



QEP ANNUAL REPORT

2012-2013

David Cobb
Wallace Community College





QEP ANNUAL REPORT

I. Introduction

Wallace Community College implemented its first Quality Enhancement Plan (QEP) during the fall of 2011. First year implementation (2011-2012) was initiated on our Spark's campus. One year later it was initiated on the Wallace Campus for year 2012-2013. The stated goal of our current QEP project is two-fold.

- A) Improvement of student performance in mathematics course work through MTH100.
- B) Increasing the success rates for developmental mathematics.

As stated in our QEP documents the developmental mathematics course MTH090, MTH091, and MTH092 would undergo a radical transformation in pedagogy. The transformation resulted in a shift away from the traditional face to face lecture model, to an emporium model of computer based instruction, with the instructional support of faculty, and peer tutors.

Assessment for the efficiency of QEP will be based upon comparison of success rate with national and regional institutions. Also, involved in the assessment is a student survey of program perceptions.

QEP at a glance



The Wallace Community College Quality Enhancement Plan (QEP) emerged from an on-going and broad-based conversation with Wallace Community College stakeholders, including faculty and staff members, administrators, students, and the community. The goal of the QEP is to improve student performance and success rates in developmental mathematics courses by redesigning Basic Mathematics (MTH 090), Developmental Algebra I (MTH 091), and Developmental Algebra II (MTH 092).



II. Objectives of QEP

A) *To ensure that knowledge and skills acquired in developmental course work are adequate for success in subsequent mathematics courses.*

STATED OUTCOMES

1. Students' success rates for each re-designed course will meet or exceed the national average.

The National average for comparison is provided by the following, "*National Study of Developmental Education II Baseline Data for Community College*."¹

Retention and Pass Rates of Developmental Students			
Subject Area	Developmental Course		Pass Rate First College Credit Course
	Retention Rate	Pass Rate	
Math	80%	68%	58%

National Average			
Developmental Math	1996	2007	
		66%	68%

* National Average data excludes student withdrawals

At our local institutions we have recorded the following success rates determined by campus.

¹ Katherine Gerlaugh, Lizette Thompson, Hunter Boylan, and Hildreth Davis, National Study of Developmental Education II, Vol. 20, Issue 4, 2007, p 2

