<p style="text-align:center">**CMU ACADEMIC AFFAIRS COUNCIL – SUMMARY NOTES**</p>

<p style="text-align:center">December 2, 2016
3:00–4:30 p.m.
Grand Mesa Multi-Purpose Room</p>

AA Council Members in Attendance: Dr. Cynthia Pemberton—Vice President for Academic Affairs; **Dr. Debra Bailey**—Dept. Head, Health Sciences; **Dr. Blake Bickham**—Dept. Head, Teacher Education; **Dr. Sonia Brandon**—Asst. VP, Institutional Research, Planning and Decision Support; **Ms. Tracy DeBellevue**—ePortfolio & Assessment Project Manager; **Ms. Suzie Garner**—Dept. Head, Art and Design; **Dr. Calvin Hofer**—Dept. Head, Music; **Dr. Kurt Haas**—Asst. VP, Academic Affairs; **Dr. Jeremy Hawkins**—Dept. Head, Kinesiology; **Dr. Jessica Herrick**—Dept. Head, Social and Behavioral Sciences; **Dr. Barry Laga**—Dept. Head, Languages, Literature and Mass Communication; **Dr. Steven Norman**—Dept. Head, Business; **Dr. Lori Payne**—Dept. Head, Computer Science, Mathematics, and Statistics; **Mr. Tim Pinnow**—Acting Asst. VP, Academic Affairs, Director of Graduate Studies/Director of Distance Education (and for Mr. Mo LaMee); **Ms. Sylvia Rael**—Director, Tomlinson Library; **Dr. Gary Ratcliff**—Director, CMU Montrose Center; **Dr. Bette Schans**—Director of Assessment and Student Learning; **Ms. Brigitte Sundermann**—Director of Manufacturing Technology and Interim Director of Engineering Programs; **Ms. Holly Teal**—Registrar; **Dr. Russ Walker**—Dept. Head, Physical and Environmental Sciences; **Dr. Carrie McVean Waring**—Dept. Head, Biological Sciences

Members Excused: Dr. Tim Brower— CU-Boulder/CMU Engineering Partnership Program; **Mr. Mo LaMee**—Dept. Head, Theatre Arts; **Ms. Cindy Lueb**—Director of Sponsored Programs; **Ms. Christine Murphy**—Director of Instruction/ Director of Developmental Programs, WCCC

Also in Attendance: Dr. Morgan Bridge, Professor of Business, Chair of HLC Steering Committee; Ms. Barbara Crane, Assistant Registrar, Registrar's Office

Announcements/Updates/Reminders:

Dr. Pemberton thanked all for coming and announced/discussed the following:
- All were given 2 items. The first was an admission ticket/invitation and raffle ticket for the Academic Council Holiday Open House to be held Friday, December 9 in Lowell Heiny Hall, Room 209. The second item was a list of Council members; all were asked to write a descriptive term for each person on the list and return the list to Dr. Pemberton at the end of the meeting—the purpose of which to be revealed at the 12/9 Open House.
- All were reminded to mark their calendars and encourage their faculty to participate in the January 12 professional development sessions featuring Dr. Donna Beegle. The workshop will be in the University Center, Meyer Ballroom and registration information will be sent via email this week.
- Dr. Pemberton reported that a proposal to create and implement a part-time faculty salary schedule that takes into consideration both degree and longevity has been

discussed with President Foster, and with his consent, will be presented during the upcoming budget process.

- Dr. Pemberton thanked and congratulated Mr. Tim Pinnow as no longer being in "Acting" status as Assistant Vice President as of January 1. His title will be Assistant Vice President of Academic Affairs/Director of Graduate Studies/Director of Distance Education. As of January 1, ePortfolio will be moved under Distance Education and report to Mr. Pinnow.

Reports and Guests:

Dr. Kurt Haas, Asst. VP Academic Affairs, discussed/reported the following:
- Dr. Haas reviewed the revised English Placement practice/process document and outlined the operational steps faculty/advisors can take to implement (see Appendix A).
- Dr. Haas noted that Dr. Pemberton is sharing this information with CMU faculty during the President/VPAA department meeting presentations currently underway.
- Dr. Haas explained that the State is asking schools to re-submit all courses for GtPathways approval.
    o Schools will utilize a rigorous process to approve their own courses, and the State will randomly audit those courses.
    o Dr. Haas provided a handout entitled "Instructions and Guidelines for GT Pathways Approval of Courses;" please review and provide feedback or seek clarification as needed (see Appendix B).
    o Dr. Haas clarified that only one sample syllabi needs to be included in the course approval file, but that the syllabus for every section of, for example, English 111, will need to include information as described in Sections I, II, and V of the handout (see Appendix B).
    o The Essential Learning Committee can help ensure that course files meet audit requirements, which will focus on the inclusion in syllabi of content required by the State as well as SLOs.
    o Dr. Pemberton will ultimately sign-off on the Institution's approval information.
    o Dr. Haas indicated that February 28, 2016 is the deadline for completing the approval process for English and Math classes, with later dates for other subjects.
    o It was noted that guaranteed transfer is important for students who decide to come to CMU to know that their courses will transfer to other Colorado schools, if that is what they choose to do at a later date; it is also important for students in selecting courses at another school if they hope to transfer to CMU in their future.

Mr. Tim Pinnow, Asst. VP Academic Affairs, Director of Graduate and Distance Education, discussed/reported the following:
- Distance Education and ePortfolio department house calls are being scheduled for Spring semester to discuss upcoming courses and changes to D2L; please contact Mr. Pinnow if not yet scheduled.
- The Graduate admissions process was discussed.

- A website glitch discovered this week is being fixed regarding the Graduate Admission process. At this time, graduate admissions can be initiated online. Students submit the application, fee and request for electronic transcripts via the online admission portal. These submission imitate the admissions process.
- Mr. Pinnow noted that each department has its own committee to review graduate admission applications as described in the [Graduate Policies and Procedure Manual](#).
- Mr. Pinnow will meet with Admissions staff to focus on communication pieces, notifications, and the admission process in total – ideally incorporating the use of admissions software – Recruiter, to facilitate application document collection and communication. This is not in place as of yet. Mr. Pinnow will update us over time. In the meantime, the process will adhere to that described in the first two bullets - above. Dr. Brandon asked to be included in admissions application discussions.

Dr. Gary Ratcliff, Director, CMU Montrose Center, discussed/reported the following:
- This week Mr. Dennis Bailey, Ms. Christine Murphy, Dr. Paul Kraft, and Dr. Gary Ratcliff met with teachers and counselors in the Montrose school district to obtain their feedback regarding joining Grand Valley BOCES to offer Career/Technical Education to high school students. The school district will be voting soon. Dr. Ratcliff noted that this would benefit WCCC and CMU providing exposure to students who may choose future enrollment. Similar conversations are underway in Delta and Gunnison.

Ms. Jessie Barnett, Coordinator of Special Programs in Academic Affairs, discussed/reported the following:
- After meeting with an informal task group including faculty and staff, and in consideration of the capabilities of Degree Works, Ms. Barnett and Ms. Erin Rooks drafted a mock revision of a program sheet and provided copies to the Council (see Appendix C).
  - The revision is easier to read, for faculty to review and edit for Curriculum, and for AA staff to make final revisions before posting.
  - In response to Degree Works implementation not as much detail is needed, e.g., signatures are no longer needed on a hard copy Program Sheet.
  - The Program Sheet revision mirrors information in Degree Works and will still be available on the web site.
  - One point of feedback included a preference for the Course Sequencing page to keep its current look. While this is aesthetically preferable it is not "edit-friendly" and Council agreed to forward the new look proposal to CMU's curriculum committees.

Ms. Barbara Crane, Assistant Registrar, discussed/reported the following:
- Ms. Crane provided a handout entitled "Summer/Fall Course Scheduling Process" (see Appendix D).
  - Fall 2017 schedule will be rolled by the end of the day, December 8.
  - All were encouraged to get changes to the spreadsheet back to the Registrar's Office asap to have more time to review them again.

- Start and end dates should be carefully checked, as well as classes that skip a semester or more.
- After the initial changes are submitted on the spreadsheet, future changes must be made on the Changes and Cancellations Form or the Additions Form (Appendix D).
- The spreadsheet for Fall will reflect all changes/corrections known at the end of the previous Fall semester.
    - o Requests and feedback included:
        - It was noted that one week is a short turnaround time; this will be considered in future timelines.
        - Special printing requests (stacked classes, omitting classes such as high school) should be sent to Ms. Crane at bccrane@coloradomesa.edu.

Academic Support Units

Ms. Holly Teal, Registrar, discussed/reported the following:
- Advisor Assignment clean-up was discussed and a handout entitled "Advisor Cleanup in Banner" was distributed (see Appendix E).
    - o Some issues noted were:
        - Too many advisors are assigned to some students.
        - Advisor assignments do not end. All were asked to think about an optimal time to end the assignment if a student does not enroll in subsequent semesters. This will be further discussed at a Council meeting in January.
    - o Administrative Assistants are working to correct these and any other identified issues.
    - o Department Heads may no longer need to be assigned as Advisor in Banner but they do need to see Early Alert information.

Action Items – Task Group Reports

Task #1: Professional Development fund use/Issues: delimit to FT faculty? Use of funds to pay for credential exams and/or cont ed? (Dr. Jessica Herrick, Dr. Russ Walker)

Dr. Jessica Herrick, Department Head, Social and Behavioral Sciences, discussed/reported the following based on the work she and Dr. Russ Walker did in response to the Task #1 assignment:
- Faculty feedback was split regarding using Faculty Professional Development Funds for part-time faculty professional development. Some discussion suggested it feasible if the person has been at CMU for a while and makes a commitment to stay.
- Funding for credentialing is not applicable in all departments.
  The conversation concluded noting that there did not appear to be strong sentiment to amend the current Professional Development fund use guidelines. Therefore, at least for now, the application requirements and process will stay the same as provided on the current application materials.

Task #2: Use of dept funds to pay for credential exams? Cont ed/grad progs – our certs? (Dr. Blake Bickham, Dr. Barry Laga)

Dr. Barry Laga—Dept. Head, Languages, Literature and Mass Communication; discussed/reported the following based on the work he and Dr. Dr. Blake Bickham did in response to the Task #2 assignment:

- Dr. Laga referred to a handout entitled "Department Funds and Professional Development" (see Appendix F). He reported that a small number of faculty responded, and those responses were split. Dr. Laga referenced the "Grand Summary" at the bottom of page 2.
    - It was noted that this is not needed in some departments; also, there could potentially be times when department funds are more limited, and it may be confusing that some faculty are funded while others are not.
    - Department travel money was discussed as a resource.
    - It was suggested that credentialing exams be considered in terms of CMU funding support , but not the coursework needed to prepare for the exam.
    - The use of department roll-forward funds was discussed; Dr. Pemberton expressed the need for consistency and that not all departments have such funds available.

  Dr. Pemberton expressed appreciation to both task groups and concluded that:
  The Faculty Professional Development funding process will remain as is.
  Funding for credentialing will continue to be considered in light of today's discussions.

ADH Tips, Tricks and Suggestions – Issues/Concerns/Questions:

Dr. Pemberton noted that this will be the first order of business at the next Council meeting.

Good of the Order/Kudos & TQs!

BOCES agreement, WCCC and Montrose: After nearly 4 years of off and on again talks, the Montrose school district and WCCC completed a BOCES agreement to offer CTE courses at the CMU Montrose campus beginning in fall 2017. BOCES is an acronym for Board of Cooperative (Educational) Services. The statutory name of BOCES is Board of Cooperative Services, as set forth by Title 22, Article 5, C.R.S., Boards of Cooperative Services Act of 1965. As per the Colorado BOCES Association website: "Boards of Cooperative Educational Services (BOCES) are an important and vital part of the public educational system in Colorado…BOCES services are those needed by children, their families, and school personnel, which can be more efficiently provided across school districts….Colorado's BOCES (or Educational Services agencies) are unique in that they are an extension of the local member school districts…."

The WCCC-Montrose BOCES MOU will be voted on by Montrose SD December 15 and by the CMU Trustees at their January meeting. Through this agreement WCCC will offer a limited number of courses in fall with hopes to expand in the future. **Thank you to Ms. Chris Murphy, Dr. Paul Kraft, Mr. Derek Wagner and Dr. Gary Radcliff for their work in helping to make this agreement possible.**

Dr. Xin Wang, CMU Instructional Designer has been awarded *The Graduate Dean's Citation for Excellence*, for the purpose of recognizing superior academic achievement of students who are candidates for a graduate degree at the University of Northern Colorado. Individuals receiving the citation will be recognized at the Dean's Citation for Excellence Reception and at the Commencement Ceremony on Friday, December 9, 2016. Receipt of the citation will be recorded on your official UNC transcript in the remarks section.

Kudos and a big Hooray to Ms. Melissa Calhoon, CMU TRiO-SSS Director and her staff. The TRiO staff just completed and submitted the Annual Performance Report (APR) and is happy to report that CMU's TRiO program met all of its objectives!

Objective Assessment Summary:
Good Academic Standing   **Achieved 86.8%** (goal 85%)
Persistence Rate   **Achieved 77.6%** (goal 72%)
6 Yr Graduation Rate   **Achieved 55.4%** (goal 24%)
Students Served   **Achieved 101.3%** or 152 students (Goal 150)

Kudos to Drs. Mike Reeder and Steve Murray on their most recent publication acceptance. Their manuscript titled "Weighted-Ball Training Leading to a Stress Fracture of the Distal Ulna in a Collegiate Softball Pitcher," has been provisionally accepted for publication in *Athletic Training & Sports Health Care*.

