

Presentation to Multnomah County Commission

January 16,
2014



National Mentoring Month



And “Thank Your Mentor” day





What works with kids?

Relationship-based interventions!





High-quality relationships

Involve ...

1. Attachment
2. Reciprocity
3. Progressive Complexity
4. Balance of Power



Three types of mentoring experiences

High-quality relationships can occur within Developmental or Instrumental relationships:

- 1. Prescriptive**
- 2. Developmental**
- 3. Instrumental**





Instrumental Mentoring

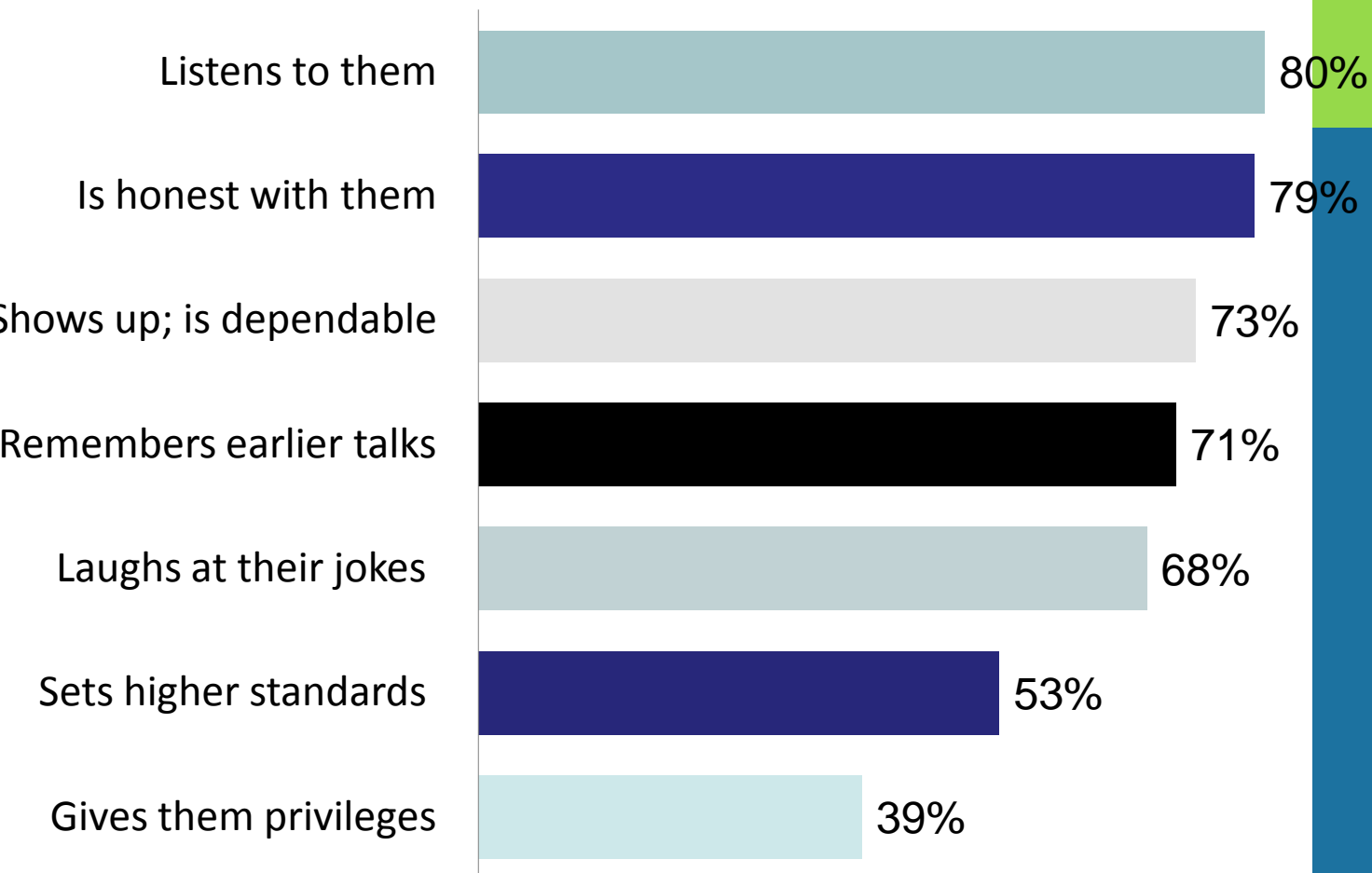
- Apply the same principles as in a developmental approach but with the primary focus on activity involvement.
- An instrumental approach can have negative affects in the school setting unless the activity is collaboratively decided upon by youth and adult (Karcher).
- Instrumental activities bring in growth opportunities and discussion and can be particularly helpful for building relationships with adolescents (Nakkula).





