It Takes Grit!
Preparing Students for College-level Academics and More

Thanks for joining us! We will begin promptly at 2:00 p.m. ET.

- Use the "questions" area to submit questions as they arise.
- This webinar will be archived at NROCnetwork.org, and you will receive a follow-up email with a link to the recording and slides.
- Contribute to the Twitter conversation at #NROCpd.
- Do you need help with GoToWebinar? Email memberservices@NROC.org.

THERESE BACA-RADLER
English and FYE Faculty, Academic Foundations, University of New Mexico

CASH CLIFTON
Foundational Math Coordinator, Academic Foundations, University of New Mexico
Changing the Way College and Career Readiness is Approached and Supported
NROC collaborates with educators to imagine, develop, test, & refine technologies that improve student success.
WHAT WE OFFER

NROC COURSES
- NROC MATH
  - Algebra 1
  - Developmental Math
- NROC ENGLISH
  - Developmental English

WEB-BASED TOOLS
- EdReady
  - a readiness system (to personalize a learner’s study path)
- Hippo Campus
  - a curated repository of learning objects

& a new product created in partnership with ACT...
EdReady

EdReady is a math and English readiness system that employs a knowledge inventory to personalize a learner’s path to subject mastery within the context of a specific educational goal.
WEB-BASED TOOLS

Open and Designed for Institutional Customization

Goals

Knowledge Inventories

Resources

What do you want your students to be ready for?

Data Access

Readiness
Academic Foundations supports a culture of grit.
MINDSET INTERVENTION STRATEGIES

THERESE BACA-RADLER
SETBACKS

• Students are presented with setbacks. In this case they are academic. They have been informed that they must take a developmental course in reading because of their scores on the college entrance exams.
• Many reasons students end up in this category, but not all of those reasons are academic.
REASONS STUDENTS ARE WRONGFULLY PLACED

- Poor test takers
- Bias tests
- Difficulty navigating academic systems

- All of these things can hinder a student’s success in academic settings and damage their beliefs about their capacity to succeed academically.
SOME STUDENTS NEED INTERVENTIONS

• Academic
  • Reading comprehension
  • Reading strategies
  • Writing strategies
  • Language

• Mindset
  • Growth mindset
  • Self-efficacy
MINDSET INTERVENTION WORKS FOR EVERYONE

- At UNM, we have paired EdReady with a series of mindset intervention modules that provide opportunities for students to reflect and learn about themselves as learners while they enhance skills for setting and accomplishing meaningful goals.
- The goal is for them to use the tools that they are gaining in EdReady to research and explore topics about learning to learn and finding their own success.
## LINKING A MINDSET INTERVENTION TO ACADEMIC CONTENT

<table>
<thead>
<tr>
<th>Course Module</th>
<th>EdReady Reading</th>
<th>EdReady Writing</th>
<th>EdReady Grammar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth Mindset</td>
<td>Annotating Topic Sentence</td>
<td>Organization</td>
<td>Subjects/Verbs End Punctuation</td>
</tr>
<tr>
<td></td>
<td>Context Clues</td>
<td>Thesis</td>
<td></td>
</tr>
<tr>
<td>Learning as a Process</td>
<td>Main Idea</td>
<td>Outlining</td>
<td>Subject-Verb Agreement</td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>Summarizing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Details</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setting Goals and Making an Action Plan</td>
<td>Point of View</td>
<td>Sentence types</td>
<td>Commas</td>
</tr>
<tr>
<td></td>
<td>Denotation and Connotation</td>
<td>Paragraphs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Definitions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Objective and Subjective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grit</td>
<td>Comparisons</td>
<td>Paraphrasing</td>
<td>Confused Words Parenthesis</td>
</tr>
<tr>
<td></td>
<td>Figurative Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>Analysis</td>
<td>Compare Contrast</td>
<td>Voice</td>
</tr>
<tr>
<td></td>
<td>Credible Sources</td>
<td>Active and Passive Voice</td>
<td></td>
</tr>
<tr>
<td>Self-Regulation</td>
<td>Bias</td>
<td>Evidentiary Support</td>
<td>Flow</td>
</tr>
<tr>
<td></td>
<td>Misleading evidence</td>
<td>Direct Quotes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fallacies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Care</td>
<td>Peer Review</td>
<td>Revising</td>
<td>Editing</td>
</tr>
<tr>
<td>Self-Directed Learning</td>
<td>Rubrics</td>
<td>In text citations</td>
<td>Formatting and Citations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
According to Carol Dweck, “a growth mindset is the understanding that we can develop our abilities and intelligence. Research has shown that our implicit beliefs about the nature of intelligence can have a great impact on our achievement.”