CMU vocals will be showcased in two concerts Saturday, performing with The Symphony in the Valley in Glenwood Springs and Rifle. Our Vocal Arts Ensemble will be featured in two numbers with the orchestra, and then joined by top high school choirs for three other works. **Dr. Monte Atkinson** will be guest conducting for some of the numbers, and CMU's new voice head, **Dr. Graham Anduri**, will be featured as baritone soloist with the choirs. See: https://goo.gl/IF4t07

Congrats to CMU Educator Preparation and our teacher education faculty. Despite the downward trends at many institutions statewide and nationally, CMU's educator preparation enrollment was up 5% and we had over 100 completers (reports attached, see Appendix G).

Dates & Deadlines/Future Meetings

Final Fall meeting, Friday December 9 (3:00-4:30 pm)
Academic Council Holiday "Open House" - Academic Affairs office area
Admission by ticket only, treats and presents (of course).

SPRING: 2017, Wednesdays (I know, you are actually sad the meetings won't be on Fridays – me too!), 3:00 – 4:30 p.m., UC 213: January 18 – CP schedule conflict, BOT/Legislative agenda – AVPAA's to co-chair meeting, February 1, February 15**,** March 1, March 15**,** April 5, April 19**,** May 3.

There may also be a year-end wrap-up retreat in late May or early June (I know - you are probably totally hoping so! So am I!). Time, date, details—TBA.

Academic Council Meeting, December 2, 2016

APPENDIX A

Colorado Mesa University (CMU) - Placement Procedure for English Writing Courses

In cases where students' ACT/SAT and/or GED scores are not deemed college-ready, CMU employs secondary placement testing (the ACCUPLACER) to help guide incoming students into college-level courses. Placement testing information is found on the CMU website at: http://www.coloradomesa.edu/testing/ . In particular, see First-Semester Placement Information at: http://www.coloradomesa.edu/testing/first-semester-assessments.html

CMU students in Bachelors, Associates, and Certificate programs (except CMU's CNA Certification program: Technical Certificate Nurse Aide) whose test scores fall below the cut scores (see the chart below) must take the ACCUPLACER test or make alternate arrangements with the Advising Center. In some instances, testing can be accommodated in students' hometowns.

ACT Cut Scores		SAT Cut Scores (2015 or before)		SAT Cut Scores (2016 or after)		GED Cut Scores	
Subject	Score	Subject	Score	Subject	Score	Subject	Score
English	18 or higher	English	Verbal: 430 or higher	English	SAT RW: 470 or higher	Reasoning Language Arts (English)	170 or higher
Math	19 or higher	Math	Math: 460 or higher	Math	Math: 500 or higher	Social Studies (Reading)	170 or higher
Reading	17 or higher	Reading	Verbal: 430 or higher	English	SATRW: 470 or higher	Mathematical Reasoning (Math)	170 or higher

1. Students will be initially referred to English class(es) based on the Placement Cut-Score Matrix (see chart above).
2. Students who feel their cut-score placement does not reflect their skill level may challenge by:
   a. Re-taking the ACCUPLACER test; or
   b. Taking a post-test for the developmental course in which they are placed. If, based on this test, the developmental course instructor determines they are at college level, students may bypass remediation and move into the college course; or
   c. Signing an opt-out document that states they understand the potential negative academic consequences of disregarding placement referral. Opt-out students who earn a grade lower than a "C" in ENGL 111 will be required to take the recommended placement course and must earn a grade of "C" or higher in that course before attempting ENGL 111 again. An advising hold will be placed on opt-out students' registration during their first attempt at ENGL 111. This hold will prevent enrollment in ENGL 112 and direct students to academic advising to assist with course selection and registration advising.
   - To register for classes before grades are posted for the ENGL 111, the student must meet with an advisor or coach in the Advising Center, Office of Student Success, WCCC Student Services Office or Montrose Center. The advisor/coach can override the hold and help the student register.
   - If a student wants to enroll in ENGL 112 while enrolled in ENGL 111, she/he must provide a progress report to the advisor/coach from the ENGL 111 instructor indicating he/she is passing the class with a "C" or higher. Alternately, the student will need to wait for the ENGL 111 grade to post at the end of the semester to see if they earned a grade of 'C' or higher, at which point the hold is removed and the student may register.
   - The advising hold is removed after grades are posted for the ENGL 111 class regardless of the student's performance in the course. (Either the student will pass and be able to take ENGL 112 or the student will be referred to their original placement level.)

Academic Council Meeting, December 2, 2016

APPENDIX B

Instructions and Guidelines for GT Pathways Approval of Courses

1. Academic Department Heads (or designees) identify course(s) from their disciplines for potential GT Pathways approval.

2. For each course, the ADH or designee must establish that the content criteria and student learning outcomes described on the appropriate "Course Submittal Form and Institutional Verification" (sample attached) will be met. This process will include filling in Section IV of the submittal form, which requires that departments briefly describe how they will ensure the inclusion of the content criteria and SLOs on the syllabi of these courses. Sample syllabi and relevant assignments will be used to fill in a documentation grid for each content criteria and competency.

3. The Academic Department Head will collect and submit the completed forms and supporting materials to the Chair of the Essential Learning Committee for review. The supporting materials should point out the course's alignment to GT Pathways content and SLOs, but do not need to provide detailed justifications for each one.

4. The Essential Learning Committee will establish review procedures for determining whether the GT Pathways content criteria and SLOs are being met by the course. They may contact appropriate faculty for further documentation as needed.

5. Upon approval by the Essential Learning Committee, the materials will be submitted to the Assistant Vice-President of Academic Affairs who—acting as the designee for the VPAA—will complete the review of the course.

6. The VPAA will receive the Course Submittal Form and Institutional Verification for signature.

7. After signing, the materials will be submitted to CDHE. The new CDHE process will include more or less automatic acceptance of the courses, but with frequent auditing, particularly concerning whether syllabi in every course include the state-approved syllabus statement, content criteria and outcomes.

GT Pathways Curriculum

COURSE SUBMITTAL FORM & INSTITUTIONAL VERIFICATION

CONTENT AREA: MATHEMATICS (GT-MA1)

SUBCATEGORY: None.

Date: _____

Institution: _____

SECTION I.   MATHEMATICS CONTENT CRITERIA – GT-MA1.

These required <u>GT-MA1 content criteria</u> **shall be either: 1)** *copied and pasted verbatim* **into each instructor's syllabus, OR 2)** *mapped* **to the institution's own content criteria in each instructor's syllabus.**

This course should provide students with the opportunity to / Students should be able to:

a) Demonstrate good problem-solving habits, including:
   - Estimating solutions and recognizing unreasonable results.
   - Considering a variety of approaches to a given problem, and selecting one that is appropriate.
   - Interpreting solutions correctly.

b) Generate and interpret symbolic, graphical, numerical, and verbal (written or oral) representations of mathematical ideas.

c) Communicate mathematical ideas in written and/or oral form using appropriate mathematical language, notation, and style.

d) Apply mathematical concepts, procedures, and techniques appropriate to the course.

e) Recognize and apply patterns or mathematical structure.

f) Utilize and integrate appropriate technology.

SECTION II.   COMPETENCIES & STUDENT LEARNING OUTCOMES FOR GT-MA1.

This required GT-MA1 competency and its required Student Learning Outcomes shall be either: 1) *copied and pasted verbatim* into each instructor's syllabus, OR 2) *mapped* to the institution's own competencies and Student Learning Outcomes in each instructor's syllabus.

Quantitative Literacy Competency

Competency in quantitative literacy represents a student's ability to use quantifiable information and mathematical analysis to make connections and draw conclusions. Students with strong quantitative literacy skills understand and can create sophisticated arguments supported by quantitative evidence and can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc.).

Student Learning Outcomes (SLOs)

Students should be able to:

1. **Interpret Information**

    a. Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).

2. **Represent Information**

    a. Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words).

3. **Perform Calculations**

    a. Solve problems or equations at the appropriate course level.
    b. Use appropriate mathematical notation.
    c. Solve a variety of different problem types that involve a multi-step solution and address the validity of the results.

4. **Apply and Analyze Information**

    a. Make use of graphical objects (such as graphs of equations in two or three variables, histograms, scatterplots of bivariate data, geometrical figures, etc.) to supplement a solution to a typical problem at the appropriate level.
    b. Formulate, organize, and articulate solutions to theoretical and application problems at the appropriate course level.
    c. Make judgments based on mathematical analysis appropriate to the course level.

5. **Communicate Using Mathematical Forms**

    a. Express mathematical analysis symbolically, graphically, and in written language that clarifies/justifies/summarizes reasoning (may also include oral communication).

6. **Address Assumptions (*required of Statistics courses only*)**

    a. Describe and support assumptions in estimation, modeling, and data analysis, used as appropriate for the course.

SECTION III. GT-MA1 COURSES TO INCLUDE IN GT PATHWAYS CURRICULUM.

Add additional rows as needed.

Course Prefix & Number	Course Title	Is this course a NEW submission?

SECTION IV. INSTITUTIONAL PROCESS TO VERIFY GT PATHWAYS COMPLIANCE.

Brief description of on-campus process to ensure that going forward: every instructor of every section of the course will 1) either copy and paste verbatim the required GT Pathways content criteria and competencies into their syllabi, or 2) map the required GT Pathways content criteria and competencies to the institution's own content criteria, competencies, and student learning outcomes. (Add additional rows or attach additional pages, if necessary.):

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SECTION V. INSTITUTIONAL VERIFICATION.

1. I verify that the courses listed above are part of our institution's general education core.
2. I verify that the courses listed above are offered at least once every two years (for CCCS, offered at a campus in the system).
3. I verify that every section taught of the courses listed above will include the required GT Pathways content criteria and competencies, and that all faculty will have the necessary resources to teach these content criteria and competencies.
4. I verify that every syllabus used in the teaching of every section of the courses listed above will contain the following statement:

The Colorado Commission on Higher Education has approved [course prefix & number] for inclusion in the Guaranteed Transfer (GT) Pathways program in the [GT-@@#] category. For transferring students, successful completion with a minimum C- grade guarantees transfer and application of credit in this GT Pathways category. For more information on the GT Pathways program, go to http://highered.colorado.gov/Academics/Transfers/gtPathways/curriculum.html.

Chief Academic Officer: _____

Printed Name

_____

Signature

Date: _____

Documentation Grids for CMU Content Criteria and Competencies—GTMA-1

Course Title and Number: MATH 111

Content Criteria--This course should provide students with the opportunity to / Students should be able to:	Documented source(s) of activity in the course
a) Demonstrate good problem-solving habits, including: • Estimating solutions and recognizing unreasonable results. • Considering a variety of approaches to a given problem, and selecting one that is appropriate. • Interpreting solutions correctly.	Syllabus, pgs. 3,4. Sample Assignment #2.
b) Generate and interpret symbolic, graphical, numerical, and verbal (written or oral) representations of mathematical ideas.	All sample assignments.
c) Communicate mathematical ideas in written and/or oral form using appropriate mathematical language, notation, and style.	Syllabus pg. 2 description of homework activity.
d) Apply mathematical concepts, procedures, and techniques appropriate to the course.	All sample assignments.
e) Recognize and apply patterns or mathematical structure.	Sample assignment #3.
f) Utilize and integrate appropriate technology.	Syllabus pg. 1.

Competency in quantitative literacy represents a student's ability to use quantifiable information and mathematical analysis to make connections and draw conclusions. Students with strong quantitative literacy skills understand and can create sophisticated arguments supported by quantitative evidence and can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc.).

Competencies (Student Learning Outcomes-- SLOs) *Students should be able to:*	Documented source of activity in the course
1. **Interpret Information** a. Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).	Sample assignment #3.
2. **Represent Information** a. Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words).	Sample assignment #3
3. **Perform Calculations** a. Solve problems or equations at the appropriate course level. b. Use appropriate mathematical notation. c. Solve a variety of different problem types that involve a multi-step solution and address the validity of the results.	All sample assignments.
4. **Apply and Analyze Information** a. Make use of graphical objects (such as graphs of equations in two or three variables, histograms, scatterplots of bivariate data, geometrical figures, etc.) to	Sample assignment #1 and #3. Small group work associated with #3 in particular.

supplement a solution to a typical problem at the appropriate level. b. Formulate, organize, and articulate solutions to theoretical and application problems at the appropriate course level. c. Make judgments based on mathematical analysis appropriate to the course level.	
5. **Communicate Using Mathematical Forms** a. Express mathematical analysis symbolically, graphically, and in written language that clarifies/justifies/summarizes reasoning (may also include oral communication).	Syllabus pg. 2 description of citizenship grade.
6. **Address Assumptions (*required of Statistics courses only*)** a. Describe and support assumptions in estimation, modeling, and data analysis, used as appropriate for the course.	N/A

Academic Council Meeting, December 2, 2016

APPENDIX C

2017-2018 PROGRAM REQUIREMENTS
Degree: Bachelor of Business Administration
Major: Business Administration
Concentration: Management

About This Major . . .

The Bachelor of Business Administration (BBA) is designed to prepare students for the challenges of today's organizations, as well as the business world of tomorrow. The program provides students with the knowledge, skills, and abilities to compete in both the local and global business environments. Additionally, the program allows for an emphasis in a specialized area such as management, marketing, finance, economics, entrepreneurship, insurance, energy management or hospitality management.