QEP ANNUAL REPORT



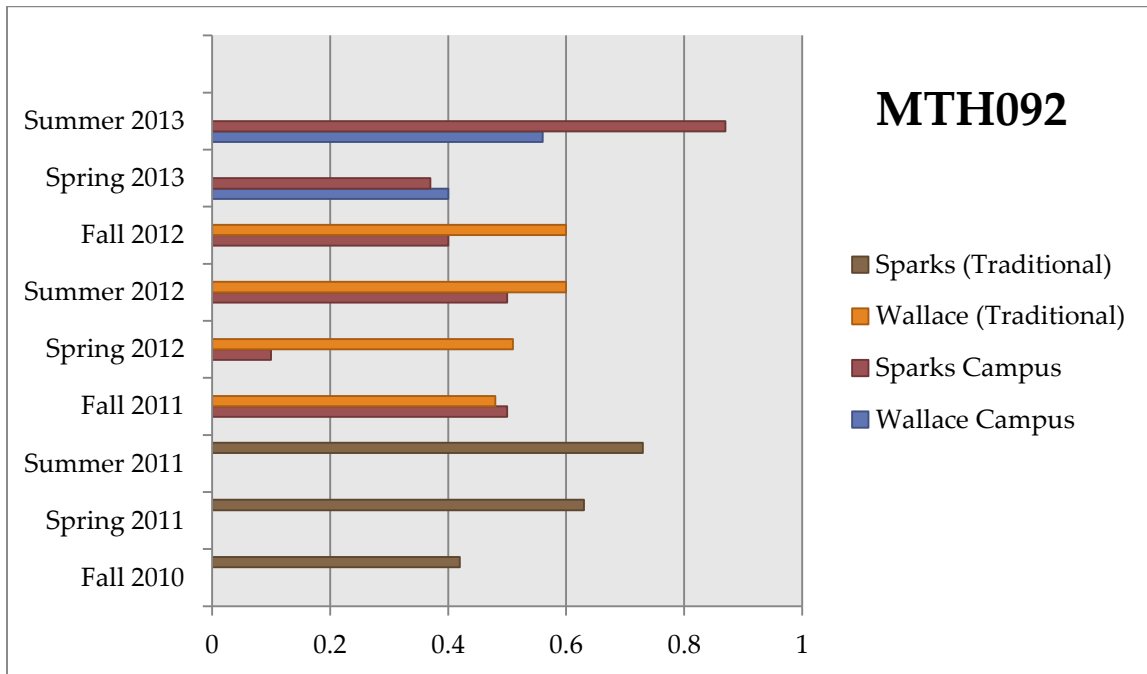
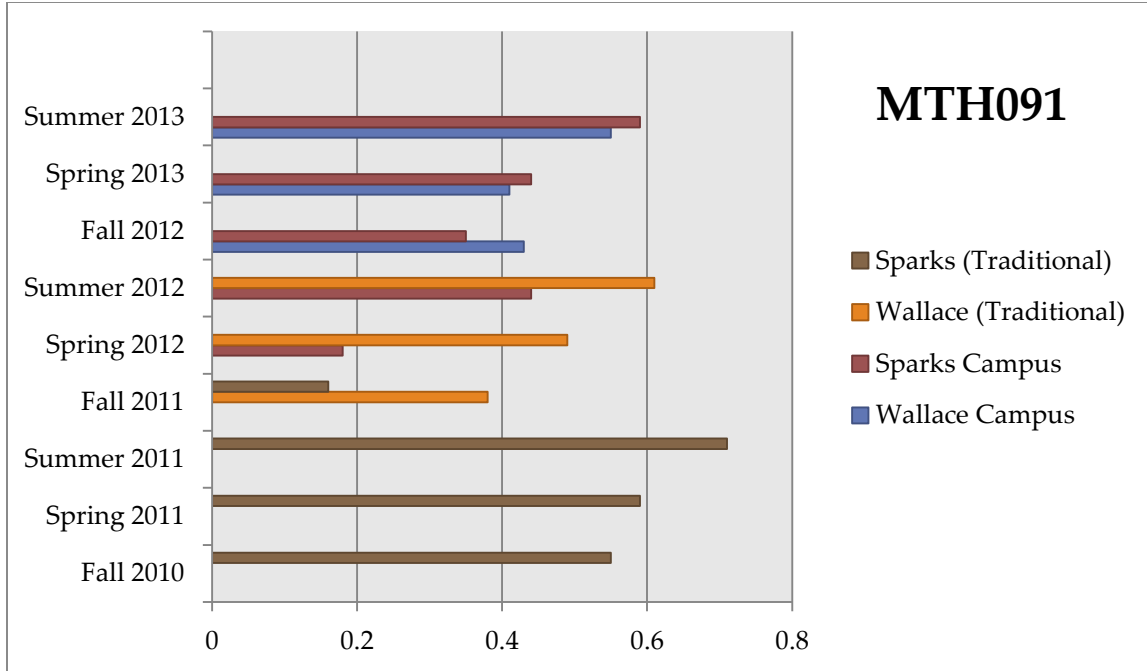
Wallace College QEP (Sparks Campus)	MTH 090	MTH 091	MTH 092
		WD Included / WD Excluded	WD Included / WD Excluded
*Fall 2010	NA	54%/64%	42%/62%
*Spring 2011	NA	59%/64%	63%/63%
*Summer 2011	NA	71%/80%	73%/80%
*Fall 2011	NA	16%/23%	50%/60%
Spring 2012	NA	18%/22%	10%/11%
Summer 2012	NA	44%/49%	50%/50%
Fall 2012	NA	35%/45%	40%/50%
Spring 2013	NA	44% /62.3%	37% / 50%
Summer 2013	NA	59% / 62.5%	87% / 87%

* indicates traditional class

Wallace College QEP (Dothan Campus)	MTH 090	MTH 091	MTH 092
		WD Included / WD Excluded	WD Included / WD Excluded
*Fall 2011	NA	38%/55%	48%/66%
*Spring 2012	NA	49%/65%	51%/64%
*Summer 2012	NA	61%/69%	60%/71%
Fall 2012 <small>*MTH092 only</small>	NA	43%/53%	60%/71%
Spring 2013	NA	41% /63%	40% /52%
Summer 2013	NA	55% /60.2%	56% /67%

