## Eastern West Virginia Community and Technical College COURSE ASSESSMENT REPORT

Course Title and Number:	Academic Term and Year of Assessment			
MTH 100 – Transitional Math Level A	Activity (Ex: Fall, 2014)			
	Spring 2016			
Report Submitted By: Andrea Williams	Number of Students Assessed: 6			
Date Report Submitted: 5/24/16 Number of Sections Included: 1				
Course Delivery Format (list all modalities used in sections assessed. Ex: web based, VDL,				
traditional section, hybrid course, etc.). Traditional section				

## **Course Role in the Curriculum**

Provide a description of the role the course serves in the curriculum (i.e. general education requirement, program technical core, restricted elective, etc.). Note all as appropriate.

MTH 100 is a transitional math course that serves as either the prerequisite or co-requisite to MTH 115 – Business Math. This course does not satisfy the general education requirements of a college-level math course.

### **Assessment Methods**

Provide a description of the assessment process used. Include description of instrument and performance standards in description. Note all methods.

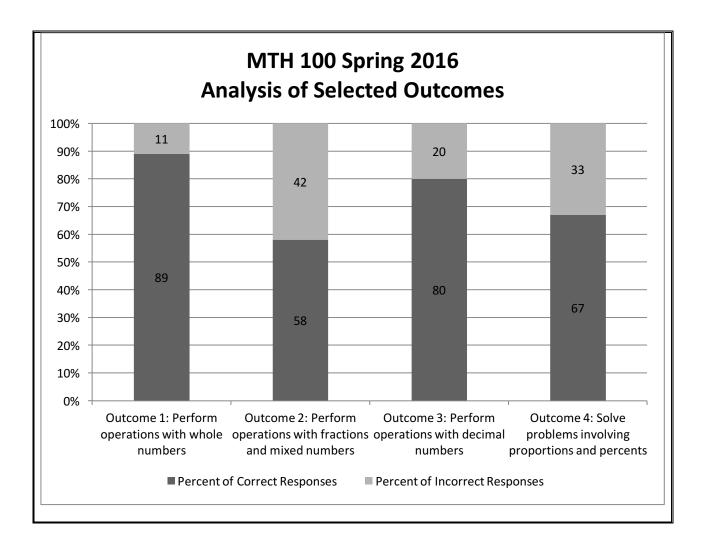
Final exam questions are used as a basis for this assessment. The final was a paper exam. Students were allowed to use a basic (non-fraction capable) calculator. Students were given partial credit based on the work they showed on their test paper, but for purposes of this analysis, only questions receiving full credit are considered correct.

Multiple questions are included in each outcome for analysis. A minimum satisfactory percent of correct responses for each outcome is 75%. Those failing to meet the standard are reviewed on an outcome-by-outcome basis.

## **Assessment Results**

Provide a summary of results including tables/charts. Incorporate information from previous assessments as appropriate. Append additional pages if necessary. If appending, include notation in box to "See attached".

Four outcomes were analyzed, and two out of the four met the 75% correct criterion. More details about the outcomes and the assessed questions are included in the action plan.



Course Level Assessment Summary of Outcomes, Indicators and Results Course Title and Number: MTH 100 – Transitional Math Level A Number of students in assessment sample = 6 Number of Sections in Assessment = 1 Add additional rows to table if necessary					
Learning Outcomes (Insert learning outcomes assessed during this cycle)	Indicator (Insert indicators used for each outcome: exam question, scoring rubric, etc. Be specific)	Percent of Correct Responses	Percent of Incorrect Responses	Performance Standard Met (75%)* (yes or no)	
Outcome 1: Perform operations with whole numbers	<ul> <li>Evaluate the following expression. 1 · (9 + 2 - 5 ÷ 5)²</li> <li>On Monday, Joe has \$2962 in his checking account. He writes 3 checks during the week for \$99, \$1893, and</li> </ul>	89%	11%	Yes	

		\$447. Then on Saturday, he deposits \$831. What is Joe's balance the following Monday?			
	12.	Find the perimeter of a triangle with sides of 14 m, 18 m, and 22 m.			
		22 m 18 m			
	17.	Find the area of a rectangle with length 5 yd and width 3 yd. $(A = lw.)$			
		3 yd 5 yd			
	20.	Find the prime factorization of the following counting number. Write any repeated factors using exponents.  300			
	23.	Find the average (mean) of the set of numbers. 4, 7, 9, 4, 6, 5, 7			
Outcome 2: Perform operations with fractions and mixed numbers	10.	Compute the difference indicated and simplify your answer. $\frac{\frac{26}{30} - \frac{9}{50}}{\frac{9}{50}}$	58%	42%	No
	11.	Use the rules for order of operations to evaluate the following expression. Write the solution as a mixed number or a fraction in lowest terms. $\left(\frac{7}{9} + \frac{7}{9}\right) \div \left(2\frac{2}{3}\right)^2$			
	14.	A recipe calls for $2\frac{1}{5}$ cups of ground meat and $3\frac{2}{3}$ cups of cheese. If the			