The BBA degree can be applied in various fields such as medicine, the arts, sports, and education. In addition to positions in corporate America, nonprofit organizations like hospitals, school systems, and theatres also require people with business training and skills. Graduates of BBA programs hold positions in organizations from entry level manager to chief executive officer. Colorado Mesa's BBA graduates are entrepreneurs, small business owners, bank vice-presidents, product managers in advertising firms and project and operations managers in manufacturing organizations.

The BBA is a very versatile, flexible and valuable degree. Colorado Mesa BBA graduates have great success stories in the business world as well as the ability to earn advanced degrees in business such as the Master of Business Administration – one of the most sought after degrees by employers in today's job market.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:
1. Integrate knowledge from multiple functional areas of business to solve business problems and to develop sound business strategies. (Specialized Knowledge)
2. Apply business knowledge and skills in appropriate business contexts and transfer knowledge and skills to new business situations. (Critical Thinking)
3. Communicate clearly, appropriately, and persuasively to the business audience, both orally and in writing, including individual presentations. (Communication Fluency)
4. Analyze business data critically, reason logically, and apply quantitative analysis methods correctly to develop appropriate business conclusions. (Quantitative Fluency)
5. Effectively work as a team. (Applied Learning)
6. Strategically apply information across functional areas of business. (Applied Learning)
7. Produce professional business work products. (Applied Learning)
8. Practice principle-based ethics in decision making both personally and professionally. (Applied Learning)
9. Apply management principles to optimize organizational resources. (Specialized Knowledge)

About the Program Sheet and DegreeWorks:

The program sheet is intended for informational use only to determine what courses and associated requirements are needed to earn a degree. The program sheet also provides a suggested course sequencing or four-year plan to lay out a program's requirements toward graduation.

DegreeWorks is an online audit reporting tool available via MavZone. It is the official record used by the Registrar's Office to evaluate a student's progress towards their degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss any questions or concerns with their advisor or academic department head. Any discrepancies in requirements should be reported to the Registrar's Office.

DEGREE REQUIREMENTS

- 120 semester hours total. Students must complete a minimum of 30 of the last 60 hours of credit at CMU.
- 40 upper division credits. A minimum of 15 taken at the 300-400 course levels within the major at CMU.
- 2.00 cumulative GPA or higher in all CMU coursework.
- A 2.75 GPA is required in the major courses. A "C" or higher is required in all major courses.
- No more than 6 semester hours of independent study courses can be used toward this degree.
- Students must pass the PLACE or PRAXIS II exam in the content area prior to beginning the internship. Also, all other coursework toward the degree must be successfully completed prior to the internship.
- During your senior year, you will be required to take a capstone exit assessment/project (e.g., Major Field Achievement Test).
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program sheet you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.
- Visit http://www.coloradomesa.edu/registrar/graduation.html for graduation application deadlines and instructions.

Special requirements: To be admitted to the Bachelor of Business Administration program, certain prerequisites must be satisfied. Please see the Business department head for complete requirements and application form. All degree requirements must be completed as described below. Any exceptions or substitutions must be recommended in advance by the faculty advisor and/or approved by the Department Head. Students are required to participate in exit examinations or other programs deemed necessary to comply with the college accountability requirement.

ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

English (6 semester hours, must receive a grade of "C" or better and must be completed by the time the student has 60 semester hours.)
- ☐ ENGL 111 - English Composition (3)
- ☐ ENGL 112 - English Composition (3)

Mathematics (3 semester hours, must receive a grade of "C" or better, must be completed by the time the student has 60 semester hours.)
- ☐ MATH 113 -College Algebra (4*)
  *3 credits apply to the Essential Learning requirements and 1 credit applies to elective credit

Humanities (3 semester hours)
- ☐ Selection from Humanities Category

Social and Behavioral Sciences (6 semester hours)
- ☐ ECON 201 - Principles of Macroeconomics (3)
- ☐ ECON 202 -Principles of Microeconomics (3)

Natural Sciences (7 semester hours, one course must include a lab)
- ☐ Select one Natural Sciences course
- ☐ Select one Natural Sciences course with a lab

History (3 semester hours)
- ☐ Select one History course

Fine Arts (3 semester hours)
- ☐ Select one Fine Arts course

OTHER LOWER-DIVISION REQUIREMENTS

Wellness Requirement (2 semester hours)
- ☐ KINE 100 - Health and Wellness (1)
- ☐ Activity Course Selection (1)

Essential Learning Capstone (4 semester hours)
Essential Learning Capstone should be completed between 45 and 75 hours.
- ☐ ESSL 290 - Maverick Milestone (3)
- ☐ ESSL 200 - Essential Speech (1)

FOUNDATION COURSES (18 semester hours)
These courses, plus ECON 201 & 202 and Essential Learning English & Math requirements must be completed within the student's first 60 hours.
- ☐ ACCT 201 - Principles of Financial Accounting (3)
- ☐ ACCT 202 - Principles of Managerial Accounting (3)
- ☐ BUGB 105 - Freshman Business Seminar (3)
- ☐ BUGB 211 - Business Communications (3)
- ☐ One of the following:
      CISB 101 - Business Information Technology
      CISB 205 - Advanced Business Software (3)
- ☐ CISB/STAT 241 - Introduction to Business Analysis (3)

BACHELOR OF BUSINESS ADMINISTRATION: MANAGEMENT CONCENTRATION (63 semester hours)

Business Administration Core (33 semester hours)
- ☐ BUGB 349 - Legal Environment of Business (3)
- ☐ BUGB 401 - International Business (3)
- ☐ CISB 210 - Fundamentals of Info Systems (3)
- ☐ FINA 301 - Managerial Finance (3)
- ☐ MANG 201 - Principles of Management (3)
- ☐ MANG 301 - Organizational Behavior (3)
- ☐ HRMA 371 - Human Resource Management (3)
- ☐ MANG 471 - Operations Management (3)
- ☐ MANG 491 - Business Strategy (3)
- ☐ MARK 231 - Principles of Marketing (3)
- ☐ One of the following courses (3):
    - CISB 341 - Quantitative Decision Making
    - MANG 341 - Quantitative Decision Making
    - MARK 350 - Marketing Research

Management Concentration Courses (30 semester hours)

Management Nucleus (15 semester hours)
- ☐ ENTR 300 - Small Business &Entrepreneurship (3)
- ☐ HMRA 372 - Employee Assessment (3)
- ☐ ENTR 450 - Entrepreneurship (3)
- ☐ Two of the following courses (6 hours):
    - ACCT 311 - Advanced Managerial Accounting
    - ENTR 340- Applied Financial Management for Emerging Businesses
    - BUGB 440 - Business Ethics
    - CISB 305 - Solving Problems Using Spreadsheets
    - CISB 306 - Solving Problems Using Databases
    - CISB 470 - Management of Information Systems
    - FINA 310 - Risk Management
    - HRMA 373 - Leadership
    - MANG 410 - Effective Workplace Communication

Concentration Electives (15 semester hours)
- ☐ In consultation with a Business Advisor, choose 15 hours that complement the nucleus or choose a nucleus of a second concentration. At least 1 hour must be upper division.

ELECTIVES (2 semester hours)
Electives (2 semester hours of college level courses appearing on final transcript, not listed above to bring total semester hours to 120.) At least one hour in Concentration Electives or in General Electives must be upper-division.

- ☐ MATH 113 College Algebra (4*)
    *3 credits apply to the Essential Learning requirements and 1 credit applies to elective credit
- ☐ Choose 1 credit

SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 16 credits
- BUGB 105 - Freshman Business Seminar (3)
- ENGL 111 - English Composition (3)
- CISB 101 - Business Information Technology **OR** CISB 205 - Advanced Business Software (3)
- MATH 113 - College Algebra (4)
- Essential Learning - Fine Arts (3)

Freshman Year, Spring Semester: 14 credits
- ENGL 112 - English Composition (3)
- CISB/STAT 241 - Introduction to Business Analysis (3)
- CISB 210 - Fundamentals of Information Technology (3)
- Essential Learning - Natural Science with Lab (4)
- KINE 100 - Health and Wellness (1)

Sophomore Year, Fall Semester: 15 credits
- ACCT 201 - Principles of Financial Accounting (3)
- ECON 201 - Principles of Macroeconomics (3)
- BUGB 211 - Business Communications (3)
- MARK 231 - Principles of Marketing (3)
- Essential Learning - History (3)

Sophomore Year, Spring Semester: 16 credits
- ACCT 202 - Principles of Managerial Accounting (3)
- ECON 202 - Principles of Microeconomics (3)
- MANG 201 - Principles of Management (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- Essential Learning - Humanities (3)

Junior Year, Fall Semester: 15 credits
- BUGB 349 - Legal Environment of Business (3)
- HRMA 300 - Small Business and Entrepreneurship (3)
- CISB/MANG 341 - Quantitative Decision Making **OR** MARK 350 - Marketing Research (3)
- Upper Division Business Elective (3)
- Essential Learning - Natural Science (3)

Junior Year, Spring Semester: 15 credits
- HRMA 371 - Human Resource Management (3)
- FINA 301 - Managerial Finance (3)
- MANG 301 - Organizational Behavior (3)
- Upper Division Business Electives (2 courses) (6)

Senior Year, Fall Semester: 15 credits
- MANG 471 - Operations Management (3)
- HRMA 372 - Employee Assessment (3)
- BUGB 401 - International Business (3)
- Concentration Electives (2 courses) (6)

Senior Year, Spring Semester: 14 credits
- MANG 491 - Business Policy (3)
- ENTR 450 - Entrepreneurship (3)
- Concentration Electives (2 courses) (6)
- KINA Activity (1)
- Elective (1)

Academic Council Meeting, December 2, 2016

APPENDIX D

Summer/Fall Course Scheduling Process

We have developed a timeline to ensure that we are able to finalize the schedule on time for the upcoming registration. We are beginning to send out the draft schedule to you now so that you and your department can begin reviewing your courses. The Summer spreadsheet will be sent out this afternoon and the Fall 2017 spreadsheet will be sent out by the end of the day Thursday December 8, 2016.

You can submit changes and updates at any time to academic_scheduling@coloradomesa.edu

Please note a few tips:

- The Registrar's Office will process schedule changes on a first come first serve basis. Therefore, the earlier we receive changes the more iterations possible for the department.

- We would ask that Departments take extra time to look at the date for classes since there have been several shifts in the academic calendar dates over the last couple of years.

- As a reminder take a quick look at the sample tab to see the best practices for completing your draft edits.

- First round changes may be submitted on the spreadsheet. Subsequent schedule changes should be submitted on the Course Addition or Course Change/Cancelation Forms.

We propose the following timeline for the scheduling process for the Summer/Fall 2017:

- *Feb 3rd – Please have drafts back to Paula by this date to guarantee that your changes are entered and are considered during the room scheduling process. If you turn in changes early and we get them entered before that date you may have the opportunity to have a second look at your drafts.*
- *Feb 6-22nd – The Registrar's Office will enter all changes received by the 5th and work first come first entered on anything entered after that date.*
- *Feb 23rd – Schedule out to Departments for review*
- *March 2nd – all final changes must be submitted*
- *March 6th schedule out to student body allowing adequate time (considering spring break) for student's time to meet with advisors prior to registration opening the week of March 28th.*

Should you need any further information or have questions, please do not hesitate to contact me.

Thank you in advance for all of your time and effort on this.

Barbara Crane
Assistant Registrar
970-248-1216/Fax 970-248-1131

CHANGES AND CANCELLATIONS

SEMESTER _____   YEAR _____   DATE _____

CRN	Course & Number	Nature of Change	Course Title	Section Number	Start/End Dates	Permission	Fee	Enroll Limit	Cr. Hrs	Days	Start/End Times	Old Room	New Room	Instructor

PLEASE COMPLETE ALL INFORMATION ON EACH COURSE

Requested by:

_____
Signature of Department Head

Revised October 2006

ADDITIONS

SEMESTER _____   YEAR _____   DATE _____

CRN	Course & Number	Course Title	Section Number	Start/End Dates	Per-mission	Fee	Enroll Limit	Cr. Hrs	Days	Start/End Times		Building and Room	Instructor

PLEASE COMPLETE ALL INFORMATION ON EACH COURSE

Requested by:

_____
Signature of Department Head

Revised October 2006

Academic Council Meeting, December 2, 2016

APPENDIX E

First and foremost, there is much appreciation for the hard work put forth by departments for advisor assignments throughout the year and the continued efforts to keep advisors accurate.

In summer 2016 while implementing Advise, advisor assignments were reviewed. The first cleanup effort was the addition of a weekly report to assign advisors for our incoming students, returning students, students whose major/advisor departments don't match, and students without any advisor. Many thanks to administrative assistants who continue to assign advisors from this report as this implementation has gone smoothly.

To continue the cleanup efforts, the following observations were noted:

Students may have unnecessary advisors assigned. It is valid to have additional advisors when students have multiple majors, concentrations, minors, and/or education advisors. However, our data shows students with 2-5 advisors without an observed academic need. This means when a student looks at his/her advisor list, it can be confusing to determine which advisor to contact. Here are some ideas to clean up the advisor lists for students.

1) **There is no technical need to assign department heads as advisors**
   CAPP, the old degree audit software, required advisor assignment in order to access the degree audit. DegreeWorks allows department heads to access all students without being formally assigned as an advisor. There are existing reports to pull advisees and advisor lists by major code without assigning a department head. Is there a need to keep department heads as a published advisor? Does it cause students to go to the department head before the advisor? Thoughts and ideas?