*indicates traditional class

QEP ANNUAL REPORT



QEP ANNUAL REPORT



2. Students' success rates will increase 5% annually.
We are obviously missing our goal of increasing success rates by 5% annually. We have made the following changes and alterations in our QEP Math protocol.
 - The original required "notebook" component of the QEP was removed. It was clearly evident early on that this additional work placed on the students would quickly overload and overwhelm them.
 - The bonus points system for modular exams was modified in order to assist and encourage students to meet the 80 percent mastery standard for module exams. We have added and adjusted bonus points for submitting writing assignments, submitting requested surveys, submitting SLO quizzes, completing short term goals, and remaining on benchmark schedule. Students were pleased to receive these ample opportunities to earn bonus points.
 - We have implemented (Summer 2013) a new student planner. The goal with this new planner is to encourage students to pay more attention to short term class goals. As a part of this new planner we have included an affective domain component in the form of exposure to positive and motivational thoughts, commentary, and quotes.
 - We have implemented (Summer 2013) a new webpage organizing the QEP Math resources in one convenient location. This webpage will be set as the browser homepage for all Math Lab computers, as well as being included as a link in Blackboard Classes.

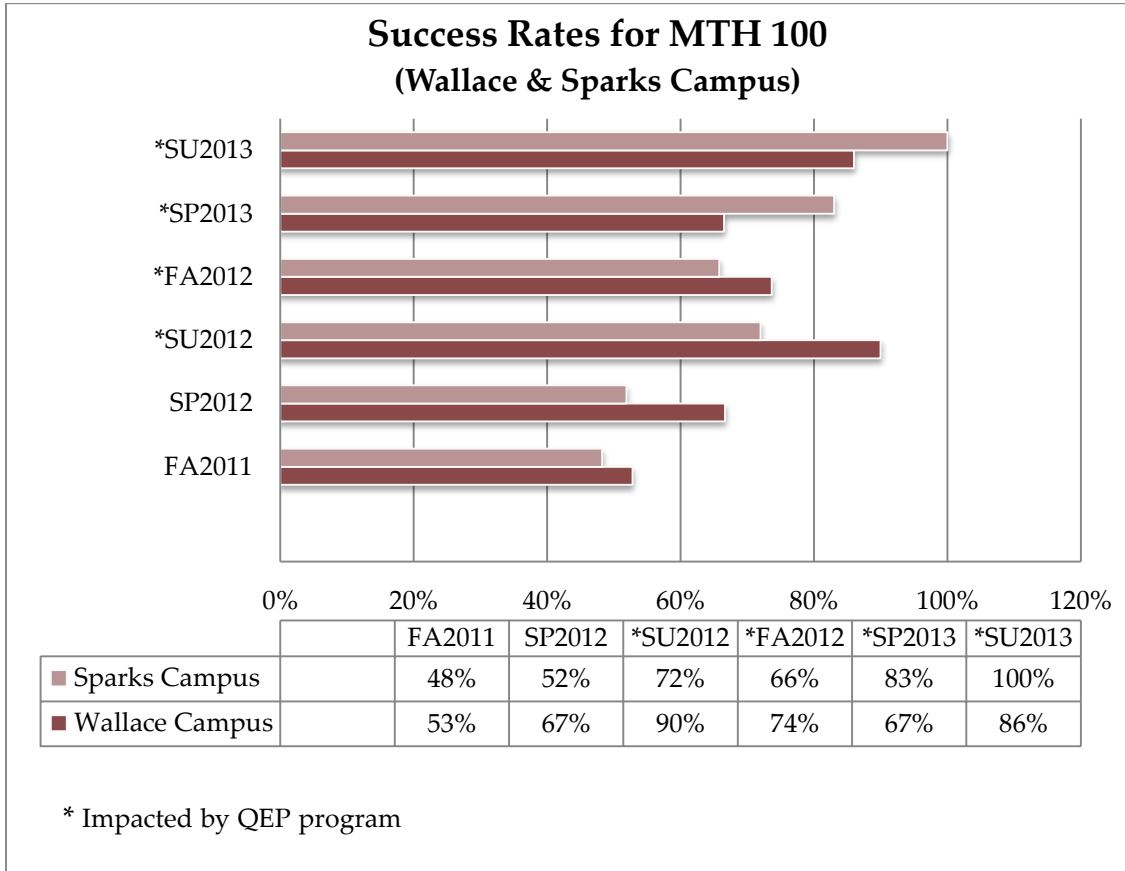
The web-page includes the following:

1. Course by course access to instructor- made videos.
2. Weekly motivational thoughts and commentary.
3. ALEKS login access.
4. Links to instructor's emails.

