



# Project Final Report

<b>Project Name</b>	Clarify Program Paths
<b>Description</b>	The Clarify Program Paths team is responsible for creating and recommending areas of interest and establishing and recommending clear and coherent academic and career program paths consistent with the ARC Strategic Plan. The model should be scalable, address disproportionate impact, and make efficient use of college resources.
<b>Project Sponsor</b>	Student Success Council
<b>Team Leads</b>	Bill Simpson, Coordinator/Instructional Faculty, Physics [Chair] Tony Giusti, Coordinator/Instructional Faculty, Nutrition [Co-Chair] Kate Jaques, AVP Instruction (Curriculum) [Co-Chair]
<b>Team Members</b>	Lynn Fowler, Articulation Officer Lisa Hayden, Student Services, Financial Aid Judy Mays, Counselor Chris Olson, Researcher Marsha Reske, Dean, Distance Education and VEC Rebeca Rico, Student Ted Ridgway, Basic Skills Faculty, Mathematics Lisa Roberts-Law, Counselor Kathy Rodgers, Instructional Faculty, English
<b>Date</b>	April 13, 2018

## Project Design Recommendations

Below are the Clarify Program Paths project team's recommendations. Since the Clarify Program Paths charge and objectives are part of the broader Redesign project, many of the team's recommendations hinge on decisions and actions that are not yet certain. That uncertainty required the team to make assumptions in order to complete the design for the project. If those assumptions are incorrect then some programs will need to be re-mapped, which will lengthen the timeline of the project.

### Recommendation #1: Create Areas of Interest

The team recommends that the college creates nine areas of interest to assist students in exploring potential majors. (See "Definitions of Areas of Interest" and "Programs in Each Area of Interest" for details.) The team also recommends that the college website be configured to organize program information according to those areas of interest, including program-specific pages within each area that identify potential transfer and/or career options and provide roadmaps that show students how to complete programs in a timely manner.

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*Assumption: The new website can accommodate what we propose and will be ready by Fall 2018 for implementation of the new areas of interest.*

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### Recommendation #2: Create Program Roadmaps

The team recommends that the college creates roadmaps for every degree and certificate that is career or transfer oriented, has a clear path to completion, and contains at least three courses. (See "Creating Clear and Coherent Program Paths" for details on the contents of the roadmaps and the process used to create them.)

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*Assumption: ENGWR 300 will be the primary way that students meet the writing competency requirement.*

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### Recommendation #3: Create a Program Paths Committee

The team recommends that the college forms a new Program Paths Committee to maintain and assess the effectiveness of the areas of interest and program roadmaps created by the Clarify Program Paths project team. (See "Clarify Program Paths Proposal for Year 2" for details.)

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*Assumption: Implementation of AB 705 will increase significantly the number of students meeting reading competency without taking a credit-bearing course.*

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*Assumption: College-level math and English do not have to both be completed in the first semester.*

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*Assumption: Start Right will include a 3-unit GE first-term-experience course.*

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Recommendation #4: Reexamine General Education

The team recommends that the college reexamines its approach to general education, especially how the benefit/value of a liberal arts education is viewed and conveyed to students by the college. (See “Reexamining General Education” for more details.) The team also recommends that there be a search tool on the college website that allows students to select appropriate GE courses using themes and other criteria. (See “Searching for GE Courses” for details.)

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*Assumption: Through Start Right and IPaSS, students will be shown how to use areas of interest and program roadmaps, and students will be highly encouraged to see a counselor to create an educational plan.*

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Recommendation #5: Monitor Key Indicators for Disproportionate Impact

The team recommends that the college monitors key student success indicators, disaggregating the data to determine whether creating areas of interest and program roadmaps has helped close gaps in student success rates. (See “Addressing Equity Issues” for a statement on how clarifying the path through college is expected to address disproportionate impact. See “Evaluating the Effectiveness of Clarify Program Paths” for a suggested list of indicators and other useful data.)

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*Assumption: Faculty will support the creation of roadmaps for their programs and maintain those roadmaps over time as curriculum and scheduling changes occur.*

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## Timeline for Implementation of Areas of Interest and Program Roadmaps

### ***Areas of Interest***

Fall 2017

- design areas of interest and how they will be implemented
- sort programs of study into groups and define commonalities
- identify programs for each area

Spring 2018

- survey students to identify potential names for each area
- survey students for words associated with each area, for search engine optimization
- survey departments to confirm placement of programs in each area
- finalize names for each area and programs within each area

Fall 2018

- implement areas of interest on the college website
- begin filling in content for programs in each area

Spring 2019

- continue filling in content for programs in each area
- hand off areas of interest to Program Paths Committee

### ***Program Roadmaps***

Fall 2017

- design roadmaps and the process for creating them

Spring 2018

- get college input on roadmaps and the mapping process
- identify “top 5” programs in each area of study
- begin mapping “top 5” programs
- begin designing printable roadmaps

Fall 2018

- identify “top 10” programs in each area of study
- continue creating roadmaps, prioritizing “top 10” programs
- publish approved roadmaps

Spring 2019

- finish mapping “top 10” programs
- finish mapping ADTs
- publish newly approved roadmaps
- hand off program roadmaps to Program Paths Committee

## Lessons Learned

Description	Recommendation
<p>We are creating tools for students, but had limited student input into the design of the tools. Student surveys take a long time to complete and the project had to keep moving forward, so many decisions were made based on the team's perceptions of students.</p>	<p>We recommend that the college finds ways to increase student involvement in projects from the very beginning, including having students on the teams and making it easier and quicker to survey students.</p>
<p>There was not a clearly established mechanism for effective and efficient communication of project information within the college. The most effective means of communication turned out to be one-on-one or small-group discussions, which are not efficient given the size of the college. The most efficient means of communication is email and posting information on the college website, but those are not effective because a large percentage of employees at the college do not pay attention to them. Mechanisms, like all-college summits, were attempted but were frequently changed to serve other purposes like case-making and district-wide meetings. The lack of clear communication led to misunderstandings and a perception we were not conducting our work in plain sight of the college.</p>	<p>We recommend that the college creates a communications team to support project teams in communicating with the college community more effectively and efficiently. Plans for clear communication should be in place prior to a team beginning its work.</p>
<p>Working on a project during the transition to the new governance structure made the work <u>much</u> harder. We were "building the plane while flying it," which is not a good way to successfully complete projects. There was also no training for team members or leaders regarding their roles, and there was little clarity regarding how and when to include collegial consultation for participatory governance.</p>	<p>We recommend the college creates one or more documents that clarify the process for consulting with constituent groups as part of forming and making design recommendations. We further recommend that project teams be created <u>after</u> their charters are approved, and that they are given clear guidance regarding the roles of the team members and leaders.</p>
<p>We were asked to use an "equity lens" but received no training nor were we given any guiding documents regarding equity. We were also asked to address disproportionate impact but were provided no guidance on what that really means or how to do it effectively.</p>	<p>We recommend that the college train members of project teams on best practices for incorporating equity in the designs of projects using an outside entity familiar with such trainings, like CUE. We further recommend that the college create guiding documents on equity and disproportionate impact to inform all of the redesign work being done at the college.</p>