2) **Generic advisor assignment:**
   - The Registrar's Office used a generic login (700236256 --,--) to access a CAPP degree audit report. The Registrar's Office will work with IT to remove these assignments. No future students should have this advisor listed.
   - The Academic Advising Center (700075255) is valid for all incoming students who don't have a major declared to let students know where to go for assistance. Once a major is declared, the Advising Center assignment should be ended when the department advisor is assigned by the department administrative assistant.
   - The Office of Student Success (700416387) is valid for all students in the Provisional Baccalaureate degree to let students know they have multiple advisor while in the PB program. Once students are transitioned into a baccalaureate degree, the OSS assignment should be ended. This will be done by OSS or the Registrar's Office when the transfer to baccalaureate paperwork is completed.
   - Department specific generic advisors such as Health Sciences (700028186) and Teacher Education (700342440). Are these still needed or does the advisee list by major cover this? Who currently assigns these?
   - The Montrose Campus (700399971) has students assigned. If a report could be generated using the students enrolled in Montrose courses, is this advisor designation needed? Or should the Montrose advisor be assigned to a person, i.e., Chris Wilcox? Who currently assigns these?

3) **Review and end prior/excess advisors beyond the primary advisors**
   The proposal is to create a list of students who have excess advisors and to work with the Administrative Assistants to clean up excess or prior advisors. The report would take major advisors, minors advisors, and teacher education into consideration and exclude those students from the cleanup list. The Registrar's Office will initially work with IT to create a report, then refine the report with the assistance of the academic departments so it can be used in future semesters. Thoughts or ideas?

Advisors have too many inactive advisees assigned. This causes DegreeWorks and Advise to pull up too many students.

4) **End advisor assignment for graduating students after their degree is awarded**
Other universities end the advisor assignment when the degree is awarded or at a later designated date. The proposal is to end the advisor assignment after census of the following term. Example, a Fall 2016 graduate who doesn't attend in Spring 2017 would have their advisor assignment ended. This allows students moving from a certificate to an associate in the same field to keep their advisor assignment, but end the assignment if the student stopped at the certificate. This task would be completed by the Registrar's Office with assistance from IT. Thoughts or ideas?

5) **End advisor assignments for students who stopped attending CMU after two semesters**
Other universities have a specified time for stop out after which the advisor assignment is ended. The proposal is to end the advisor assignment by the end of the second semester away (excluding summer). Example, a student attends in Spring 2016, but not Fall 2016 or Spring 2017. The advisor assignment would end in May 2017. This allows time to recruit back stop outs, but not so long that advisor lists are cluttered with multiple year non-attendees. This task would be completed by the Registrar's Office with assistance from IT. Another option is to end the advisor assignment at census of the second semester (moving the end date forward by 3 months). Thoughts or ideas?

Academic Council Meeting, December 2, 2016

APPENDIX F

Departments Funds and Professional Development

Context:⊠

HLC requires that all faculty earn at least 18 hours in the discipline that they teach or demonstrate "tested experience."

⊠⊠Proposal:⊠

For the professional development of adjunct/instructors, departments may use department funds (rollover?) to pay for credential exams, continuing education, graduate courses, certificates, etc. as a way to help our colleagues either demonstrate pre-existing expertise or meet HLC's education requirements for post-secondary instructors.

⊠⊠Please pass along your thoughts, observations, and suggestions as it relates to "using funds", the purpose (i.e. "demonstrate pre-existing expertise or bring them up to speed") and the tool/method ("credential exams, continuing education, graduate courses, certificates, etc."), and the extent to which funds would be used or "how much" departments could cover. ⊠

Responses:

We might consider for each semester of graduate work paid for at the gradual level, the adjuncts commits to a post semester of work.

Fees for credentialing will be paid after the person passes the credential process.

My feelings on this are mixed. It would be nice to be able to pay for credential exams, graduate courses, etc. but funds are limited in my department – I have very little extra money. If I have extra money I think it should be spent on needs for full-time faculty.

If it's just a matter of paying for an exam that demonstrates expertise, then I approve. Otherwise, I prefer to dedicate the money to full-time faculty and students.

I am all for the departments/CMU helping our faculty pay to get up to HLC standards. Any other company requiring current employees to attend certain training or classes helps pay for them (or pays all the cost), so I believe we should help if we can.

Purpose: To help meet the HLC credentialing requirements. I do think this should be restricted to employees here for some period of time (not future hires), or at least that current faculty be given preference for any funds available.

Tool method: Any of the techniques used to prove qualifications. Mostly I believe that would be graduate coursework, but perhaps in some fields it might be credentialing exams, etc.

Extent: A dollar amount maximum might be necessary, as some might choose to attend a course at an expensive school rather that at CMU, and thus expect more money than others taking courses at CMU. So perhaps 50% up to $1000 per course or something like that? If the department has the money available, that is.

I believe that is a normal funding rate many companies use for employees who are taking graduate courses towards a certification or graduate degree, so should be something we would consider.

I think the policy makes sense. I do think there needs to be encouragement for us to hire properly credentialed individuals in the future, if at all possible. To say that another way, there should be a time limit associated with the use of this policy. I know I have inherited a number of individuals who teach activity courses that I have had to dig deep to show they are qualified to do what they do.

Does this policy need to be a uniform policy, or can we leave it to the discretion to each department and their available funds?

Grand Summary

As we can see, the departments heads are split, although more seem inclined than not. Everyone does, however, seem keen on limits and parameters.

The following questions may guide our discussion:

Who is our priority? Do we dedicate our limited resources to full-time faculty, to faculty who, by definition, have a part-time commitment to the university, or to student opportunities? Rank.

Does paying for "credential exams, continuing education, graduate courses, certificates, etc." improve quality of instruction and benefit students?

Where do we get the greatest bang for our buck... helping under qualified PT faculty pay for "credential exams, continuing education, graduate courses, certificates, etc., or directing our limited funds to full-time faculty, or providing students with more opportunities? Rank.

Do we have a responsibility to part-time faculty? If so, what are the limits of our responsibility?

What is our real goal...professional development or demonstration of expertise?

Academic Council Meeting, December 2, 2016

APPENDIX G

2016 LEGISLATIVE REPORT
EDUCATOR PREPARATION REPORT AY2015-2016

DECEMBER 2016

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This report was prepared by the Student Success and Academic Affairs Division at the Colorado Department of Higher Education (CDHE) with the assistance of the Office of Educator Preparation, Licensing and Educator Effectiveness at the Colorado Department of Education (CDE) pursuant to the requirements of §23-1-121(6) Colorado Revised Statutes.

For more information please contact:

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Executive Summary

Significant findings described within this report include:

- The total number of individuals completing an educator preparation program at Colorado colleges and universities during the 2015-16 academic declined by 2.2% from the previous year to 2,472. This is the sixth consecutive year the number of completers has declined.

- The number of individuals completing an alternative licensing program was 796 during 2015-16. This continues to remain consistent over the last two reporting cycles and represents approximately one-quarter (25%) of all the total completers in the state.

- There has been a 24.4% decline in the number of educators completing an educator preparation program at Colorado colleges and universities between the years 2010- 2016.

- In addition to a decline in completers, enrollment in educator preparation programs at institutions of higher education remains at low levels and unchanged from the previous academic year. Significant declines in math, science and English language arts were noted during 2015-16.

- While overall numbers are lower, 2015-16 saw an increase in the number of diverse students enrolled in educator preparation programs. The number of black/African American, Hispanic, Asian and multi-racial candidates all increased as compared to the previous academic year.

- Rural districts continue to have difficulty in recruiting and retaining teachers in historically hard-to-staff endorsement and licensure areas. The overall teacher shortage continues to have a dramatic impact on rural districts, particularly those throughout the eastern plains.

I. Introduction

Pursuant to §23-1-121(6) Colorado Revised Statutes, the Colorado Commission on Higher Education (CCHE) reports annually to the Joint Education Committee of the General Assembly on enrollment in, graduation (completion) rates from, and effectiveness of the review of educator preparation programs at institutions of higher education and designated agencies. This report fulfills this statutory requirement.

This report was completed by the Colorado Department of Higher Education (CDHE) and the Colorado Department of Education (CDE). The materials utilized in this report originate from data submitted annually to the department by the 19 institutions of higher education offering educator preparation. Additional material to supplement the report has been provided by the Colorado Workforce Development Council.

The report is divided into eight sections: an introduction, an analysis of educator preparation completers in traditional institutions of higher education, a review of completers from alternative route educator preparation programs, an examination of the enrollment and enrollment trends for educator preparation programs at Colorado colleges and universities, a review of the demographics of those enrolled in educator preparation programs at institutions of higher education, a summary of the reauthorization and program approvals completed in 2016 and additional areas of focus and recommendations for the Colorado education community throughout 2017 and beyond.

## II. Completers Through Traditional Licensure Routes

Completer data has become increasingly useful in regards to understanding and forecasting the number of individuals entering the classroom or school as a teacher, administrator or special services provider. The number of completers has a direct correlation to the projected needs of local school districts and has a direct impact on the 899,112 students in Colorado's K12 schools.

The importance of licensure for educators is well-documented and abundant in national and global research. In nearly all cases, unlicensed teachers serving in classrooms resulted in lower achievement rates for students as evidenced by lower assessment scores and decreased high-school completion rates (Darling-Hammond, 2000; Presley, White and Gong, 2005). In general, teachers without a license, earned through a traditional program or an alternative provider, are more likely to be evaluated as ineffective and/or leave the teaching profession within two years of hire. Based on this data, both DHE and CDE continue to support efforts to ensure all teachers are of the highest quality and possess the required licenses and endorsements.

For most Colorado residents, obtaining licensure in the state of Colorado is done primarily through completing an approved educator preparation program ("traditional route") at an established college or university or through a designated agency for alternative teacher preparation ("alternative route"). All combined, 3268 educators completed programs through either a traditional educator preparation program or through a designated agency.

Chart 1 below shows the number and percent of completers from college- and university-based programs versus alternative providers/designated agencies.

Chart 1 - Colorado Educator Preparation Completers 2015-16

796, 24% — Alternative Preparation Agencies

2472, 76% — Colorado Universities and Colleges
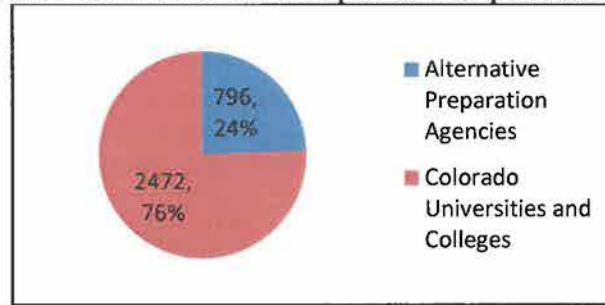
During the 2015-16 academic year, 2,472 students completed traditional educator preparation programs at colleges/universities, versus 2,529 completers in 2014-2015, which is a 2% reduction and marks the sixth consecutive year the number of completers from university/college-based educator preparation programs has declined. From 2010 to 2016, there is a decrease of 24.4% in the total number of completers from traditional educator preparation programs at colleges/universities, as illustrated in Chart 2 below.

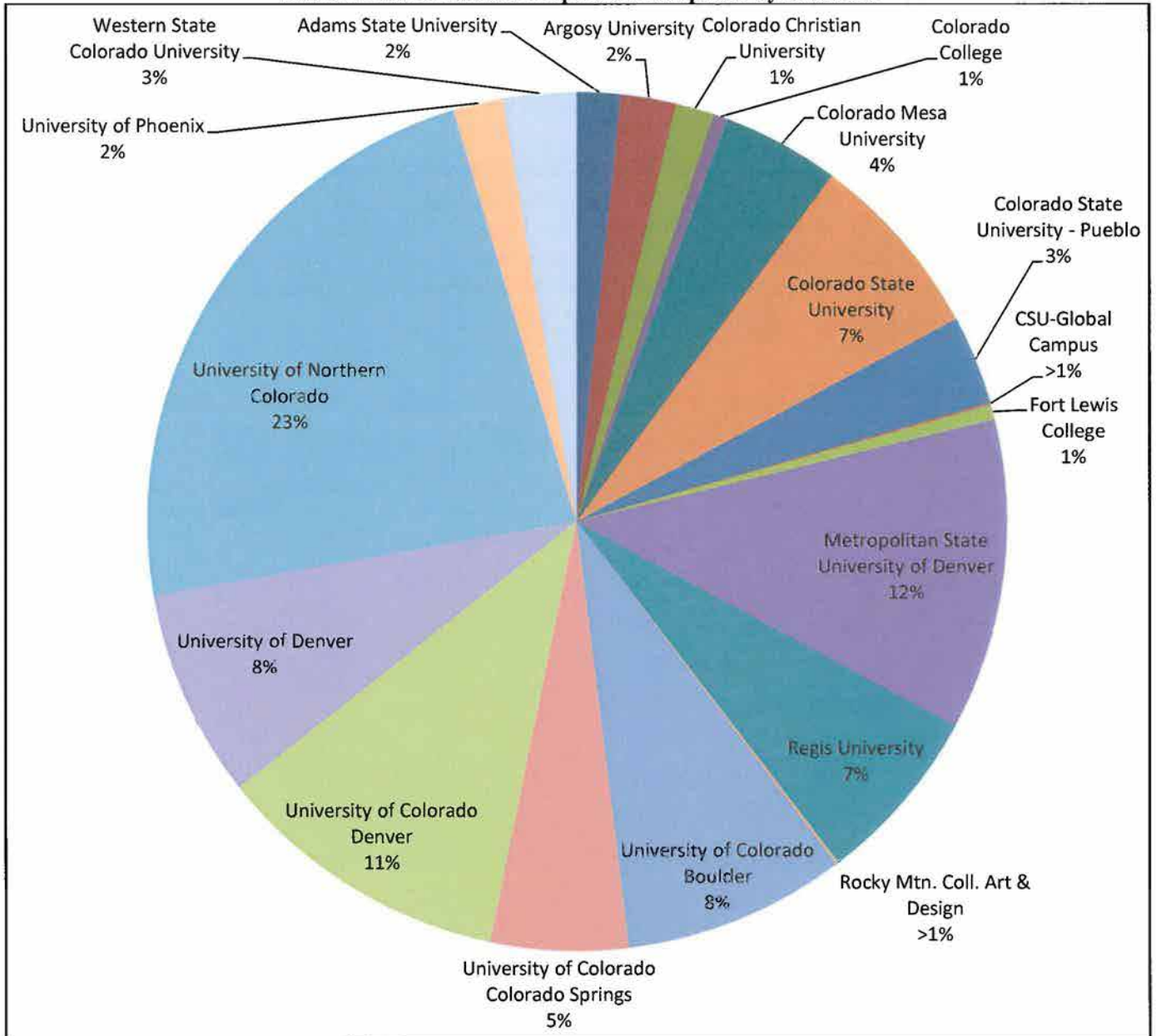**Chart 2 – Colorado Educator Preparation Institution of Higher Education Completers
2010-2016**

