Strategies to increase access to accelerated learning and career and technical education courses

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Why are here today?

Goals

• Learn about root cause analysis
• Learn about strategies to address participation gaps in accelerated learning and career and technical education (CTE) courses
Reflections on data dashboard

• What thoughts have you had since we met?

• What questions do you have about using the data dashboards?
Root cause analysis
Data inquiry framework

Seek information

Access and gather data

Monitor progress and measure success

Develop an action plan

Analyze and interpret data

Sources: Bocala, et al., 2014; Kekahio & Baker, 2013
Data inquiry framework

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Last time we:
- Used the data dashboards to access and gather data
- Identified equity gap(s) and prepared for a root cause analysis

Today we will:
- Learn how to conduct a root cause analysis
- Hear strategies from teachers and practitioners to close equity gaps in accelerated learning and CTE coursework

We will share resources so you can:
- Develop an action plan to address the root causes
- Monitor progress and measure success

Sources: Bocala, et al., 2014; Kekahio & Baker, 2013
Root Cause Analysis

Definition
Root causes are the deepest underlying causes of a problematic outcome that, if resolved, would eliminate or substantially improve the outcome.

Guidelines
1. Focus on what you/your team can control
2. Distinguish root causes from contributing factors
3. Verify root causes using multiple data sources

Sources: Kekahio & Baker, 2013; Preuss, 2003; Silverstein, 2014
Drilling down

1. Prioritize a gap
2. Conduct root cause analysis
3. Verify root causes with multiple data sources
4. Review findings
   - Is this finding a root cause?
     - If yes: Create action plan
     - If no: Continue with step 3

Sources: Kekahio & Baker, 2013; Silverstein, 2014
Fishbone diagram

Schools

Course placement policies

Lack of knowledge about benefits of courses

Students

Lack of communication about benefits

Current English learner students are under-represented in advanced coursework (Advanced Placement, International Baccalaureate, dual credit)

Districts

Lack of postsecondary partnerships

Teachers and counselors

Lack of knowledge about benefits of courses

Source of example root causes: Vazquez Cano et al., 2021
Activity source: Bocala et al., 2014
Root cause: Schools have course placement policies that negatively impact English learner students

- Ensure students classified as English learners are not tracked into lower-level courses
- Consider practices like a co-teaching model that allow English learner students access to advanced coursework

Source: Vazquez Cano et al., 2021

https://www.elrdcenter.wested.org/improve-course-access-of-els
Students who have an IEP in grades 9-12 are less likely than non-IEP students to achieve CTE concentrator status in Health Science programming.

Activity source: Bocala et al., 2014
Root cause: **CTE teachers lack training to support students with special education needs**

- Engage CTE teachers with IEP teams to assist in planning and placement
- Give CTE teachers access to students’ IEPs and engage them in finding accommodations

Sources: Haber & Sutherland, 2008; Wonacott, 2001
Finding evidence-based strategies

• Explore the literature to find promising approaches that have been proven to work. Options include:
  • Visiting the CTE Research Network website https://cteresearchnetwork.org/
  • Exploring the What Works Clearinghouse website https://ies.ed.gov/ncee/wwc/
  • Scanning Advance CTE’s Resource Center https://careertech.org/resource-center
  • Additional free resources included at the end of this deck.
Practice session: Conduct a root cause analysis

1. Breakout groups have been created based on the equity gaps you submitted prior to this training. Please join (or request to join) the group that aligns with your interests.

2. Facilitators will be in the main room to answer any questions you may have.

3. Use this time in your breakout room to identify root causes for the priority gap you selected
   - Activity 1 is done.
   - Start on Activity 2. The goal is to start to think about the 5 Why’s and move the root causes and categories into the fishbone.