<b>Description</b>	<b>Recommendation</b>
<p>The team's goal was to make data-informed decisions, so we made multiple requests to the Research Office for data. While most of the requests were responded to in a timely manner, we did not receive all of the data we asked for so some of our decisions were based primarily on the team's perceptions.</p>	<p>In order to provide data in time for it to be useful to project teams, we recommend that the college invest in additional resources (software/personnel) for the Research Office to reduce the back-log of requests.</p>

## Definitions for Areas of Interest

1. **Applied Technology and Digital Arts:** career and technical programs that provide students with opportunities to apply their skills and knowledge to real-world situations (through work experience, field experience, and hands-on projects) using electronics, computers, and other modern technologies.
2. **Arts:** programs that provide opportunities for students to develop their skills and talents in the visual and performing arts (music, dance, theatre, drawing, painting, ceramics, sculpture), as well as the applied arts (design, fashion, culinary arts).
3. **Business, Hospitality and Recreation:** programs that prepare students to work in government, corporate, or small-business environments, in fields such as accounting, management, marketing, sales, customer service, or (non-IT) support roles. Also, programs that contribute to the local economy through hospitality management and recreational opportunities.
4. **Science, Technology, Engineering and Mathematics (STEM):** science, technology, engineering and math programs designed for students planning to transfer to a four-year college or university and pursue a bachelor's degree (or higher) in a STEM field.
5. **Health, Human Services and Well Being:** programs that focus on the health of the mind and body.
6. **People, Culture and Society:** programs that study human beings and their interactions, as well as the human condition.
7. **Language and Communication:** programs focusing on language acquisition, textual analysis and interpretation, and the use of language to communicate ideas clearly.
8. **Public Service and Education:** programs that prepare students to work in jobs serving the public, such as education, police, fire, public health, and sign language interpreting.
9. **Manufacturing, Construction and Transportation:** programs that prepare students to work in the manufacturing, construction, and transportation sectors. This may include design, engineering, construction, manufacturing, and repair.

## Programs in Each Area of Interest

### Applied Technology and Digital Arts:

- Art New Media
  - Art New Media (AA)
  - Art New Media: Foundation (certificate)
  - Art New Media: Graphic Design (certificate)
  - Art New Media: Illustration (certificate)
  - ARTNM: 3D Animation (certificate)
  - ARTNM: 3D Modeling and Texturing (certificate)
  - ARTNM: 3D Rigging Technical Director (certificate)
  - ARTNM: 3D Technical Director (certificate)
  - ARTNM: Web Design (certificate)
- Biotechnology
  - Biotechnology (AS)
  - Biotechnology (certificate)
- Business
  - Computer Applications for Small Business (certificate)
- Business Technology
  - Office Technology (certificate)
  - Virtual Administrative Professional (AA)
  - Virtual Office Professional (certificate)
- Computer Information Science
  - CIS: Computer Networking Management (AS)
  - CIS: Computer Networking Management (certificate)
  - CIS: Computer Programming (AS)
  - CIS: Computer Programming (certificate)
  - CIS: Database Management (AS)
  - CIS: Database Management (certificate)
  - CIS: Microcomputer Applications (AA)
  - CIS: Microcomputer Applications (certificate)
  - CIS: Mobile Programming (certificate)
  - CIS: PC Support (certificate)
  - CIS: PC Support Management (AS)
  - Computer Information Security Essentials (certificate)
  - Computer Science (AS)
  - Information Systems Security (AS)
  - Information Systems Security (certificate)
  - Internet Marketing (certificate)
  - Network Administration Essentials - Windows (certificate)
  - Web Developer (certificate)



- Web Publishing (certificate)
- Design & Engineering Technology
  - Design Technology (AA)
  - Design Technology (certificate)
  - Engineering Technology (AS)
  - Engineering Technology (certificate)
- Electronics Technology
  - Advanced Electronics and Telecommunications (certificate)
  - Basic Electronics and Telecommunications (certificate)
  - Basic Mechatronics (certificate)
  - Biomedical Equipment Technology (certificate)
  - Digital Home Technology Integration (certificate)
  - Digital Repair and Upgrade Technician (certificate)
  - Electronic Systems Technology (AS)
  - Electronic Systems Technology (certificate)
  - Fiber Optics (certificate)
  - Mechatronics (AS)
  - Mechatronics (certificate)
  - Robotics (certificate)
  - Telecommunication Specialist (certificate)
- Energy
  - Solar Energy Systems Design, Estimation, and Sales (certificate)
  - Solar Energy Technology (certificate)
- Fashion
  - Apparel Construction (certificate)
  - Patternmaking and Draping (certificate)
- Geographical Information Systems
  - Geographic Information Systems (GIS) (AS)
  - Geographic Information Systems (GIS) (certificate)
- Horticulture
  - Floristry (certificate)
  - Horticulture (AS)
  - Horticulture (certificate)
  - Horticulture Skills (certificate)
  - Landscape Design (certificate)
  - Landscape Design Technology (AS)
  - Landscape Design Technology (certificate)
  - Plant Production (certificate)
  - Sustainable Landscape (certificate)
- Interior Design
  - Designed 4 Life (certificate)

- Green Building and Sustainable Design for Interiors (certificate)
- Interior Planning and Design (AA)
- Interior Retail Merchandising (certificate)
- Para Professional Interior Planning and Design (certificate)
- Universal Design (certificate)
- Digital Music
  - Digital Audio Production (certificate)
- Natural Resources
  - Environmental Conservation (certificate)
  - Environmental Conservation Technician (Conservation/Restoration) (certificate)
  - Environmental Conservation Technician (Fisheries) (certificate)
  - Environmental Conservation Technician (Forest/Rangeland) (certificate)
  - Environmental Conservation Technician (Sustainability) (certificate)
  - Environmental Conservation Technician (Vegetation) (certificate)
  - Environmental Conservation Technician (Water Resources) (certificate)
  - Environmental Conservation Technician (Wildlife) (certificate)
- Theatre Arts
  - Theatre Arts: Technical Production (AA)
- Welding
  - Gas Metal Arc and Flux Core Arc Welding Plate (252 hours) (certificate)
  - Gas Tungsten Arc Plate and Pipe Welding (180 hours) (certificate)
  - Pipe Welding (certificate)
  - Shielded Metal Arc Plate and Pipe (270 hours) (certificate)
  - Welding Equipment Maintenance and Blueprint Interpretation (234 hours) (certificate)
  - Welding Metallurgy and Inspection (270 hours) (certificate)
  - Welding Technology (AS)
  - Welding Technology (certificate)
- Work Experience