Year	Completers
2010-11	3274
2011-12	3078
2012-13	2858
2013-14	2704
2014-15	2529
2015-16	2472
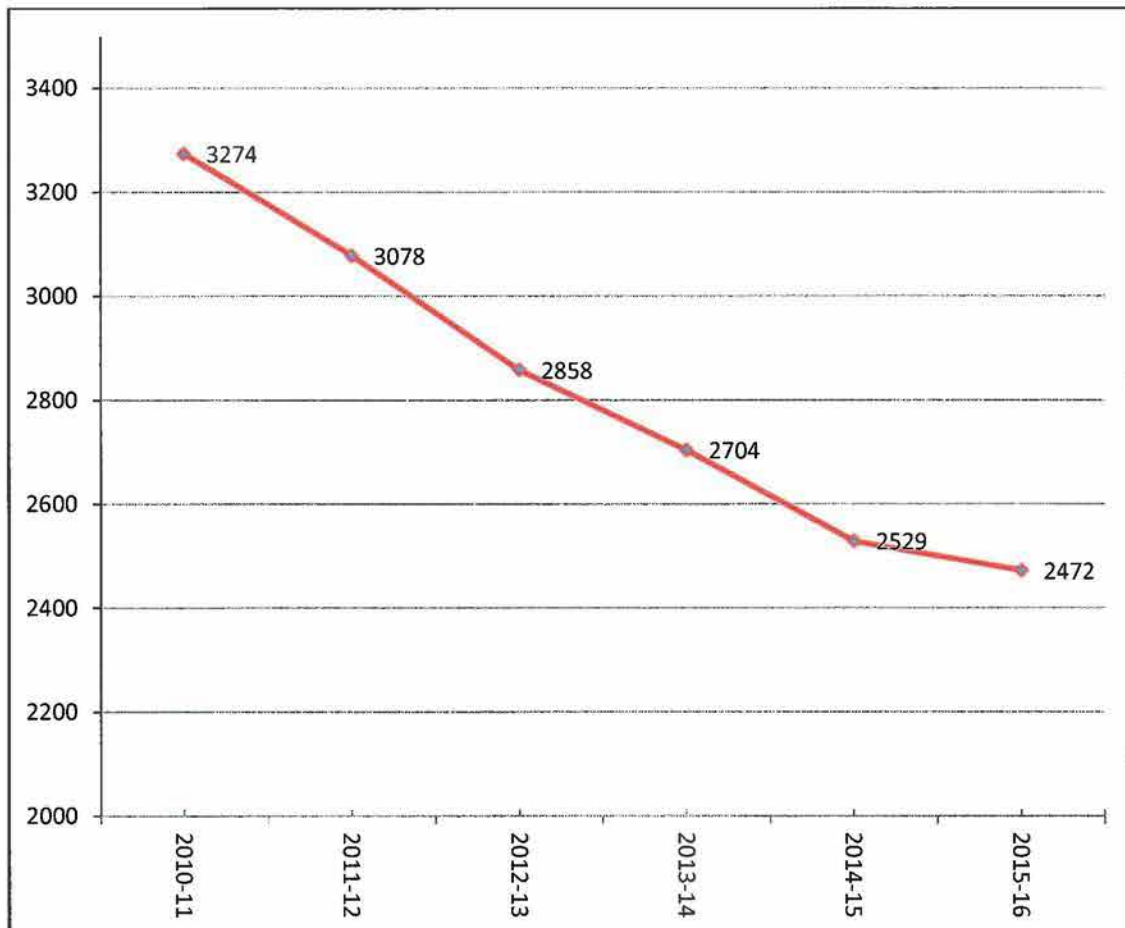
This downward trend in completer numbers mirrors national and global patterns (USDOE, 2013) related to the ongoing teacher shortage. According to recent studies, less than 5% of high school students are interested in pursuing careers as an educator (ACT, 2016). Primary reasons for this lack of interest in careers in education include: perceptions of job instability, the impact of teacher evaluation systems and financial limitations related to salaries for teachers (Sawchuk, 2014).

Within the "traditional route" students in the state of Colorado are able to complete educator preparation programs at one or more of the 19 state-approved educator preparation providers. In 2015-16 students did complete programs from all of these various institutions of higher education. The University of Northern Colorado had the largest number of completers, 573, encompassing 23% of all completers in the state. Chart 3 below provides a percentage breakdown of completers from colleges and universities during the 2015-16 academic year.

Chart 3: 2015-16 Educator Preparation Completers by Institution

- Western State Colorado University 3%
- Adams State University 2%
- Argosy University 2%
- Colorado Christian University 1%
- Colorado College 1%
- University of Phoenix 2%
- Colorado Mesa University 4%
- Colorado State University 7%
- Colorado State University - Pueblo 3%
- CSU-Global Campus >1%
- Fort Lewis College 1%
- University of Northern Colorado 23%
- Metropolitan State University of Denver 12%
- University of Denver 8%
- Regis University 7%
- University of Colorado Denver 11%
- University of Colorado Boulder 8%
- Rocky Mtn. Coll. Art & Design >1%
- University of Colorado Colorado Springs 5%

Elementary education programs continue to produce the largest number of completers in the state (751 in 2015-16). Table 1 provides information regarding the endorsement areas for completers at each institution of higher education during the 2015-16 academic year.

Table 1: Completers -- Area of Licensure/Endorsement by Institution

Institution & Total Number of Completers	Completer Licensure/Endorsement Area & Number of Completers
Adams State University – 41 completers	Visual Arts (K-12) 3; Elementary Education 21; English Language Arts 3; World Language 1; Music (K-12) 6; Physical Education 5; Science 1; Social Studies 1
Argosy University – 51 completers	Principal 51
Colorado Christian University – 36 completers	Early Childhood Education 3; Elementary Education 23; English Language Arts 1; Music (K-12) 1; Science 1; Social Studies 1; Special Education Generalist 6
Colorado College – 13 completers	Visual Arts (K-12) 1; Elementary Education 7; English Language Arts 4; Music (K-12) 1
Colorado Mesa University – 109 completers	Visual Arts (K-12) 1; Elementary Education 36; English Language Arts 10; Culturally and Linguistically Diverse Education 3; Mathematics 8; Music (K-12) 5; Physical Education 10; Principal 10; Science 8; Social Studies 10; Special Education Generalist 4; Undeclared or Unknown 4
Colorado State University – 175 completers	Agriculture , Food and Natural Resources 6; Visual Arts (K-12) 16; Business and Marketing Education 1; Business Education 2; Early Childhood Education 28; English Language Arts 37; Family and Consumer Sciences 6; World Language 8; Business and Marketing 2; Mathematics 12; Music (K-12) 9; Science 23; Social Studies 22; Speech 1; Technology Education 2
Colorado State University – Pueblo – 83 completers	Visual Arts (K-12) 3; Elementary Education 21; English Language Arts 5; Instructional Technology Specialist 1; Instructional Technology Teacher 1 Culturally and Linguistically Diverse Education 22; Mathematics 5; Music (K-12) 6; Physical Education 8; Science 2; Social Studies 6 Special Education Generalist 3
CSU – Global Campus – 2 completers	Principal 2
Fort Lewis College – 14 completers	Visual Arts (K-12) 1; Drama Theatre Arts 1; Early Childhood Education 2; Elementary Education 3; English Language Arts 4; World Language 1; Culturally and Linguistically Diverse Education 2; Physical Education 1; Social Studies 1
Metropolitan State University of Denver – 290 completers	Visual Arts (K-12) 19; Early Childhood Education 18; Elementary Education 117; English Language Arts 30; World Language 5; Culturally and Linguistically Diverse Education 9; Mathematics 11; Music (K-12) 5; Physical Education 15; Science 12; Social Studies 22; Special Education Generalist 36

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Institution & Total Number of Completers	Completer Licensure/Endorsement Area & Number of Completers
Regis University – 166 completers	Visual Arts (K-12) 2; Business Education 2; Early Childhood Education 4; ECE Special Education 2; Elementary Education 45; English Language Arts 6; Culturally and Linguistically Diverse Education 49; Mathematics 5; Principal 39; Reading Specialist 7; Reading Teacher 1; Science 6; Social Studies 9; Special Education Generalist 14; Undeclared or Unknown 1
Rocky Mountain College of Art and Design – 2 completers	Visual Arts (K-12) 2;
University of Colorado Boulder – 207 completers	Elementary Education 58; English Language Arts 18; World Language 3; Culturally and Linguistically Diverse Education 52; Mathematics 15; Music (K-12) 22; Reading Teacher 8; Science 18; Social Studies 13
University of Colorado Colorado Springs – 128 completers	Early Childhood Education 6; ECE Special Education 6; Elementary Education 52; English Language Arts 3; World Language 1; Gifted Education Specialist 4; Culturally and Linguistically Diverse Education 1; Mathematics 3; Principal 21; Reading Specialist 1; Reading Teacher 2; Science 7; Social Studies 14; Special Education Generalist 13
University of Colorado Denver – 276 completers	Administrator 18; ECE Special Education: Specialist 24; Elementary Education 39; English Language Arts 8; World Language 3; Instructional Technology Specialist 9; Culturally and Linguistically Diverse Education 35; Mathematics 4; Principal 71; Reading Teacher 20; Teacher Librarian 1; Science 8; Social Studies 16; Special Education Generalist 14 Teacher Librarian 9
University of Denver – 194 completers	Visual Arts (K-12) 5; ECE Special Education: Specialist 7; Elementary Education 49; English Language Arts 7; World Language 2; Mathematics 7; Principal 94; Science 5; Social Studies 10; Teacher Librarian 3; Undeclared or Unknown 5
University of Northern Colorado – 573 completers	Administrator 2; Visual Arts (K-12) 14; Drama Theatre Arts 8; Early Childhood Education 40; ECE Special Education 17; ECE Special Education: Specialist 16; Elementary Education 259; English Language Arts 12; World Language 5; Gifted Education Specialist 2; Culturally and Linguistically Diverse Education 67; Mathematics 12; Music (K-12) 29; Physical Education 13; Principal 66; Science 12; Social Studies 15; Special Education Director 8; Special Education Generalist 60; Special Education Specialist: Deaf/Hard of Hearing 8
University of Phoenix – 46 completers	Elementary Education 6; English Language Arts 3; Mathematics 1; Principal 24; Social Studies 12
Western State Colorado University – 68 completers	Visual Arts (K-12) 6; Elementary Education 15; English Language Arts 6; World Language 2; Mathematics 1; Music (K-12) 1; Physical Education 5; Principal 18; Science 5; Social Studies 6 Special Education Generalist 3

Individuals completed programs in 34 licensure areas at Colorado colleges and universities during the 2015-16 academic year. Of particular note are the 84 completers in secondary mathematics, marking the first time since 2011-12 where less than 100 individuals completed the high-demand program. A complete breakdown of completers by endorsement/licensure areas is included in Table 2 below. A list of institutions' abbreviations can be found in Appendix A.