The purpose of mentoring

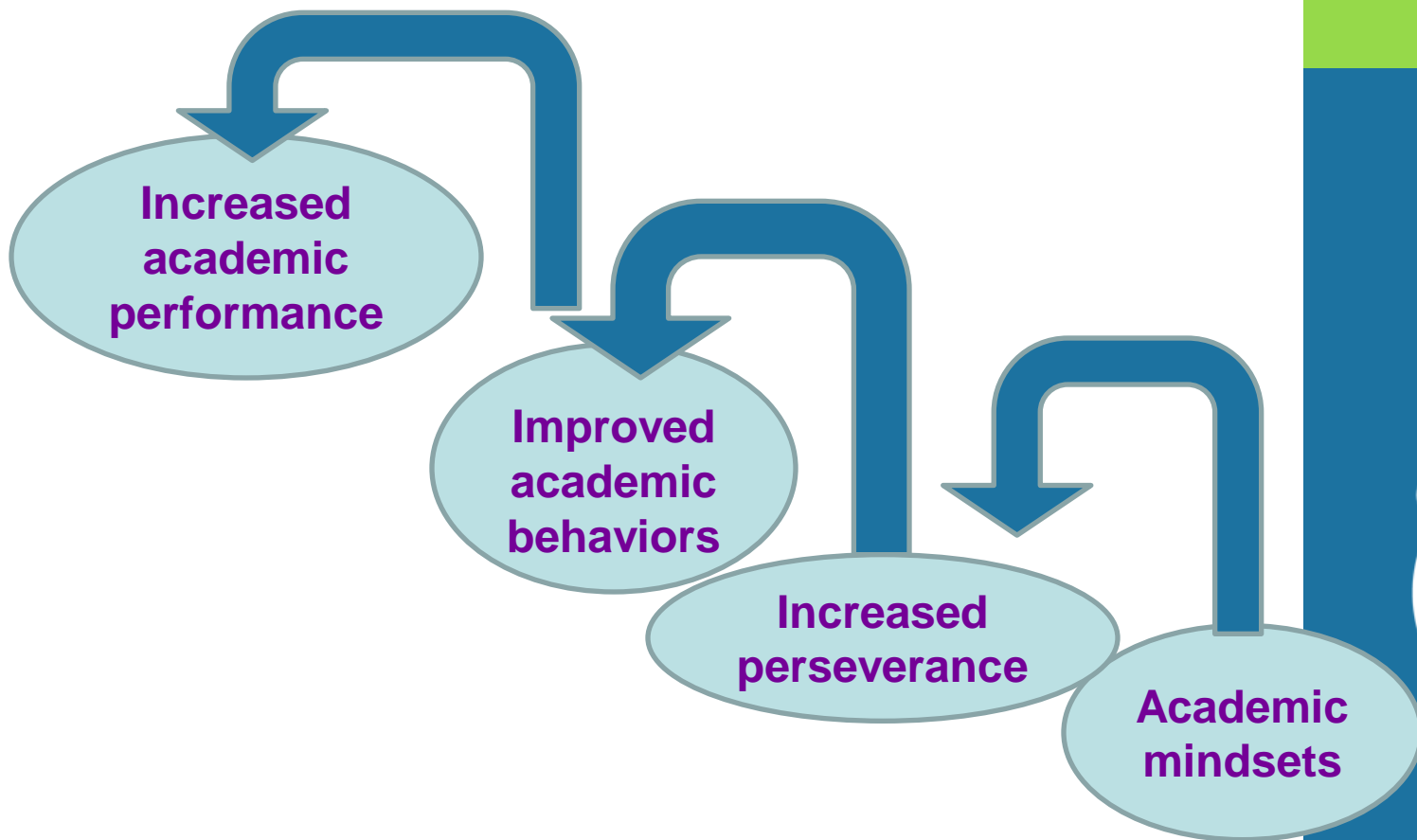
Percentage of 15 year olds who say adults "get" them do these things "a lot."





How does this affect school performance?

“...human beings can alter their lives by altering their attitudes of mind.”





For more information, go to:
oregonmentors.org

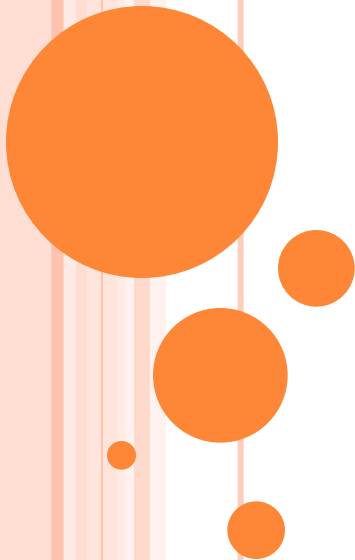
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BEC *STEM CONNECT™*

**Community Partners Improving Student
Achievement in Math and Science**



WHAT IS THE STEM CONNECT INITIATIVE?

