The research that supports Summit Learning

Summit Learning was developed by Summit Public Schools over the course of 15 years, in partnership with nationally acclaimed learning scientists, researchers, and academics.

Center for Education Policy Research
HARVARD UNIVERSITY

Yale Center for Emotional Intelligence

Dig into the research with the Science of Summit white paper: summitlearning.org/research
The student experience is defined by specific design choices that help students achieve three key outcomes.
Students demonstrate proficiency in the following three outcomes:

- **Cognitive Skills**: Essential and transferable lifelong skills
- **Content Knowledge**: Understanding and application of complex, challenging facts and concepts
- **Habits of Success**: Mindsets and behaviors that support academic achievement and well-being
THE COMPONENTS OF SUMMIT LEARNING

Mentoring
Students meet 1:1 with a dedicated mentor who knows them deeply and supports them in setting and achieving their short- and long-term goals.

Projects
Students apply their acquired knowledge, skills and habits to projects that prepare them for the real-world scenarios they'll encounter in life after school.

Self-Direction
Students are guided through a learning cycle that develops self-direction by teaching them how to set goals, make plans, demonstrate their skills and knowledge, and reflect.
Students meet 1:1 with a dedicated mentor who knows them deeply and supports them in setting and achieving their short and long-term goals.
Mentorship in Action

Path to Purpose

Mentorship

Goal Setting

Modeling Habits of Success

Goals

1:1
Mentoring

Students meet 1:1 with a dedicated mentor who knows them deeply and supports them in setting and achieving their short and long-term goals.
Students spend most of their time working with teachers and classmates on rich, real-world projects.
Projects in Action

Cognitive Skills Rubric

Real-World Projects

Mentor Guidance

Content Knowledge Application

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Students apply their acquired knowledge, skills and habits to projects that prepare them for the real-world scenarios they'll encounter in life after school.
Students are guided through a learning cycle that develops self-direction by teaching them how to set goals, make plans, demonstrate their skills and knowledge, and reflect.
SELF-DIRECTION IN ACTION

LEARNING HOW TO LEARN

ON-DEMAND ASSESSMENTS

PEER-TO-PEER MENTORING

CONTENT PLAYLISTS
Students are guided through a learning cycle that develops self-direction by teaching them how to set goals, make plans, demonstrate their skills and knowledge, and reflect.
What is it?

- Essential and transferable lifelong skills
- Assessed on Cognitive Skills Rubric, developed with the Stanford Center for Assessment, Learning, and Equity (SCALE)

Why is it important?

- Skills students need beyond high school to navigate college and careers
- Include creative and critical approaches to problem-solving and decision-making
Cognitive Skills Rubric

- 36 interdisciplinary, higher-order thinking skills for college and career readiness
- Graded on a continuum of 0-8 points (must score 6 in all Cognitive Skills to graduate)
- Embedded in all projects

Designed in collaboration with the Stanford Center for Assessment, Learning & Equity. May, 2017.
36 Cognitive Skills

All projects in all subjects are assessed on the following cognitive skills:

**Textual Analysis**
- Theme/Central Idea
- Point of View/Purpose
- Development
- Structure
- Word Choice

**Products & Presentations**
- Style & Language (Tone, Academic Language, Syntax)
- Oral Presentation
- Multimedia in Written Production
- Multimedia in Oral Presentation
- Conventions
- Precision

**Inquiry**
- Asking Questions
- Hypothesizing
- Designing Processes and Procedures

**Analysis & Synthesis**
- Identifying Patterns & Relationships
- Comparing/Contrasting
- Modeling
- Interpreting Data/Info
- Making Connections & Inferences
- Critiquing the Reasoning of Others
- Justifying/Constructing an Explanation

**Speaking/Language**
- Discussion/Contribution
- Preparation
- Norms/Active Listening

**Composing/Writing**
- Argumentative Claim
- Informational/Explanatory Thesis
- Narrative
- Counterclaims
- Selection of Evidence
- Explanation of Evidence
- Integration of Evidence
- Organization (Transitions, Cohesion, Structure)
- Introduction & Conclusion

**Using Sources**
- Selecting Relevant Sources
- Contextualizing Sources
- Synthesizing Multiple Sources
COGNITIVE SKILLS IN ACTION

Blackstone Valley Prep High School | Cumberland, RI
Jerome Bruner makes the case for a spiral curriculum that starts in early childhood

Jean Piaget details the intricate relationship between mental and physical growth development, from birth through adolescence

Lev Vygotsky emphasizes the essential role of social relationships in cognitive development

Martin Haberman challenges urban educators to focus on creating a learning environment that fits the needs and nature of urban youth

Elizabeth Cohen and Rachel Lotan blend theory with effective teaching strategies for group work, emphasizing multiple ability and bilingual classrooms

