

# FALL 2013 ACADEMIC VICE PRESIDENT'S SAGA REPORTS **VOLUME 5**

**VOLUME**  
**5**



## INSIDE THIS ISSUE

Of the Academic Vice President's  
Small Assessment Grant Award Reports

### **DEAL & DCAPS .....5**

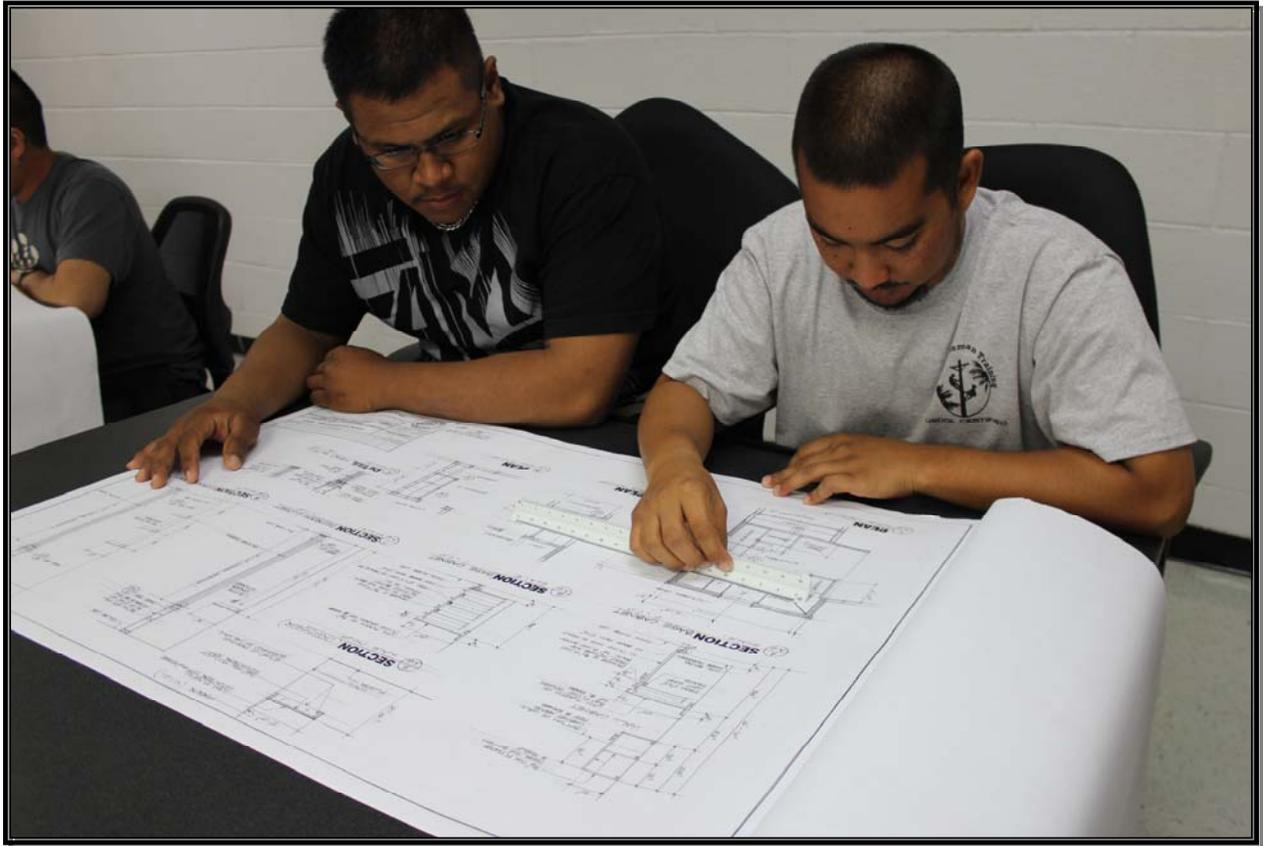
Status Report  
by Dr. Michael L. Chan

### **MATH PATH .....36**

Data Analysis Report  
by Dr. Michael L. Chan

### **SPECIAL PROJECTS .....49**

Special Projects Report  
by Joanne A. Iget



## **MISSION**

The mission of Guam Community College is to be a leader in career and technical workforce development by providing the highest quality education and job training in Micronesia.

### ***Sinangan Misión*** (Chamorro translation)

*I misión i Kulehon Kumunidã't Guåhan, guiya i gé'hilo' i fina'che'cho' siha yan I kinahulo' i mamfáfa'che'cho' ya u na'guáguåha nu i manákhilo' yan manmaolek na tiningo' yan fina'nå'guen cho'cho' siha gi iya Maikronisiha.*

Board of Trustees Policy 100 (Amended & Adopted: May 5, 2011 (with Chamorro translation); Re-examined & Adopted: February 9, 2011; New Adoption: March 11, 2009; Amended & Adopted September 5, 2008; Reexamined & Adopted: January 25, 2007; First Adopted: September 19, 1990)

# Foreword by the AVP



I am pleased to present Volume 5 of the AVP SAGA REPORTS (Fall 2013), which brings the rich harvest of outcomes derived from investigative explorations of issues at the community college that deserve a wider readership. In this year's harvest are three (3) reports that deal with critically-important issues: our dual enrollment and dual credit programs called DEAL and DCAPS, a Math bridge intervention study, and a report on Special Project course offerings at the college.

The Dual Enrollment Accelerated Learning or DEAL program at Guam Community College was designed to provide high school juniors and seniors the opportunity to earn college credit while still enrolled in high school by taking GCC courses normally not offered at the secondary level. These courses are usually General Education courses like English and Math. Taking these courses early provides our students with a head start in entering college life.

The Dual Credit Articulated Program of Study or DCAPS, on the other hand, was designed to handle the trades and technical courses that would allow students to gain college credits as they pursue their secondary CTE programs of study. Through a rigorous process of curriculum alignment and commitment to the program of study, certain parameters have been set up in order for our students to avail of these college credits, ranging from three (3) to fifteen (15) across various CTE programs.

The Math intervention study and the in-depth review of Special project course offerings were intended to highlight persistent issues that frequently arise in faculty discussions, such as college readiness, as well as course modality and rigor. The written reports showcased in this booklet provide various recommendations on these areas that are meaningful for further dialogue and discussion. It is my intent through this publication to bring these issues to the forefront of conversations occurring between faculty and administrators.

I commend Dr. Michael Chan and Joanne Ige as the featured authors of this volume, for their tenacity and perseverance as they tackled these difficult academic issues with diligence, thoroughness, and a belief in accountability and improvement.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Somera". The signature is written in a cursive, flowing style.

R. Ray D. Somera, Ph. D.  
Academic Vice President



## Contents

|  |    |
|--|----|
| <i>Foreword by the AVP</i> .....   | 3  |
| Dual Enrollment Accelerated Learning Program (DEAL).....   | 5  |
| GCC Enrolled Students who received a Certificate of Completion / Certificate of Mastery (2010 – 2013)<br>..... | 7  |
| SY 2010 - 2011.....  | 7  |
| SY 2011 – 2012.....  | 8  |
| SY 2012 – 2013.....  | 10 |
| Dual Credit Articulated Program of Study (DCAPS) .....   | 12 |
| Summary .....  | 15 |
| APPENDIX A.....  | 19 |
| ADMINISTRATIVE GUIDELINES .....  | 20 |
| Dual Enrollment Accelerated Learning (DEAL).....   | 20 |
| APPENDIX B .....   | 24 |
| Dual Credit Articulated Program of Study Agreement .....   | 24 |
| DCAPS Program.....   | 24 |
| Dual Credit Articulated Program of Study Agreement .....   | 25 |
| Math Path Data Analysis Report .....   | 36 |
| Introduction .....   | 36 |
| Methodology.....   | 36 |
| Hypothesis.....  | 37 |
| Data Analysis.....   | 38 |
| Results .....  | 38 |
| Conclusion.....  | 40 |
| Recommendations.....   | 41 |
| APPENDICES .....   | 44 |
| APPENDIX A.....  | 45 |
| APPENDIX B.....  | 46 |
| APPENDIX C.....  | 47 |
| APPENDIX D.....  | 48 |
| SPECIAL PROJECT REPORT.....  | 49 |
| ACKNOWLEDGEMENTS .....   | 53 |

## Dual Enrollment Accelerated Learning Program (DEAL)

### Introduction

At Guam Community College the Dual Enrollment Accelerated Learning program (DEAL) and the Dual Credit Articulated Program of Study (DCAPS) are two programs that allow for the awarding of college credit. DEAL centers on the general education aspect, primarily Mathematics and English; DCAPS is centered on the career and technical education programs. DEAL allows eligible students to earn both college and high school credits simultaneously and DCAPS allows certificate of mastery recipients to be awarded college credit based on the successful completion of CTE courses as indicated in the DCAPS program agreement.

Since spring of 2010, GCC has had thirty two students participate in the DEAL program; as reflected in the table below.

| <b>GWHS</b> | <b>Grade Level</b> | <b>Semester Enrolled</b> | <b>Course(s) &amp; Grade(s)</b>            |
|-------------|--------------------|--------------------------|--|
| Student 1   | 12 <sup>th</sup>   | Spring 2010              | MA095 – P; EN100W - Z                      |
| Student 2   | 12 <sup>th</sup>   | Spring 2010              | MA095 – P; EN100W - Z                      |
| Student 3   | 12th               | Spring 2011              | MA085 – Z                                  |
| Student 4   | 11th               | Spring 2011              | EN100B – Z                                 |
| Student 5   | 11th               | Summer 2011              | MA095 – P                                  |
| Student 6   | 11th               | Summer 2011              | MA108 – A; EN110 – A                       |
| Student 7   | 11th               | Summer 2011              | EN100W – P                                 |
| Student 8   | 11th               | Spring 2012              | MA095 - TF                                 |
| Student 9   | 11th               | Spring 2012              | MA095 - TF                                 |
| Student 10  | 12th               | Spring 2012              | EN110 - A                                  |
| Student 11  | 11th               | Summer 2012              | EN110 – A                                  |
| Student 12  | 11th               | Spring 2013              | EN100W – P; MA108 - A                      |
| Student 13  | 11th               | Summer 2013              | EN110 – B; MA110 - A                       |
| Student 14  | 11th               | Summer 2013              | MA085 – P                                  |
| Student 15  | 12th               | Fall 2013                | EN111 – In Progress<br>MA161A- In Progress |

| <b>SSHS</b> | <b>Grade Level</b> | <b>Semester Enrolled</b> | <b>Course(s) &amp; Grade(s)</b> |
|-------------|--------------------|--------------------------|---------------------------------|
| Student 1   | 12 <sup>th</sup>   | Summer 2010              | MA095 – P; EN110 - A            |
| Student 2   | 12 <sup>th</sup>   | Summer 2010              | MA095 – P; EN110 - B            |
| Student 3   | 12th               | Spring 2012              | EN100R - P                      |
| Student 4   | 12th               | Spring 2012              | EN100W – Z                      |
| Student 5   | 12th               | Spring 2012              | EN100R – F                      |
| Student 6   | 11th               | Summer 2012              | EN110 – C                       |

| <b>JFK</b> | <b>Grade Level</b> | <b>Semester Enrolled</b> | <b>Course(s) &amp; Grade(s)</b> |
|------------|--------------------|--------------------------|---------------------------------|
| Student 1  | 11th               | Summer 2011              | MA085 - P                       |

| <b>SHS</b> | <b>Grade Level</b> | <b>Semester Enrolled</b> | <b>Course(s) &amp; Grade(s)</b> |
|------------|--------------------|--------------------------|---------------------------------|
| Student 1  | 12 <sup>th</sup>   | Summer 2010              | MA095 – P; EN110 – C            |
| Student 2  | 10th               | Summer 2012              | EN110 – D                       |
| Student 3  | 11th               | Summer 2013              | EN110 – A                       |

| <b>OHS</b> | <b>Grade Level</b> | <b>Semester Enrolled</b> | <b>Course(s) &amp; Grade(s)</b> |
|------------|--------------------|--------------------------|---------------------------------|
| Student 1  | 11th               | Spring 2011              | MA095 – P                       |
| Student 2  | 12th               | Spring 2011              | MA108 – C; ED220 – A            |
| Student 3  | 11th               | Spring 2011              | MA110A – A                      |
| Student 4  | 12th               | Spring 2011              | EN100R – Z                      |
| Student 5  | 11th               | Spring 2011              | MA085 – P                       |
| Student 6  | 11th               | Summer 2012              | MA095 – P                       |

| <b>Home School</b> | <b>Grade Level</b> | <b>Semester Enrolled</b> | <b>Course(s) &amp; Grade(s)</b>             |
|--------------------|--------------------|--------------------------|---|
| Student 1          | 11th               | Fall 2013                | EN100W – In Progress<br>MA110 – In Progress |

In spring 2013, a junior from George Washington high school participated in DEAL. The student enrolled in EN100W and MA108. The student passed both courses, but did not receive high school or college credit. During summer 2013, three students participated in DEAL through the Citi Foundation’s Post-Secondary Education Accessibility Initiative (PSEAI); two of those participants were from George Washington High School and the other participant was from Southern High School. Two out of the 3 participants enrolled in college level courses. Student 13 from George Washington High School enrolled in EN110 and MA110 and received a grade of a “B” and “A” respectively. Student 13 was awarded both high school and college credit. Student 14 from George Washington High School enrolled in MA085 and received a “P”; no credit was awarded. Student 3 from Southern High School enrolled in EN110 and received a grade of an “A” and received both high school and college credit.