Growth Mindset Survey – How much do students really believe that they are capable of growth?

<table>
<thead>
<tr>
<th>Reading</th>
<th>Writing</th>
<th>Grammar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annotating, Topic Sentence,</td>
<td>Organization, Thesis</td>
<td>Subjects, Verbs, End</td>
</tr>
<tr>
<td>Context Cues</td>
<td></td>
<td>Punctuation</td>
</tr>
</tbody>
</table>
Learning as a Process

- Learning is a personal process that is guided by personal goals and motivation to reach those goals based on the value and expectations that a person has invested in those goals.
- We all learn differently.
- Identifying strengths and areas for improvement in our personal learning processes allows an individual to take autonomy over themselves as learners.
- Bloom’s Taxonomy of Learning Objectives

<table>
<thead>
<tr>
<th>Reading</th>
<th>Writing</th>
<th>Grammar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Idea, Support, Details</td>
<td>Outlining, Summarizing</td>
<td>Subject-Verb Agreement</td>
</tr>
</tbody>
</table>
BLOOM’S TAXONOMY OF LEARNING OBJECTIVES

CREATING
- Use information to create something new
- Design, build, construct,
- Plan, produce, devise, invent

EVALUATING
- Critically examine info & make judgements
- Judge, test, critique,
- Defend, criticize

ANALYZING
- Take info apart & explore relationships
- Categorize, examine,
- Compare/contrast, organize

APPLYING
- Use information in a new (but similar) situation
- Use, diagram, make a chart, draw, apply, solve, calculate

UNDERSTANDING
- Understanding & making sense out of information
- Interpret, summarize, explain, infer, paraphrase, discuss

REMEMBERING
- Find or remember information
- List, find, name, identify, locate,
- Describe, memorize, define
SETTING GOALS AND MAKING AN ACTION PLAN

- Setting meaningful and attainable goals can yield valuable results.
- SMART Goals help us to organize what we want to accomplish and how we are going to get there.

<table>
<thead>
<tr>
<th>Reading</th>
<th>Writing</th>
<th>Grammar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point of View, Denotation and Connotation, Definitions, Objective and Subjective</td>
<td>Sentence Types, Paragraphs</td>
<td>Commas</td>
</tr>
</tbody>
</table>
According to Angela Duckworth grit is the “passion and perseverance to reach long-term goals.”

Short Grit Scale – How gritty are you?

What can you do to get grittier?

<table>
<thead>
<tr>
<th>Reading</th>
<th>Writing</th>
<th>Grammar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparisons, Figurative Language</td>
<td>Paraphrasing</td>
<td>Confused Words, Parenthesis</td>
</tr>
</tbody>
</table>
SELF-EFFICACY

- Self-efficacy is the “belief in one’s capabilities to organize and execute the courses of action required to produce given attainments” (Bandura, 1997, p. 3).
- According to Freudenberg, Cameron & Brimble (2011) self-efficacy is a way of measuring one’s capacity to cope with learning and performing.

<table>
<thead>
<tr>
<th>Reading</th>
<th>Writing</th>
<th>Grammar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis, Credible Sources</td>
<td>Compare Contrast, Active and Passive Voice</td>
<td>Voice</td>
</tr>
</tbody>
</table>
SELF-REGULATION

- Self-regulation requires us to try and better understand ourselves and others.

<table>
<thead>
<tr>
<th>Reading</th>
<th>Writing</th>
<th>Grammar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bias, Misleading Evidence, Fallacies</td>
<td>Evidentiary Support Direct Quotes</td>
<td>Flow</td>
</tr>
</tbody>
</table>
SELF-CARE

• Learning requires balance in all aspects of life.

<table>
<thead>
<tr>
<th>Reading</th>
<th>Writing</th>
<th>Self-Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Review</td>
<td>Revising</td>
<td>Editing</td>
</tr>
</tbody>
</table>
SELF-DIRECTED LEARNING

Putting it all together and applying what we have learned about ourselves into new contexts for learning.

![Diagram showing elements of self-directed learning]

<table>
<thead>
<tr>
<th>Reading</th>
<th>Writing</th>
<th>Grammar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubrics</td>
<td>In-Text Citations</td>
<td>Formatting</td>
</tr>
</tbody>
</table>
REFERENCES


Questions?
What is grit?

- Grit is about passion and perseverance. It takes grit… (Duckworth, 2018)

- …but how do you teach it? To quote Duckworth’s famous Ted Talk, “I don’t know.”