**Arts:**

- Art
  - Art (AA)
  - Art History (AAT)
  - Freelance Photography (certificate)
  - Sculpture (certificate)
  - Studio Art (AAT)
- Art New Media
  - Art New Media (AA)
  - Art New Media: Foundation (certificate)
  - Art New Media: Graphic Design (certificate)
  - Art New Media: Illustration (certificate)

- ARTNM: 3D Animation (certificate)
- ARTNM: 3D Modeling and Texturing (certificate)
- ARTNM: 3D Rigging Technical Director (certificate)
- ARTNM: 3D Technical Director (certificate)
- ARTNM: Web Design (certificate)
- Fashion
  - Apparel Construction (certificate)
  - Fashion Design (AA)
  - Fashion Design (certificate)
  - Fashion Entrepreneur (certificate)
  - Fashion Illustration (certificate)
  - Fashion Merchandising (AA)
  - Fashion Merchandising (certificate)
  - Fashion Retailing Certificate (certificate)
  - Patternmaking and Draping (certificate)
  - Runway Design (certificate)
- Gerontology
  - Gerontology: Environmental Design (AA)
  - Gerontology: Environmental Design (certificate)
- Horticulture
  - Floristry (certificate)
- Hospitality Management
  - Culinary Arts/ Restaurant Management (certificate)
  - Hospitality Management: Culinary Arts/Restaurant Management (AA)
  - Introductory Baking (certificate)
- Interdisciplinary Studies
  - History of the Creative Arts (AA)
- Interior Design
  - Designed 4 Life (certificate)
  - Green Building and Sustainable Design for Interiors (certificate)
  - Interior Planning and Design (AA)
  - Interior Retail Merchandising (certificate)
  - Para Professional Interior Planning and Design (certificate)
  - Universal Design (certificate)
- Kinesiology and Athletics
  - Dance (AA)
- Music
  - Commercial Music: Business (AA)
  - Commercial Music: Business (certificate)
  - Commercial Music: Recording (AA)
  - Commercial Music: Recording (certificate)

- Digital Audio Production (certificate)
- Jazz Studies (AA)
- Music (AA)
- Music (AAT)
- Music Management and Promotion (certificate)
- Studio Jazz/Pop Voice Instructor (certificate)
- Studio Voice Instructor (certificate)
- Theatre Arts
  - Acting (certificate)
  - Children's Theatre (certificate)
  - Costuming (certificate)
  - Musical Theatre (certificate)
  - Theatre Arts (AAT)
  - Theatre Arts: Acting (AA)
  - Theatre Arts: Technical Production (AA)
  - Theatre Production (certificate)
- Theatre Arts: Film
  - Film (certificate)

#### **Business, Hospitality and Recreation:**

- Accounting
  - Accounting (AA)
  - Accounting (certificate)
  - Accounting Clerk (certificate)
  - Taxation (certificate)
- Business
  - Business Administration (AST)
  - Computer Applications for Small Business (certificate)
  - Cross-Cultural Conflict Resolution (certificate)
  - Entrepreneurship (certificate)
  - General Business - Introduction (certificate)
  - General Business (AA)
  - General Business (certificate)
  - Small Business Management (AA)
  - Small Business Management (certificate)
- Business Technology
  - Administrative Professional (AA)
  - Business Information Worker (certificate)
  - Office Assistant (certificate)
  - Office Technology (certificate)
  - Virtual Administrative Professional (AA)

- Virtual Office Professional (certificate)
- Economics
  - Economics (AAT)
- Fashion
  - Fashion Entrepreneur (certificate)
  - Fashion Merchandising (AA)
  - Fashion Merchandising (certificate)
  - Fashion Retailing Certificate (certificate)
- Gerontology
  - Activity Leader Certificate (certificate)
  - Gerontology: Business (AA)
  - Gerontology: Business (certificate)
  - Gerontology: Recreation (AA)
  - Gerontology: Recreation (certificate)
- Hospitality Management
  - Culinary Arts/ Restaurant Management (certificate)
  - Hospitality Management: Culinary Arts/Restaurant Management (AA)
  - Hospitality Management: Restaurant Management (certificate)
  - Introductory Baking (certificate)
- Legal Assisting
  - Law Office Clerical Assistant (certificate)
  - Legal Assisting (AA)
  - Legal Assisting (certificate)
- Management
  - Conflict Management (certificate)
  - Introduction to Leadership in Action (certificate)
  - Leadership (AA)
  - Leadership (certificate)
  - Leadership in Action: Organizational Learning (certificate)
  - Leadership in Action: Organizational Systems (certificate)
  - Leadership in Action: Organizational Teams (certificate)
  - Leadership in Action: Organizational Variation (certificate)
  - Management (AA)
  - Management (certificate)
  - Project Management (certificate)
- Marketing
  - Advertising and Sales Promotion (AA)
  - Marketing - Introduction (certificate)
  - Marketing (AA)
  - Retail Management (AA)
  - Retail Management (WAFC) (certificate)

- Music
  - Commercial Music: Business (AA)
  - Commercial Music: Business (certificate)
  - Music Management and Promotion (certificate)
- Real Estate
  - Real Estate (AA)
  - Real Estate (certificate)
  - Real Estate Sales (certificate)
- Recreation
  - Recreation (AA)
- Technical Communication
  - Technical Communications (AA)
  - Technical Communications (certificate)

**Science, Technology, Engineering and Mathematics (STEM):**

- Astronomy
- Biology
  - Biology (AST)
  - Biotechnology (AS)
  - Biotechnology (certificate)
- Chemistry
- Computer Information Science
  - Computer Science (AS)
- Engineering
  - Civil Engineering (AS)
  - Electrical Engineering (AS)
  - Mechanical Engineering (AS)
- Geography
  - Geography (AAT)
  - Geography (AS)
- Geology
  - Geology (AST)
- Mathematics
  - Mathematics (AS)
  - Mathematics (AST)
- Natural Resources
  - Environmental Conservation (AS)
  - Environmental Conservation (certificate)
  - Environmental Conservation Technician (Conservation/Restoration) (certificate)
  - Environmental Conservation Technician (Fisheries) (certificate)
  - Environmental Conservation Technician (Forest/Rangeland) (certificate)

- Environmental Conservation Technician (Sustainability) (certificate)
- Environmental Conservation Technician (Vegetation) (certificate)
- Environmental Conservation Technician (Water Resources) (certificate)
- Environmental Conservation Technician (Wildlife) (certificate)
- Physical Science & Physics
  - Physical Science/Mathematics (AS)
  - Physics (AST)
- General Science
  - General Science (AS)