Table 2: Institution of Higher Education Educator Preparation Program Completers
by Endorsement/Licensure Areas

Endorsement/Licensure Area	AY 15-16 Completers	Completers by Institution
Administrator	20	UCD 18; UNC 2
Agriculture, Food and Natural Resources	6	CSU 6
Visual Arts (K-12)	73	ASU 3; CC 1; CMU 1; CSU 16; CSUP 3; FLC 1; MSUC 19; RU 2; RMCAD 2; DU 5; UNC 14; WSCU 6
Business and Marketing Education	1	CSU 1
Business Education	4	CSU 2; RU 2
Culturally and Linguistically Diverse Education	240	CMU 3; CSUP 22; FLC 2; MSUD 9; RU 49; UCB 52; UCCS 1; UCD 35; UNC 67
Drama Theatre Arts	9	FLC 1; UNC 8
Early Childhood Education (ECE)	101	CCU 31 CSU 28; FLC 2; MSUD 18; RU 4; UCCS 6; UNC 40
ECE Special Education	25	RU 2; UCCS 6; UNC 17
ECE Special Education: Specialist	47	UCD 24; DU 7; UNC 16
Elementary Education	751	ASU 21; CCU 23; CC 7; CMU 36; CSUP 21; FLC 3; MSUD 117; RU 45; UCB 58; UCCS 52; UCD 39; DU 49; UNC 259; UP 6; WSCU 15
English Language Arts	157	ASU 3; CCU 1; C 4; CMU 10; CSU 37; CSUP 5; FLC 4; MSUD 30; RU 6; UCB 18; UCCS 3; UCD 8; DU 7; UNC 12; UP 3; WSCU 6
Family and Consumer Sciences	6	CSU 6
World Language	31	ASU 1; CSU 8; FLC 1; MSUD 5; UCB 3; UCCS 1; UCD 3; DU 2; UNC 5; WSCU 2
Gifted Education Specialist	6	UCCS 4; UNC 2
Instructional Technology Specialist	10	CSUP 1; UCD 9
Instructional Technology Teacher	1	CSUP 1
Mathematics	84	CMU 8; CSU 12; CSUP 5; MSUD 11; RU 5; UCB 15; UCCS 3; UCD 4; DU 7; UNC 12; UP 1; WSCU 1
Music (K-12)	85	ASU 6; CCU 1; CC 1; CMU 5; CSU 9; CSUP 6; MSUD 5; UCB 22; UCD 29; WSCU 1
Physical Education	57	ASU 5; CMU 10; CSUP 8; FLC 1; MSUD 15; UNC 13; WSCU 5
Principal	396	AU 51; CMU 10; CSUG 2; RU 39; UCCS 21; UCD 711 DU 94; UNC 66; UP 24; WSCU 18
Reading Specialist	8	RU 1; UCCS 1

Endorsement/Licensure Area	AY 15-16 Completers	Completers by Institution
Reading Teacher	31	RU 1; UCB 8; UCCS 2; UCD 20
Teacher Librarian	1	UCD 1
Science	108	ASU 1; CCU 1; CMU 8; CSU 23; CSUP 2; MSUD 12; RU 6; UCB 18; UCCS 7; UCD 8; DU 5; UNC 12; WSCU 5
Social Studies	158	ASU 1; CCU 1; CMU 10; CSU 22; CSUP 6; FLC 1; MSUD 22; RU 9; UCB 13; UCCS 14; UCD 16; DU 10; UNC 15; UP 12; WSCU 6
Special Education Director	8	UNC 8
Special Education Generalist	153	CCU 6; CMU 4; CSUP 3; MSUD 36; RU 14; UCCS 13; UCD 14; UNC 60; WSCU 3
Special Ed. Specialist: Deaf/Hard of Hearing	8	UNC 8
Special Ed. Specialist: Visually Impaired	0	
Speech	1	CSU 1
Technology Education (previously Industrial Arts)	2	CSU 2
Undeclared or Unknown	10	CMU 4; RU 1; DU 5

Specific teaching and administrative areas show variability in terms of the numbers of completers during the last three years. Elementary education remains the most consistently popular endorsement area (30.3% of all completers), as the total numbers of completers in other endorsement areas continue to fluctuate. Significant numbers of educators continue to complete programs leading to principal licensure (396 in 2015-16) and culturally and linguistically diverse endorsements (240). Simultaneously, relatively low numbers of completers can be found in the world languages (31), math (84), science (108) and early childhood education (101) domains – all of which continue to be areas of high demand for school districts due to the limited number of licensed educators in these fields. Chart 4 below highlights this variance.

Chart 4 – Institution of Higher Education Completers by Area (minimum 30 completers in 2015-16 AY)
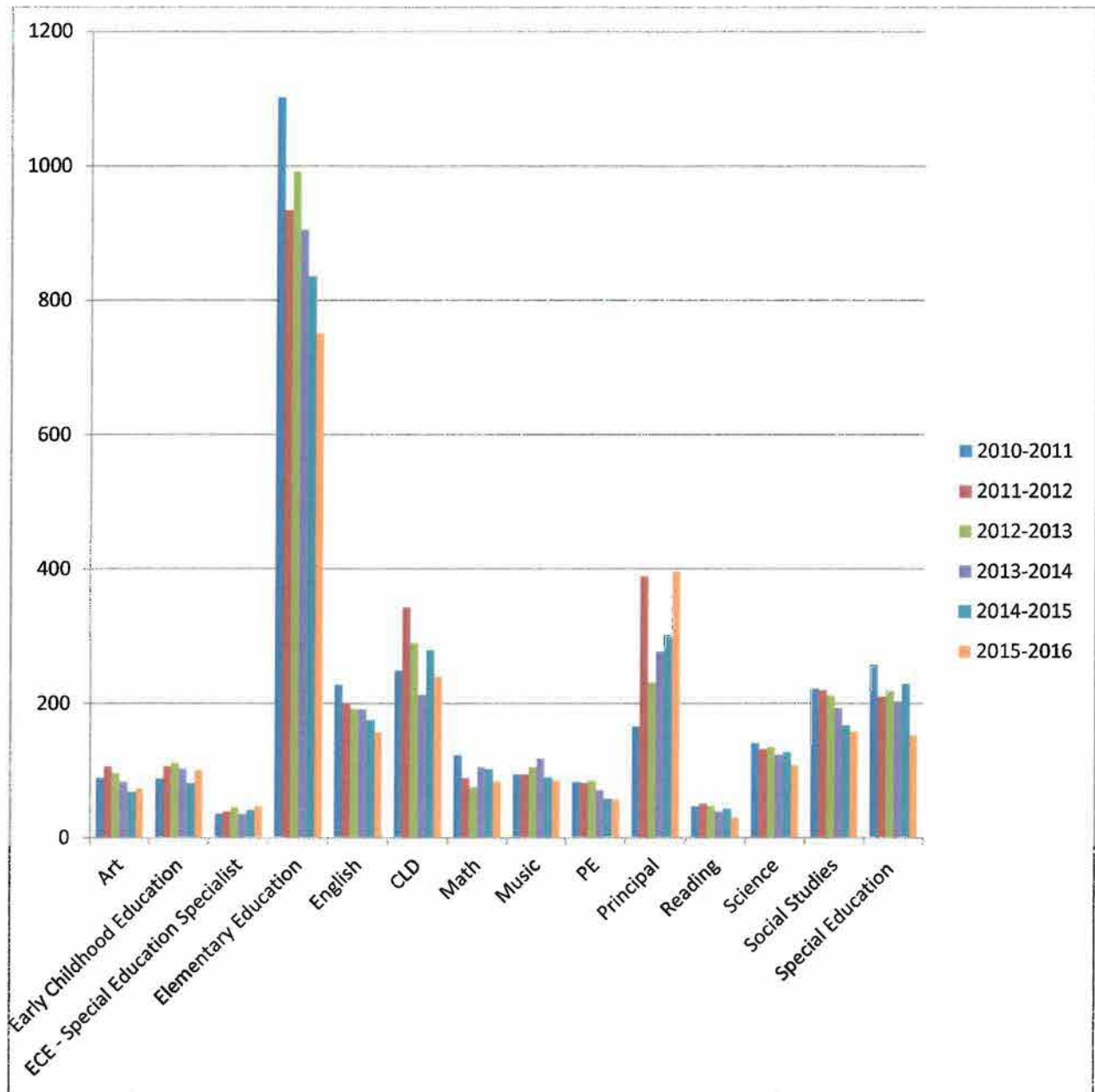
III. Completers Through Alternative Licensure Routes

In contrast to declining completer numbers at traditional educator preparation programs at colleges and universities, alternative teacher licensure programs remained largely consistent, with a minor decrease of 20 completers in 2015-16. During the 2014-15 academic year, 796 individuals completed an alternative licensure program from one of the 25 designated agencies authorized to provide alternative teacher preparation. Of those, 25% completed programs in elementary education and 35% in the identified high-needs areas of special

education, mathematics, science and foreign/world language combined. Table 3 lists the number of alternative program completers by designated agency during the 2014-15 academic year.

Table 3: Alternative Teacher Licensure Program Completers by Designated Agency
2015-16

Designated agency	# of completers	% of total completers	Endorsement Areas
Archdiocese of Denver	25	3%	EC Education 3; Elementary Education 3; English Language Arts 2; French 1; Latin 1; Math 4; PE 7; Science 3; Spanish 1
ASPIRE: University of Colorado Denver	183	24%	Agriculture 2; Visual Arts 2; Business 3; Dance 1; Drama Theatre Arts 3; Elementary Education 50; English Language Arts 30; Math 21; Music 2; Science 29; Social Studies 4; Special Education 30; Speech 1; Spanish: 4; Chinese: 1
Boulder Journey School	35	5%	EC Education 35
Cal Frazier Teacher Fellows Program/School Leaders for Colorado	5	>1%	Elementary Education 1; Math 1; PE 1; Science 1; Social Studies 1
Centennial BOCES	34	4%	Visual Arts 1; Business 2; EC Education 1; Elementary Education 9; English Language Arts 5; Instructional Technology 2; Math 3; Music 1; Science 1; Social Studies 5; Spanish 4
Colorado Christian University	17	2%	Visual Arts 1; Business 1; Drama Theatre Arts 1; EC Education 1; Elementary Education 4 English Language Arts 2; Math 1; Science 1;Spanish 1 Special Education 4
Colorado State University - Pueblo	14	2%	Elementary Education 1; English Language Arts2; French 1; Math 2; PE 2; Science 1; Special Education 4 Technology Education 1
Denver Public Schools	47	6%	Elementary Education 5; Math 5; Science 8; Special Education 29
Douglas County School District	2	>1%	Marketing 1; Instructional Technology 1
Eagle Rock School and Professional Development	4	>1%	Math 1; Music 1; PE 1; Science 1

Designated agency	# of completers	% of total completers	Endorsement Areas
East Central BOCES	9	1%	Visual Arts 2; English Language Arts 3; PE 1; Science 2; Social Studies 1
Friends' School	27	3%	EC Education 5; Elementary Education 22
Metropolitan State University of Denver	80	10%	Visual Arts 2; Business/Marketing 2; Drama Theatre Arts 2; EC Education 5 Elementary Education 19; English Language Arts 5; Math 9; PE 2; Science 10; Social Studies 1; Special Education 17; Spanish 6
Mountain BOCES	37	5%	Visual Arts 1; Business 1; Business/ Marketing 2; EC Education 2; Elementary Education 9; English Language Arts 1; Health 1; Math 11; Music 1; Science 3; Social Studies 3; Teacher Librarian1; Spanish 1
Northeast BOCES	25	3%	Visual Arts 2; Elementary Education 15; Math 5; PE 3
Northwest BOCES	11	1%	Elementary Education 4; English Language Arts 1; Science 2; Social Studies 1; Technology Education 1; Spanish 2
Public Education & Business Coalition	74	10%	Visual Arts 1; Business 2; Elementary Education 29; English Language Arts 9; Math 9; PE 2; Science 13; Social Studies 9
Pikes Peak BOCES	43	6%	Visual Arts 3; Drama Theatre Arts 1; EC Education 2; Elementary Education 7; English Language Arts 2; Family/Consumer Studies 1; Instructional Technology 2; Math 4; Music 2; PE 2; Science 3; Social Studies 1; Special Education 6; Technology Education 2; Spanish 5
San Luis Valley BOCES	6	>1%	Visual Arts 1; Math 1; PE 2; English Language Arts 1; Science 1

Designated agency	# of completers	% of total completers	Endorsement Areas
Southeast BOCES	11	1%	Elementary Education 2; English Language Arts 1; Math 1; Science 3; Social Studies 3; Special Education 1
Stanley British Primary School	52	7%	EC Education 43; Elementary Education 9
University of Colorado - Colorado Springs	15	2%	English Language Arts 6; Math 2; Science 3; Social Studies 2; Spanish 2
West Central Licensing Program	7	1%	Agriculture 1; Elementary Education 2; PE 2; Science 1; Spanish 1
Western State Colorado University	11	1%	Elementary Education 1; English Language Arts 3; Math 3; PE 1; Science 2; Special Education 1
TOTAL	796		

IV. Enrollment

Unlike the declining numbers of completers, enrollment in educator preparation programs at institutions of higher education remained largely unchanged during the 2015-16 academic year, with an increase of 5 additional students enrolled as compared to the previous academic year. This increase is partially due to the inclusion of data from three additional institutions (Argosy University, Colorado Mountain College and Colorado State University – Global Campus) that recently began to offer educator preparation programs in Colorado.

It is notable that the 2014-15 academic year posted the lowest enrollment totals dating back to 2010. Accordingly, the state of Colorado continues to see record low enrollment numbers for educator preparation programs at institutions of higher education. We expect this to continue to have a negative impact on the number of completers for the next four-to-five years.

These decreased enrollments also align with national and global trends regarding teacher shortages. Table 4 below provides both cumulative enrollment figures and individual enrollments for the 18 colleges/universities that included at least one program completer during the 2014-15 academic years.

