Success and Failures of Building a Stronger Community College Network in Colorado

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Brian Sanders
spacegrant.colorado.edu
Deputy Director - Colorado Space Grant Consortium

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Outline

1. Why strengthening Community Colleges was important to Colorado
2. Outcomes we observed
3. What ideas didn't work
4. Share what we learned over the past four years with some practical examples

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Defining the Challenge

It all started at our COSGC Affiliate Member meeting 2013

Defining the Challenge

- 2-year to 4-year transfer students saw highly varied experiences
- Transfer student retention
- How could CC programs be strengthened?
- Transfer credits were difficult to transfer
- We shared antidotal success and failures stories
- Continued the dialog for the past 4 years while the landscape changed.

Why we wanted to make a change

- Reach students who might not have considered STEM fields or space.
- Impacting a greater diversity of students than typically found in 4-year STEM programs.
- Help reach geographically diverse parts of our state.
- Developing Pipelines
  - Retaining talented transfer students
  - Many financial disadvantaged and veteran students start at Community Colleges. We saw a change in our member faculty over time.

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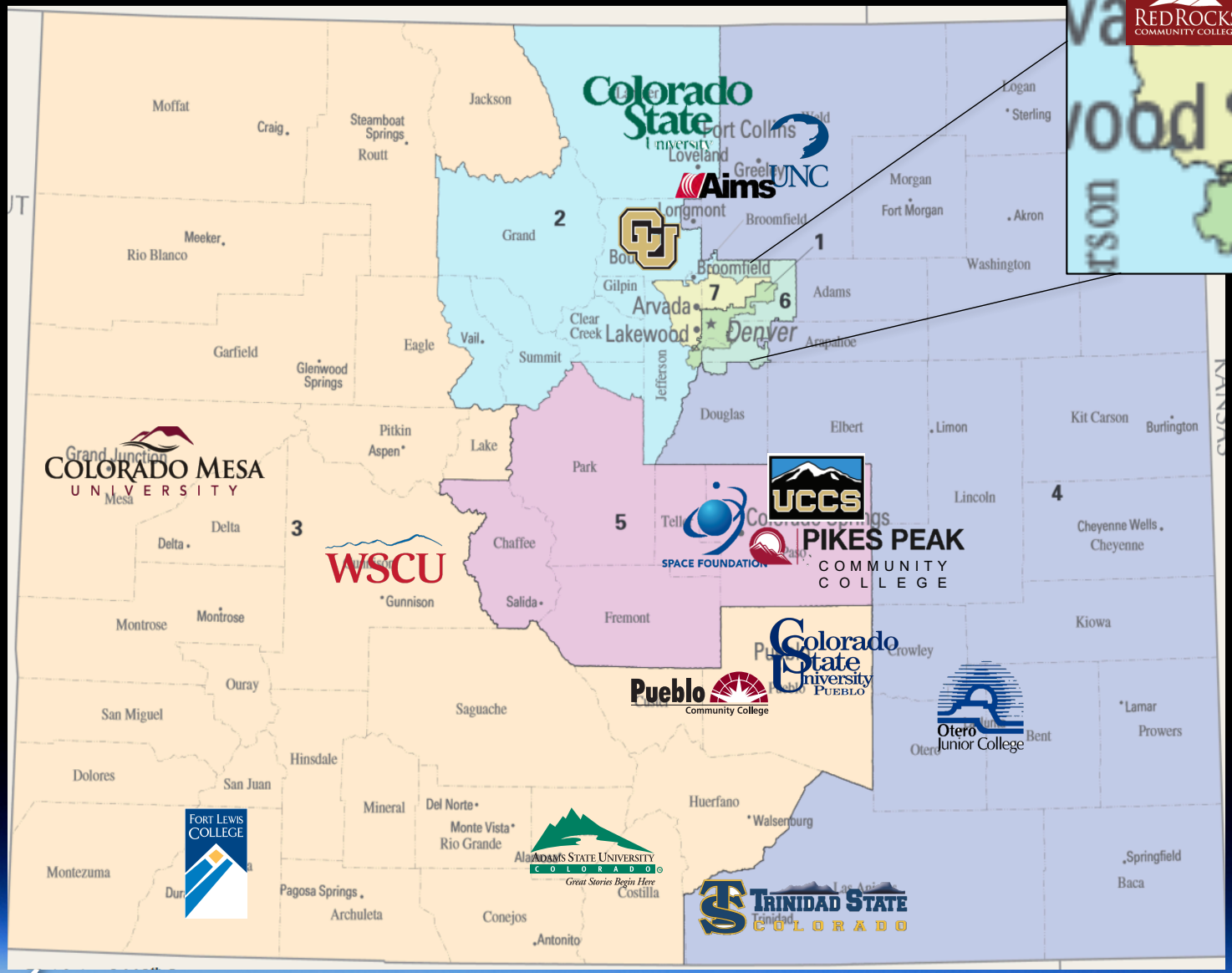
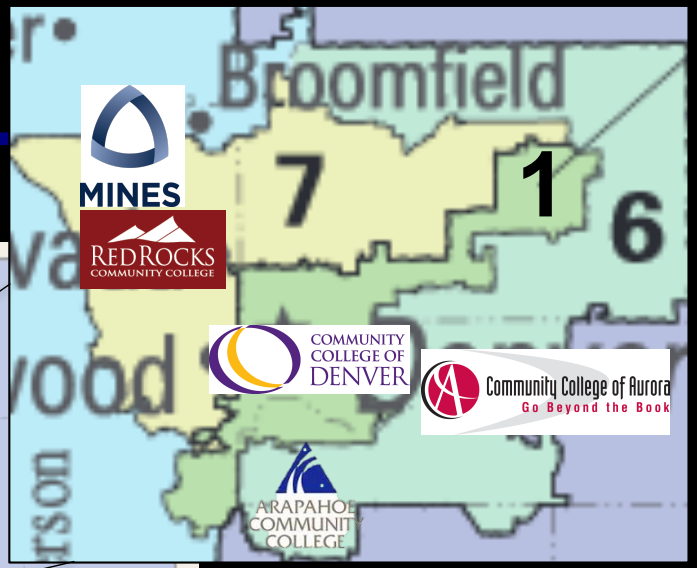
Community Colleges in CO





