Factor: CF – Contextual Factors, LG – Learning Goals, AP – Assessment Plan, DFI – Design for Instruction, IDM – Instructional Decision Making, ASL – Analysis of Student Learning, and RSE – Reflection and Self-Evaluation.

Table 8: Percentage of Mathematics Candidates who “Passed” Each TWS Component

	CF	LG	AP	DFI	IDM	ASL	RSE
Math	83%	100%	67%	100%	83%	100%	83%
SECED	79%	96%	70%	96%	81%	87%	83%
Total	86%	98%	78%	95%	82%	78%	75%

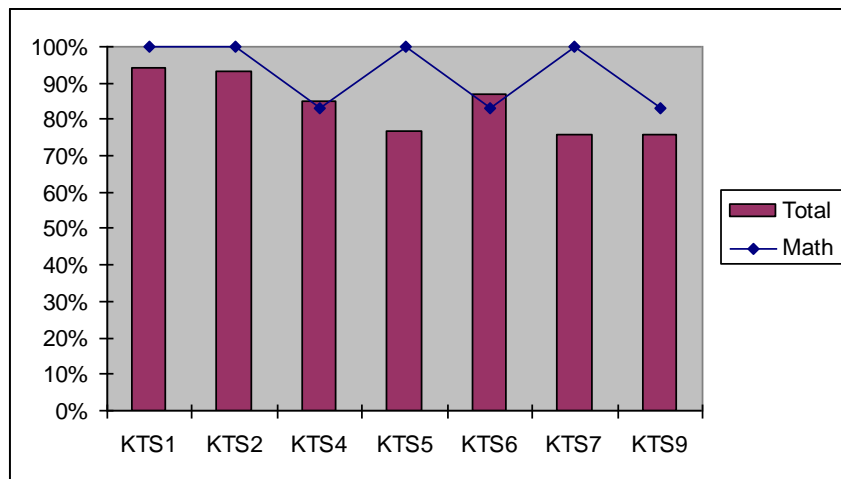
Chart 1: Percentage of Mathematics Candidates who “Passed” Each TWS* Factor



*TWS Key: CF – Contextual Factors, LG – Learning Goals, AP – Assessment Plan, DFI – Design for Instruction, IDM – Instructional Decision-Making, ASL – Analysis of Student Learning, RSE – Reflection & Self-Evaluation

Because the TWS indicators have been aligned to Kentucky Teacher Standards, we can use these scores to ascertain candidate success in meeting each standard related to the TWS (Chart 2 and Table 9).

Chart 2 Percentage by Program of Candidates who “Passed” Each Kentucky Teacher Standard*



*KTS Key: 1 – Content Knowledge, 2 – Designs/Plans Instruction, 4 – Implements/Manages Instruction, 5 – Assessment/Evaluation, 6 – Technology, 7 – Reflection, 9 – Professional Development

Table 9: Percentage of Mathematics Candidates “Passing” Each Kentucky Teacher Standard*

	1*	2	4	5	6	7	9
Math	100%	100%	83%	100%	83%	100%	83%
SECED	96%	85%	85%	79%	87%	83%	83%
Total	94%	93%	85%	77%	87%	76%	76%

*KTS Key: 1 – Content Knowledge, 2 – Designs/Plans Instruction, 4 – Implements/Manages Instruction, 5 – Assessment/Evaluation, 6 – Technology, 7 – Reflection, 9 – Professional Development

Student Teacher Evaluation Results

Additionally, all candidates are assessed during their student teaching experience using the Student Teaching Evaluation form. Table 10 reports the percentages of 2008-2009 Mathematics student teachers successful on each standard. For program evaluation purposes, candidates are considered successful who average at least 2.5 on a three point scale (1 – Not Met, 2 – Partially Met, and 3 – Met) on indicators aligned to a standard.

Table 10: Student Teaching Evaluation Proficiency Rates by Kentucky Teacher Standards*

Program	Kentucky Teacher Standards									
	1	2	3	4	5	6	7	8	9	10
Mathematics	100%	88%	88%	88%	88%	100%	88%	88%	88%	75%
Secondary Ed.	100%	91%	97%	93%	84%	84%	84%	93%	93%	84%
Unit-Wide	96%	93%	95%	88%	88%	85%	88%	92%	93%	87%

*KTS Key: 1 – Content Knowledge, 2 – Designs/Plans Instruction, 3 – Maintains Learning Climate, 4 – Implements/Manages Instruction, 5 – Assessment/Evaluation, 6 – Technology, 7 – Reflection, 8 – Collaboration, 9 – Professional Development, 10 – Leadership

e. Exit and Follow Up Data

Table 11 delineates the Educational Testing Center Services reports of the pass rates on Praxis II content exams of candidates who completed the program in the 2007-2008 academic year (the most recent data with complete data). The last column allows for pass rate comparison of our candidates to our 2006-2007 results.