4. Breakout sessions will end in about 10 minutes. We will reconvene in the main room.
Distinguishing between root causes and contributing factors

- Conditions that collectively increase the likelihood of a problematic outcome ➔ Contributing factors
- Conditions that by themselves cause the problem ➔ Root causes

- The problem would have occurred even if this factor was absent ➔ Contributing factors
- The problem would *not* have occurred if the cause was absent ➔ Root causes

Sources: Preuss, 2003
1. Students ever eligible for FRPL are underrepresented in accelerated learning

2. Female students are underrepresented in CTE dual credit

3. Students who ever had an IEP are underrepresented in accelerated learning

4. Students classified as English learners in grades 9-12 are underrepresented in accelerated learning

5. Students who have an IEP are less likely than students without an IEP to achieve CTE concentrator status in Health Science programming

6. Female students are less likely than male students to achieve CTE concentrator status in STEM programming
Report out

• What questions do you have about root cause analysis?
• What additional supports would you need to complete a comprehensive root cause analysis?
Break
Strategies to increase access to accelerated learning and CTE coursework
Strategies to increase access to accelerated learning and CTE coursework

- Course policies and eligibility requirements
- Community engagement
- Student feedback and voice
- Teacher training and instruction
1. Course policies and eligibility requirements
Broaden eligibility for students to enroll in advanced coursework

- Use multiple measures, such as counselor or teacher recommendation, completion of prerequisite courses, a student’s demonstrated proficiency in the targeted subject, or a demonstrated supplemental support team.

- Utilize college course options with no or lowered test requirements to expose students to college and build their confidence and experience for more restricted coursework.

Sources: Cooper, n.d.; Mehl et al., 2020
Address CTE entrance requirements

• Avoid additional entrance requirements that may discourage individuals from applying or prevent them from applying by making the application process burdensome.

• If there are more applicants than available spots, explore using a lottery rather than entrance requirements.

• Set aside seats for students, for example, “who are identified as having a certain number of risk factors for dropping out” (Rosen & Molina, 2019, p. 5)

Sources: Dalporto & Tessler, 2020; Estes & McCain, 2019; Kantrov, 2017; Rosen & Molina, 2019
2. Community engagement
Use focused and intentional communication strategies

• All families – particularly those with first-generation and low-income students and students of color – need access to information on opportunities for advanced coursework during high school.
  • Ensure that communication to families is delivered in their primary languages
  • Ensure that outreach is inclusive and differentiated to authentically engage targeted communities

Source: Mehl, et al, 2020; Patrick, et al., 2020
Addressing recruitment and placement in CTE

- Introduce current CTE students and alumni to the community
- Make equity an explicit goal of recruitment including adapting outreach and marketing to student and families’ culture and language
- Strive to make programs’ student body reflect the demographics of the district/community without ignoring student preferences

Sources: Dalporto & Tessler, 2020; Kantrov, 2017
3. Student feedback and voice
Provide opportunities for students to give feedback

- Collect information about the barriers different groups of students face to accessing and succeeding in advanced coursework
- Create a brief exit survey to learn about their experiences in the course
- Create a similar survey for students who did not enroll in advanced coursework

Sources: Cooper, n.d.; Mehl et al., 2020; Patrick et al., 2020
Student Feedback & Voice

_Engaging students in accelerated credit access, equity, and program planning_

HSD Strategies In Place

- HSD Secondary Needs Assessment survey
- Superintendent Listening Sessions
- Spring survey to students about courses and exam outcomes
- Students present/share at PD CCP ambassadors at building level
- Student representation on
  - Strategic Planning
  - CCAC
  - Accelerated Credit Committee
4. Teacher training and instruction
Provide professional development and training to teachers and counselors

- High school and college dual credit faculty collaborate to offer high-quality courses
- Discuss strategies for recognizing and overcoming personal biases.
- Develop inclusive and culturally responsive teaching practices.

Sources: Cooper, n.d.; Mehl et al., 2020
Professional Development: Culturally Responsive Teaching in CTE

- Awareness
- Implicit Bias
- Information Processing

**READY FOR RIGOR: A FRAMEWORK FOR CULTURALLY RESPONSIVE TEACHING**

**AWARENESS**
- Know and own your cultural lens.
- Understand the three levels of culture.
- Recognize cultural archetypes of individualism and collectivism.
- Understand how the brain learns.
- Acknowledge the sociopolitical context around race and language.
- Recognize your brain’s triggers around race and culture.
- Broaden your interpretation of culturally and linguistically diverse students’ learning behaviors.

**LEARNING PARTNERSHIPS**
- Reimagine the student and teacher relationship as a partnership.
- Take responsibility to reduce students’ social-emotional stress from stereotype threat and microaggressions.
- Balance giving students both care and push.
- Help students cultivate a positive mindset and sense of self-efficacy.
  - Support each student to take greater ownership for his learning.
  - Give students language to talk about their learning moves.