QEP ANNUAL REPORT



- Students successfully completing MTH100 on first attempt will increase 5% annually.



It is evident that our success rates in MTH 100 are showing signs of increase. It should be noted that MTH100 success rates began an upward trajectory on both campuses prior to any effects regarding students completing the developmental redesign program. This is most likely due to renewed emphasis being placed on student perception which was initiated and encouraged by the Dean of Instruction.

QEP ANNUAL REPORT



B) *To establish programs and services which strengthen students' developmental mathematics skills and knowledge.*

STATED OUTCOMES

1. All students will complete learning with 80% mastery.
 - We have maintained the 80% mastery standard for module exams and progression through the redesigned developmental courses. We have made minor adjustments and additions to the opportunity for students to earn bonus points in order to apply to module exam results.
2. Students enrolled in developmental math courses will be required utilize the QEP Lab and its resources for average of 1.25 additional hours per week.
 - The requirement for utilization of the Math Lab for an average of 1.25 additional hours per week was implemented as necessary “flex time” in order to accommodate the volume of students and classes utilizing our facilities.
3. 80% of students should respond with satisfied or very satisfied for questions 2, 5, 8 on the annual QEP Assessment Survey.
 - QEP Assessment (Satisfaction) Survey Results for questions 2, 5, 8.
 1. Question 2: Were you satisfied with the staffing? $162/169 = 96\%$
 2. Question 5: Were you satisfied with the helpfulness of supplementary materials? $152/169 = 90\%$
 3. Question 8: Are you satisfied with the increase level of confidence in your math skills? $145/169 = 86\%$

According to the QEP assessment survey data the program is successful in the above areas. Continued improvement is an on-going effort.

C) *To implement tools, policies, and methods in order to enable students to improve their study skills in mathematics courses.*

STATED OUTCOMES

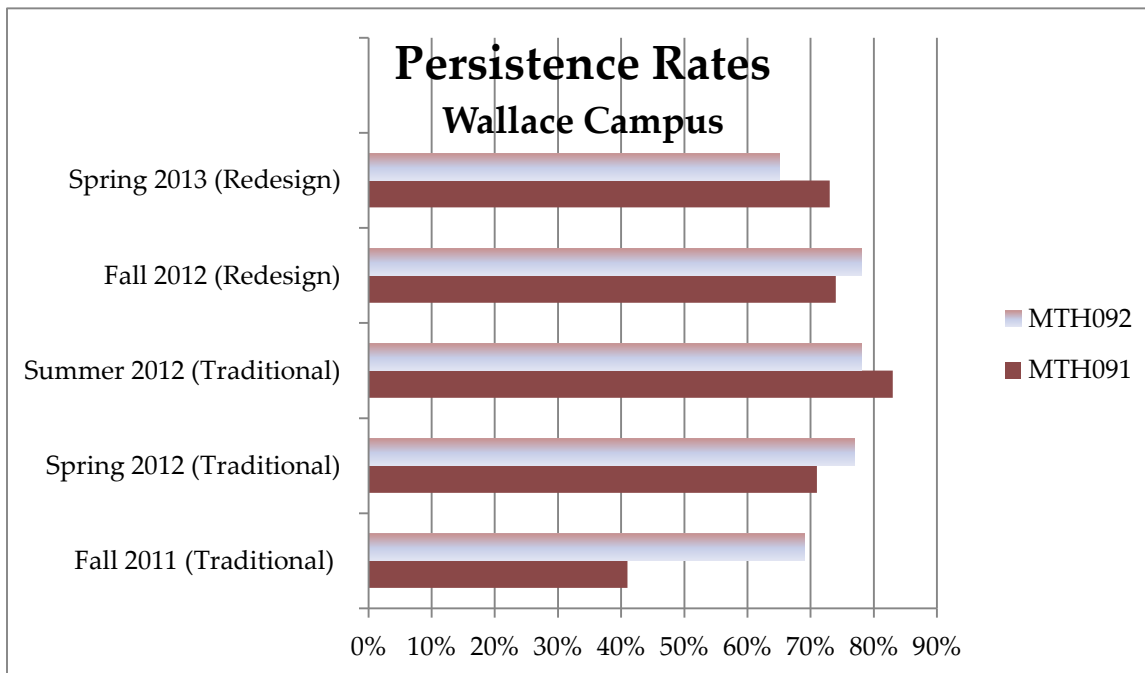
1. 100% of students taking a module exam will complete at least 85% of the courses notebook for that module.
 - The “Course Notebook” was discontinued at the very beginning (first semester) of the implementation of our redesign on the Sparks campus. It was immediately