Table 4: Program Enrollments by Institution, 2010-16

Institution	2010	2011	2012	2013	2014	2015	2016	Change 2015-2016
Adams State University[1]	486	473	378	314	246	175	188	+ 7.4%
Argosy University	-	-	-	-	-	-	51	n/a
Colorado Christian University	227	245	214	209	195	165	201	+21.8%
Colorado College	62	59	55	42	43	37	26	-30%
Colorado Mesa University	364	219	257	260	200	217	228	+ 5.1%
Colorado Mountain College	-	-	-	-	-	-	92	n/a
Colorado State University	772	879	795	576	868	892	792	-1%
Colorado State University – Global Campus	-	-	-	-	-	-	40	n/a
Colorado State University - Pueblo	387	411	367	325	280	282	334	+18.4%
Fort Lewis College	219	227	180	170	180	171	157	-8.2%
Metropolitan State University of Denver[2]	1868	1931	2001	1913	1770	1448	1687	+16.5%
Regis University[4]	907	1139	732	869	706	545	509	-6.6%
Rocky Mtn. Coll. Art & Design	55	59	47	40	20	39	35	-10.2%
University of Colorado Boulder	871	694	823	786	712	803	708	-11.8%
University of Colorado Colorado Springs	426	351	458	713	655	778	757	-2.7%
University of Colorado Denver	1339	1255	990	866	864	774	725	-6.3%
University of Denver[5]	174	213	329	350	239	289	255	-11.8%
University of Northern Colorado	3770	3986	3689	3498	3222	2900	2822	-2.7%
University of Phoenix[3]	782	746	431	289	195	265	255	-3.8%
Western State Colorado University	140	111	122	88	98	97	71	-26.8%
Grand Total	**12950**	**13103**	**11987**	**11387**	**10537**	**9891**	**9896**	**+ >1%**

[1] 2013 data includes students enrolled as part of the Colorado Boettcher Teacher Residency Program.
[2] 2013 enrollment data includes student enrollment within the post-baccalaureate ALP program.
[3] University of Phoenix did not report all Elementary Education enrollees in 2009.
[4] 2013 enrollment data includes students within the post-baccalaureate archdiocese education program.
[5] Universtiy of Denver 2013 enrollment data includes students enrolled as part of the Denver Teacher Residency Program.

Institution of Higher Education–Based Undergraduate, Post-Baccalaureate, and Graduate Enrollments

Institutions of higher education offer a variety of programs to support the development of educators. While some focus on the undergraduate population, other colleges/universities offer post-baccalaureate and graduate entry points into the education professions. This varied approach is beneficial to both the institutions and the student population, as it provides multiple avenues towards teacher licensure and a career in education. A list of the enrollments at the various levels for each institution is listed in Table 5 below.

Table 5: Program Enrollments for all Endorsement/Licensure Areas by Level by Institution, 2015-16

Institution	Undergraduate	Post-Baccalaureate	Graduate	Grand Total
Adams State University	63	2	123	188
Argosy University			51	51
Colorado Christian University	196	5		201
Colorado College	2	24		26
Colorado Mesa University	145	45	42	228
Colorado Mountain College	92			92
Colorado State University	609	183		792
Colorado State University – Global Campus		17	23	40
Colorado State University – Pueblo	198	76	61	334
Fort Lewis College	144	13		157
Metropolitan State University of Denver	1374	202	122	1687
Regis University	133	22	354	509
Rocky Mtn. Coll. Art & Design	35			35
University of Colorado Boulder	341	94	286	708
University of Colorado - Colorado Springs	614		143	757
University of Colorado - Denver	63		663	725
University of Denver	46		214	255
University of Northern Colorado	2071	12	751	2822
University of Phoenix	127	21	107	255
Western State Colorado University	18		53	71
Grand Total	**6271**	**716**	**2993**	**9980**[1]
% Grand Total	**62.8%**	**7.2%**	**30.0%**	

[1] *Enrollment total of 9980 varies from program enrollment by institution (9896) due to individual students enrolled in more than one program at one or more institutions leading to duplicative counts.*

Institution of Higher Education–Based Enrollment by Licensure/Endorsement Area over the Last Five Years

Changes in the enrollment population in the various license and endorsement areas continue to have an impact on Colorado's education environment. In historical areas of high need, enrollments have fluctuated and follow the continuing trend of declining numbers of students enrolled in these educator preparation programs. In 2015-16, Colorado saw an overall 7.4% decrease in total enrollments as compared to previous years with notable decreases in math (-4.5%), science (-4.1%) and English language arts (-8.2%). Increases in the number of individuals pursuing licenses or endorsements in culturally and linguistically diverse education (+27.6%), early childhood education (+58%) and early childhood education – special education (+80.5%) may correlate to increased demand for these roles based on state and national guidelines associated with teacher/pupil ratios and directives related to equity in education. Table 6 provides data related to program enrollments by endorsement licensure areas within Colorado's institutions of higher education.

Table 6: College/University-Based Program Enrollments by Endorsement/Licensure Areas, 2010-2016

Endorsement/Licensure Area	2010	2011	2012	2013	2014	2015	2016	% change 15-16
Administrator	61	53	20	25	29	30	41	+36.7%
Agriculture, Food and Natural Resources	18	24	25	29	53	48	54	+12.5%
Visual Arts (K-12)	389	402	382	338	289	315	318	+1.0%
Business and Marketing Education	34	15	8	1	4	7	5	-28.6%
Business Education	30	28	16	21	17	13	10	-23.1%
CLDE Specialist: Bilingual Education	42	34	36	21	4	7	4	-42.9%
Culturally and Linguistically Diverse Education	1204	1165	1091	1152	970	1010	1289	+27.6%
Drama Theatre Arts	72	59	63	59	70	73	68	+6.8%
Early Childhood Education	537	662	659	576	590	476	752	+58.0%
ECE Special Education	91	114	99	106	85	113	204	+80.5%
ECE Special Education: Specialist	180	198	179	210	191	193	196	+1.6%
Elementary Education	4213	4072	3801	3533	3254	2886	2840	-1.6%
English Language Arts	931	1001	778	771	726	730	670	-8.2%
Family and Consumer Sciences	34	45	28	23	31	36	28	-16.7%
World Languages	222	234	228	180	169	151	135	-10.6%
Gifted Education Specialist	59	51	46	35	31	27	28	+3.7%
Instructional Technology Specialist	26	20	35	36	30	29	31	+6.7%
Instructional Technology Teacher	28	50	52	26	23	7	6	-14.3%
Business and Marketing	--	--	--	--	1	1	2	+100.0%
Mathematics	470	505	424	449	428	422	403	-4.5%
Music (K-12)	430	511	578	571	572	542	515	-5.0%
Physical Education	398	371	337	281	245	219	220	-0.5%
Principal	926	768	858	762	819	778	819	+5.3%
Reading Specialist	--	21	59	90	61	47	41	-12.8%
Reading Teacher	252	221	170	165	149	162	152	-6.2%
Teacher Librarian	96	144	34	18	11	25	12	-52.0%
Science	536	539	498	470	482	489	469	-4.1%
Social Studies	973	1189	978	859	750	700	669	-4.4%
Special Education Director	53	58	46	44	44	44	35	-20.5%
Special Education Generalist	1342	1379	1187	1203	1094	1009	839	-16.8%
Special Education Specialist	8	8	3	1	4	1	0	-100.0%
Special Education Specialist: Deaf/Hard of Hearing	36	39	24	22	16	24	32	+33.3%
Special Education Specialist: Visually Impaired	51	40	7	7	8	6	3	-50.0%
Speech	10	22	22	14	9	11	9	-18.2%
Teacher Librarian (requires 1 or more years of teaching experience)	71	51	29	14	9	10	32	+220.0%
Technology Education (previously Industrial Arts)	4	4	7	9	21	15	12	-20.0%
Undeclared or Unknown	13	13	1	19	3	36	40	-11.1%
Grand Total	**12950**	**13103**	**11987**	**11227**	**11292**	**10692**	**9896**	**-7.4%**

V. Demographics

For students enrolled in educator preparation programs, the demographics of age, race and ethnicity, and gender remains stable. In general, Colorado's emerging teaching and educational administrative work force tends to be young, female and white/non-Hispanic. One important factor to note, however, is that this demographic data only includes those students enrolled in educator preparation programs at colleges/universities. Demographic data from the alternative certification and licensure programs is not collected at this time, and, therefore, not included.

Gender

As seen in Table 6, more than three-quarters (75.45%) of all students enrolled in an educator preparation program are female. As a percentage, the number of male teachers has increased during the last five years, but the increase has been minimal and, when evaluated with the decrease in the total numbers of students enrolled in educator preparation programs, reflects a decrease of 113 male teachers from the previous academic year.

Table 6: Institution of Higher Education-Based Educator Preparation Program Enrollments For All Endorsement/Licensure Areas by Gender, 2009-2015

Gender	2009	2010	2011	2012	2013	2014	2015	2016
Female	8418	9852	9992	9143	8613	7946	7464	7609
	76.10%	76.08%	76.26%	76.27%	76.72%	75.65%	75.45%	76.89%
Male	2639	3087	3103	2828	2601	2523	2410	2279
	23.86%	23.84%	23.68%	23.59%	23.17%	24.02%	24.36%	23.02%
Unknown	8	13	12	23	14	35	17	8
	0.07%	0.10%	0.09%	0.19%	0.12%	0.33%	.17%	.08%
Grand Total	**11062**	**12950**	**13103**	**11987**	**11227**	**10504**	**9891**	**9896**

Race and Ethnicity

Racial and ethnic diversity among black/African American (non-Hispanic) and Hispanic candidates showed significant increases in 2015-16. The number of black/African American candidates increased by 29 and the number of enrolled Hispanic educators throughout Colorado increased by 149 to 1375 – the highest total in the last six years. The number of Asian students enrolled in educator preparation programs increased by 14 and those reporting more than one race/ethnicity increased 44 to a total of 257 candidates (2.6% of all enrolled students). Table 7 provides additional detail regarding the racial and ethnic composition of candidates.

Table 7 columns: Federal Race and Ethnicity Categories, 2011, 2012, 2013, 2014, 2015, 2016, Percentage 2016.Table 7: Endorsement/Licensure Areas by Race and Ethnicity, 2011-2016

Federal Race and Ethnicity Categories	2011	2012	2013	2014	2015	2016	Percentage 2016
Asian	204	189	164	160	133	147	1.5%
Black or African American, non-Hispanic	266	253	224	204	193	222	2.2%
Hawaiian or Pacific Islander	13	16	12	12	13	11	>1%
Hispanic[1]	1261	1315	1329	1218	1226	1375	13.9%
Native American or Alaskan Native	116	106	92	74	76	76	>1%
Unknown Ethnicity	1727	1395	1279	1001	862	735	7.4%
White, non-Hispanic	9384	8538	7924	7575	7145	7064	71.4%
More than one race/ethnicity (non-Hispanic)	128	180	207	227	213	257	2.6%
Non-Resident Alien	24	30	35	33	40	41	>1%
Grand Total	**13103**	**11987**	**11227**	**10504**	**9891**	**9896**	

[1] Under the new federal categories, "Hispanic" is prioritized over other categories. That is, if an individual claims "Hispanic" ethnicity, they cannot claim any other category. Accordingly, "More than one race or ethnicity" is for non-Hispanics only.

Age

The majority (79%) of enrolled candidates are under the age of 35. This pattern has been consistent since 2009. Inclusion of demographic data from alternative licensure programs would likely result in an increase in the numbers of students in the 35+ stratum. Table 8 provides detail regarding the age of students enrolled in educator preparation programs in Colorado colleges and universities during the 2015-16 academic year.

Table 8: Institution of Higher Education-Based Educator Preparation Program Enrollments
For All Endorsement/Licensure Areas by Age, 2009-2016

Age	2009	2010	2011	2012	2013	2014	2015	2016
24 years or younger	5087	5487	5887	5732	5441	4989	4868	4876
	45.99%	42.37%	44.93%	47.82%	48.46%	47.50%	49.22%	49.27%
25-34 years	3513	4358	4283	3803	3499	3269	3075	2973
	31.76%	33.65%	32.69%	31.73%	31.17%	31.12%	31.09%	30.04%
35+ years	2638	3323	3163	2631	2465	2246	2095	2047
	23.85%	25.66%	24.14%	21.95%	21.96%	21.38%	21.18%	20.69%
Grand Total	**11062**	**12950**	**13103**	**11987**	**11227**	**10504**	**9891**	**9896**

Note: Some students are in more than one age bracket because they had birthdays at some point during the academic year that moved them from one age bracket to the next. The Grand Total, however, reflects the number of unduplicated students.

The age demographics of educator preparation differ from the total population of students enrolled at four-year institutions, as educator preparation students tend to be older. For students in all programs within Colorado four-year colleges and universities, 90.05% (147,840 of 164,172) of students are under 40 years of age, while educator preparation programs also have nearly 21% of students older than 35. Further, educator preparation

programs are comprised of 50.73% of students above age 24, where the general Colorado population reflects only 22.43% of students older than 24.

V. Reauthorization and Programmatic Approval

CDHE and CDE monitor educator preparation providers through periodic and regular programmatic review. As stipulated in 23-1-121(4)(a)(I),C.R.S., the Colorado Commission on Higher Education (CCHE) and CDHE, in conjunction with the State Board of Education (SBoE) and CDE, are required to review all educator preparation providers not more frequently than once every five years to ensure the programs meet the statutory requirements for reauthorization.

In addition to on-campus reauthorization site visits, both CDE and CDHE review all new educator preparation program proposals submitted by institutions of higher education. Upon successful review by CDE and CDHE staff, new program proposals are approved by both the SBoE and CCHE.