Grant Wiggins advocates for and details performance-based assessment, focused on helping students improve

Carol Ann Tomlinson collates field-tested and best practices for differentiated instruction in multiple ability classrooms

Erik De Corte emphasizes the need for active learning experiences and the importance of metacognition and communication skills in transfer of knowledge

John Hattie and Helen Timperley suggest best ways to deliver individualized feedback in the classroom

David Conley sets forth the Cognitive Skills, Content Knowledge, and "habits of mind" necessary for high school students to be college ready

Jo Boaler provides roadmap of research-based strategies for helping all children be successful in mathematics

Daniel Schwartz et al. categorize and describe 26 "scientifically proven" approaches to learning
What is it?
- Understanding and application of complex and challenging facts and concepts

Why is it important?
- Foundational to the development of cognitive skills
- Supports and enables critical thinking
- Students develop a broad knowledge base
LEARNING HOW TO LEARN

CONTENT KNOWLEDGE IN ACTION

ON-DEMAND ASSESSMENTS

PEER-TO-PEER MENTORING

CONTENT PLAYLISTS
The research behind content knowledge

30 years of formative influences on our approach and model

1988

Robert Glaser and Micheline Chi draw attention to the cognitive and psychological conditions that enhance and limit the development of expertise

Donna R. Recht and Lauren Leslie find prior knowledge has significant effect on learners' retention and summarizing of information after reading

John D. Bransford et al. combine theories of how we learn with best practices for effective learning in the classroom

Carol Ann Tomlinson collates field-tested and best practices for differentiated instruction in multiple ability classrooms

David Conley sets forth the Cognitive Skills, Content Knowledge, and "habits of mind" necessary for high school students to be college ready

Daniel Willingham emphasizes the importance of background knowledge in the critical thinking process

Peter C. Brown et al. present concrete practices for mastery learning, like building background knowledge, based on recent research in cognitive psychology and related fields

Jo Boaler provides roadmap of research-based strategies for helping all children be successful in mathematics

Todd Rose proposes an individualized, versus standardized, approach to performance assessment in education and in the workforce

Kristina Zeiser et al. (AIR) make case for positive relationship between competency-based education and greater autonomy over and motivation for learning

Daniel Schwartz et al. categorize and describe 26 "scientifically proven" approaches to learning
What is it?

- Mindsets and behaviors that support academic achievement and well-being
- 16 social-emotional learning skills
- Developed from Turnaround for Kids' *Building Blocks for Learning*

Why is it important?

- Align to development of a learner in an educational setting
- Impact college and career success
HABITS OF SUCCESS

Based on the Building Blocks for Learning Framework

THE 16 HABITS OF SUCCESS

INDEPENDENCE AND SUSTAINABILITY
- Self-Direction
- Curiosity
- Purpose

PERSEVERANCE
- Resilience
- Agency
- Academic Tenacity

MINDSETS FOR SELF AND SCHOOL
- Growth Mindset
- Self-Efficacy
- Sense of Belonging
- Relevance of School

SCHOOL READINESS
- Self-Awareness
- Empathy/Relationship Skills
- Executive Function

HEALTHY DEVELOPMENT
- Attachment
- Stress Management
- Self-Regulation

HABITS OF SUCCESS IN ACTION

Blackstone Valley Prep High School | Cumberland, RI
Albert Bandura reveals his robust theory on the cognitive and social factors that affect human motivation.

Elizabeth Cohen and Rachel Lotan blend theory with effective teaching strategies for group work, emphasizing multiple ability and bilingual classrooms.

Daniel Goleman introduces model for emotional intelligence encompassing five skills, which include self-regulation and empathy.

Carol Dweck explains how to leverage mindset to better fulfill individual potential.

David Conley sets forth the Cognitive Skills, Content Knowledge, and "habits of mind" necessary for high school students to be college ready.

Arthur Costa and Bena Kallick present a guide for shaping schools around 16 habits of mind.

Teresa Amabile identifies the leadership traits and environmental forces that elicit more productive and happier employees.

Camille Farrington et al. (University of Chicago Consortium in Chicago School Research) link non-cognitive skills with higher student achievement.

Ron Berger et al. advocate for self-directed learning and student-engaged assessments.

Angela Duckworth and David Yeager discourage use of evaluative assessments for social-emotional skills.

K. Brooke Stafford-Brizard's Building Blocks for Learning framework integrates social and cognitive pathways for optimal development.

Trevor Fronius et al. (WestEd) answers questions about restorative justice as a favorable approach to school and student discipline.

David Osher et al. (AIR) present a comprehensive case for student-centered, individualized classrooms and schools.

The research behind habits of success: 30 years of formative influences on our approach and model.