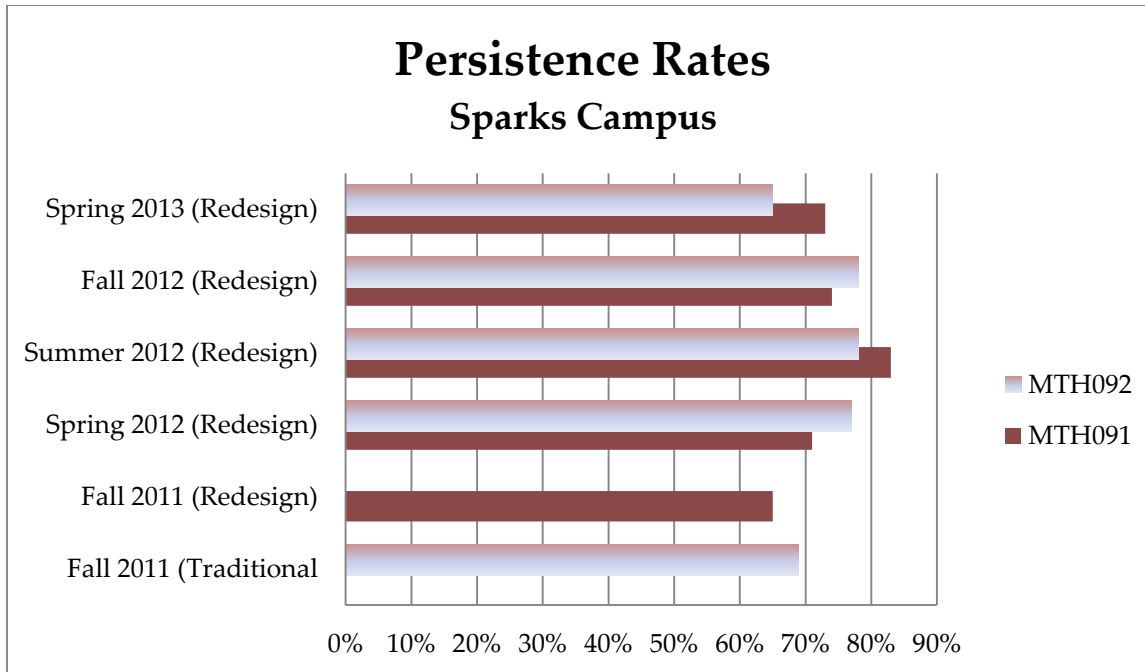
QEP ANNUAL REPORT



evident that the level of effort and work required by the use of ALEKS alone would be an enormous increase over the former traditional lecture class method. The added demand of the “Course Notebook” as originally intended increased the work load demand upon students to a point which would be detrimental even to the low success rates that we experienced.

2. 80% of students should respond “Satisfied” or “Very Satisfied” to question #7 of the QEP Assessment Survey.
 - Question 7: “Were you satisfied with the improvements of your organizational skill as a result of keeping a notebook”? 87% responded satisfied or very satisfied.
3. Completion rate (success rate) will increase by 5% annually from baseline data (2010-2011).
 - Completion rates are reported earlier as course success rates.
4. Persistence rates for each redesigned course will increase by 5% each semester. This translates into a reduced withdrawal rate.





Persistence rates measure the number of students who complete a course without withdrawing or receiving a “WF”. Analysis of our persistence rates suggest that a great number of students are “persisting” the course, but unfortunately are doing so unsuccessfully. These leads to three observations:

1. 9.3 % of students are persisting to the point of obtaining an IP grade.
2. 30 % of students persisting are doing so unsuccessfully.
3. Attendance records suggest that class attendance impacts this persistence with/without success ratio.