On May 13, 2013 a dual enrollment agreement between Father Duenas Memorial School and the Guam Community College was signed and implemented. Two GCC representatives presented information on the new dual enrollment agreement to the sophomores and juniors and how they can avail themselves of the opportunity to receive both high school and college credit. Father Duenas was contacted on August 12, 2013 and was asked if any student had submitted transcripts to be transferred as high school credit from GCC. The registrar indicated that no student had yet to transfer any credits from GCC.

On June 21, 2013 a dual enrollment agreement between Reyes Home School from the Home School Association of Guam and Guam Community College was signed and implemented. Reyes Home School requested a dual enrollment agreement with GCC in order to supplement its Mathematics, English, and foreign language requirements. One student from Reyes Home School has enrolled for fall 2013. The student enrolled in EN100W and MA110.

**GCC Enrolled Students who received a Certificate of Completion / Certificate of Mastery (2010 – 2013)**

**SY 2010 - 2011**

In SY 2010 – 2011, out of 251 certificate of completion recipients, a total of 85 students (34%) continued on and enrolled at GCC. Out of 84 certificate of mastery recipients, a total of 52 students (62%) continued on and enrolled at GCC. George Washington High School led the way with 30 of its certificate of completion recipients continuing on to GCC (12%), followed by Simon Sanchez High School with 19 students (8%), John F. Kennedy High school with 17 students (7%), Southern High School with 15 students (6%), and Okkodo High School with 4 students (2%). Okkodo High School and Simon Sanchez both had the most with a total of 16 certificate of mastery recipients in SY 2010 – 2011 who continued on and enrolled at GCC (19%), followed by JFK with 10 students (12%), George Washington with 8 students (10%), and Southern High School with 2 students (2%).

| <b>GWHS</b>       | <b>PROGRAM</b>            | <b>SY</b> | <b>COC</b> | <b>COM</b> | <b>Grand Total</b> |
|-------------------|---------------------------|-----------|------------|------------|--------------------|
|                   | Allied Health             | SY10-11   | 3          | 1          | 4                  |
|                   | Automotive Service Tech   | SY10-11   | 1          | 0          | 1                  |
|                   | Construction Technology   | SY10-11   | 1          | 0          | 1                  |
|                   | Construction - AUTOCAD    | SY10-11   | 4          | 0          | 4                  |
|                   | Early Childhood Education | SY10-11   | 12         | 0          | 12                 |
|                   | Electronics Technology    | SY10-11   | 2          | 0          | 2                  |
|                   | Marketing                 | SY10-11   | 0          | 1          | 1                  |
|                   | Tourism – Lodging Mgt     | SY10-11   | 3          | 2          | 5                  |
|                   | Tourism –ProStart         | SY10-11   | 4          | 4          | 8                  |
| <b>GWHS Total</b> |                           | SY10-11   | 30         | 8          | 38                 |

| <b>JFK</b>       | <b>PROGRAM</b>         | <b>SY</b> | <b>COC</b> | <b>COM</b> | <b>Grand Total</b> |
|------------------|------------------------|-----------|------------|------------|--------------------|
|                  | Allied Health          | SY10-11   | 8          | 4          | 12                 |
|                  | Electronics Technology | SY10-11   | 6          | 0          | 6                  |
|                  | Marketing              | SY10-11   | 0          | 1          | 1                  |
|                  | Tourism – Lodging Mgt  | SY10-11   | 0          | 2          | 2                  |
|                  | Tourism –ProStart      | SY10-11   | 3          | 3          | 6                  |
| <b>JFK Total</b> |                        | SY10-11   | 17         | 10         | 27                 |

| <b>OHS</b>       | <b>PROGRAM</b>         | <b>SY</b> | <b>COC</b> | <b>COM</b> | <b>Grand Total</b> |
|------------------|------------------------|-----------|------------|------------|--------------------|
|                  | Electronics Technology | SY10-11   | 1          | 8          | 9                  |
|                  | Marketing              | SY10-11   | 1          | 2          | 3                  |
|                  | Tourism – Lodging Mgt  | SY10-11   | 2          | 6          | 8                  |
| <b>OHS Total</b> |                        | SY10-11   | 4          | 16         | 20                 |

| <b>SSHS</b>       | <b>PROGRAM</b>          | <b>SY</b> | <b>COC</b> | <b>COM</b> | <b>Grand Total</b> |
|-------------------|-------------------------|-----------|------------|------------|--------------------|
|                   | Allied Health           | SY10-11   | 7          | 4          | 11                 |
|                   | Construction Technology | SY10-11   | 3          | 0          | 3                  |
|                   | Electronics Technology  | SY10-11   | 4          | 0          | 4                  |
|                   | Marketing               | SY10-11   | 1          | 1          | 2                  |
|                   | Tourism – Lodging Mgt   | SY10-11   | 1          | 7          | 8                  |
|                   | Tourism –ProStart       | SY10-11   | 3          | 4          | 7                  |
| <b>SSHS Total</b> |                         | SY10-11   | 19         | 16         | 35                 |

| <b>SHS</b>       | <b>PROGRAM</b>          | <b>SY</b> | <b>COC</b> | <b>COM</b> | <b>Grand Total</b> |
|------------------|-------------------------|-----------|------------|------------|--------------------|
|                  | Allied Health           | SY10-11   | 3          | 0          | 3                  |
|                  | Automotive Service Tech | SY10-11   | 1          | 0          | 1                  |
|                  | Auto Body Repair        | SY10-11   | 2          | 0          | 2                  |
|                  | Marketing               | SY10-11   | 5          | 1          | 6                  |
|                  | Tourism – Lodging Mgt   | SY10-11   | 4          | 1          | 5                  |
| <b>SHS Total</b> |                         | SY10-11   | 15         | 2          | 17                 |

## **SY 2011 - 2012**

In SY 2011 – 2012, out of 347 certificate of completion recipients, a total of 110 students (32%) continued on and enrolled at GCC. Out of 153 certificate of mastery recipients, a total of 83 students (54%) continued on and enrolled at GCC. George Washington High School had the most with 45 of its certificate of completion recipients continuing on to GCC (41%), followed by Simon Sanchez High School with 19 students (17%), Southern High School and Okkodo High School both had 16 students (15%), and John F. Kennedy High School had 14 students (13%). Simon Sanchez High School had the most certificate of mastery recipients who continued on to enroll at GCC with a total of 23 (28%), followed by Okkodo High School with 21 students (25%), John F. Kennedy with 20 students (24%), George Washington High School with 14 students (17%), and Southern High School with 5 students (6%).

| <b>GWHS</b>       | <b>PROGRAM</b>            | <b>SY</b> | <b>COC</b> | <b>COM</b> | <b>Grand Total</b> |
|-------------------|---------------------------|-----------|------------|------------|--------------------|
|                   | Advanced Carpentry        | SY11-12   | 1          | 0          | 1                  |
|                   | Allied Health             | SY11-12   | 4          | 3          | 7                  |
|                   | Auto Body Repair          | SY11-12   | 2          | 0          | 2                  |
|                   | Automotive Service Tech   | SY11-12   | 2          | 0          | 2                  |
|                   | Construction - AUTOCAD    | SY11-12   | 5          | 0          | 5                  |
|                   | Early Childhood Education | SY11-12   | 15         | 0          | 15                 |
|                   | Electronics Technology    | SY11-12   | 6          | 5          | 11                 |
|                   | Marketing                 | SY11-12   | 2          | 1          | 3                  |
|                   | Tourism – Lodging Mgt     | SY11-12   | 2          | 1          | 3                  |
|                   | Tourism –ProStart         | SY11-12   | 1          | 4          | 5                  |
|                   | Visual Communications     | SY11-12   | 5          | 0          | 5                  |
| <b>GWHS Total</b> |                           | SY11-12   | 45         | 14         | 59                 |

| <b>JFK</b>       | <b>PROGRAM</b>         | <b>SY</b> | <b>COC</b> | <b>COM</b> | <b>Grand Total</b> |
|------------------|------------------------|-----------|------------|------------|--------------------|
|                  | Allied Health          | SY11-12   | 5          | 6          | 11                 |
|                  | Electronics Technology | SY11-12   | 3          | 0          | 3                  |
|                  | Marketing              | SY11-12   | 2          | 5          | 7                  |
|                  | Tourism – Lodging Mgt  | SY11-12   | 3          | 3          | 6                  |
|                  | Tourism –ProStart      | SY11-12   | 1          | 6          | 7                  |
| <b>JFK Total</b> |                        | SY11-12   | 14         | 20         | 34                 |

| <b>OHS</b>       | <b>PROGRAM</b>              | <b>SY</b> | <b>COC</b> | <b>COM</b> | <b>Grand Total</b> |
|------------------|-----------------------------|-----------|------------|------------|--------------------|
|                  | Advanced Carpentry          | SY11-12   | 5          | 0          | 5                  |
|                  | Automotive Service Tech     | SY11-12   | 2          | 0          | 2                  |
|                  | Electronics – C. Networking | SY11-12   | 6          | 3          | 9                  |
|                  | Tourism – Lodging Mgt       | SY11-12   | 2          | 11         | 13                 |
|                  | Marketing                   | SY11-12   | 1          | 7          | 8                  |
| <b>OHS Total</b> |                             | SY11-12   | 16         | 21         | 37                 |

| <b>SSHS</b>       | <b>PROGRAM</b>             | <b>SY</b> | <b>COC</b> | <b>COM</b> | <b>Grand Total</b> |
|-------------------|----------------------------|-----------|------------|------------|--------------------|
|                   | Allied Health              | SY11-12   | 6          | 6          | 12                 |
|                   | Construction Trades        | SY11-12   | 1          | 0          | 1                  |
|                   | Electronics- C. Networking | SY11-12   | 7          | 4          | 11                 |
|                   | Tourism – Lodging Mgt      | SY11-12   | 3          | 5          | 8                  |
|                   | Tourism –ProStart          | SY11-12   | 2          | 3          | 5                  |
|                   | Marketing                  | SY11-12   | 0          | 5          | 5                  |
| <b>SSHS Total</b> |                            | SY11-12   | 19         | 23         | 42                 |

| <b>SHS</b>       | <b>PROGRAM</b>             | <b>SY</b> | <b>COC</b> | <b>COM</b> | <b>Grand Total</b> |
|------------------|----------------------------|-----------|------------|------------|--------------------|
|                  | Advanced Carpentry         | SY11-12   | 1          | 0          | 1                  |
|                  | Allied Health              | SY11-12   | 4          | 0          | 4                  |
|                  | Auto Body Repair           | SY11-12   | 1          | 0          | 1                  |
|                  | Electronics- C. Networking | SY11-12   | 2          | 0          | 2                  |
|                  | Tourism – Lodging Mgt      | SY11-12   | 1          | 1          | 2                  |
|                  | Tourism –ProStart          | SY11-12   | 5          | 0          | 5                  |
|                  | Marketing                  | SY11-12   | 2          | 4          | 6                  |
| <b>SHS Total</b> |                            | SY11-12   | 16         | 5          | 21                 |