### **Health, Human Services and Well Being:**

- Funeral Service Education
  - Funeral Service Education (AS)
- Gerontology
  - Activity Leader Certificate (certificate)
  - Dementia Care (certificate)
  - Elder Care Certificate (certificate)
  - Ethnicity and Aging Certificate (certificate)
  - Gerontology: Business (AA)
  - Gerontology: Business (certificate)
  - Gerontology: Case Management/Social Services (AA)
  - Gerontology: Case Management/Social Services (certificate)
  - Gerontology: Environmental Design (AA)
  - Gerontology: Environmental Design (certificate)
  - Gerontology: Health Care (AA)
  - Gerontology: Health Care (certificate)
  - Gerontology: Recreation (AA)
  - Gerontology: Recreation (certificate)
  - Gerontology: Social Policy/Advocacy (AA)
  - Gerontology: Social Policy/Advocacy (certificate)
  - Leadership in Assisted Living Communities (certificate)
  - Social Service Designee (certificate)
- Health Education
- Healthcare Interpreting
  - Healthcare Interpreting (certificate)
- Human Lactation
  - Baby Friendly Hospital Staff (certificate)
  - Lactation Consultant Assistant (certificate)
  - Lactation Educator/Counselor (certificate)
- Human Services

- Chemical Dependency Studies (AA)
- Chemical Dependency Studies (certificate)
- Human Services (AA)
- Human Services (certificate)
- Kinesiology and Athletics
  - Fitness Specialist (certificate)
  - Kinesiology (AAT)
  - Physical Education (AS)
  - Senior Fitness (certificate)
  - Sports Medicine (AS)
- Nursing and Allied Health
  - Certified Nurse Assistant (certificate)
  - Home Health Aide (certificate)
  - Licensed Vocational Nurse (LVN) 30-unit option (certificate)
  - LVN to RN Career Mobility (AS)
  - Registered Nursing (AS)
- Nutrition
  - Dietary Manager/Dietary Service Supervisor (certificate)
  - Nutrition and Dietetics (AST)
- Paramedic and EMT
  - Emergency Medical Technician (EMT) (certificate)
  - Paramedic (AS)
  - Paramedic (certificate)
- Recreation
  - Recreation (AA)
- Respiratory Care
  - Respiratory Care (AS)
- Speech-Language Pathology
  - Speech-Language Pathology Assistant Program (AS)

**People, Culture and Society:**

- Anthropology
  - Anthropology (AAT)
  - Anthropology (AS)
- Art History
  - Art History (AAT)
- Deaf Culture & ASL
  - Deaf Culture and American Sign Language Studies (AA)
  - Deaf Culture and American Sign Language Studies (certificate)
- Early Childhood Education
  - Assistant Teacher (certificate)



- Associate Teacher (certificate)
- Curriculum Specialist (certificate)
- Early Childhood Education (AA)
- Early Childhood Education for Transfer (AST)
- Early Childhood Education Management Specialist (certificate)
- ECE: Culture and Diversity Specialist (certificate)
- Family Child Care (certificate)
- Infant Specialist (certificate)
- Master Teacher (certificate)
- School Age (certificate)
- Site Supervisor (certificate)
- Special Needs Specialist (certificate)
- Teacher (certificate)
- Economics
  - Economics (AAT)
- Honors
  - Honors Transfer (certificate)
- Geography
  - Geography (AAT)
  - Geography (AS)
- History
  - History (AAT)
- Human Career Development
- Humanities
- Interdisciplinary Studies
  - CSU General Education Certificate of Achievement (certificate)
  - History of the Creative Arts (AA)
  - Intersegmental General Education Transfer (IGETC) Certificate of Achievement (certificate)
  - The Individual and Society (AA)
- International Studies
  - International Studies (AA)
- Philosophy
  - Philosophy (AAT)
- Political Science
  - Political Science (AA)
  - Political Science (AAT)
- Psychology
  - Psychology (AA)
  - Psychology (AAT)
- Social Science

- Social Science (AA)
- Sociology
  - Sociology (AAT)
- Student Government

**Language and Communication:**

- Deaf Culture & ASL
  - Deaf Culture and American Sign Language Studies (AA)
  - Deaf Culture and American Sign Language Studies (certificate)
- English
  - English (AAT)
  - Literary Publishing (certificate)
- English as a Second Language
  - Advanced Proficiency Certificate in English as a Second Language (certificate)
  - Advanced-High Proficiency Certificate in English as a Second Language (certificate)
  - Intermediate-High Proficiency in English as a Second Language (certificate)
  - Intermediate-Low Proficiency in English as a Second Language (certificate)
  - Intermediate-Mid Proficiency in English as a Second Language (certificate)
- Foreign Languages
  - Spanish (AAT)
- Healthcare Interpreting
  - Healthcare Interpreting (certificate)
- Interdisciplinary Studies
  - English Communication and Literature (AA)
  - Language Studies (AA)
- Journalism
  - Journalism and Mass Communication (AA)
  - Journalism and Mass Communications (AAT)
- Library
- Sign Language Studies
  - ASL-English Interpreter Preparation Program (AA)
  - ASL-English Interpreter Preparation Program (certificate)
- Speech
  - Communication Studies (AAT)
- Speech-Language Pathology
  - Speech-Language Pathology Assistant Program (AS)
- Technical Communications
  - Technical Communications (AA)
  - Technical Communications (certificate)

## **Manufacturing, Construction and Transportation:**

- Apprenticeship
  - Carpenter Apprenticeship (certificate)
  - Carpenter Apprenticeship (AA)
  - Drywall/Lathing Apprenticeship (certificate)
  - Drywall/Lathing Apprenticeship (AA)
  - Electrical Apprenticeship (certificate)
  - Electrical Apprenticeship (AA)
  - Electrical Residential Apprenticeship (certificate)
  - Green Technology Pre-Apprenticeship (certificate)
  - Infrastructure Pre-Apprenticeship (certificate)
  - Ironworkers Apprenticeship (certificate)
  - Ironworkers Apprenticeship (AA)
  - Mill and Cabinet Maker Apprenticeship (certificate)
  - Pre-Apprenticeship (certificate)
  - Residential/Commercial Electrician Trainee (certificate)
  - Sheet Metal Apprenticeship (certificate)
  - Sheet Metal Apprenticeship (AA)
  - Sheet Metal Residential Apprenticeship (certificate)
  - Sheet Metal Service Technician Apprenticeship (certificate)
  - Sheet Metal Service Technician Apprenticeship (AA)
  - Utilities Worker Pre-Apprenticeship (certificate)
- Automotive Collision Technology
  - Automotive Claims Estimator (certificate)
  - Automotive Collision Technology. (AS)
  - Automotive Collision Technology. (certificate)
  - Automotive Collision Technology-Non-Structural (certificate)
  - Automotive Collision Technology-Refinish (certificate)
  - Automotive Collision Technology-Structural (certificate)
- Automotive Technology
  - Air Conditioning Service (certificate)
  - Alternative Fuels and Green Vehicle Technology (certificate)
  - Automotive Analysis (AS)
  - Automotive Analysis (certificate)
  - Automotive Component Service Technician (AS)
  - Automotive Component Service Technician (certificate)
  - Automotive Emissions Inspection and Repair Technician (certificate)
  - Automotive Service Technician (certificate)
  - Automotive Technology (AS)
  - Automotive Technology (certificate)
  - Extreme Tuner Certificate (certificate)