Reauthorization

During the 2016 calendar year, the educator preparation providers at the following institutions underwent reauthorization review:

- Argosy University
- Colorado Christian University
- Colorado Mountain College
- Colorado State University – Pueblo
- Western State Colorado University

In all instances, review teams are comprised of academic experts in the field of educator preparation, individuals familiar with the P20 pipeline in Colorado and, when possible, a local K12 practitioner from a partner district associated with the institution. Per statute, each reauthorization visit coincided with accreditation visits from national accreditation agencies (when applicable) to reduce or eliminate duplicative reporting.

Programmatic Approval

During the 2016 calendar year, the following new programs were approved by the Colorado State Board of Education and/or the Colorado Commission for Higher Education:

- Administrator Licensure at Western State Colorado University
- Bachelor of Arts in Inclusive Elementary Education at the University of Colorado Colorado Springs
- Bachelor of Arts in Early Childhood Education at Adams State University
- Education Doctorate in Leadership at Adams State University
- Culturally and Linguistically Diverse Bilingual Education Specialist at the University of Colorado Denver
- Approval of the Relay Graduate School of Education as an educator preparation provider within Colorado
- Masters of Arts in Education with Teacher Licensure at Fort Lewis College

- Bachelor of Arts in Elementary Education at the University of Colorado Boulder
- Principal Licensure at Colorado Christian University

VI. Areas of Focus and Recommendations

In 2017, CDHE and CDE will embark on various initiatives designed to support educator preparation providers and the educator population throughout Colorado. These ventures center on ensuring Colorado compliance with new federal regulations regarding the oversight of educator preparation entities in the state, modifying and adopting best practices regarding teacher quality and educator preparation program review, continuing to support rural districts in their need to recruit and retention effective classroom educators and supporting existing initiatives such as concurrent enrollment, post-secondary workforce readiness and educator effectiveness.

Areas of Focus

The Educator Preparation, Licensure and Educator Effectiveness division of CDE began the task of analyzing and aligning the current rules established with licensure in 2014. After extensive effort in collecting and analyzing stakeholder feedback and public commentary, the new rules for Colorado licensure were adopted in 2016. These new rules translate to a more streamlined licensing experience for both new and existing educators.

Supporting the recruitment and retention of educators within rural school districts in Colorado continues to be an area of focus for the Student Success and Academic Affairs division of CDHE. With the passage of Senate Bill 16-106, DHE has become the administrator of a program designed to support rural teacher recruitment and retention through specific action steps adopted by the Colorado State Legislature. In November, 2016 an institution of higher education will be awarded the right to host and help administer these programs in conjunction with CDE and DHE and the Colorado Community College System. It is expected that these initiatives will result in more cohesive avenues connecting educators and these rural districts will develop a more robust and stable educator workforce.

The ongoing changes within the higher education sector continues to present challenges to both agencies – particularly related to institutions that offer educator preparation services in multiple states and in on-line environments. Both Educator Preparation and Licensing at CDE and Educator Preparation at DHE continue to keep abreast of ongoing changes related to institutional changes that are impacting the higher education sector throughout the United States. It is anticipated that ongoing communication between the two agencies will help mitigate any potential issues with impacted institutions.

Recommendations

A general understanding regarding the long-term decline of educator numbers in Colorado has been widely developed and the state urgently needs to increase the number of individuals interested in pursuing a career in education. Accordingly, it is recommended that higher education institutions, Colorado state agencies, non-profit entities and local school districts begin to develop a plan of action that addresses the systemic issues causing and related to the teacher shortage impacting all regions of the state. The Colorado BOCES Association has actively proposed the development of a plan that includes solutions related to remedying the

issue of educator shortages and both CDE and DHE, along with members of the larger education and legislative communities should participate in the development of this plan.

Programmatic modification should continue to be reviewed by both CDE and CDHE to align with national trends regarding outcome-based assessments, multi-disciplinary curriculum design and instruction and adherence to district needs regarding culturally and linguistically diverse (CLD) endorsement and other areas of licensure perceived as "high needs." Further, an initial study into the structure and content contained within Colorado's graduate programs in education (e.g. M.Ed. and M.A.T.) should be undertaken to ensure program quality, academic rigor and alignment with the needs of local school districts and community partners. This will not only ensure that practicing educators are being exposed to current and emerging educational theory and practice, but will also directly benefit the students in their charge. Ensuring that Colorado teachers are well prepared for teaching throughout the 21st century continues to be a primary objective of both the Colorado Department of Education and the Colorado Department of Higher Education.

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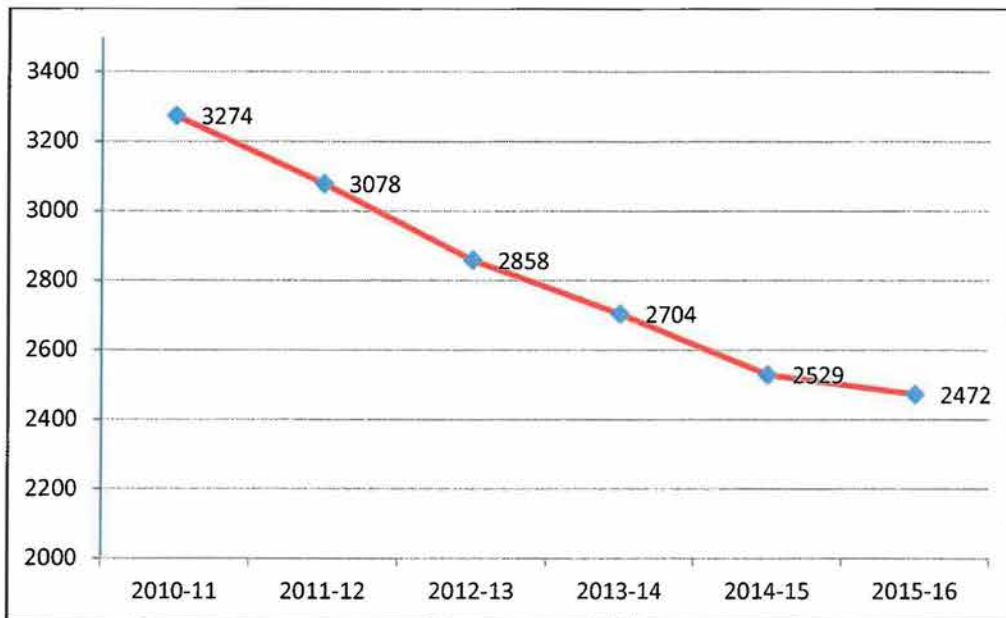
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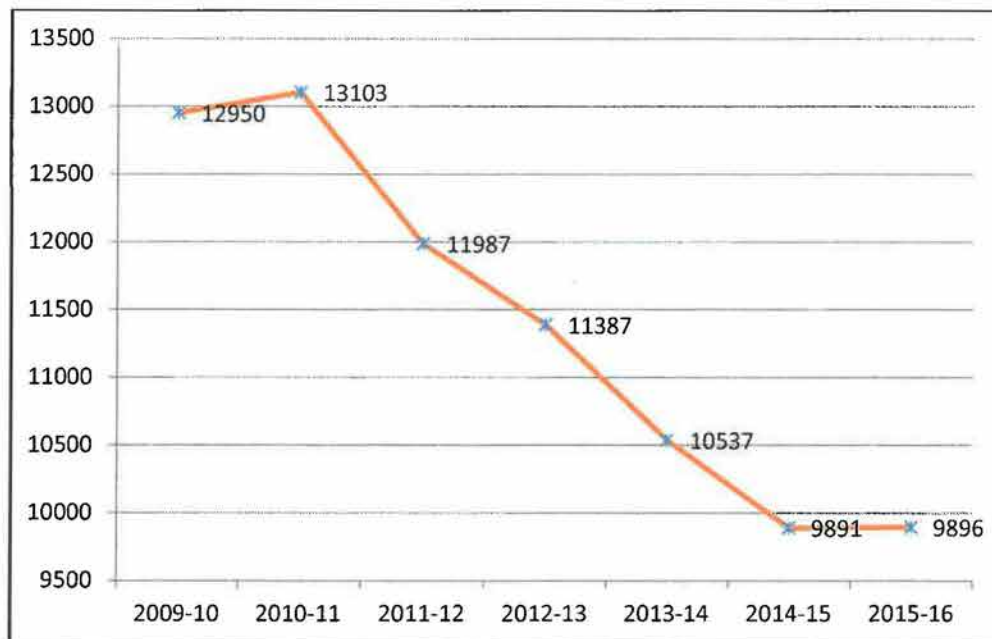
Appendix A: Institutions' Abbreviations

ASU – Adams State University

AU – Argosy University

CCU – Colorado Christian University

CC – Colorado College

CMU – Colorado Mesa University

CSU – Colorado State University

CSUG – Colorado State University – Global Campus

CSUP – Colorado State University Pueblo

FLC – Fort Lewis College

JIU – Jones International University

MSUD – Metropolitan State University of Denver

RU – Regis University

RMCAD – Rocky Mountain College of Art and Design

UCB – University of Colorado Boulder

UCCS – University of Colorado Colorado Springs

UCD – University of Colorado Denver

DU – University of Denver

UNC – University of Northern Colorado

UP – University of Phoenix

WSCU – Western State Colorado University

Colorado Educator Preparation – At A Glance

COMPLETERS OF EDUCATOR PREPARATION PROGRAMS

Year	Completers
2010-11	3274
2011-12	3078
2012-13	2858
2013-14	2704
2014-15	2529
2015-16	2472

ENROLLMENT IN EDUCATOR PREPARATION PROGRAMS

Year	Enrollment
2009-10	12950
2010-11	13103
2011-12	11987
2012-13	11387
2013-14	10537
2014-15	9891
2015-16	9896

NUMBER OF COMPLETERS STATEWIDE IN SELECTED AREAS

Endorsement/Licensure Area	AY 15-16 Completers	Completers by Institution
Agriculture, Food and Natural Resources	6	CSU 6
Business Education	4	CSU 2; RU 2
Culturally and Linguistically Diverse Education	240	CMU 3; CSUP 22; FLC 2; MSUD 9; RU 49; UCB 52; UCCS 1; UCD 35; UNC 67
Early Childhood Education (ECE)	101	CCU 3l CSU 28; FLC 2; MSUD 18; RU 4; UCCS 6; UNC 40
Elementary Education	751	ASU 21; CCU 23; CC 7; CMU 36; CSUP 21; FLC 3; MSUD 117; RU 45; UCB 58; UCCS 52; UCD 39; DU 49; UNC 259; UP 6; WSCU 15
English Language Arts	157	ASU 3; CCU 1; C 4; CMU 10; CSU 37; CSUP 5; FLC 4; MSUD 30; RU 6; UCB 18; UCCS 3; UCD 8; DU 7; UNC 12; UP 3; WSCU 6
World Language	31	ASU 1; CSU 8; FLC 1; MSUD 5; UCB 3; UCCS 1; UCD 3; DU 2; UNC 5; WSCU 2
Mathematics	84	CMU 8; CSU 12; CSUP 5; MSUD 11; RU 5; UCB 15; UCCS 3; UCD 4; DU 7; UNC 12; UP 1; WSCU 1
Science	108	ASU 1; CCU 1; CMU 8; CSU 23; CSUP 2; MSUD 12; RU 6; UCB 18; UCCS 7; UCD 8; DU 5; UNC 12; WSCU 5
Social Studies	158	ASU 1; CCU 1; CMU 10; CSU 22; CSUP 6; FLC 1; MSUD 22; RU 9; UCB 13; UCCS 14; UCD 16; DU 10; UNC 15; UP 12; WSCU 6
Special Education Generalist	153	CCU 6; CMU 4; CSUP 3; MSUD 36; RU 14; UCCS 13; UCD 14; UNC 60; WSCU 3

ENROLLMENTS IN EDUCATOR PREPARATION PROGRAMS

	2010	2011	2012	2013	2014	2015	2016	Change 2015-2016
Adams State University	486	473	378	314	246	175	188	+ 7.4%
Argosy University	-	-	-	-	-	-	51	n/a
Colorado Christian University	227	245	214	209	195	165	201	+21.8%
Colorado College	62	59	55	42	43	37	26	-30%
Colorado Mesa University	364	219	257	260	200	217	228	+ 5.1%
Colorado Mountain College	-	-	-	-	-	-	92	n/a
Colorado State University	772	879	795	576	868	892	792	-1%
Colorado State University – Global Campus	-	-	-	-	-	-	40	n/a
Colorado State University - Pueblo	387	411	367	325	280	282	334	+18.4%
Fort Lewis College	219	227	180	170	180	171	157	-8.2%
Metropolitan State University of Denver	1868	1931	2001	1913	1770	1448	1687	+16.5%
Regis University	907	1139	732	869	706	545	509	-6.6%
Rocky Mtn. Coll. Art & Design	55	59	47	40	20	39	35	-10.2%
University of Colorado Boulder	871	694	823	786	712	803	708	-11.8%
University of Colorado Colorado Springs	426	351	458	713	655	778	757	-2.7%
University of Colorado Denver	1339	1255	990	866	864	774	725	-6.3%
University of Denver	174	213	329	350	239	289	255	-11.8%
University of Northern Colorado	3770	3986	3689	3498	3222	2900	2822	-2.7%
Western State Colorado University	140	111	122	88	98	97	71	-26.8%
Grand Total	**12950**	**13103**	**11987**	**11387**	**10537**	**9891**	**9896**	**+ >1%**