### **SY 2012 - 2013**

In SY 2012 – 2013, out of 232 certificate of completion recipients, a total of 46 students (20%) continued on and enrolled at GCC. Out of 147 certificate of mastery recipients, a total of 78 students (53%) continued on and enrolled at GCC. George Washington High School had the most with 18 of its certificate of completion recipients continuing on to GCC (8%), followed by John F. Kennedy High School with 17 students (7%), Okkodo High School with 7 students (3%), Simon Sanchez High School with 3 students (1%), and Southern High School with 1 student (.04%). Simon Sanchez High School had the most certificate of mastery recipients who continued on to enroll at GCC with a total of 26 (18%), followed by Okkodo High School with 21 students (14%), George Washington with 17 students (12%), John F. Kennedy High School with 9 students (6%), and Southern High School with 5 students (3%).

| <b>GWHS</b>       | <b>PROGRAM</b>             | <b>SY</b> | <b>COC</b> | <b>COM</b> | <b>Grand Total</b> |
|-------------------|----------------------------|-----------|------------|------------|--------------------|
|                   | Allied Health              | SY12-13   | 1          | 4          | 5                  |
|                   | Auto Body Repair           | SY12-13   | 2          | 0          | 2                  |
|                   | Automotive Service Tech    | SY12-13   | 3          | 0          | 3                  |
|                   | Early Childhood Education  | SY12-13   | 1          | 3          | 4                  |
|                   | Electronics- C. Networking | SY12-13   | 0          | 1          | 1                  |
|                   | Tourism – Lodging Mgt      | SY12-13   | 3          | 5          | 8                  |
|                   | Tourism –ProStart          | SY12-13   | 3          | 4          | 7                  |
|                   | Visual Communications      | SY12-13   | 5          | 0          | 5                  |
| <b>GWHS Total</b> |                            | SY12-13   | 18         | 17         | 35                 |

| <b>JFK</b>       | <b>PROGRAM</b>        | <b>SY</b> | <b>COC</b> | <b>COM</b> | <b>Grand Total</b> |
|------------------|-----------------------|-----------|------------|------------|--------------------|
|                  | Allied Health         | SY12-13   | 8          | 2          | 10                 |
|                  | Tourism – Lodging Mgt | SY12-13   | 4          | 2          | 6                  |
|                  | Marketing             | SY12-13   | 2          | 3          | 5                  |
|                  | Tourism – ProStart    | SY12-13   | 3          | 2          | 5                  |
| <b>JFK Total</b> |                       | SY12-13   | 17         | 9          | 26                 |

| <b>OHS</b>       | <b>PROGRAM</b>              | <b>SY</b> | <b>COC</b> | <b>COM</b> | <b>Grand Total</b> |
|------------------|-----------------------------|-----------|------------|------------|--------------------|
|                  | Electronics – C. Networking | SY12-13   | 2          | 2          | 4                  |
|                  | Tourism – Lodging Mgt       | SY12-13   | 5          | 17         | 22                 |
|                  | Marketing                   | SY12-13   | 0          | 2          | 2                  |
| <b>OHS Total</b> |                             | SY12-13   | 7          | 21         | 28                 |

| <b>SSHS</b>       | <b>PROGRAM</b>             | <b>SY</b> | <b>COC</b> | <b>COM</b> | <b>Grand Total</b> |
|-------------------|----------------------------|-----------|------------|------------|--------------------|
|                   | Allied Health              | SY12-13   | 1          | 4          | 5                  |
|                   | Automotive Service Tech    | SY12-13   | 0          | 2          | 2                  |
|                   | Electronics- C. Networking | SY12-13   | 0          | 2          | 2                  |
|                   | Tourism – Lodging Mgt      | SY12-13   | 0          | 11         | 11                 |
|                   | Tourism –ProStart          | SY12-13   | 0          | 2          | 2                  |
|                   | Marketing                  | SY12-13   | 2          | 5          | 7                  |
| <b>SSHS Total</b> |                            | SY12-13   | 3          | 26         | 29                 |

| SHS              | PROGRAM           | SY      | COC | COM | Grand Total |
|------------------|-------------------|---------|-----|-----|-------------|
|                  | Allied Health     | SY12-13 | 1   | 0   | 1           |
|                  | Marketing         | SY12-13 | 0   | 4   | 4           |
|                  | Tourism –ProStart | SY12-13 | 0   | 1   | 1           |
| <b>OHS Total</b> |                   | SY12-13 | 1   | 5   | 6           |

**Dual Credit Articulated Program of Study (DCAPS)**

DCAPS was implemented in spring 2012. During the course of summer 2012, applications were being received. Forty three students applied upon implementation and 15 students were awarded post-secondary credits. The students who were not awarded post-secondary credits either did not submit an application, did not submit the proper documents, or did not meet edibility requirements.

*Table 1: Summer 2012 (Initial Implementation)*

| GWHS      | Major     | First Award                | Second Award        |
|-----------|-----------|----------------------------|---------------------|
| Student 1 | AA-CULART | HS208 & HS203A (Fall 2012) | HS245 (Spring 2013) |
| Student 2 | AS-HTVL   | HS150 (Fall 2012)          |                     |
| Student 3 | AS-MRKT   | MK123 (Fall 2012)          |                     |
| Student 4 | AS-CNET   | EE211 (Fall 2012)          | EE215 (Fall 2013)   |

| JFK       | Major     | First Award       | Second Award                      |
|-----------|-----------|-------------------|-----------------------------------|
| Student 1 | AA-CULART | HS208 (Fall 2012) | HS293 (Summer 2013)               |
| Student 2 | JFK       | AA-CULART         | Pending awarding of DCAPS credits |
| Student 3 | AA-CULART | HS208 (Fall 2012) | AA-CULART                         |
| Student 4 | JFK       | AS-MRKT           | Pending awarding of DCAPS credits |
| Student 5 | JFK       | AS-MRKT           | MK123 (Fall 2012)                 |

\*Two students are pending awarding of post-secondary credits. According to the log submitted by the registrar’s office, students 2 and 4 submitted all the necessary documents and met all requirements, but were not awarded post-secondary credits. The registrar’s office has been notified of this possible error.

| <b>OHS</b> | <b>Major</b> | <b>First Award</b> | <b>Second Award</b>       |
|------------|--------------|--------------------|---------------------------|
| Student 1  | AS-HMGT      | HS150 (Fall 2012)  | HS292 (Spring 2013)       |
| Student 2  | AS-MRKT      | MK123 (Fall 2012)  |                           |
| Student 3  | AS-HMGT      | HS150 (Fall 2012)  | HS152 & HS292 (Fall 2013) |
| Student 4  | AS-CNET      | EE211 (Fall 2012)  | EE215 (Spring 2013)       |
| Student 5  | AS-MRKT      | MK123 (Fall 2012)  |                           |
| Student 6  | AS-HMGT      | HS150 (Fall 2012)  |                           |

| <b>SSHS</b> | <b>Major</b> | <b>First Award</b> | <b>Second Award</b>               |
|-------------|--------------|--------------------|-----------------------------------|
| Student 1   | SSHS         | AS-HMGT            | HS152 (Fall 2012)                 |
| Student 2   | SSHS         | AS-HMGT            | HS208 (Fall 2012)                 |
| Student 3   | SSHS         | AS-HMGT            | Pending awarding of DCAPS credits |

\*One student was pending awarding of post-secondary credits. According to the log submitted by the registrar's office, student 3 submitted all the necessary documents and met all requirements, but was not awarded post-secondary credits. The registrar's office has been notified of this possible error.

Throughout the academic year 2012 - 2013, the registrar's office was receiving DCAPS applications for the immediate awarding of credits and the awarding of remaining credits. As of July 29, 2013, twenty six more students have been awarded post-secondary credits through DCAPS.

*Table 2: Fall 2012 – Summer 2013*

| <b>GWHS</b> | <b>Major</b> | <b>First Award</b> | <b>Second Award</b> |
|-------------|--------------|--------------------|---------------------|
| Student 1   | AS-CNET      | EE211 (Fall 2012)  | EE215 (FALL 2013)   |
| Student 2   | AS-CNET      | EE211 (Fall 2013)  |                     |
| Student 3   | AS-ECE       | CD110 (Fall 2013)  |                     |
| Student 4   | AA-CULART    | HS208 (Fall 2013)  |                     |

| <b>JFK</b> | <b>Major</b> | <b>First Award</b>  | <b>Second Award</b> |
|------------|--------------|---------------------|---------------------|
| Student 1  | AS-HTVL      | HS150 (Summer 2013) | HS292 (Fall 2013)   |
| Student 2  | AA-CULART    | HS208 (Fall 2013)   |                     |
| Student 3  | AS-HTVL      | HS152 (Spring 2013) | HS208 (Fall 2013)   |
| Student 4  | AA-CULART    | HS208 (Fall 2013)   |                     |
| Student 5  | AS-MRKT      | MK123 (Fall 2013)   |                     |

| OHS       | Major   | First Award               | Second Award              |
|-----------|---------|---------------------------|---------------------------|
| Student 1 | AS-HTVL | HS150 (Fall 2013)         |                           |
| Student 2 | AS-CNET | EE211 (Fall 2012)         | EE215 (Spring 2013)       |
| Student 3 | AS-HMGT | HS150 (Fall 2013)         |                           |
| Student 4 | AS-HMGT | HS150 (Fall 2012)         | HS150 & HS292 (Fall 2013) |
| Student 5 | AS-HTVL | HS150 (Fall 2013)         |                           |
| Student 6 | AS-HFBV | HS150 (Spring 2013)       | HS150 & HS292 (Fall 2013) |
| Student 7 | AS-HMGT | HS150 & HS152 (Fall 2012) | HS292 (Spring 2013)       |
| Student 8 | AS-CNET | EE211 (Fall 2012)         | EE215 (Spring 2013)       |

| SSHS      | Major     | First Award         | Second Award |
|-----------|-----------|---------------------|--------------|
| Student 1 | AST-GST   | AST100 (Fall 2013)  |              |
| Student 2 | AST-GST   | AST100 (Fall 2013)  |              |
| Student 3 | AA-CULART | HS208 (Fall 2013)   |              |
| Student 4 | AS-HMGT   | HS150 (Fall 2013)   |              |
| Student 5 | AS-MRKT   | MK123 (Fall 2013)   |              |
| Student 6 | AS-MRKT   | MK123 (Fall 2013)   |              |
| Student 7 | AS-HMGT   | HS150 (Fall 2013)   |              |
| Student 8 | AS-MRKT   | MK123 (Fall 2013)   |              |
| Student 9 | AS-HMGT   | HS150 (Spring 2013) |              |

| GWHS                              |   |
|-----------------------------------|---|
| CTE Program                       |   |
| Culinary                          | 2 |
| LMP                               | 1 |
| Marketing                         | 1 |
| Automotive                        | 0 |
| Early Childhood Education         | 1 |
| Electronics – Computer Networking | 3 |
| Construction Trades               | 0 |
| Total                             | 8 |

| OHS                               |    |
|-----------------------------------|----|
| CTE Program                       |    |
| Culinary                          | 0  |
| LMP                               | 9  |
| Marketing                         | 2  |
| Automotive                        | 0  |
| Early Childhood Education         | 0  |
| Electronics – Computer Networking | 3  |
| Construction Trades               | 0  |
| Total                             | 14 |

| <b>JFK</b>                        |           |
|-----------------------------------|-----------|
| <b>CTE Program</b>                |           |
| Culinary                          | 5         |
| LMP                               | 2         |
| Marketing                         | 3         |
| Automotive                        | 0         |
| Early Childhood Education         | 0         |
| Electronics – Computer Networking | 0         |
| Construction Trades               | 0         |
| <b>Total</b>                      | <b>10</b> |

| <b>SSHS</b>                       |           |
|-----------------------------------|-----------|
| <b>CTE Program</b>                |           |
| Culinary                          | 1         |
| LMP                               | 6         |
| Marketing                         | 3         |
| Automotive                        | 2         |
| Early Childhood Education         | 0         |
| Electronics – Computer Networking | 0         |
| Construction Trades               | 0         |
| <b>Total</b>                      | <b>12</b> |

A total of forty four students have been awarded post-secondary credits since the implementation of DCAPS in spring 2012. Okkodo High School leads the way with fourteen students being awarded post-secondary credits; Simon Sanchez High School has a total of twelve students, followed by John F. Kennedy High School with 10 students, and then George Washington High School with eight students. Southern High School did not have any students awarded post-secondary credits through DCAPS. One Southern High School student submitted a DCAPS application on August 9<sup>th</sup>, 2012; however, the student did not provide a transcript for grade confirmation to ensure eligibility. The registrar’s office request of a transcript copy from each applicant is due to the discovery of students who received a certificate of mastery despite not meeting the “B” semester grade requirement. A certificate of mastery application was thus implemented in spring 2013 to enforce the “B” semester grade requirement of the DCAPS program and to develop consistency in the procedure of receiving a certificate of mastery for all CTE students regardless of what program and school they are in.