20 institutions around the state

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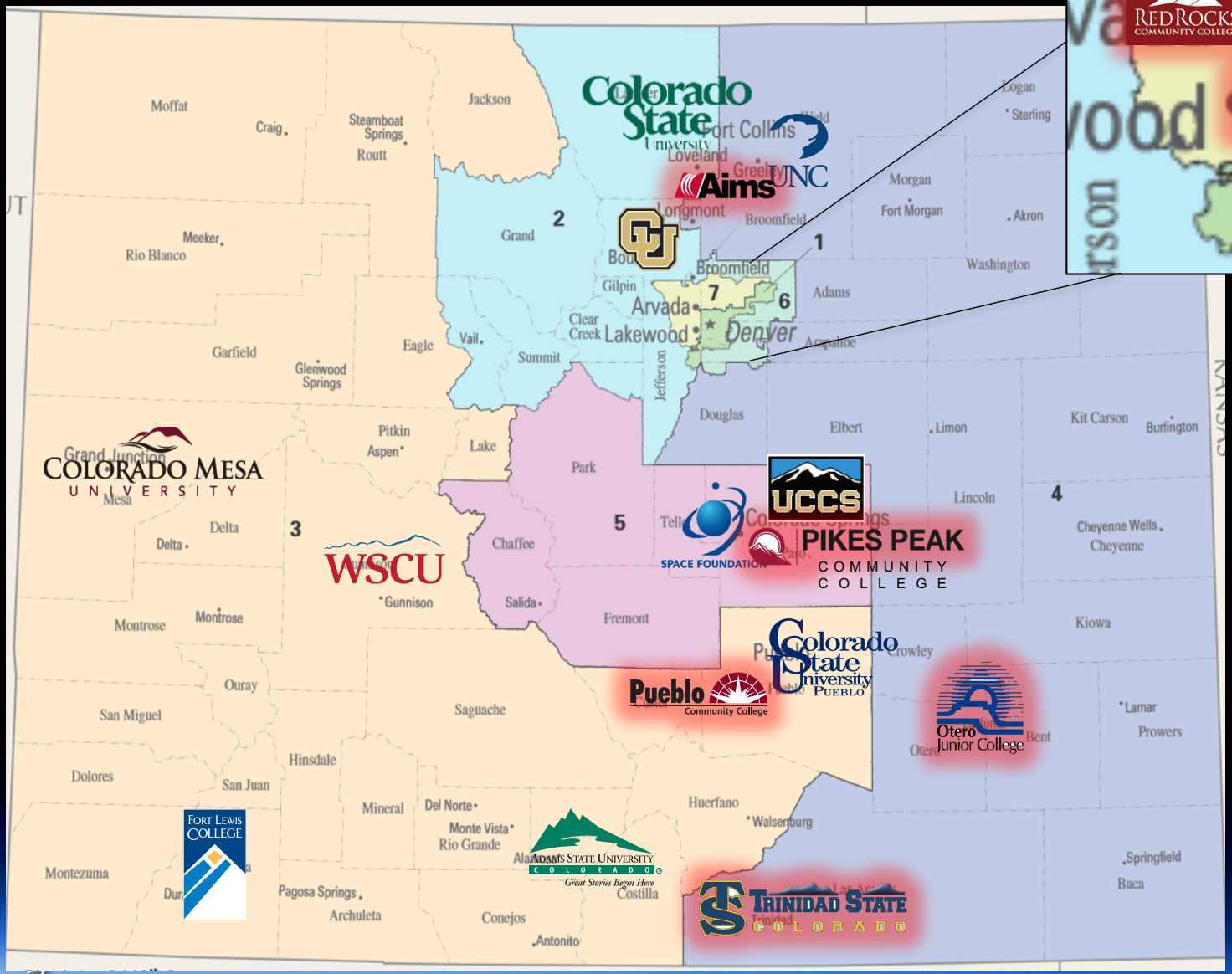
Community Colleges in CO