	19.	recipe is multiplied by $3\frac{1}{2}$ , how much of the mixture will there be?  Find the following quotient. Reduce to lowest terms. $5 \div \frac{9}{20}$			
Outcome 3: Perform operations with decimal numbers	6.	Find the circumference of a circle with a diameter of 20 ft. $C = \pi d$ . Use $\ddot{a} = 3.14$ . Round your answer to the nearest hundredth.	80%	20%	Yes
	7.	Change the decimal to fraction form (or mixed number form) and reduce, if possible.  54.418			
	8.	Write the indicated sum in decimal form rounded to the nearest thousandth if necessary. $\frac{13}{100} + 2.4 + \frac{13}{20}$			
	18.	Change the fraction to decimal form rounded to the nearest thousandth if necessary. $\frac{6}{40}$			
	25.	Write in order from smallest to largest: $0.63, \frac{5}{8}, 0.64$ .			
Outcome 4: Solve problems involving proportions and percents	4.	William has accumulated \$420,000 in savings and wishes to invest this money sensibly. The types of investments and their corresponding percentages, recommended by a financial advisor, are shown in the following circle graph. Find the amount of money that William should invest in Annuities. Round your answer to the nearest hundredth, if	67%	33%	No

necessary. 13. Teresa is investing her money. She thinks that she should make \$9 for every \$150 she invests. How much does she expect to make on an investment of \$8550? **16.** Solve the following problem for the unknown quantity. Round your answer to the nearest tenth of a percent, if necessary. % of 64 is 96. 21. Convert the units of measure as indicated. (16 oz = 1 lb.)22 lb =\_\_\_\_ oz 22. The discount on a new copier was \$240. This was a discount of 19%. What was the original selling price of the copier? Round your answer to the nearest cent. 24. How much simple interest would be paid on a loan of \$13,480 at 6% for 46 months? I = Prt. Round your answer to the nearest cent. Note: 360

days in a year and 30 days in a month.

#### Conclusions

Provide a brief summary of conclusions derived based on analysis of data. Append additional pages if necessary. If appending, include notation in box to "See attached".

Although the small sample size provides a limited amount of information, most students seem to be receiving and retaining the information they should be from this course. A few minor revisions are discussed in the Action Plan below.

## **Previous Assessment Reports and Results**

Date of Previous Assessment: N/A

**List of Outcomes Not Met:** 

Summary of Actions Taken to Address Unmet Learning Outcomes: Append additional pages if necessary. If appending, include notation in box to "See attached".

<sup>\*</sup> Please note if using a different minimum performance standard.

#### **Action Plan and Date for Reassessment**

Identify action plan for improvement or maintaining current performance levels including outcomes identified for re-assessment, curriculum revision, LOT proposal, new or revised course activities to reinforce learning outcomes, etc. Append additional pages if necessary. If appending, include notation in box to "See attached".

Outcome 1: Perform operations with whole numbers

With an 89% success rate, no adjustment in instruction is recommended at this time.

Outcome 2: Perform operations with fractions and mixed numbers

There were a couple of minor mistakes on these questions such as copying errors or multiplying instead of adding. However, there was one student who did not even know how to approach two of the problems, and several students tried to solve them by converting to decimal numbers instead of fractions. The problem with that approach is not all of the fractions converted to decimals "nicely", i.e. they required rounding, which meant the students did not get an exact answer. In the future, more fraction problems will be included on the final exam review.

Outcome 3: Perform operations with decimal numbers

With an 80% success rate, no adjustment in instruction is recommended at this time.

Outcome 4: Solve problems involving proportions and percents

This is seemingly one of the most important outcomes of the course in terms of knowledge required for MTH 115 but unfortunately was not mastered. Students did well with the question that directly asked them to solve a proportion but struggled with the questions that had a proportion hidden in a word problem. More homework problems similar to these will be assigned in the future, and it will be ensured there are similar questions on the final exam review.

With the exception of one student who apparently stopped attending at some point during the semester, every student who was co-enrolled in both this course and MTH 115 passed both courses. Success in MTH 100 as well as MTH 115 will continue to be monitored to determine the effectiveness and the relevance of this course as a co-requisite.

Proposed date for the next assessment is Spring 2018.

# Assessment Committee Recommendation/Approval (To be posted by Assessment Committee Chair)

 $\Xi$  Approved as presented

Approved with recommendations for future reports (Explanation Required) Resubmission Required. Reason for Resubmission:

Date: 8-25-16