By program, the Lodging Management Program has the most awardees at eighteen students, followed by Marketing with nine students, Culinary has a total of eight students, Electronics – Computer Networking has six awardees, Automotive has two students, and Early Childhood Education has one student. The Construction Trades DCAPS agreement was just signed and implemented this past May 2013 resulting in no students being awarded post-secondary credits as of yet. It is also important to note that the Early Childhood Education program is only available at George Washington High School, and thus resulting in no students being awarded post-secondary credits at the other high schools.

**Summary**

| <b>School</b> | <b># of students awarded credits through DCAPS</b> | <b>Total COM enrolled at GCC</b> | <b>Total Percentage of students who received a COM and were awarded credits through DCAPS</b> |
|---------------|--|----------------------------------|---|
| <b>GWHS</b>   | <b>8</b>   | <b>24</b>                        | <b>32%</b>  |
| <b>JFK</b>    | <b>10</b>  | <b>21</b>                        |   |
| <b>OHS</b>    | <b>14</b>  | <b>42</b>                        |   |
| <b>SSHS</b>   | <b>12</b>  | <b>39</b>                        |   |
| <b>SHS</b>    | <b>0</b>   | <b>10</b>                        |   |
| <b>Total</b>  | <b>44</b>  | <b>136</b>                       |   |

| <b>GWHS</b>                       | <b># of students awarded credits through DCAPS</b> | <b>COM 11-12 enrolled at GCC</b> | <b>SY at</b> | <b>COM 12-13 enrolled at GCC</b> | <b>SY at</b> | <b>Total COM enrolled at GCC</b> | <b>Percentage of students who received a COM and were awarded credits through DCAPS</b> |
|-----------------------------------|--|----------------------------------|--------------|----------------------------------|--------------|----------------------------------|---|
| <b>CTE Program</b>                |  |                                  |              |                                  |              |                                  | <b>33%</b>  |
| Culinary                          | 2  | 4                                |              | 4                                |              | 8                                |   |
| LMP                               | 1  | 1                                |              | 5                                |              | 6                                |   |
| Marketing                         | 1  | 1                                |              | 0                                |              | 1                                |   |
| Electronics – Computer Networking | 3  | 5                                |              | 1                                |              | 6                                |   |
| Early Childhood Education         | 1  | 0                                |              | 3                                |              | 3                                |   |
| Automotive                        | 0  | 0                                |              | 0                                |              | 0                                |   |
| Construction Trades               | 0  | 0                                |              | 0                                |              | 0                                |   |
|                                   | <b>8</b>   | <b>11</b>                        |              | <b>13</b>                        |              | <b>24</b>                        |   |

| <b>JFK</b>                        | <b># of students awarded credits through DCAPS</b> | <b>COM 11-12 enrolled at GCC</b> | <b>SY at</b> | <b>COM 12-13 enrolled at GCC</b> | <b>SY at</b> | <b>Total COM enrolled at GCC</b> | <b>Percentage of students who received a COM and were awarded credits through DCAPS</b> |
|-----------------------------------|--|----------------------------------|--------------|----------------------------------|--------------|----------------------------------|---|
| <b>CTE Program</b>                |  |                                  |              |                                  |              |                                  | <b>48%</b>  |
| Culinary                          | 5  | 6                                |              | 2                                |              | 8                                |   |
| LMP                               | 2  | 3                                |              | 2                                |              | 5                                |   |
| Marketing                         | 3  | 5                                |              | 3                                |              | 8                                |   |
| Electronics – Computer Networking | 0  | 0                                |              | 0                                |              | 0                                |   |
| Early Childhood Education         | 0  | 0                                |              | 0                                |              | 0                                |   |
| Automotive                        | 0  | 0                                |              | 0                                |              | 0                                |   |
| Construction Trades               | 0  | 0                                |              | 0                                |              | 0                                |   |
|                                   | <b>10</b>  | <b>14</b>                        |              | <b>7</b>                         |              | <b>21</b>                        |   |

| <b>OHS</b>                        | <b># of students awarded credits through DCAPS</b> | <b>COM 11-12 enrolled at GCC</b> | <b>SY at</b> | <b>COM 12-13 enrolled at GCC</b> | <b>SY at</b> | <b>Total COM enrolled at GCC</b> | <b>Percentage of students who received a COM and were awarded credits through DCAPS</b> |
|-----------------------------------|--|----------------------------------|--------------|----------------------------------|--------------|----------------------------------|---|
| <b>CTE Program</b>                |  |                                  |              |                                  |              |                                  | <b>33%</b>  |
| Culinary                          | 0  | 0                                |              | 0                                |              | 0                                |   |
| LMP                               | 9  | 11                               |              | 17                               |              | 28                               |   |
| Marketing                         | 2  | 7                                |              | 2                                |              | 9                                |   |
| Electronics – Computer Networking | 3  | 3                                |              | 2                                |              | 5                                |   |

|                           |           |    |    |           |
|---------------------------|-----------|----|----|-----------|
| Early Childhood Education | <b>0</b>  | 0  | 0  | <b>0</b>  |
| Automotive                | <b>0</b>  | 0  | 0  | <b>0</b>  |
| Construction Trades       | <b>0</b>  | 0  | 0  | <b>0</b>  |
|                           | <b>14</b> | 21 | 21 | <b>42</b> |

| <b>SSHS</b>                       | <b># of students awarded credits through DCAPS</b> | COM 11-12 enrolled at GCC | SY at | COM 12-13 enrolled at GCC | SY at | <b>Total COM enrolled at GCC</b> | <b>Percentage of students who received a COM and were awarded credits through DCAPS</b> |
|-----------------------------------|--|---------------------------|-------|---------------------------|-------|----------------------------------|---|
| <b>CTE Program</b>                |  |                           |       |                           |       |                                  | <b>31%</b>  |
| Culinary                          | <b>1</b>   | 3                         |       | 2                         |       | <b>5</b>                         |   |
| LMP                               | <b>6</b>   | 5                         |       | 11                        |       | <b>16</b>                        |   |
| Marketing                         | <b>3</b>   | 5                         |       | 5                         |       | <b>10</b>                        |   |
| Electronics – Computer Networking | <b>0</b>   | 4                         |       | 2                         |       | <b>6</b>                         |   |
| Early Childhood Education         | <b>0</b>   | 0                         |       | 0                         |       | <b>0</b>                         |   |
| Automotive                        | <b>2</b>   | 0                         |       | 2                         |       | <b>2</b>                         |   |
| Construction Trades               | <b>0</b>   | 0                         |       | 0                         |       | <b>0</b>                         |   |
|                                   | <b>12</b>  | 17                        |       | 22                        |       | <b>39</b>                        |   |

| <b>SHS</b>                        | <b># of students awarded credits through DCAPS</b> | COM 11-12 enrolled at GCC | SY at | COM 12-13 enrolled at GCC | SY at | <b>Total COM enrolled at GCC</b> | <b>Percentage of students who received a COM and were awarded credits through DCAPS</b> |
|-----------------------------------|--|---------------------------|-------|---------------------------|-------|----------------------------------|---|
| <b>CTE Program</b>                |  |                           |       |                           |       |                                  | <b>0%</b>   |
| Culinary                          | <b>0</b>   | 0                         |       | 1                         |       | <b>1</b>                         |   |
| LMP                               | <b>0</b>   | 1                         |       | 0                         |       | <b>1</b>                         |   |
| Marketing                         | <b>0</b>   | 4                         |       | 4                         |       | <b>8</b>                         |   |
| Electronics – Computer Networking | <b>0</b>   | 0                         |       | 0                         |       | <b>0</b>                         |   |
| Early Childhood Education         | <b>0</b>   | 0                         |       | 0                         |       | <b>0</b>                         |   |
| Automotive                        | <b>0</b>   | 0                         |       | 0                         |       | <b>0</b>                         |   |
| Construction Trades               | <b>0</b>   | 0                         |       | 0                         |       | <b>0</b>                         |   |
|                                   | <b>0</b>   | 5                         |       | 5                         |       | <b>10</b>                        |   |

Approximately one third of the certificate of mastery recipients who continue on and enroll at GCC apply to receive post-secondary credits through DCAPS. The number of applicants increased from the time DCAPS was first implemented in spring of 2012 to summer of 2013. The number of applicants is anticipated to rise as high school students become more aware of the program and as GCC post-secondary programs work to continue to improve and expand.

In Summary, George Washington High School had a total of 24 graduates from SY2011 – 2012 and SY2012 – 2013 enrolled at GCC who were awarded a certificate of mastery from a program that has a DCAPS agreement; eight out of the 24 students applied and were awarded post-secondary credits through DCAPS (33%). John F. Kennedy High School had a total of 21 graduates from SY2011 – 2012 and SY2012 – 2013 enrolled at GCC who were awarded a certificate of mastery from a program that has a DCAPS agreement; ten out of the 21 students applied and were awarded post-secondary credits through DCAPS (48%). Okkodo High School had a total of 42 graduates from SY2011 – 2012 and SY2012 – 2013 enrolled at GCC who were awarded a certificate of mastery from a program that has a DCAPS agreement; fourteen out of the 42 students applied and were awarded post-secondary credits through DCAPS (33%). Simon Sanchez High School had a total of 39 graduates from SY2011 – 2012 and SY2012 – 2013 enrolled at GCC who were awarded a certificate of mastery from a program that has a DCAPS agreement; twelve out of the 39 students applied and were awarded post-secondary credits through DCAPS (31%). Southern High School had a total of 10 graduates from SY2011 – 2012 and SY2012 – 2013 enrolled at GCC who were awarded a certificate of mastery from a program that has a DCAPS agreement; a student from Southern High School has yet to be awarded post-secondary credits through DCAPS.

**APPENDIX A**

**Dual Enrollment Accelerated Learning (DEAL)  
Program**

## **ADMINISTRATIVE GUIDELINES**

### **Dual Enrollment Accelerated Learning (DEAL)**

Upon successful completion of the approved courses, students will be awarded credit at both the Guam Department of Education (GDOE) and at Guam Community College (GCC).