- Parts and Service (certificate)
- Transmission Service (certificate)
- Undercar Service (certificate)
- Design & Engineering Technology
  - Design Technology (AA)
  - Design Technology (certificate)
  - Engineering Technology (AS)
  - Engineering Technology (certificate)
- Diesel/Clean Diesel Technology
  - Clean Diesel Hybrid Technology (certificate)
  - Clean Diesel Management Systems (certificate)
  - Clean Diesel Technology (certificate)
  - Diesel Technology (AS)
  - Diesel Technology (certificate)
  - Preventive Maintenance (certificate)
- Energy
  - Solar Energy Systems Design, Estimation, and Sales (certificate)
  - Solar Energy Technology (certificate)
- Engineering
  - Civil Engineering (AS)
  - Electrical Engineering (AS)
  - Mechanical Engineering (AS)
- Welding
  - Gas Metal Arc and Flux Core Arc Welding Plate (252 hours) (certificate)
  - Gas Tungsten Arc Plate and Pipe Welding (180 hours) (certificate)
  - Pipe Welding (certificate)
  - Shielded Metal Arc Plate and Pipe (270 hours) (certificate)
  - Welding Equipment Maintenance and Blueprint Interpretation (234 hours) (certificate)
  - Welding Metallurgy and Inspection (270 hours) (certificate)
  - Welding Technology (AS)
  - Welding Technology (certificate)

**Public Service and Education:**

- Administration of Justice
  - Administration of Justice (AS)
  - Administration of Justice (AST)
- Early Childhood Education
  - Assistant Teacher (certificate)
  - Associate Teacher (certificate)
  - Curriculum Specialist (certificate)
  - Early Childhood Education (AA)

- Early Childhood Education for Transfer (AST)
- Early Childhood Education Management Specialist (certificate)
- ECE: Culture and Diversity Specialist (certificate)
- Family Child Care (certificate)
- Infant Specialist (certificate)
- Master Teacher (certificate)
- School Age (certificate)
- Site Supervisor (certificate)
- Special Needs Specialist (certificate)
- Teacher (certificate)
- Education/Teaching
  - Elementary Teacher Education (AAT)
- Fire Technology
  - Fire Investigation 1A (certificate)
  - Fire Investigation 1B (certificate)
  - Fire Investigation 2A (certificate)
  - Fire Investigation 2B (certificate)
  - Fire Management 1 (certificate)
  - Fire Technology (certificate)
  - Fire Technology (AA)
  - Firefighter Recruit Academy (certificate)
  - Training Instructor 1A (certificate)
  - Training Instructor 1B (certificate)
  - Training Instructor 1C (certificate)
  - USDA Advanced Academy (certificate)
  - USDA Basic Academy (certificate)
- Gerontology
  - Gerontology: Case Management/Social Services (AA)
  - Gerontology: Case Management/Social Services (certificate)
  - Gerontology: Social Policy/Advocacy (AA)
  - Gerontology: Social Policy/Advocacy (certificate)
  - Social Service Designee (certificate)
- Healthcare Interpreting
  - Healthcare Interpreting (certificate)
- Homeland Security
  - Homeland Security (certificate)
- Human Lactation
  - Baby Friendly Hospital Staff (certificate)
  - Lactation Consultant Assistant (certificate)
  - Lactation Educator/Counselor (certificate)
- Nursing and Allied Health

- Certified Nurse Assistant (certificate)
  - Licensed Vocational Nurse (LVN) 30-unit option (certificate)
  - LVN to RN Career Mobility (AS)
  - Registered Nursing (AS)
- Paramedic & EMT
  - Emergency Medical Technician (EMT) (certificate)
  - Paramedic (AS)
  - Paramedic (certificate)
- Public Safety
  - 80 public safety certificates
- Respiratory Care
  - Respiratory Care (AS)
- Sign Language Studies
  - ASL-English Interpreter Preparation Program (AA)
  - ASL-English Interpreter Preparation Program (certificate)

## Creating Clear and Coherent Program Paths

Clear and coherent program paths will be provided to students in the form of roadmaps for each CTE and transfer degree and certificate program at ARC that has a clear path to completion and at least 3 courses in it. Program roadmaps are suggested sequences of courses that show students how programs can be completed in a timely manner; they are not educational plans. Students will meet with counselors to create individualized educational plans, using the roadmaps as a starting point.

Each degree will have two roadmaps, one for full-time students (averaging 15 units per semester) and one for half-time students (averaging 7.5 units per semester). Certificates will have at least one roadmap, and the number of units per semester will be based on the rate at which students typically complete the program. Roadmaps will be designed for students who are college-ready (no need for remediation) and major-ready (able to start the first courses in the sequence of required courses). The roadmaps will specify elective and general education courses, which will be determined through faculty collaboration and dialogue. Roadmaps will also contain scheduling notes, indications of honors and distance education courses, progress milestones and gatekeeper courses, and instructions to see a counselor as well as check on financial aid eligibility. CTE program roadmaps will also identify potential job titles and employers. Transfer program roadmaps will identify target majors at nearby universities and potential careers upon completion of a four-year degree.

The Clarify Program Paths team will provide mapping templates, instructions, and examples to faculty to assist them in creating roadmaps. The team will also provide workshops and one-on-one meetings to assist faculty in the mapping process. Mapping will begin in spring 2018. Approximately 300 programs will be mapped. Based on the number of roadmaps being created, the process will likely take at least three semesters to complete, and the process may take longer for departments that decide to revise curriculum as a result of the mapping process.

### **Roadmap Contents:**

Program roadmaps will contain the following information.

- the name of the program
- the catalog year the roadmap is for
- the publication date of the roadmap
- a label identifying it as a full-time or part-time roadmap
- the GE pattern used (for degrees)
- a semester-by-semester listing of courses
- semester-by-semester unit totals and the total units for the degree/certificate
- potential transfer majors and the type of employment options that they may lead to (for transfer degrees)
- potential employment opportunities (for CTE programs)
- competency markers, showing the semester by which students are recommended to be at college level in math and English

- special notes (optional), which could include scheduling limitations, additional recommended coursework, milestones and gatekeeper courses

### **Roadmap Presentation Notes:**

The roadmaps must make the following things very clear.