- A way to establish and nurture vital partnerships between community sponsors and local underserved schools.
- Our goal is to open a world of exciting and rewarding STEM careers to students significantly underrepresented in those professions.
- *STEM Connect* targets 4th and 5th grade classrooms



WHY TARGET UNDERSERVED 4TH & 5TH GRADE CLASSROOMS?

- Underserved students have less access and exposure to science related education.
- Research shows that negative interest in STEM begins in elementary school.
- Classroom experiences students have with STEM must be meaningful and can impact students' decision to pursue STEM in the future.





Laura Randall
AP Mentoring Program Manager

To inspire, connect, challenge, and support future leaders and innovators through real-world applications in Science, Technology, Engineering, and Mathematics (STEM) and to challenge students to succeed in more rigorous academic subjects.

nConnect was founded with three fundamental beliefs:

- 1. More rigorous courses are requisite in high school if US students are to be competitive in the global economy.**
- 2. All students should have the opportunity to succeed in these rigorous courses -- not just the privileged.**
- 3. Mentors can play a significant, if not vital, role in education and can help many more students succeed in challenging courses.**

**nConnect encourages Rigor, demonstrates Relevance,
and builds Relationships**

nConnect AP[®] Mentoring program expansion and volunteer opportunity

High School

Participating AP classes

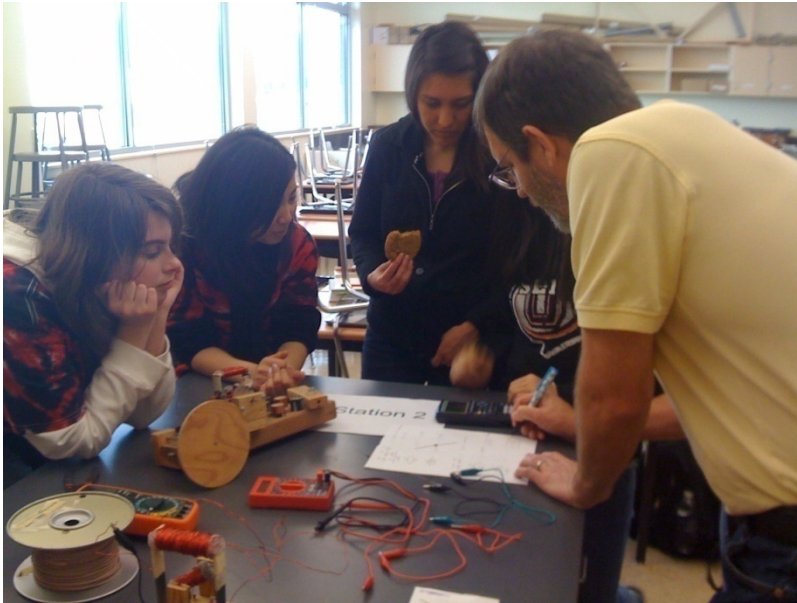
Parkrose High School

Calculus, Statistics

Reynolds High School

Calculus, Statistics, Biology, Environmental Science

Feedback from the students



Mentor Matt Driggers and Union High School physics students experiment with resistors then learn how to predict current with mathematical formulas



Mentor Emily Cragerud and Mountain View High School calculus students work together on homework problems

“The **nConnect** program has made my calculus class experience much better. It gives me a way better understanding of the curriculum.”

– **nConnect** student

“Whenever I work with my mentor, the next few days in class make more sense. I understand the material way better than if I wouldn't go to the mentoring sessions.”

– **nConnect** student

Mentors aid STEM push The Columbian, December 8, 2013

"There's a big gap between scientists and students, the kids are hungry for learning like this."

-Tom Wolverton, iTech Prep teacher who works with an **nConnect** mentor

"STEM professionals bring a relevance to the classroom that is difficult to duplicate otherwise. We know what employers need and are looking for from direct experience. We know why the math or science is important to employers."

- **nConnect** mentor turned teacher: David Britton, Retired electromagnetic compatibility engineer, Hewlett-Packard

"I can share my real-world applications of calculus with the students to reinforce the fact that these topics are relevant to many situations. I consciously explain to students the benefits, especially job success examples. This shows students that a test result is not the only benefit for learning."

-**nConnect** mentor John Sturman, Hardware design engineer, Hewlett-Packard

"I've been fortunate to have had a number of fantastic teachers and mentors who have helped guide me. My primary motivation for volunteering has been to hopefully have a similar impact and to encourage kids who may have otherwise written off STEM subjects to reconsider that decision."

- **nConnect** mentor Chris Zwach, engineer, Hewlett-Packard

Tours and Job Shadow



Next Steps:

What's the commitment?

Submit application; be subject to a background check

Attend an orientation, dinner provided (**Thursday, January 30, 5:30-7:30 pm**)

Meet with students and/or visit classroom **February through May**

Mentor 2-4 times per month. Sessions typically last 1 hour at a time

Maintain communication with AP Teacher, nConnect Program Manager

Please contact:

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