**INFORMATION PROCESSING**
- Provide appropriate challenge in order to stimulate brain growth to increase intellective capacity.
- Help students process new content using methods from oral traditions.
- Connect new content to culturally relevant examples and metaphors from students’ community and everyday lives.
- Provide students authentic opportunities to process content.
- Teach students cognitive opportunities to process content.
- Use formative assessments and feedback to increase intellective capacity.

**STUDENTS ARE READY FOR RIGOR AND INDEPENDENT LEARNING**

**COMMUNITY OF LEARNERS & LEARNING ENVIRONMENT**
- Create an environment that is intellectually and socially safe for learning.
  - Make space for student voice and agency.
  - Build classroom culture and learning around communal (sociocultural) talk and task structures.
  - Use classroom rituals and routines to support a culture of learning.
  - Use principles of restorative justice to manage conflicts and redirect negative behavior.

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Teacher Preparation: CTE Licensure Courses

Introduction to CTE in Oregon (ED 220)
- What is culturally responsive teaching?
- Socio-political context of CTE
- Data to identify access and opportunity gaps

Curriculum Design, Instructional Strategies, and Assessment (ED 131)
- Universal Design for Learning
- NAPE: Know Yourself, Know Your Students, Strategies for Bringing Culture into the Classroom
Model and Reinforce High Leverage Strategies

- Incorporate project-based learning
- Bring diverse representations into curricula and classroom
- Include students’ heritage and lived experiences in curricula
- Include opportunities for storytelling
- Connect lessons to social impact
- Create cooperative, collaborative learning groups
- Incorporate music and movement
- Increase wait time
- Differentiate instruction
Potential next steps
Next steps for you and your team

- Conduct a root cause analysis to surface underlying causes of underrepresentation in accelerated learning or CTE
- Set a specific goal related to the student groups who are underrepresented in accelerated learning or CTE coursework
- Develop an action plan to address root causes and achieve goal
- Monitor progress and measure success

What is one next step you plan to take?

Source: Bocala et al., 2014
Resources
Data inquiry (free) resources


Accelerated learning (free) resources


The Education Trust and College in High School Alliance (n.d.) *Advancing equity in college in high school programs: Opportunities under ESSA* [Fact sheet.]. https://edtrust.org/issue/dual-enrollment/


Related infographic: https://ies.ed.gov/ncee/rel/Products/Resource/60189


Accelerated learning (free) resources (continued)


Vazquez Cano, M., Umansky, I. M., & Thompson, K. D. (2021). *How state, district, and school levers can improve the course access of students classified as English learners in secondary schools.* WestEd. https://www.elrdcenter.wested.org/improve-course-access-of-els


CTE (free) resources


Dalporto, H., & Tessler, B. (2020). *Voices from the field: How community colleges are advancing equity in career and technical education.* MDRC. https://eric.ed.gov/?id=ED604541


CTE (free) resources (continued)


Completed fishbone: Accelerated learning

**Schools**
- Course offerings and scheduling
- Course cost
- Course placement policies
- Reclassification policies
- Lack of postsecondary partnerships
- Curriculum requirements

**Students**
- Lack prerequisites
- Do not believe they can succeed
- Lack of knowledge about benefits of courses
- Implicit bias
- Lack of certification and training
- Lack of communication about benefits

**Districts**

**Teachers and counselors**

Current English learner students are under-represented in advanced coursework (Advanced Placement, International Baccalaureate, dual credit)

Source of example root causes: Vazquez Cano et al., 2021
Activity source: Bocala et al., 2014
Completed fishbone: CTE

**Schools**
- Lack of professional development
- Does not provide accommodations
- Lack transport options
- Employees not supportive
- Lack of accessibility
- Liability issues

**Students**
- Lack math prerequisites
- Lack of role models
- Do not believe they can succeed
- Lack of training
- Believe students cannot succeed
- Unaware of challenges

**Workplace**
- Employees not supportive
- Belief students cannot succeed

**Teachers**
- Lack of training
- Unaware of challenges

Students who have an IEP in grades 9-12 are less likely than non-IEP students to achieve CTE concentrator status in Health Science programming.

Activity source: Bocala et al., 2014