Applying ACT Holistic Framework to Improving Evaluation and Assessments



Pawan Adhikari and Changhua Rich India-ATP Presentation New Delhi, November 30, 2018



India Higher Education and Skills Gap

- Rapid increase in college students enrollment in the past decades
- College graduates are not ready for employment
- Education system slow changing: knowledge, skills, curriculum, evaluation and assessment
- Technological advancement fast changing: big data, artificial intelligence, cloud computing, automation
- Jobs become redundant; skills become outdated

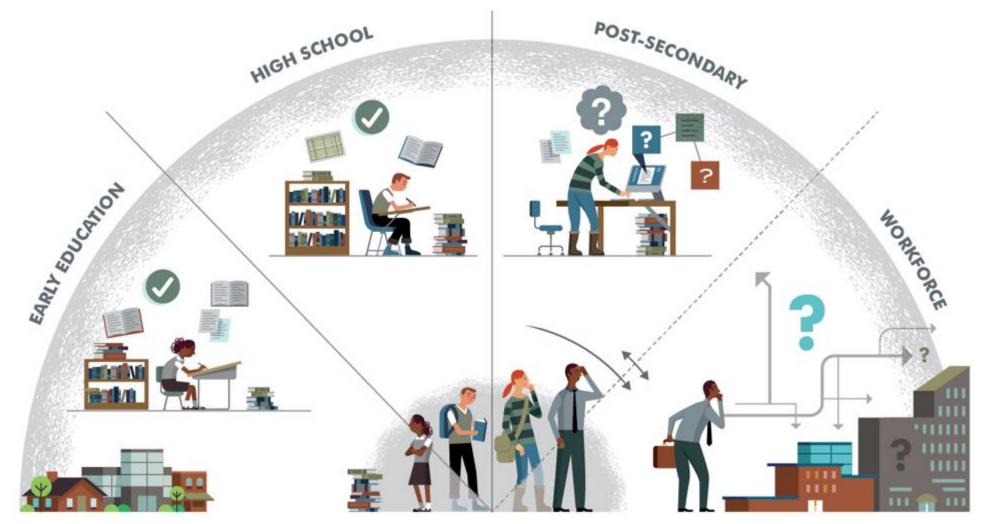


Engage Employers: Google and InfoSys

- Google Study: How to revolutionize the university to prepare students for a world in flux
- India Minister of Skills Development, InfoSys CEO, and World Economic Forum to convene top 100 companies to develop action plans to close the skills gap
- What can we learn from existing thought leader about exam transformation research?



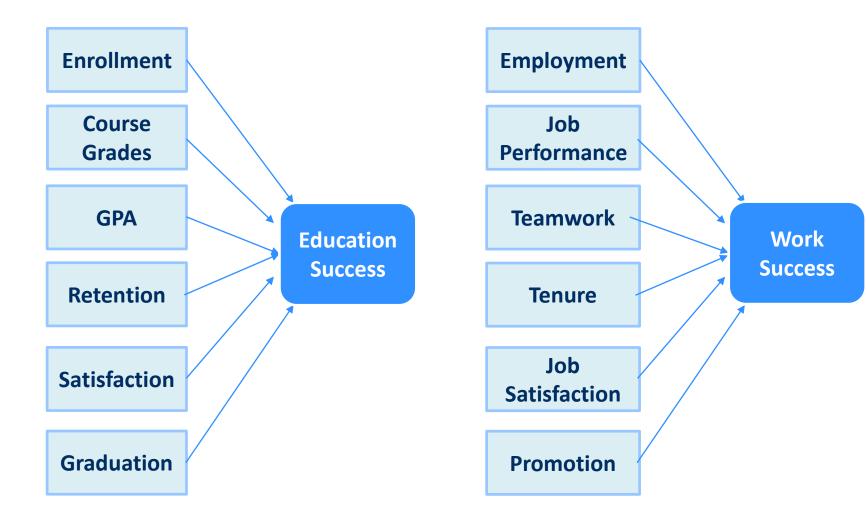
The Common Model: ELA and Math Is this model still useful for preparing students for success?