Table 11: Pass Rates on Content Licensure Tests for Initial Teacher Preparation

Program / Name of Licensure Test	N Taking Assessment (2007-08)	WKU Pass Rate (2007-08)	WKU Pass Rate (2006-07)
Secondary Education / MATHEMATICS: CONTENT KNOWLEDGE	8	100%	86%*
Secondary Education / MATH PROOFS MODELS PROBLEMS PART 1	8	100%	100%*

*Pass rate based on N<10

WKU Teacher Survey Results (Academic Year 2008-09)

Below are the results of the electronic WKU Teacher Survey sent to student teachers and alumni who have potentially been teaching one or more years. Survey items requested the respondent’s perception of WKU preparation on each of the Kentucky Teacher Standards using a scale of 1 “Poor,” 2 “Fair,” 3 “Good,” and 4 “Excellent.” Standards with average scores of 3 or better

across items were considered to demonstrate acceptable program quality. Table 15 reports student teacher results by program with averages below 3 highlighted; Table 12 reports alumni results.

Table 11: Student Teacher Averages on Teacher Standards Questions

Kentucky Teacher Standard*	Program		
	MATH	SECED	Grand Total
	N=7	N=48	N=354
1	3.21	2.92	3.35
2	3.11	2.88	3.31
3	3.49	3.16	3.53
4	3.09	2.73	3.23
5	3.29	2.65	3.16
6	2.86	2.71	3.28
7	3.05	2.76	3.23
8	2.64	2.48	3.08
9	3.29	3.30	3.33
10	2.68	2.59	3.03

Table 12: Alumni Averages on Teacher Standards Questions

Kentucky Teacher Standard*	Program		
	MATH	SECED	Grand Total
	N=5	N=17	N=102
1	3.05	3.01	3.29
2	3.40	2.96	3.26
3	3.32	3.09	3.37
4	2.96	2.81	3.12
5	3.24	2.87	2.99
6	3.00	2.96	3.17
7	3.27	2.90	3.19
8	2.80	2.66	2.93
9	3.40	3.43	3.29
10	2.65	2.74	2.89

*KTS Key: 1 – Content Knowledge, 2 – Designs/Plans Instruction, 3 – Maintains Learning Climate, 4 – Implements/Manages Instruction, 5 – Assessment/Evaluation, 6 – Technology, 7 – Reflection, 8 – Collaboration, 9 – Professional Development, 10 – Leadership

2. Summary Comments

a. Admission Data

The mean ACT score and mean GRE composite scores were above the means of all candidates. The admission GPA of 3.21 was less than the mean of 3.29 for all students.

b. Course Based Assessment Data

Critical Performance (CP) proficiency level percentages indicate the Mathematics candidates are performing as well as or better than average. The exceptions are Standards 8 and 10.

c. Clinical Experiences Data

The percentages of students working with diverse populations are within guidelines.

d. Culminating Assessment Data

The Mathematics proficiency rates on the Unit-Wide Dispositions are 100% across the board. Figures for both Teacher Work Sample and the Kentucky Teacher Standards suggest that the areas that have the most room for improvement compared with the unit are “Contextual Factors,” “Assessment Plan,” KTS4 and KTS6. Mathematics Education and Education Faculty need to collaborate to ensure that mathematics students are able to transfer what they learn to the mathematics classroom.

e. Exit and Follow Up Data

The pass rate on the 2007-2008 Praxis showed improved over the previous year with 100% of candidates passing both the Mathematics Content Knowledge test and part 1 of the Math Proofs and Models Problems.

The results of the WKU Teacher Survey that looks at the respondent’s perception of WKU preparation on each of the Kentucky Teacher Standards show that student teachers from mathematics rate the program at or above that of all secondary teachers. However, in comparison to all WKU student teachers, there was a significant difference in collaboration.

3. Summarize your efforts to report and disseminate your results.

This report was forwarded to the Mathematics Department’s Teacher Education Committee and Undergraduate Studies Committee for reading and discussion. Issues raised by this report will inform future decisions regarding the direction of the program.

4. Summarize key discussions and/or decisions made based on assessment results:

- a. Describe any assessment or data collection changes you have made/will make based on your assessment results.

At this time, we believe that data collection is comprehensive and requires no changes at this time.

- b. Describe any program curriculum or experience changes you have made/will make based on your assessment results.

We recognize the need to make students aware of professional development opportunities and encourage them to participate. We will place emphasis on professional development in SEC 477 and will build it in as part of the course requirements. Based on performance on the TWS scores, we will encourage students to be more detailed on the Assessment Plan and on Implementing and Managing Instruction.

- c. Describe any decisions about group/individual student progress you have made/will make based on your assessment results.

The breakdown of Praxis II scores show that a percentage of our students scored low on the problem solving and proof portions of the test. As a result, we will consider making math 421 more available for mathematics students to take during their program.