- which courses can/cannot be changed (required vs. elective courses)
- which courses meet GE requirements (for degrees)
- students should see a counselor to create an individualized educational plan
- students on financial aid should check on eligibility
- the roadmap is not a guarantee of course availability
- which courses are honors courses
- which courses are regularly scheduled in the evening or online
- note regarding foreign language requirements for UC transfer (for degrees)
- note regarding the availability of some courses over the summer

### **Mapping Process:**

- contact department chair, sending a mapping packet that includes:
  - course list from catalog
  - ASSIST articulation information (for transfer degrees)
  - list of GE approvals, prerequisites, corequisites, and advisories for each course
  - copy of the appropriate GE pattern from the catalog
  - GE checklist
  - link to GE course website and an explanation of GE themes
  - ISLO checklist
  - definitions of milestones and gatekeeper courses
  - pre-mapping template
- offer to meet with department prior to mapping, to explain the process and answer questions
- department deliberates and completes as much of the roadmap as possible
- meet with department to complete the roadmap
- have the Clarify Program Paths team review and approve the roadmap
- at the end of the semester, balance GE courses used in the roadmaps created that semester
- publish the roadmaps on the college website



## Clarify Program Paths Proposal for Year 2

### **Background:**

The Clarify Program Paths project team is responsible for creating areas of interest at the college and designing a framework for mapping the college's programs of study. Since there is no existing entity at the college to maintain the new areas of interest and program roadmaps, it is necessary to create one. Also, since the project team will have completed the majority of the design work in year 1 of the project, it will focus in year 2 on implementation of the designs, creating program roadmaps and fleshing out the information provided on the college website for each of the areas of interest.

### **Proposal:**

1. Create a Program Paths Committee to maintain the areas of interest and program roadmaps created by the Clarify Program Paths team. (See below for a description of the committee's duties.)
2. Modify the charter of the Clarify Program Paths team to focus on implementation of the design.

### Program Paths Committee:

The proposed committee would have the following duties:

- Maintain program roadmaps over time.
  - Update roadmaps annually to reflect changes to curriculum.
  - Update roadmaps annually to reflect changes to course scheduling (primarily the semesters that certain courses are available).
  - Annually review and publish roadmaps to the ARC website, on the same schedule as the catalog.
  - Rotate default GE courses in degree roadmaps on a regular (3-year) basis.
- Regularly assess whether students, faculty, and staff are using program roadmaps as intended, and make changes to improve the effectiveness of the roadmaps.
  - Are the roadmaps helping counselors and students create educational plans?
  - What is working/not working? What can be improved?
  - Are students using the roadmaps as default educational plans, without modifying them? Or, are they modifying them to meet their individual needs?
  - How are students who place below college level in reading, writing, or math perceiving the roadmaps?
  - Is there a change in demand for certain GE courses because of the roadmaps?
- Regularly assess the areas of interest to make sure they are working as intended, and update them over time.
  - How often do students use the areas of interest section of the college website to identify potential programs of study?
  - Is the information in that section of the website accurate, up-to-date, and useful to students?
  - Are there new programs that need to be added to the areas of interest, or existing programs whose placement needs to be reconsidered?

### **Resource Request:**

The Clarify Program Path team requests that the college creates or purchases software to facilitate program roadmap creation, maintenance and publication, similar to what Socrates does for curriculum.

## Reexamining General Education

During college-wide discussions about program maps, people expressed concerns about how general education (GE) courses would be selected for each degree map. It became clear from those discussions that not everyone at the college agrees on the purpose and value of general education; indeed some of us have diametrically opposed views on GE. Typical statements include:

- *Students should take GE courses to explore their options before picking a major.*
- *Students should not use GE courses to explore their options because career and personal exploration are not a part of the curriculum for most GE courses.*
- *The GE courses students take should be connected to each other and follow a theme.*
- *The GE courses students take should not be related to each other in any way. A random set of GE courses is best.*
- *Students should take GE courses that are similar to those in their major.*
- *Students should take GE courses to broaden their knowledge, so they should not be related to the courses in their major in any way.*
- *I don't want to tell students what to take. Students should choose their own GE courses.*
- *Students don't know how to put together a cohesive set of GE courses. They just take whatever they can fit into their busy schedules. We need to show them how to do it better.*

Unfortunately, students, instructional and counseling faculty, staff, administrators, and even community members have expressed the sentiment that GE requirements are a hoop to jump through, and that students just need to get GE “out of the way.” Yet, since we know that the average person will change careers 5-7 times during his/her working life, we can argue that the competencies college students develop in their general education coursework (i.e., critical thinking, oral/written communication, cultural/social understanding, scientific/quantitative reasoning, and personal development) are more transferable between careers, and thus more valuable, than those acquired in major-specific courses. Rather than thinking of GE as a barrier to a degree completion, we should articulate an understanding of GE as an essential foundation for higher education.

The devaluing of general education, along with the disagreement regarding its purpose, is disheartening and concerning. It will be challenging for the college to create successful program paths with high-value GE courses in them if we cannot agree on the purpose or significance of general education. The Clarify Program Paths project team therefore recommends to the Student Success Council to have the college reexamine its approach to general education, especially how the benefit of a liberal arts education is conveyed to students and to the public.

## Searching for GE Courses

In meetings with faculty to develop maps for degrees, one suggestion consistently comes up. “Wouldn’t it be great if there were a tool on our website that let students search for good GE courses? There are a lot of great GE courses offered at the college, but many students are unaware they exist.”

Faculty have suggested that courses should be searchable by GE pattern and areas within the pattern, scheduling (online, evening, spring/fall), CSU/UC transferability, and whether they meet GE/graduation requirements at transfer institutions. Other proposed search criteria include GE themes, “I enjoy ...” prompts, and life/career competencies (listed below).

Although this is not specifically in the scope of the Clarify Program Paths project, as outlined in the charter, the team feels it is important to pass on this recurring request to the Student Success Council.

### Examples of GE themes:

- diversity and multicultural issues
- gender and sexuality
- global studies – people and cultures outside of the U.S.
- race and ethnicity
- the environment and sustainability
- honors

### Examples of “I enjoy...” prompts (*from CPP.edu*)

- Baking
- Being a role model for younger people
- Being part of a strong learning community
- Building models
- Building or assembling products
- Collecting and identifying rocks, shells, flowers or other things found in nature
- Coming to the aid of people who are in trouble
- Creating new recipes
- Decorating
- Designing and building machines
- Doing experiments to see how things work
- Doing research projects for school
- Driving or repairing cars and trucks
- Enforcing rules and laws
- Filmmaking or video editing
- Finding out about new processes or technologies
- Gathering facts about an incident
- Hands-on projects
- Helping guests or out-of-town visitors
- Helping people who have disabilities to learn new skills
- Helping people who have medical problems
- Learning about different world cultures
- Learning about energy efficiency
- Learning about laws and the legal system
- Learning about nutrition and health
- Learning about social issues
- Learning about the human body and how it works
- Learning from your experiences
- Learning to use new computer software
- Listening to people to see what they need
- Maintaining a healthy smile
- Making people feel comfortable
- Managing financial information
- Managing the details for a special event
- Media buying and planning