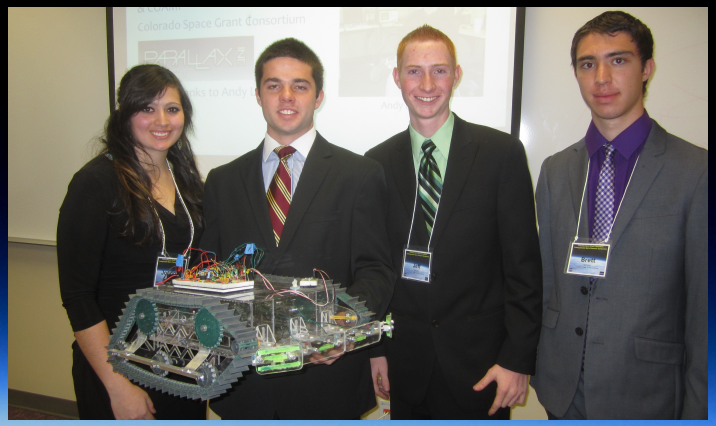


20 institutions around the state

9 are now Community Colleges

The Start

- Started a CU pilot transfer program and then additional NASA grants enabled program growth.
- COSGC Workshops to help the state pipeline by sharing content and experiences.
- CC started teaching Arduino classes which led to an Experimental Design class taught at CCA
- Two use cases: 2-year and students seeking a 4-year program



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Push/Pull Mentoring

- Great way to bridge the mentoring gap.
- Generational pipeline

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Transfer Student Summer Bridge

- Introduction to peers and faculty, student resources, and research interests.
- Spent a day on campus as more than just another high school student orientation
- Faculty-to-faculty connections to areas outside their discipline

Transfer Students

- Meeting with students is key to persistence. Life, financial, community balance is a key. 15 minutes every month can make a difference.
- Inclusion and Belonging. By engaging transfer students in hands-on projects, students will met peers and form study groups.
- Space Grant at CU is now seen as a an active network of STEM focused CC programs.

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Teamwork across Campuses

Sent three teams to RockOn from three CC. This then lead to a supplemental grant which enabled a three school RockSat collaboration. Enabled engineering, science, communication skills and integration.