III. Where do we go from here?

A) Timeline of the QEP task.

1. In the earliest days of research for the genesis of the math department was informed that the first years would not show progress or marked improvement. The experience of other institutions which utilized ALEKS as a means to course redesign and mastery indicated that the pedagogical change from traditional class to the emporium model would not show positive results for the first year. To that end it is suggested that the current ALEKS (QEP) program continue for at least one more academic year. This will give of three years of data for the Sparks campus and 2 years of data for the Wallace main campus. During this time we will continue to look for and implement any refinements which might assist in increasing student success rates.

B) Observed criticisms and difficulties with the current model.

1. Mastery Learning.

Research consistently links mastery learning elements to highly effective instructional strategies and student success. (Guskey 2010)², (Klecker, B. M. and Chairman, A. 2008).³ Mastery learning using modular design with small units of instructions and frequent testing is known as “chunking” the course content. (Miller, G.A 1956)⁴ This concept of “chunking” is addressed in ALEKS in the form of automated assessments. A more linear model of “chunking” is used by other mastery models. Overlaying those more linear models on ALEKS may be overwhelming regarding numbers of assessments and time spent on those assessments. It does bear further investigation.

Researching curriculum in developmental mathematics in the state of Alabama indicates that we at Wallace College require a more content rich curriculum. The data of our success and persistence rates suggest that WHAT we ask of OUR students in the TIME frame we define may in fact be too much for a significant number of our underprepared students.

2. A significant number of students claim that they would prefer and perform better in a more traditional oriented classroom. Some students even stated this in the form of an ADA request. This particular “criticism” has been demonstrated in the QEP Assessment Survey as well as having been voiced by numerous students. Transitional Studies has discussed offering course alternatives of a more traditional nature for students who meet the following established criteria:

1. Must have attempted ALEKS for one semester
2. Must have invested a minimum time requirement for that effort
3. Referral by counseling or ADA services

² Guskey, T.R. (2010), *Lessons of Mastery Learning*, *Educational Leadership*, 68 (2), 52-57.

³ Klecker, B. M., and Chapman, A. (2008), *Advocating the Implementation of Mastery Learning in Higher Education to Increase Student Learning and Retention*. Online Submission, EBSCOHOST.

⁴ Miller, G. A. (1956), *The Magic Number Seven, Plus or Minus Two: Some Limits on Our Capacity*, *Psychology Review*, 63, 81-97.

QEP ANNUAL REPORT



C) Proposals and considerations

1. The Transitional Studies department purposes the re-alignment of the MTH090, MTH091, and MTH092 course content topics to more closely match and align the Alabama State Plan of Instruction for each course and what other state institutions are doing regarding developmental mathematics. This will result in some topics being removed from and adjusted in each course. Furthermore, this re-alignment may require a look at course content and emphasis in MTH 100.
2. Transitional studies redesigned the modular exams for each transitional math course in order to have greater control over the degree of comprehensive randomization present in modular exams created by the ALEKS software.
3. We have aligned the QEP advisory committee with the leadership and faculty of Transitional Studies. This action was suggested and implemented with the intent to streamline efficiencies for making adjustments to the policies, pedagogy and curricula content in our developmental math courses. Furthermore, in the beginning of this QEP proposal no such Transitional Studies Division existed.
4. For the 2013 – 2014 academic year the QEP program is implementing a Student Planner as a required component of MTH090, MTH091, and MTH092. The intent is to assist students in the development of planning and organizational skills, as well as the application of these skills to college course work. We will evaluate the effectiveness of this tool during the Fall and Spring (2013-2014) semesters by requesting student input.
5. The Transitional Studies division suggest that the current status of MTH091 and MTH092 as 4 semester hour courses be considered. Most Alabama institutions teach all developmental courses as 3 semester hour courses. The current 4 semester hour model presents inherent scheduling, facilities and registration difficulties. Furthermore, most Alabama institutions do not follow the MTH090, MTH091, MTH 092 path through developmental mathematics. Most institutions in our state follow a MTH090, MTH098 path to MTH 100.

QEP ANNUAL REPORT