- Organizing information
- Playing or listening to music
- Preparing meals for family and friends
- Reading about technical developments
- Reading
- Repairing things when they are not working
- Resolving problems and disputes
- Setting up a computer or network
- Sketching out design ideas
- Solving puzzles
- Studying a scientific topic like biology, physics or chemistry
- Taking care of children
- Taking things apart to see how they work
- Talking to people about their health problems
- Talking with people about their family or personal problems
- Teaching, tutoring, or advising others
- Teaching others about safety
- Troubleshooting computer hardware problems
- Using a computer for 3-D design
- Using a computer for drawing and designing
- Using maps
- Using math to solve real-world problems
- Woodworking and carpentry
- Working outdoors
- Working pleasantly with all kinds of people
- Working with children
- Working with computers
- Working with numbers
- Working with others to assemble a product
- Working with the public
- Working with your hands, tools and other equipment
- Writing articles, advertisements or reports
- Writing blogs, stories or poetry

### **Examples of Life/Career Competencies (from wikijob.co.uk)**

#### *I. People Management*

##### 1. Training and Development

- Pro-actively identifying training opportunities
- Developing your employees' skills through relevant assignments

##### 2. Managing Performance

- Setting clear, measurable performance goals
- Finding solutions to problems that may impact your performance

##### 3. Coaching and Mentoring

- Sharing your expertise with others
- Listening and responding to questions effectively

##### 4. Team Building

- Responding constructively to others' ideas and suggestions
- Encouraging active participation and cooperation within the team

#### *II. Personal Development*

##### 5. Commitment to Excellence

- Fact-checking your work

- Actively seeking new ways of working to improve productivity

##### 6. Mind Mapping and Structured Thinking

- Using mind maps to display complex information
- Communicating specialist technical information clearly and concisely

##### 7. Career Progression

- Working to develop existing competencies to a higher level
- Actively seeking training opportunities that facilitate progression

#### *III. Leadership*

##### 8. Strategic Management

- Evaluating data to gain business insight
- Analyzing multiple processes and systems simultaneously

##### 9. Future Planning

- Identifying industry trends and developments in advance of planning
- Anticipating stumbling blocks and developing contingency plans

##### 10. Persuading and Influencing Staff

- Using audience-specific language and examples to best illustrate your point
- Presenting multiple arguments in support of your position

#### 11. Change Management

- Helping others to manage the emotional impact of change
- Embracing change and proposing more effective ways of working

### IV. Communication

#### 12. Commitment to Customer Excellence

- Speedy and effective resolution of customer issues and complaints
- Adopting processes to track customer satisfaction

#### 13. Collaborative Working

- Expressing an interest in others' experiences and ideas
- Working to build strong channels of communication with outside agencies/departments that may later be of assistance

#### 14. Customer Relationship Management

- Communicating with customers to deliver a better service
- Ensuring interactions with customers are always polite and positive

#### 15. Social and Emotional Learning

- The ability to recognize and regulate your emotions and behaviors in the workplace
- The ability to recognize others' emotions and perspectives and take them into account

#### 16. Persuasive Techniques

- Successfully addressing key concerns and presenting mutually beneficial solutions
- Building successful relationships to ensure support during negotiations

#### 17. Writing Skills

- Using concise, clear, appropriate language
- Structuring ideas clearly

#### 18. Speaking and Listening Skills

- Speaking clearly and at a measured pace
- Maintaining eye contact to hold listeners' attention

### V. Logical Reasoning

#### 19. Making Decisions

- Analyzing data and information to make considered decisions
- Prioritizing different business needs

#### 20. Methodical Approach

- Breaking complex tasks into manageable segments
- Identifying possible problems or stumbling blocks

#### 21. Identifying Patterns or Connections

- Understanding the impact of specific data patterns and trends on the business
- Identifying inconsistencies in data and information

#### 22. Research

- Identifying relevant sources of information
- Effectively using data and research to reach informed, effective decisions

#### 23. Problem Solving

- Identifying the cause and effects of problems in the workplace
- Analyzing existing information to come up with appropriate solutions

### VI. Transferable Competencies

#### 24. Resourcefulness

- Using existing information to devise new ways of working
- Tackling unforeseen challenges using existing resources

#### 25. Trustworthiness

- Communicating openly and honestly with colleagues and customers
- Taking personal responsibility for the quality and content of your work

#### 26. Stress Reduction

- Responding calmly to criticism
- Proactively managing feelings or symptoms of stress

#### 27. Moral Principles and Ethical Standards

- Taking responsibility for mistakes and errors in your work
- Respecting confidentiality agreements

#### 28. Planning and Organization

- Using resources effectively to achieve objectives

- Prioritizing your workload to ensure deadlines are met

#### 29. Business Acumen

- Analyzing competitors' products and services to better understand your business position
- Understanding how industry trends impact on the business

### *VII. Technical Competencies*

#### 30. Creative thinking

- Using existing knowledge to develop original ways of working
- Working with others to brainstorm original, mutually beneficial solutions

#### 31. Technical Capabilities

- Developing new solutions with existing technology
- Acting as a technical expert in a specific area/program

#### 32. Computer Literacy

- Learning new systems quickly
- Experience of using a variety of relevant software packages

#### 33. Data Management

- Checking all available data to get a more complete picture
- Using the data to propose effective solutions and identify potential risks

#### 34. Equipment and Program Knowledge

- Understanding how specific equipment and programs can benefit the business and its customers
- Using existing knowledge to diagnose technical issues

#### 35. Policies and Planning

- Knowing how and why policy is important
- Effectively communicating business values and culture

# Addressing Equity Issues and Disproportionate Impact

## Equity and Social Justice in Degree Roadmaps

The college's strategic plan has an explicit commitment to social justice and equity. Therefore, the team is asking faculty to include at least one GE course addressing those issues in every degree roadmap. To help faculty identify appropriate courses, the team created a set of GE themes, including "Diversity and Multicultural Issues," "Gender and Sexuality," "Global Studies -- People and Cultures Outside the U.S.," and "Race and Ethnicity." Each of them identifies courses that address some aspect of the theme, and all of the themes are posted on the GE course website.

## Impact of Clarify Program Paths on First-Generation College Students

Areas of interest and program roadmaps are tools that help all students succeed. They are not specifically designed to focus on disproportionately impacted groups, but some indirect effects for those groups are expected. In particular, the team recognizes the benefit of providing clear paths to first-generation college students, who are at a disadvantage because they have to navigate the complex college environment without the benefit of a family member who has already successfully completed college.

According to one NCES report,<sup>1</sup> first-generation students are less likely to be white, non-Hispanic, than non-first-generation students and they also tend to come more often from low-income households. Another NCES report<sup>2</sup> provides the percentages of undergraduate college students whose parents had a high school diploma or less for the 2011-12 school year, showing that students of color tend to come, more often, from households with parents who have not completed college.