Failures – Challenges we found

- Transfer credits would not be awarded equally to students from the same institution and classes.
  - By meeting with students we can help illuminate inconsistencies.
- Placing CC students at NASA internships was a goal.
  - We had few students selected however alternative experiences were found.
- Transfer credit and pre-reqs at a 4-year would prevent a clean transfer
  - Direct lines of communication between CC faculty and admissions and transfer

Failures – Challenges we found

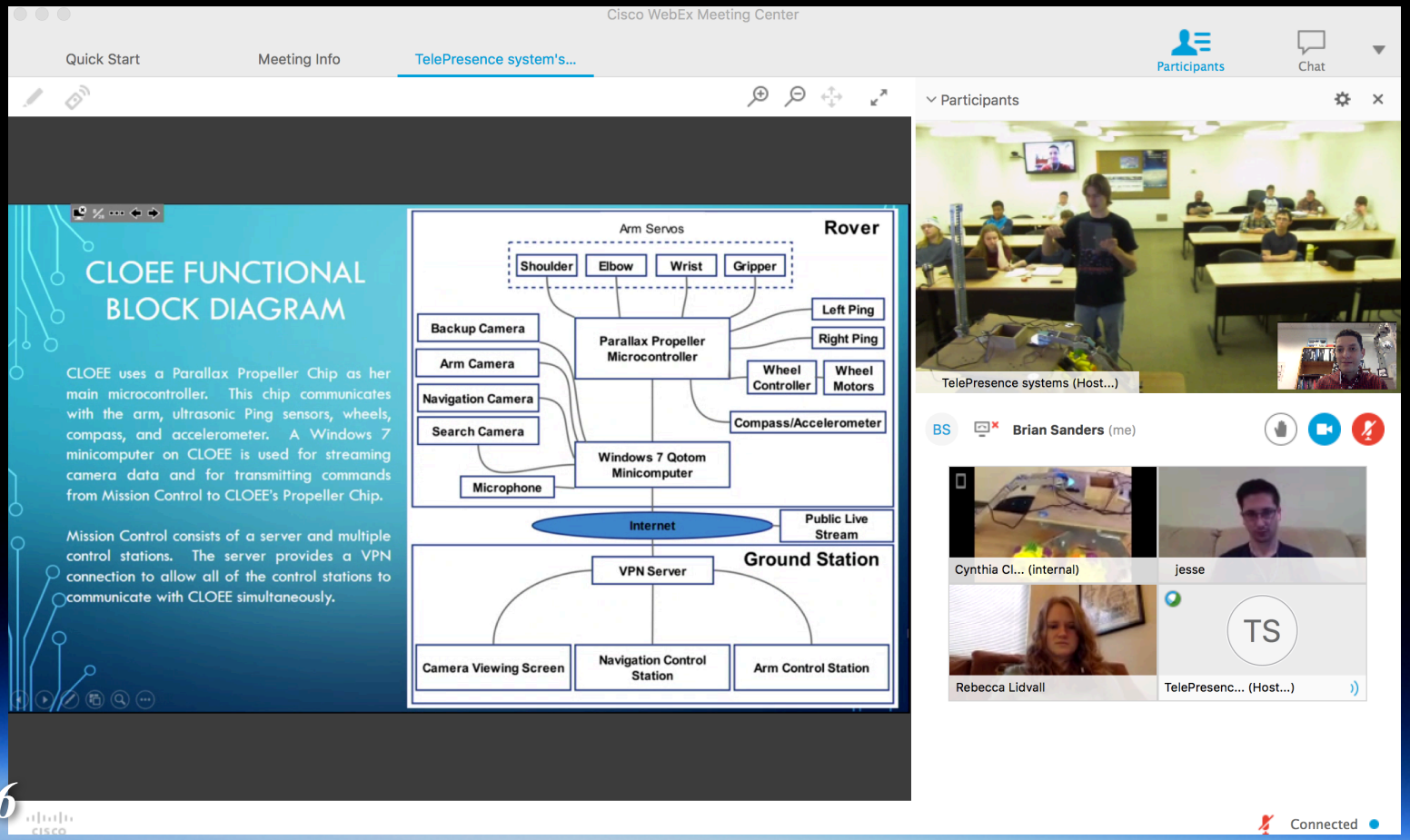
- Transfer Student Scholarships were appreciated by students but didn't have the impact we were expecting
  - College is expensive
  - Greater impact was with time and inclusion on projects
- Hands-on projects were great for some students, but others didn't have the time.
  - They were welcomed in our lab space so they had a sense of community.

Symposium

Getting students to talk to one another at Statewide activities. They talk to recent graduates who are typically Judges and students can see themselves taking that next step or joining a new field.

Mentoring

Leveraging the COSGC network for Trinidad State Junior College. Alumni and grad students helping to bring new mentoring.



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Community Engagement

Autonomous robot following a human traffic cone at the summer farmer's market in downtown Trinidad with TSJC students

Brian.Sanders@colorado.edu

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