#### Requirements for Student Participation

- Students enrolled in GDOE, in the 11<sup>th</sup> or 12<sup>th</sup> grade with a GPA of 70% or higher, and at least 16 years old by the first day of class are eligible.
- Students must complete a DEAL application, including the student's parent or legal guardian's signature indicating permission to participate.
- Students must have the approval of their high school principal and counselor. GDOE and GCC officials reserve the option to deny a request based on academic or behavior records that indicate the student would not be best served by this program.
- Students must complete GCC's student information, admission and registration, and health clearance forms.
- Students are expected to comply with GCC's admissions and registration policies and procedures.

#### Available Courses

- College-level courses in English, mathematics, science, social science, or foreign languages; occupational/technical courses; or other courses agreed upon by the school system and the College is open to eligible students.
- Students must meet course prerequisites prior to enrollment in any of the college courses.
- GCC course titles shall be used for all GCC dual enrollment courses. All GCC course numbers at GDOE will be converted by GDOE to applicable courses as articulated in this Appendix to be added as needed. All approved dual enrollment courses shall be weighted by GDOE in a manner similar to Honors courses.
- Students shall not be enrolled concurrently in a separate GDOE course and a GCC dual enrollment equivalent course.

#### Tuition, Fees and Textbooks

- Students and their parents are responsible for paying college tuition, fees, and purchasing textbooks within the designated deadlines, and accounts must be kept current.

#### Financial Assistance

- Traditional financial aid is not available for students enrolled under the DEAL program. Federal government regulations require students to have a high school diploma or GED to qualify for any form of financial aid. However, students may apply for grant assistance at GCC through the College Access Challenge Grant Program (CACGP) to determine if they are eligible for grant-in-aid assistance. Eligibility and application information and forms can be obtained by calling program personnel at 735-5565.

#### Semester Calendar

- Students enrolled in dual credit courses will follow the academic calendar of the College.

Grades/Credits

- A GDOE student must be officially enrolled in the DEAL program in order for the Principal to accept the credit earned at GCC.
- Final grades from GCC shall be recorded as a percentage grade in order for GDOE to weigh the GDOE grade in the same manner that GDOE AP and Honors courses are weighted.
- At the end of each term, the GCC Registrar will send to GDOE the grades and credits earned for students enrolled in the program.
- Students must complete all college courses with a grade of "C" or better to be eligible to continue in the program.

DEAL Program Course Articulation – Spring 2010

| Guam Community College  |                                       |                | Guam Department of Education |   |           |
|---|---------------------------------------|----------------|------------------------------|---|-----------|
| Course Code   | Course Title & Description            | College Credit | Course Code                  | Course Title & Description  | HS Credit |
| EN110   | FRESHMAN ENGLISH                      | 3              | LA411DEG                     | ADVANCED PLACEMENT LANGUAGE AND COMPOSITION – DUAL ENROLLMENT GCC | 1         |
| MA110A  | FINITE MATHEMATICS                    | 3              | MA301DEG                     | TRIGONOMETRY & ANALYTICAL GEOMETRY – DUAL ENROLLMENT GCC          | 1         |
| MA161A  | COLLEGE ALGEBRA/TECHNICAL MATHEMATICS | 4              | MA401DEG                     | ELEMENTARY FUNCTIONS – DUAL ENROLLMENT GCC                        | 1         |
| <p>1. This course articulation matrix is only for Spring 2010. GDOE and GCC will re-visit and review the course alignments prior to SY2010-11 to determine what, if any, modifications need to be made.</p> <p>2. College-level courses in other content areas (science, social science, foreign languages, or occupational/technical courses) will be considered for future dual enrollment articulation upon agreement between GCC and GDOE.</p> <p>3. Based on the Placement Test results, students who place into <b>developmental English or developmental mathematics</b> may enroll in the developmental course(s) at GCC and receive GCC credit for the course(s); however, students will NOT receive a GDOE credit for the developmental course(s):</p> <p style="padding-left: 40px;">English: EN100B (Fundamentals of English-Basic), EN100R (Fundamentals of English-Reading, and EN100W (Fundamentals of English-Writing)</p> <p style="padding-left: 40px;">Math: MA085 (Fundamentals of Mathematics); MA095 (Pre-College Mathematics), and MA108 (Introduction to College Algebra)</p> |                                       |                |                              |   |           |



**RELEASE OF ACADEMIC RECORD**

I authorize Guam Community College to release my academic record each term to \_\_\_\_\_.  
This release is countersigned by my parent or legal guardian, if I am less than 18 years of age. This release shall remain in effect until I provide written notice to the GCC Registrar's Office to discontinue the release or until I earn my high school diploma. I authorize my parent or legal guardian, specified below, access and authorization to release my academic record.

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Parent/Guardian Signature

\_\_\_\_\_  
Date

**APPENDIX B**

**Guam's Career Pathway System  
Dual Credit Articulated Program of Study Agreement  
DCAPS Program**

**Guam's Career Pathway System**  
**Dual Credit Articulated Program of Study Agreement**

**GUAM COMMUNITY COLLEGE/  
GUAM DEPARTMENT OF EDUCATION**

**AND**

**GUAM COMMUNITY COLLEGE**

**I. Purpose**

The purpose of this Articulation Agreement is to provide a mechanism which will enable students from the Guam Department of Education (GDOE) high schools who enroll at Guam Community College to receive college credits for mastery of standards/student learning outcomes gained in courses taken at the high school.

**II. Agreements and Procedures**

- A. **Scope of Agreement.** This Articulation Agreement is entered into between the Guam Community College's secondary program at GDOE and Guam Community College's postsecondary program. Acceptance of these credits toward a program of study at any other institution will be contingent upon the program and college requirements of the receiving institution.
- B. **Term of Agreement.** This Articulation Agreement will remain in effect for five (5) years, or until January 2015. This Articulation Agreement will be subject to annual reviews by faculty and other appropriate representatives from GCC and representatives from GDOE to address curriculum and course changes. Faculty and other appropriate representatives from GCC and representatives from GDOE will conduct an extensive review of possible substantive changes to the Agreement prior to the expiration of the Agreement.
- C. **Number of Credits to be Awarded.**
- D. **Transferability of Credits.** As stipulated in this Agreement, credits awarded:
- (1) will transfer between Guam Community College's/Guam Department of Education's secondary program and Guam Community College's postsecondary program and
  - (2) may not be applicable to programs outside of this Agreement.

**III. Student Application Guidelines for Articulated Credits**

**A. Student Eligibility.**

**B. Timeline for Application.** Students should apply for articulated credit by contacting the college counselor or program chair (see list of contact persons) in their first year of attendance at Guam Community College. Students will have 2 years after date of high school graduation to apply for articulated credits.

**C. Table 1**

**Dual Credit Articulated GCC/GDOE Secondary Program of Study and GCC Postsecondary Program of Study Courses**

|  |
|--|
| <b>GCC/GDOE Cluster Courses</b>  |
| <b>Students completing the above courses with a “B” or better may earn free articulated credits for _____ at Guam Community College.</b> |
| <b>Guam Community College</b>  |
|  |

*Note: Should the Guam Community College and/or Guam Department of Education course alphas and numbers change, but the course content and student learning outcomes remain the same, the conditions of the Articulation Agreement will be honored.*

**D. Crosswalk of Student Learning Outcomes (SLOs) for the program of study secondary courses and the program of study postsecondary.**

| SECONDARY SLOs | POSTSECONDARY SLOs |
|----------------|--------------------|
|                |                    |
| SECONDARY SLOs | POSTSECONDARY SLOs |
|                | 1.                 |
| SECONDARY SLOs | POSTSECONDARY SLOs |
|                |                    |
| SECONDARY SLOs | POSTSECONDARY SLOs |
|                |                    |
| SECONDARY SLOs | POSTSECONDARY SLOs |
|                | I.                 |

**E. Plan of Action:**

| <b>Plan of Action Matrix</b>  |   |                             |
|---|---|-----------------------------|
| <b>TASK</b>   | <b>OUTCOME</b>  | <b>RECOMMENDED DEADLINE</b> |
| Ensure SLO Alignment  | Modify secondary SLOs to align with postsecondary SLOs              | March 31, 2010              |
| Ensure that articulation details are states in respective course and program guides.<br><br>Identify, review and share recommendation(s) with Advisory Committee. | Concurrence of Advisory Committee on recommendation(s).             | March 31, 2010              |
| Make appropriate change to curricula (i.e., Non-Substantive, Substantive Course Document, Substantive Program Document, SLO Maps, etc.)                           | Approved by respective signatories                                  | October 15, 2010            |
| Implement approved document   | Offer course/program and begin assessment process                   |                             |
| Share assessment results with Advisory Committee  | Meet and incorporate recommendations made by the Advisory Committee |                             |

**F. Campus Contacts**

Inquiries regarding content of specific courses in this Agreement should be directed to the individuals with asterisk (\*) in the table below.

| <b>Program Contact</b> | <b>Administration Contact</b>   |
|------------------------|---|
|                        | Admission and Registration<br>Tel. (671) 735-5531 – 34<br>Fax. (671) 734-5238<br>Email: <a href="mailto:gcc.admission@guamcc.edu">gcc.admission@guamcc.edu</a><br><a href="mailto:Gcc.registrar@guamcc.edu">Gcc.registrar@guamcc.edu</a><br><br>Assessment and Counseling<br>Tel. (671) 735-5562 – 65<br>Fax. (671) 734-5238<br>Email: <a href="mailto:gcc.counseling@guamcc.edu">gcc.counseling@guamcc.edu</a> |

**PERSONAL PLAN OF STUDY**

|                         |  |                      |
|-------------------------|--|----------------------|
| <i>Career Cluster</i>   | <i>Transportation, Distribution, &amp; Logistics</i> |                      |
|                         | <i>Secondary</i>                                     | <i>Postsecondary</i> |
| <i>Program of Study</i> |  |                      |

| Education Levels | Grade        | English   | Math  | Science  | Social Studies/ Sciences  | Other Required Courses<br>Other Electives<br>Recommended Electives<br>Learner Activities   | Career & Technical Courses<br>and/or Degree Major Courses |
|------------------|--------------|---|---|--|---|--|---|
| <b>SECONDARY</b> | 9            | <ul style="list-style-type: none"> <li>English/Language Arts 9</li> </ul>                                 | <ul style="list-style-type: none"> <li>Applied Math or</li> <li>General Math</li> </ul> | <ul style="list-style-type: none"> <li>General Science</li> </ul>  | <ul style="list-style-type: none"> <li>World Geography or</li> <li>World History</li> </ul>         | <ul style="list-style-type: none"> <li>Chamorro or History of Guam</li> <li>Any of the following</li> <li>Physical Education</li> <li>Health</li> <li>Dance</li> </ul> |   |
|                  | 10           | <ul style="list-style-type: none"> <li>English/Language Arts 10</li> </ul>                                | <ul style="list-style-type: none"> <li>Pre-Algebra</li> </ul>                           | <ul style="list-style-type: none"> <li>Physical Science</li> </ul>   | <ul style="list-style-type: none"> <li>US History</li> </ul>  |  |   |
|                  | 11           | <ul style="list-style-type: none"> <li>English/Language Arts 11</li> </ul>                                | <ul style="list-style-type: none"> <li>Algebra I – or-<br/>Geometry</li> </ul>          | <ul style="list-style-type: none"> <li>Any of the following:</li> <li>Biology</li> <li>Marine Biology</li> <li>Physics</li> <li>Chemistry</li> </ul> | <ul style="list-style-type: none"> <li>American Govt. –or-<br/>American History</li> </ul>          |  |   |
|                  | 12           | <ul style="list-style-type: none"> <li>English/Language Arts 12</li> <li>Applied Communication</li> </ul> |   |  |   | <ul style="list-style-type: none"> <li>Art I –or-Speech and Debate</li> <li>Computer Literacy</li> </ul>   |   |
|                  | <b>Sem 1</b> | <ul style="list-style-type: none"> <li>EN110 Freshman English</li> </ul>                                  | <ul style="list-style-type: none"> <li>MA110 Finite Math</li> </ul>                     |  |   |  |   |
|                  | <b>Sem 2</b> |   |   | <ul style="list-style-type: none"> <li>CS151 Windows or CS152 Macintosh Applications</li> </ul>  |   |  |   |
|                  | <b>Sem 3</b> |   |   | <ul style="list-style-type: none"> <li>SI103 Introduction to Marine or SI110 Environmental Biology</li> </ul>  | <ul style="list-style-type: none"> <li>PY120 General Psychology SI103 Intro to Sociology</li> </ul> |  |   |



**Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.**

|  |  |   |  |   |  |   |  |
|--|--|---|--|---|--|---|--|
| Sample of Career Specialties / Occupations | <p><b>Air/Space Transportation:</b><br/>Transportation Managers (Air) * Commercial Pilots * Flight Engineers * Flight Attendants * Dispatchers (Air) * Traffic Managers * Air traffic Controllers * Aircraft Cargo Handling Supervisors * Airfield Operations Specialists</p> <p><b>Rail Transportation:</b><br/>Transportation Managers (Rail) * Dispatchers (Rail) * Traffic Managers * Locomotive Engineers * Locomotive Firers * Railyard Conductors and Yardmasters * Railroad Brake, Signal and Switch Operators * Railyard Engineers, Dinkey Operators, and Hostlers</p> <p><b>Water Transportation:</b><br/>Transportation Managers (Water) * Dispatchers (Water) * Traffic Managers * Captains * Mates * Pilots of Water Vessels * Sailors and Marine Oilers * Able Seamen * Ordinary Seamen * Ship and Boat Captains * Ship Engineers * Bridge and Lock Tenders</p> <p><b>Road Transportation</b><br/>Transportation managers (Road) * Dispatchers (Truck/Bus/Taxi) * Traffic Managers * Truck Drivers (Tractor-Trailer) * Truck Drivers (Light or Delivery Services) * Bus Drivers (Transit and Intercity) * School Bus Drivers * Taxi Drivers and Chauffeurs</p> <p><b>Transit Systems:</b><br/>Transportation Managers (Mass Transit) * Dispatchers (Bus) * Traffic Managers * Dispatchers (Rail) * Traffic Managers * Bus Drivers (Transit and Intercity) * Subway and Streetcar Operators</p> | <p>Logisticians *<br/>Logistics Managers *<br/>Logistics Engineers *<br/>Logistics Analysts *<br/>Logistics Consultants *<br/>International Logistics Specialists</p> | <p>Warehouse Managers *<br/>Storage and Distribution Managers *<br/>Industrial and Packaging Engineers *<br/>Traffic, Shipping and Receiving Clerks *<br/>Production, Planning, Expediting Clerks *<br/>First-line Supervisors/Managers of Helpers *<br/>Laborers, and Material Movers (Hand) *<br/>First-line Supervisors /Managers of Transportation and Material (Moving Machine and Vehicle Operators) *<br/>Laborers and Freight, Stock and Material Movers (Hand) *<br/>Car, Truck and Ship Loaders *<br/>Packers and Packers-hand</p> | <p><b>Facility:</b> Facility Maintenance Managers and Engineers *<br/>Industrial Equipment Mechanics *<br/>Industrial/Electronic Technicians</p> <p><b>Mobile Equipment:</b><br/>General--Mobile Equipment Maintenance Managers *<br/>Electrical and Electronic Installers and Repairers (Transportation Equipment) *<br/>Mobile Heavy Equipment Mechanics<br/>Air/Space--Aerospace Engineering and Operations Technicians *<br/>Aircraft Mechanics and Service Technicians *<br/>Airframe Mechanics *<br/>Power plant Mechanics *<br/>Aircraft Engine Specialists *<br/>Avionics Technicians<br/>Water--Ship Mechanics and Repairers *<br/>Motorboat Mechanics *<br/>Automotive/Truck Mechanics and Body Repairers<br/>Rail--Rail Car Repairers *<br/>Signal and Track Switch Repairers *<br/>Rail Locomotive Mechanics and Repairers<br/>Road--Electronic Equipment Installers and Repairers (Motor Vehicle) *<br/>Automotive Body and Related Repairers *<br/>Automotive Service Technicians and Mechanics *<br/>Automotive Master Mechanics *<br/>Automotive Specialty Technicians *<br/>Bus and Truck Mechanics and Diesel Engine Specialists *<br/>Motorcycle Mechanics *<br/>Bicycle Repairers</p> | <p>General--<br/>Intermodal--<br/>Urban and Regional Planners *<br/>Civil Engineers *<br/>Engineering Technicians *<br/>Surveying and Mapping Technicians *<br/>Government Service Executives *<br/>Environmental Compliance Inspectors<br/>Air/Space--Air Traffic Controllers *<br/>Aviation Inspectors<br/>Road--Traffic Engineers *<br/>Traffic Technicians *<br/>Motor Vehicle Inspectors *<br/>Freight Inspectors<br/>Rail--Railroad Inspectors<br/>Water--Marine Cargo Inspectors *<br/>Vessel Traffic Control Specialists<br/>Transit--Public Transportation Inspectors<br/>Other---<br/>Regulators *<br/>Inspectors and other federal/state/local transportation agency jobs</p> | <p>Health and Safety Managers *<br/>Industrial Health and Safety Engineers *<br/>Environmental Scientists and Specialists *<br/>Environmental and Protection Technicians *<br/>Environmental Managers and Engineers *<br/>Environmental Compliance Inspectors *<br/>Safety Analysts</p> | <p>Marketing Managers, *<br/>Sales Managers *<br/>Sales Representatives of Transportation /Logistics Services *<br/>Reservation, Travel and Transportation Agents *<br/>Cargo and Freight Agents *<br/>Customer Service Managers *<br/>Cashiers, Counter and Rental clerks</p> |
|  | Pathways   | Transportation Operations   | <b>Logistics Planning and Management Services</b>  | Warehousing and Distribution Center Operations  | <b>Facility and Mobile Equipment Maintenance</b>   | <b>Transportation Systems/ Infrastructure Planning, Management, and Regulation</b>  | <b>Health, Safety and Environmental Management</b>   |
| Cluster K&S                                | <p style="text-align: center;"><b>Cluster Knowledge and Skills</b></p> <p style="text-align: center;">◆ Academic Foundations ◆ Communications ◆ Problem Solving and Critical Thinking ◆ Information Technology Applications ◆ Systems ◆ Safety, Health and Environmental ◆ Leadership and Teamwork ◆ Ethics and Legal Responsibilities ◆ Employability and Career Development ◆ Technical Skills</p>   |   |  |   |  |   |  |









## DCAPS APPLICATION

### Awarding of Remaining DCAPS Credits

PLEASE PRINT ALL INFORMATION

Student ID Number: \_\_\_\_\_ Start Term: \_\_\_\_\_

Social Security Number: \_\_\_\_\_  
(Optional)

LEGAL NAME: \_\_\_\_\_ DATE OF BIRTH: \_\_\_\_\_  
Last Name MI Month/Day/Year

FORMER NAME: \_\_\_\_\_ GENDER: ( ) MALE ( ) FEMALE  
If you have used another name (i.e. Maiden Name) please list here

MAILING ADDRESS: \_\_\_\_\_  
PO BOX / STREET NAME CITY STATE ZIP CODE

RESIDENTIAL ADDRESS \_\_\_\_\_  
HS/BA/ APT# STREET NAME CITY STATE ZIP CODE

HOME PHONE#: \_\_\_\_\_ WORK PHONE#: \_\_\_\_\_ CELL PHONE#: \_\_\_\_\_

EMAIL ADDRESS (1): \_\_\_\_\_ ( ) WORK ( ) PERSONAL ( ) OTHER

EMAIL ADDRESS (2): \_\_\_\_\_ ( ) WORK ( ) PERSONAL ( ) OTHER

**\*Note: In order for remaining postsecondary credits to be awarded, according to the DCAPS guidelines, nine (9) postsecondary (college) credits must have been successfully completed by the student at Guam Community College. There is a limit of nine (9) credits to be awarded at no cost. A recording fee will be assessed for the awarding of credits beyond nine (9).**

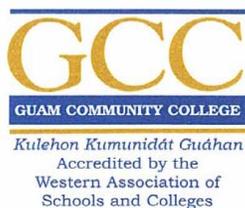
| Please list the completed secondary (high school) Career and Technical Education courses under the DCAPS agreement & dates of completion.<br>(Must be successfully completed with a "B" or better) |                    |
|--|--------------------|
| COURSE DESCRIPTION   | DATE OF COMPLETION |
|  |                    |
|  |                    |
|  |                    |
|  |                    |
|  |                    |

| Please list the postsecondary (college) Career and Technical Education courses aligned to the secondary courses listed to receive postsecondary (college) credits under the DCAPS guidelines. |  |
|---|--|
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |

I hereby apply for admission to the Guam Community College Dual Credit Articulated Programs of Study (DCAPS). Further, I certify that the statements made in this form are true and correct to the best of my knowledge. I understand that any false information found to have been willfully given by me herein or in any supporting document may be cause for refusing to admit me to or my immediate dismissal from Guam Community College.

STUDENT SIGNATURE: \_\_\_\_\_ Date: \_\_\_\_\_

Created April 2012



*Academic Affairs Division*  
**R. Ray D. Somera, Ph.D.**  
*Vice President*

## MEMORANDUM

TO: College Community

FROM: Dr. R. Ray D. Somera  
Vice President for Academic Affairs

SUBJECT: Implementation of Dual Credit Articulated Program of Study (DCAPS) Agreements

DATE: April 9, 2012

It has been almost two years since the campus dialogue on DCAPS agreements began, when the report, “Establishing Guam’s CTE Career Pathway System” was first published in AVP SAGA Reports in fall 2010. As a collaborative product of GCC faculty and administrators, the report recommended that DCAPS agreements, guidelines, and procedures be adopted by the Guam Community College in order to align the courses between its secondary and post-secondary CTE programs.

With the completion of the Dual Credit Articulated Program of Study (DCAPS) agreements and guidelines within the past year, DCAPS agreements will start implementation, *effective spring 2012*, for the following CTE programs:

Automotive  
ProStart  
Lodging Management  
Early Childhood  
Electronics-Computer Networking  
Marketing

The following guidelines will govern the implementation of DCAPS, based on best practices of other institutions with dual credit programs:

- 1) There will be a limit of nine (9) postsecondary articulated credits to be awarded upon successful completion of respective aligned secondary courses at no cost; a student may be immediately awarded three (3) or more postsecondary credits as a result of successfully completing one secondary aligned course.
- 2) Students must complete at least nine (9) credits at the college before the remaining articulated postsecondary credits are awarded and the student must apply for these postsecondary credits to be awarded within two years after completing high school.

1



GUAM COMMUNITY COLLEGE

*Kolehon Kumunidat Guahan*  
Accredited by the  
Western Association of  
Schools and Colleges

*Academic Affairs Division*

R. Ray D. Somera, Ph.D.  
*Vice President*

- 3) If a student fails to apply for DCAPS within two years, the credits will be considered null and the credits must be acquired through the successful completion of its corresponding postsecondary course(s).
- 4) A dual credit recording fee will be assessed to award the remaining postsecondary credits should a program contain a DCAPS agreement that states that there are more than nine credits. The cap per program is 15 postsecondary credits to be awarded. The dual credit recording fee will follow the \$30 recording fee for all EMI Independent Study courses in the Emergency Management Program.
- 5) All programs participating in DCAPS will have a course grade of "B" or better as a minimum requirement for articulation of courses.

The possibility of expanding DCAPS to other CTE programs, as well as increasing the number of articulated courses, while retaining the academic rigor required of these programs, remain open for future discussion and dialogue. It will be the TSS Associate Dean's responsibility to monitor, review, and assess the efficacy of the DCAPS initiative through periodic reports to the Vice President for Academic Affairs via the Deans.