- Can grit be taught? (Denby, 2016)
It takes a village: A culture of student success in University College

“I appreciate that not everyone comes from a background where parents, teachers pushed and prodded work out of young students. Therefore, I say to the possible annoyance of my students, ‘shoot for Mars, and if we just make it to the Moon, that’s okay. In fact it is more than okay, it is quite far.’”

- Kristina Yu, Associate Dean for Curriculum and Program Development, Director of Academic Communities, University College
How do we support student success in Foundational Math?

- Carol Dweck & Growth Mindset
  - Fixed versus Growth mindset, Need to be open to change (Dweck, 2006)
  - Mindset & Motivation (Dweck, 2012)

- Multiple Intelligences (Gardner, 2006)
  - Varied content delivery methods (Armstrong, 2017)

- Carl Roger’s “Core conditions for change” (Rogers, 1965)
  - Genuineness
  - Empathy
  - Unconditional Positive Regard
“Especially with the population I serve, they’ve already struggled. Showing them how they've gotten through other difficult things in life by trying hard and persevering relates directly back to math and other subjects. Sometimes you have to try and struggle. Once they know they can actually grow and learn the subject matter, sometimes that’s all they need in the end…to know they can do it.”

- Matthew Edelen, Foundational Math “Boot camp” Adult Education Instructor, University of New Mexico Valencia
How do we teach students about success and perseverance

- Productive stress
- Eustress versus Distress: Imposter syndrome (Han)
- Motivational Interviewing (Miller & Rollnick, 2002)

Discussions
- Requiring students to be proactive and have a plan
- Helping students see how failure can work to their advantage
- College success skills: Note taking, time management, etc.
It takes a village: A culture of student success in University College

“I think as a whole we support failure. We teach them that it’s healthy. They see it as something that was supposed to be avoided, and we see it as a normal part of life. If you’re doing something worth doing, you’re pushing boundaries and doing something new or unexpected. So of course you’re not going to have everything right. That’s where you learn. They don’t feel so bad about themselves then they don’t judge themselves so harshly.”

- Shelly Clapp, Foundational Math Instructor, University College
Fostering a healthy definition of failure

- “Higher ed leaders can help students break a self-defeating attitude by encouraging them to see early setbacks as challenges to overcome, rather than evidence of whether they belong or not.” (“3 phrases that discourage students,” 2019).

- Understanding failure and learning from it – recognizing what needs to change & feeling empowered. Helping them know their new options and choices.

- EdReady Learning Path
"In considering the most important things I walked away from college with – it was not facts, figures, or how-to’s, but a set of skills that I had learned and practiced over the course of obtaining my degree. Skills that were transferrable in both my personal and professional life. Our students are here to achieve a goal that they’ve set for themselves. Persistence is one of the most critical skills one can have in working toward accomplishing goals – big and small, short or long-term, personal or communal. It is crucial that students learn to persist, because accomplishing goals isn’t always easy and doesn’t always go as planned. Such is life! In all reality, persistence is a life skill – and we are here to teach students not only how to be successful in their time spent at this University, but beyond."

- Lisa Montoya, Program Specialist, University College
Person-first approach

- Holistic Student Development
  - Social Media Boundaries & Academic Performance (Cao et al, 2018)
  - Math trauma can be overcome (Nic, 2017)

- Worldview is the lens through which you see the world.
  - No “one size fits all” approaches: Respecting academic freedom of instructors
  - Self-directed learning: Campus resource assignments (Link to Fall 2017 sample)
  - High school GPA predicts, but does not guarantee success. (Guo, 2016)

- Foundational Math Instructor Shelly Clapp addresses "students who have a history of success taking on too much and failing, and then they judge themselves harshly."
Sources

3 phrases that discourage students. (2019, April 30). In EAB. Retrieved May 15, 2019, from https://www.eab.com/daily-briefing/2018/07/12/3-phrases-that-discourage-students


Questions?
MEMBERSHIP WORKS BEST WHEN PARTNERS:

**Commit**
Significant time and staffing to becoming facile with NROC courses and tools.

**Adapt**
NROC’s suite of solutions to meet their students’ specific needs.

**Contribute**
Efficacy stories and original supplemental resources to the broader membership.
Special thanks to our presenters:

Therese Baca-Radler, University of New Mexico, tbaca3@unm.edu
Cash Clifton, University of New Mexico, cclifton4@nmde1.org

Thank you for joining us!

You will be receiving a link to the recording and presentation assets at NROC.org.