### Percentage of households in which the parents had a high school diploma or less (2011-12)<sup>2</sup>:

- 47.8% of Hispanic students
- 42.0% of Black African-American students
- 39.6% of American Indian students
- 32.9% of Asian students
- 27.9% of White students
- 24.6% of Pacific Islander students
- 23.9% of students of two or more races

By providing guided exploration of major and career options through the areas of interest, and examples of how to complete programs in a timely manner with program roadmaps, we intend to give first-generation students information they need to navigate college successfully. Since first-generation college students also tend to be students of color, we expect this effort will increase success rates for disproportionately impacted groups more than for other groups.

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<sup>1</sup>U.S. Department of Education. (1998). National Center for Education Statistics. First-generation students: Undergraduates whose parents never enrolled in post-secondary education.

<http://nces.ed.gov/pubs98/98082.pdf>

<sup>2</sup>National Center for Education Statistics [NCES]. Web table: Profile of Undergraduate Students 2011-2012.

<https://nces.ed.gov/pubs2015/2015167.pdf>

## Evaluating the Effectiveness of the Clarify Program Paths Project

### Primary indicators to monitor:

- Average number of units completed per semester.
- Average number of units completed per year.
- Course sequence progression persistence.
- Milestone completion rate (degree, certificate, transfer).
- Employment data for CTE programs - CTE job placement rates (Launchboard).
- Excess units earned by graduation.
- Percentage of students who are truly “on plan.” (This is aspirational.)

### Other indicators to monitor:

- Unit milestones (15+, 30+, 45+, 60+).
- Fall-fall and fall-spring persistence.
- Percentage of students with completed educational plans.
- College-level math and English writing completed in first year (one or both).
- Percentage of students who are full-time.
- Percentage of students who attempt/complete 15 units per term.
- Percentage of students who attempt/complete 30 units per year.
- Percentage of students who pass at least 9 units of coursework in the same field of study (like accounting) in the first year.
- Percentage of students who pass at least 9 units of coursework in the same area of interest (like STEM) in the first year.

### Survey/focus group/interview data:

- How do students perceive program roadmaps?
- How useful do students find the roadmaps?
- What information is useful and what is confusing in the roadmaps?
- How useful are areas of interest for exploring majors/careers?
- How do roadmaps change student-counselor and student-faculty interactions?
- Are students modifying roadmaps to create personalized educational plans?
- How are basic skills students perceiving/using roadmaps?
- Is the demand for GE courses changing because of roadmaps?

### Climate surveys (need a baseline prior to implementing redesign):

- Ask students how easy/challenging it is to navigate through college.
- Ask students if they feel welcome and included, that they belong and can find others (students, staff) like them at ARC.



## Top 10 Programs in Each Area of Interest:

### **Science, Technology, Engineering and Mathematics**

1. Mathematics (AST)
2. Computer Science (AS)
3. Mathematics (AS)
4. Biotechnology (AS)
5. Physics (AST)
6. Environmental Conservation (AS)
7. Biotechnology (certificate)
8. Environmental Conservation (certificate)
9. Environmental Conservation Technician (7 certificates)

### **Arts**

1. Introductory Baking (certificate)
2. Hospitality Management: Culinary Arts/Restaurant Management (AA)
3. Art New Media (AA)
4. Art (AA)
5. Culinary Arts/ Restaurant Management (certificate)
6. Studio Art (AAT)
7. Floristry (certificate)
8. Commercial Music: Recording (AA)
9. Fashion Design (AA)
10. Art History (AAT)

### **Public Service and Education**

1. Registered Nursing (AS)
2. Associate Teacher (certificate)
3. Administration of Justice (AS)
4. Emergency Medical Technician (EMT) (certificate)
5. Administration of Justice (AST)
6. Early Childhood Education for Transfer (AST)
7. ASL-English Interpreter Preparation Program (AA)
8. Early Childhood Education (AA)
9. Teacher (certificate)
10. Respiratory Care (AS)

### **Business, Hospitality and Recreation**

1. Business Administration (AST)
2. Accounting (AA)
3. Introductory Baking (certificate)
4. Legal Assisting (AA)
5. Hospitality Management: Culinary Arts/Restaurant Management (AA)
6. General Business (AA)
7. Legal Assisting (certificate)
8. Culinary Arts/ Restaurant Management (certificate)
9. Hospitality Management: Restaurant Management (certificate)
10. Small Business Management (AA)

### **Health, Human Services and Well Being**

1. Registered Nursing (AS)
2. Funeral Service Education (AS)
3. Emergency Medical Technician (EMT) (certificate)
4. Kinesiology (AAT)
5. Speech-Language Pathology Assistant Program (AS)
6. Human Services (AA)
7. Chemical Dependency Studies (AA)
8. Respiratory Care (AS)
9. Healthcare Interpreting (certificate)
10. Human Services (certificate)

### **Language and Communication**

1. Communication Studies (AAT)
2. Speech-Language Pathology Assistant Program (AS)
3. ASL-English Interpreter Preparation Program (AA)
4. English (AAT)
5. Journalism and Mass Communications (AAT)
6. Healthcare Interpreting (certificate)
7. ASL-English Interpreter Preparation Program (certificate)
8. Deaf Culture and American Sign Language Studies (AA)
9. Spanish (AAT)
10. Deaf Culture and American Sign Language Studies (certificate)

### **People, Culture and Society**

1. Psychology (AAT)
2. Associate Teacher (certificate)
3. Psychology (AA)
4. Sociology (AAT)
5. History (AAT)
6. Anthropology (AAT)
7. Early Childhood Education (AA)
8. Anthropology (AS)
9. Teacher (certificate)
10. Political Science (AAT)

### **Manufacturing, Construction and Automotive Technology**

1. Diesel Technology (certificate)
2. Gas Tungsten Arc Plate and Pipe Welding (180 hours) (certificate)
3. Shielded Metal Arc Plate and Pipe (270 hours) (certificate)
4. Air Conditioning Service (certificate)
5. Gas Metal Arc and Flux Core Arc Welding Plate (252 hours) (certificate)
6. Automotive Technology (AS)
7. Welding Technology (AS)
8. Automotive Component Service Technician (AS)
9. Preventive Maintenance (certificate)
10. Automotive Component Service Technician (certificate)

### **Applied Technology and Digital Art**

1. Advanced Electronics and Telecommunications (certificate)
2. Fiber Optics (certificate)
3. CIS: Computer Programming (AS)
4. Gas Tungsten Arc Plate and Pipe Welding (180 hours) (certificate)
5. Electronic Systems Technology (AS)
6. Gas Tungsten Arc Plate and Pipe Welding (180 hours) (certificate)
7. Shielded Metal Arc Plate and Pipe (270 hours) (certificate)
8. Computer Science (AS)
9. Basic Electronics and Telecommunications (certificate)
10. Art New Media (AA)