Finally, in fall of 2011, requests have been made at the Registrar's office to articulate credits through the DCAPS program. The Registrar's office has these documents on file pending official implementation of the program. With this implementation memo, these documents requesting articulation will therefore fall under the 2012 guidelines of the newly implemented DCAPS program.

Please be guided accordingly.

A handwritten signature in black ink, appearing to read "R. Somera", is written over a horizontal line.

Dr. R. Ray D. Somera  
Vice President for Academic Affairs

## **Math Path Data Analysis Report**

### **Introduction**

From AY 2005 – 2006 through AY 2012 – 2013 7,000 out of 7,207 students who took the mathematics COMPASS placement test placed in a developmental course; that is more than 97% of GCC’s students placing in MA085, MA095, or MA108 (GCC Fact Book, 2012-2013). In summer 2013, the Office of the Academic Vice President in collaboration with the math department, College Access, and Project AIM, implemented a pilot intervention program called “Math Path” which allowed students to receive a two week refresher workshop focusing on mathematics skills the students would need in order to improve their placement test scores. The goal of the Math Path pilot study was to determine if such an intervention would make a significant difference in improving student placement test scores.

### **Methodology**

The Math Path intervention participants were the Summer Bridge students from the College Access Challenge Grant Program (CACGP) and the Summer Success students from Project AIM. The CACGP Summer Bridge program consisted of two sessions and so had two different groups of students ( $N = 35$ ) and the Project AIM Summer Success program consisted of only one group of students ( $N = 11$ ) for a total of 46 students. Each summer program had their respective instructor. The mathematics instructor for the CACGP Summer Success program conducted the Math Path intervention for both sessions and covered the same material over the same amount of time with the same delivery method of lecture and practice.

The GCC mathematics department took the lead in organizing the intervention. Ideally, the students would have taken the COMPASS placement test, go through the intervention, and

then take the COMPASS placement test again to determine the effectiveness of the intervention. However, due to funding issues, the COMPASS placement test was only able to be given at the end of the intervention. To compensate for this, the mathematics department developed the review material and the locally developed test to serve as the pre-test and post-test based on available resources and their knowledge of the COMPASS placement test. The nature of the COMPASS placement test stopping students from continuing on once the student had reached a certain number of incorrect answers was a threat to the validity of the data. The reason this was a threat to the validity of the data was because the pre-test and post-test was to be conducted by the instructor and the instructor would not stop the students from finishing the test regardless of their answers. To control this threat, the mathematics department based the development of the review material on available resources and their knowledge of the COMPASS placement test; in addition, the mathematics department, as accurately as possible, developed their cut off scores to best reflect where the students would place had they actually taken the COMPASS placement test. The instructor conducted the pre-test at the start of the intervention. After the pre-test was completed, the two week intervention workshop then commenced. Once the two week workshop was completed, the students then took the post-test. The mathematics problems on the pre-test and post-test were different; however, the difficulty level and mathematical content was identical. After the post-test was completed, the students then took the actual COMPASS placement test the following day.

### **Hypothesis**

$H_{01}$ : There is no true difference between the pre-test scores and the post-test scores.

$H_{A1}$ : There is a true difference between the pre-test scores and the post-test scores.

$H_{02}$  : There is no true relationship between the Math Path placement interpretations and the actual COMPASS placement.

$H_{A2}$  : There is a true relationship between the Math Path placement interpretations and the actual COMPASS placement.

### Data Analysis

A dependent  $t$ -test was conducted at the 0.05 level since the students would be undergoing an intervention program and take a pre-test and post-test. Since the Math Path pre-test and post-test were not identical in nature to the COMPASS placement test in terms of scoring and the manner with which the test is to be conducted, a Pearson  $r$  coefficient at the .05 level was conducted to determine if there is a true relationship between the Math Path placement interpretations and the actual placement of the students based on the COMPASS results. This Pearson  $r$  analysis will answer the question as to how well the post-test placement interpretation of the mathematics department will translate to the actual placement of the students done by COMPASS.

### Results

#### Hypothesis 1

Null Hypothesis 1 states that there is no true difference between the pre-test scores and the post-test scores. For CACGP session 1, the pre-test results had a slightly lower mean ( $M = 29.924$ ,  $SD = 13.286$ ) than the post-test results ( $M = 31.906$ ,  $SD = 12.425$ ). The critical value of  $t$  at the .05 level for 16 degrees of freedom is 2.120. Our observed value of  $t$  is 0.949 which is below the critical value and thus failing to reject the null hypothesis. In other words, there is no

true difference between the pre-test scores and the post-test scores where ( $t = 0.949, p < .05$ ) (see Appendix A).

For CACGP session 2, the pre-test results had a lower mean ( $M = 31.122, SD = 17.263$ ) than the post-test results ( $M = 37.906, SD = 15.477$ ). The critical value of  $t$  at the .05 level for 17 degrees of freedom is 2.110. Our observed value of  $t$  is 3.155 which exceeds the critical value and thus we reject the null hypothesis. In other words, there is a true difference between the pre-test scores and the post-test scores where ( $t = 3.155, p < .05$ ) (see Appendix B).

For Project AIM, the pre-test results had a lower mean ( $M = 37.782, SD = 14.757$ ) than the post-test results ( $M = 61.001, SD = 24.131$ ). The critical value of  $t$  at the .01 level for 10 degrees of freedom is 3.169. Our observed value of  $t$  is 4.068 which exceeds the critical value and thus we reject the null hypothesis. In other words, there is a true difference between the pre-test scores and the post-test scores where ( $t = 4.068, p < .01$ ) (see Appendix C).

## **Hypothesis 2**

Null Hypothesis 2 states that there is no true relationship between the Math Path placement interpretations and the actual COMPASS placement. The critical value of the Pearson  $r$  at the .05 level for 2 degrees of freedom is 0.950. Since the correlation coefficient ( $r$ ) exceeds the critical value, there is a significant relationship between the Math Path placement interpretations and actual COMPASS placement ( $r = 0.985, r^2 = .97, p < .05$ ). The value of the square of  $r$  is .969 which indicates that about 97% of the variance in the COMPASS placement of the students can be accounted for in the Math Path placement interpretation. Thus, there is a strong relationship.

### Overview of COMPASS Placement

At the end of the intervention, COMPASS placed 23 students into MA085, 17 students into MA095, 5 students into MA108, and 1 student into MA110.

|                   | MA085 | MA095 | MA108 | MA110 | Total |
|-------------------|-------|-------|-------|-------|-------|
| COMPASS Placement | 23    | 17    | 5     | 1     | 46    |

### Conclusion

Hypothesis 1 was testing to determine if the intervention had a significant effect on the post-test scores. The *t*-test showed that for the students in the CACGP section 1, there was no significant difference between the pre-tests and the post-tests; although the test showed the results to not be significant, there was still a slight improvement. However, for the students in the CACGP section 2 and for the students in the Project AIM Summer Success program, there was a significant difference between the pre-test scores and the post-test scores. This means that the Math Path intervention was successful in increasing the students' test scores. The real question is how the increased post-test scores will translate into the students being placed by COMPASS.

Hypothesis 2 was testing to determine if there was a true relationship between the Math Path placement interpretations and the actual COMPASS placement. The Pearson *r* analysis showed that there was a true relationship between the Math Path placement interpretations and the actual COMPASS placement and it was also shown to be a strong relationship. This means that the correct predictions the mathematics department made as to where the students would place based on their post-test scores were not correct by chance. In other words, the mathematics department made those correct predictions as to where COMPASS would place the students because they knew enough about the mathematics COMPASS placement test to make the predictions.

Although two out of the three sections did show a significant difference in their pre-test and post-test scores, the overall outcome of the intervention did not succeed in placing the students in college level math courses.

### **Recommendations**

In terms of future math intervention studies similar to this, the first recommendation is to have the students take the actual COMPASS placement test as the pre-test and post-test in order to remove any threats towards data validity. The second recommendation is to increase the sample size. Perhaps acquire a mixture of high school graduates as well as adult learners returning to school. The third recommendation is to contact ACT and inquire about any studies they have done regarding increasing COMPASS math placement test scores or if they have any recommendations on practices that have been proven to increase COMPASS math placement test scores; ACT knows their test better than anyone.

In terms of implementing a math placement test intervention as well as providing an opportunity for students to accelerate themselves to a higher level math course, these are practices that are highly recommended. GCC can begin to be more proactive with the DOE high schools and their respective math departments. GCC can provide the high school math instructors the content as to what students can expect from the COMPASS math placement test and more importantly, inform the students that a math placement test is part of the process for most post-secondary institutions. The teachers can in turn incorporate the content into their lessons, if they are not do so already, or provide a refresher towards the end of the school year prior to graduation during lunch time, or after school if the instructors are available and if there are enough interested students. If the high school teachers are not able to provide the refresher course, then GCC can perhaps implement a course through Continuing Education similar to that

of George Highlands College. Georgia Highlands College offers a “COMPASS math prep course” through their Continuing Education program for a fee of \$99 (Georgia Highlands College, 2013), though the length of time with which this course takes place is not clearly stated. Similarly, Joliet Junior College in Illinois is currently conducting a free pilot intervention program that allows students to participate in their “My Math Test” to assist in preparing for their COMPASS math placement test (Joliet Junior College, 2013). Both of these institutions provide practice math questions on their school website as a means for students to arm themselves with resources and to prepare at their own time and at their own pace. This is something that GCC can easily implement. Practice math questions are readily available for download at the ACT COMPASS website.

If after going through an intervention program and the student still places in a developmental course, but feels that he/she should have placed at a higher level math course, it is recommended that the student be given one last opportunity to place at a higher level math course. With the result of the Pearson  $r$  analysis indicating a strong relationship between the predicted placement of students taking the locally developed test and the actual placement through COMPASS, the locally developed test can be used as a means for students to “test out” of their COMPASS placement. This is a practice that the math department faculty can explore and determine its feasibility for implementation beginning spring of 2014. This will allow student to save money, and provide them with the opportunity to place at a higher level math course that is more appropriate to their actual skill level.

### References

Guam Community College Fact Book (2013). *Math Placement: AY 2006 to AY 2013*, GU: Office of Assessment and Institutional Effectiveness & Research.

Georgia Highlands College (2013). *COMPASS Test Preparation*. Retrieved from <http://www.highlands.edu/site/tutorial-center-compass-test-preparation>

Joliet Junior College (2013). *ACT COMPASS Preparation*. Retrieved from <http://www.jjc.edu/services-for-students/academic-resources/academic-skills-center/Pages/compass-review-materials.aspx>

**APPENDICES**



**APPENDIX B**

**Session 2 Data Analysis**

| <b>College Access Challenge Grant (Session 2)</b>   |             |                          |                    |                           |
|---|-------------|--------------------------|--------------------|---------------------------|
| <b>Pre Test Results</b>   |             | <b>Post Test Results</b> | <b>D</b>           | <b>D<sup>2</sup></b>      |
| 6.7   |             | 20                       | 13.3               | 176.89                    |
| 28.9  |             | 20                       | -8.9               | 79.21                     |
| 28.9  |             | 33.3                     | 4.4                | 19.36                     |
| 31.1  |             | 35.6                     | 4.5                | 20.25                     |
| 20  |             | 24.4                     | 4.4                | 19.36                     |
| 17.8  |             | 28.9                     | 11.1               | 123.21                    |
| 28.9  |             | 40                       | 11.1               | 123.21                    |
| 28.9  |             | 37.8                     | 8.9                | 79.21                     |
| 22.2  |             | 28.9                     | 6.7                | 44.89                     |
| 33.3  |             | 31.1                     | -2.2               | 4.84                      |
| 35.6  |             | 37.8                     | 2.2                | 4.84                      |
| 6.7   |             | 35.6                     | 28.9               | 835.21                    |
| 48.9  |             | 64.4                     | 15.5               | 240.25                    |
| 60  |             | 55.6                     | -4.4               | 19.36                     |
| 75.6  |             | 82.2                     | 6.6                | 43.56                     |
| 31.1  |             | 33.3                     | 2.2                | 4.84                      |
| 40  |             | 37.8                     | -2.2               | 4.84                      |
| 15.6  |             | 35.6                     | 20                 | 400                       |
| 560.2   |             | 682.3                    | 122.1              | 2243.33                   |
| $\Sigma$ Pre = 560.2  |             | $\Sigma$ Post = 682.3    | $\Sigma$ D = 122.1 | $\Sigma$ D <sup>2</sup> = |
| M(1) = 31.122   | 31.12222222 | M(2) = 37.906            | 37.90555556        | 2243.33                   |
| Pre Test Standard Deviation   |             | 17.26307026              |                    |                           |
| Post Test Standard Deviation  |             | 15.47667969              |                    |                           |
| Degrees of Freedom  |             | 17                       |                    |                           |
| p < .05 Level   |             |                          |                    |                           |
| <b>Null Hypothesis: There is no true difference between the pre test scores and the post test scores.</b>   |             |                          |                    |                           |
| <b>t (value) = 3.155</b>  |             |                          |                    |                           |
| <b>The critical value of t at the .05 level for 17 degrees of freedom is 2.110. Our observed value of t is 3.155 which exceeds the critical value and thus we reject the null hypothesis. In other words, there is a true difference between the pre test scores and the post test scores where ( t = 3.155, p &lt; .05).</b> |             |                          |                    |                           |



**APPENDIX D**

Pearson r Coefficient

**Data Analysis**

| <u>Pearson r Coefficient</u>  | <u>MA085</u>            | <u>MA095</u>       | <u>MA108</u>                    | <u>MA110</u> | <u>Total</u>     |
|---|-------------------------|--------------------|---------------------------------|--------------|------------------|
| <u>Math Path Placement</u>  | 21                      | 18                 | 7                               | 0            | 46               |
| <u>COMPAS Placement</u>   | 23                      | 17                 | 5                               | 1            | 46               |
| <u>Total</u>  | 44                      | 35                 | 12                              | 1            | 92               |
| <u>Math Path Placement</u>  | <u>COMPAS Placement</u> |                    |                                 |              |                  |
| <u>x</u>  | <u>x<sup>2</sup></u>    | <u>y</u>           | <u>y<sup>2</sup></u>            | <u>xy</u>    |                  |
| <b>21</b>   | 441                     | <b>23</b>          | 529                             | 483          |                  |
| <b>18</b>   | 324                     | <b>17</b>          | 289                             | 306          |                  |
| <b>7</b>  | 49                      | <b>5</b>           | 25                              | 35           |                  |
| <b>0</b>  | 0                       | <b>1</b>           | 1                               | 0            |                  |
| <b>46</b>   | <b>814</b>              | <b>46</b>          | <b>844</b>                      | <b>824</b>   |                  |
| $\Sigma$ X  | $\Sigma$ X <sup>2</sup> | $\Sigma$ Y         | $\Sigma$ Y <sup>2</sup>         | $\Sigma$ XY  |                  |
| <b>Null Hypothesis: There is no true relationship between the post test scores and the COMPAS placement test scores.</b>  |                         |                    |                                 |              |                  |
| <b>Correlation Coefficient ( r )</b>  |                         | <b>0.984564809</b> | <b>Degrees of Freedom</b>       |              | <b>2</b>         |
| <b>Magnitude of r (r<sup>2</sup>)</b>   |                         | <b>0.969367864</b> | <b>Correlation Significance</b> |              | <b>.05 Level</b> |
| <b>Because our degrees of freedom is 2, we need a value of r of at least .950 to declare the correlation significant at the .05 level and reject the null hypothesis.</b>   |                         |                    |                                 |              |                  |
| <b>There is significant positive relationship between the placement of students by the Math Path placement interpretations and the actual placement of the students by COMPASS ( r = 0.985, r<sup>2</sup> = .97, p &lt; .05). A total of 97% of the variance in the placement of students by the COMPASS placement test can be accounted for by knowing where the Math Path program placed the student.</b> |                         |                    |                                 |              |                  |

## **SPECIAL PROJECT REPORT**

### **I. PURPOSE**

The following is a review of the current process that Guam Community College (GCC) uses to offer Special Project courses. The findings and recommendations will assist in the development of standardized processes and guidelines for all special project courses.

### **II. DEFINITION OF SPECIAL PROJECT COURSES**

Special courses, including special projects, are described in the “Recognition of Non-Traditional Learning” section of the College catalog as “open-entry/open-exit courses”. Special Projects are courses (1-6 credits) designed for individual students, including special studies, individual research and special projects.

According to the catalog, in order to take a special course, a student must do the following:

- Complete an Application to Take Special Course form
- Work with either a counselor or an advisor as well as the supervising faculty member in preparing the Application to Take form (the number of credits to be earned must be specified on the form)
- A student must obtain the approval of the counselor or advisor, supervising faculty member, Department Chairperson, Dean and the Registrar in order to take a Special Course.

The Application to Take Special Course form is for the following courses:

- **\_\_190, \_\_290:** Special Projects - Courses for individual students, including special studies, individual research and special projects.
- **\_\_192, \_\_292:** Practicum Courses - Guided work experience supervised by a qualified faculty member or project director to whom the student reports at regular intervals dealing with various applied aspects of a program of study.
- **\_\_198, \_\_298:** Cooperative Education/Work-Learn - Instruction combined with company placement related to that instruction, providing an opportunity to earn college credit and wages “paid or unpaid work experience” in an on-the-job setting arranged by the College.

### **III. METHODOLOGY**

A request was made to the Office of Assessment, Institutional Effectiveness & Research (AIER) to provide a list of courses offered from AY2007-2008 to AY2011-2012 with faculty salaries of \$500.00. A flat rate of \$500.00 is paid to faculty teaching special project courses as well as faculty teaching courses with enrollments of six or less students. A class roster for each course was requested from the Admissions and Registration Office. After obtaining the class roster, a review of individual student files was conducted to determine which of the courses listed in the report provided by AIER were special project courses. Based on this review, it was determined that 40 special project courses were offered between AY2008-2009 to AY2011-2012. Eighty students were registered in these 40 special project courses. Of the 80 students who were registered, 40 had an Application to Take Special Project form in their student file. There was no Application to Take Special Project form in the other 40 student files for the

reason that the 80 files reviewed included the students who registered for the course but due to low enrollment, the instructor agreed to teach the course on a Special Project rate of \$500.

Table I below shows the number of special project courses that were offered by academic year. A five-year comparison reveals that most of the special project courses were offered in AY2011-2012 (37.5%), followed by AY2008-2009 (27.5%). Only two special project courses were offered in AY2010-2011. According to the Registrar, this low data is inaccurate in accordance to the enrollment data for this academic year. This low data could stem from a variety of reasons, including the posting date after the academic year the course was offered.

| <b>TABLE 1</b>   |           |
|--|-----------|
| <b>Number of Special Project Courses with Faculty Salaries of \$500.00</b> |           |
| <b>AY2008-2009 to AY2011-2012</b>  |           |
| 2007-2008  | 7         |
| 2008-2009  | 11        |
| 2009-2010  | 5         |
| 2010-2011  | 2         |
| 2011-2012  | 15        |
| <b>Total # of Contracts:</b>   | <b>40</b> |
| <i>Source: AIER Data, December 2012</i>                                    |           |

Although there were some changes to the Application to Take Special Project form over the five-year period under review, the following are fields that are commonly found in the forms.

- Student Name
- Term
- Program
- GCC ID #
- Catalog Year
- Course ID Number
- Course Type
- Rationale
- Student Signature
- Instructor Signature
- Department Chair Approval
- Dean Approval
- Registrar’s Review

A summary of the findings follows below.

**IV. FINDINGS**

A review of the Application to Take Special Project forms revealed inconsistency in form completion. For example, a number of fields identified in the forms were not completely filled. There was missing information in several of the forms. For example, some forms did not have a faculty member or term identified. As shown in Table 2 below, of the 40 student files reviewed eleven included syllabi for the special project course. Twenty-two Application to Take Special Project forms had an instructor identified, seven forms had the class time identified, twelve forms had the class meeting days identified, and fourteen had the instructional program identified.

Table 2 contains the results of the student file review. As mentioned earlier, the forms were inconsistently completed. For example, only 22 forms had an instructor identified. Additionally, of the 40 student files reviewed, only eleven included syllabi for the special project course.

| <b>TABLE 2</b>                                  |                 |
|---|-----------------|
| <b>Description</b>                              | <b>Quantity</b> |
| Student files reviewed                          | 40              |
| Special project forms found in student files    | 40              |
| Syllabus included with SP form and reviewed     | 11              |
| Instructors indicated on SP form                | 22              |
| Class time indicated on form                    | 7               |
| Class meeting days identified                   | 12              |
| Program Identified on the form                  | 14              |
| <i>Source: Admissions Office, February 2013</i> |                 |

In order to determine whether students completed the Special Project course, a completion report was requested from the Registrar. This report contained the grades that each student received for the Special Project course as well as graduation information. Based on the report, of the 40 students registered in a Special Project course, twenty-six were issued a grade (twenty-five passed and one failed). Fourteen students were not provided a grade by the instructor. According to the Registrar, this could be due to data entry error, the student did not complete the course, or because the instructor never submitted a grade. It is interesting to note that of the 40 students who completed an Application to Take Special Project form, ten did not graduate.

The Special Course forms were submitted for the following fourteen programs in Table 3 that also includes the number of programs for each Special Project forms reviewed and the dates or term when the Special Project form was processed.

| <b>TABLE 3</b>                                  |                 |   |
|---|-----------------|---|
| <b>Program</b>                                  | <b>Quantity</b> | <b>Dates or Term of Special Project (Qty)</b>   |
| A.S. - Computer Science                         | 3               | Spring 2011 (2)<br>Fall 2011 (1)  |
| A.S. - Criminal Justice                         | 17              | Summer 2012 (1)<br>Spring 2012 (8)<br>Spring 2010 (1)<br>Spring 2009 (2)<br>Fall 2009 (1)<br>2008-2010 (2)<br>2008-2009 (1)<br>Not listed (1) |
| A.S. - Marketing                                | 3               | Summer 2012 (3)   |
| A.S. - Office Technology                        | 4               | Spring 2012 (3)<br>Spring 2011 (1)  |
| Adult High School                               | 1               | Spring 2008 (1)   |
| Certificate in Computer Science                 | 1               | Spring 2012 (1)   |
| Liberal Arts                                    | 1               | Fall 2009 (1)   |
| Literature Survey                               | 2               | Spring 2010 (1)<br>Fall 2008 (1)  |
| Marketing                                       | 3               | Summer 2012 (3)   |
| Supervision & Management                        | 1               | Spring 2012 (1)   |
| Visual Communications                           | 4               | Spring 2012 (2)<br>Fall 2011 (1)<br>Fall 2009 (1)   |
| Education                                       | 1               | Spring 2012 (1)   |
| Electronic Engineering                          | 1               | Spring 2012 (1)   |
| Culinary  | 1               | Fall 2009 (1)   |
| <b>Total # of Programs: 14</b>                  |                 |   |
| <i>Source: Admissions Office, February 2013</i> |                 |   |

**V. RECOMMENDATIONS**

The findings reflect the need for the College to establish Guidelines or Standard Operating Procedures (SOP) for Special Projects. Based on the findings of this research, it is recommended that the Admissions and Registration Office develop an SOP for special project courses.

The following are some things to consider when developing the SOP:

- A deadline for all special project requests should be identified (i.e., first two weeks of the semester).
- A course syllabus should be attached to the Application to Take Special Project form.
- Ensure the completeness and accuracy of all Special Project forms
- Ensure that grades are submitted via Banner system by the deadlines identified on the Academic Calendar.
- The Registrar should generate a list of Special Project courses that have no grades submitted and provide this list to the Deans.

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Math Path Data Analysis Report

Joanne A. Ige, GCC Associate Dean, Student Support Services, School of Technology and  
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Special Projects Report





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