Success is Multidimensional

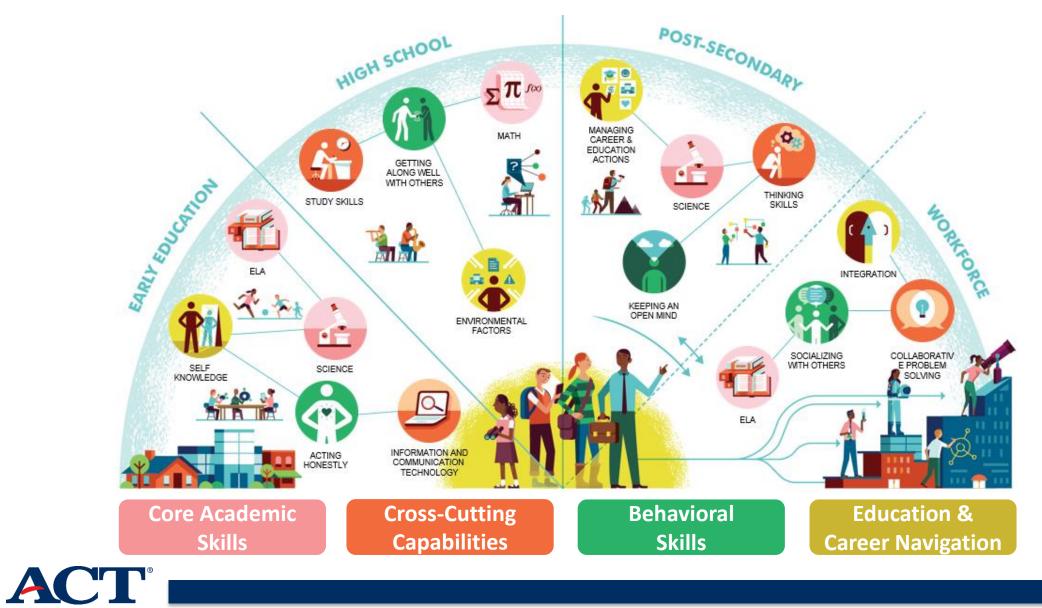
If success is multidimensional, shouldn't readiness for school and work focus on a diverse set of knowledge and skills?

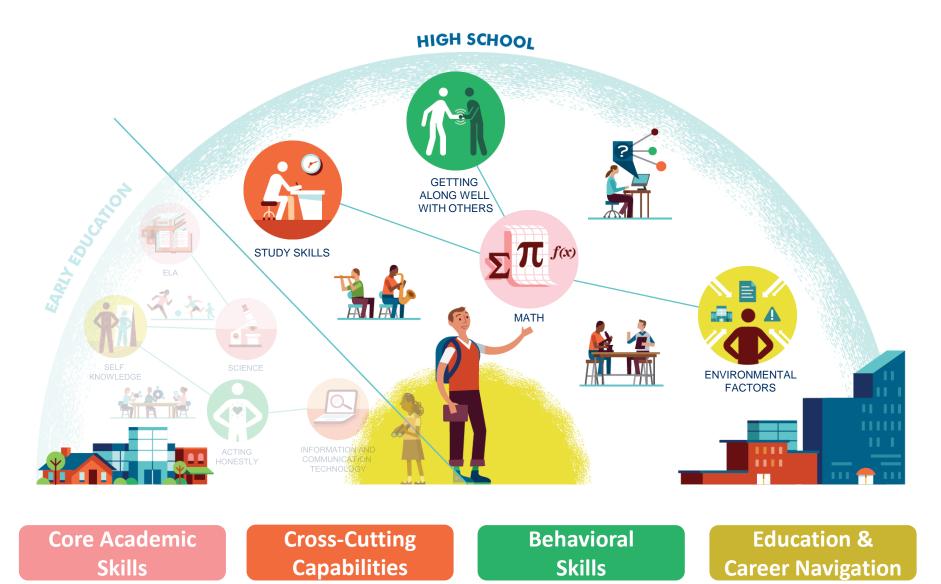




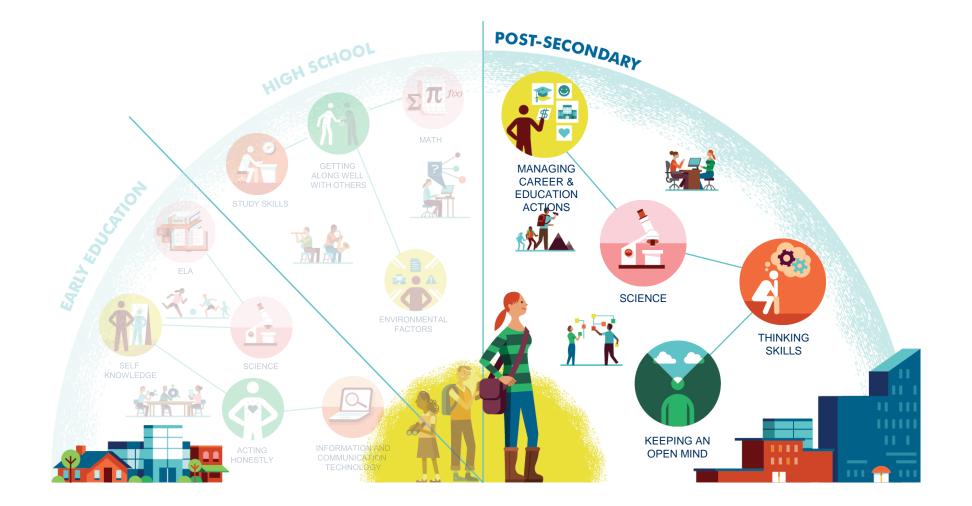
Beyond Academics:

ACT's Holistic Model of Education and Work Success





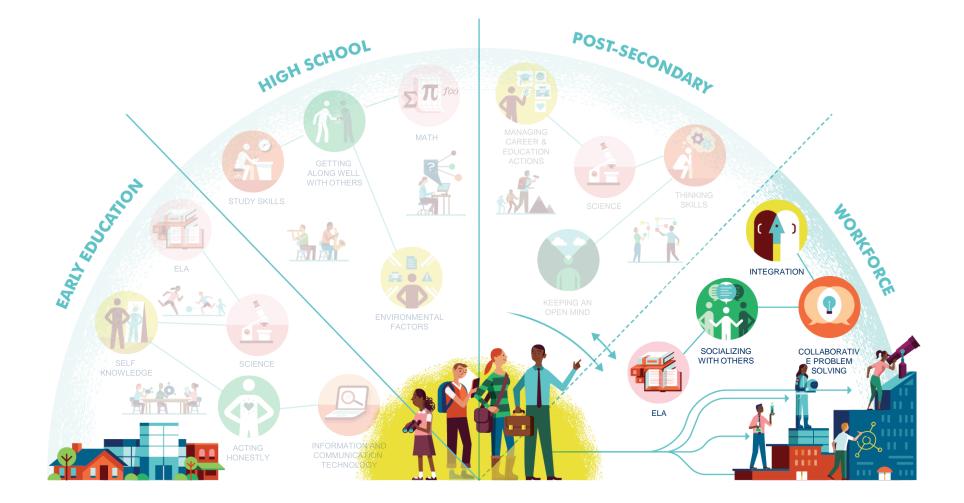




Core Academic Skills

ACT

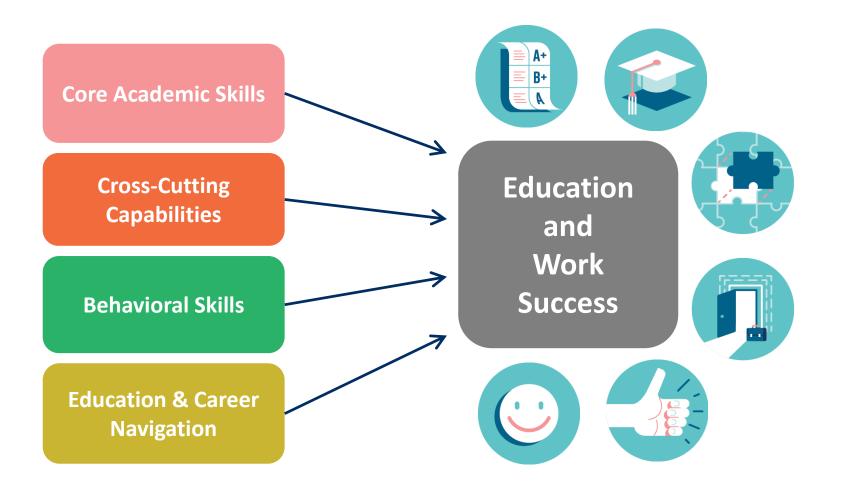
Cross-Cutting Capabilities Behavioral Skills Education & Career Navigation



Core Academic Skills Cross-Cutting Capabilities Behavioral Skills Education & Career Navigation



ACT's Holistic Model of Education and Work Success





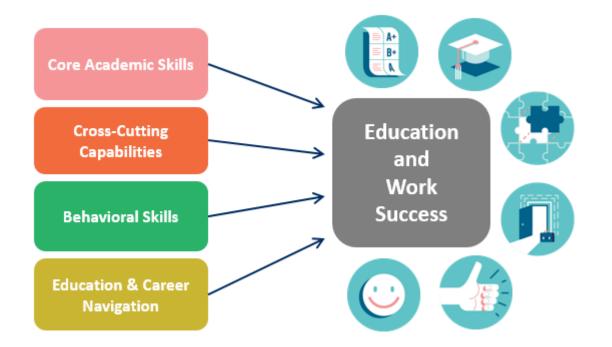
Advantages of ACT's Holistic Framework

- Comprehensive recognizes broad range of skills needed for college and career readiness
- Integrative has potential to organize personalized results and insights for users in a coherent way
- Actionable addresses the "so what?" (alignment to valued outcomes) and "what's next" (connecting current K&S to training)
- Developmental outlines progressive learning across key developmental and transition periods in K – career continuum
- Authoritative includes authoritative and research-based content



Core Academic Skills

Core Academic Skills: knowledge and skills necessary to perform essential tasks in core academic content.







English Language Arts: Literacy skills related to comprehension and capacity for use of written and oral language.



Mathematics: Relating and transforming numeric and symbolic quantities, including applications to data sets, patterns, space, and change.



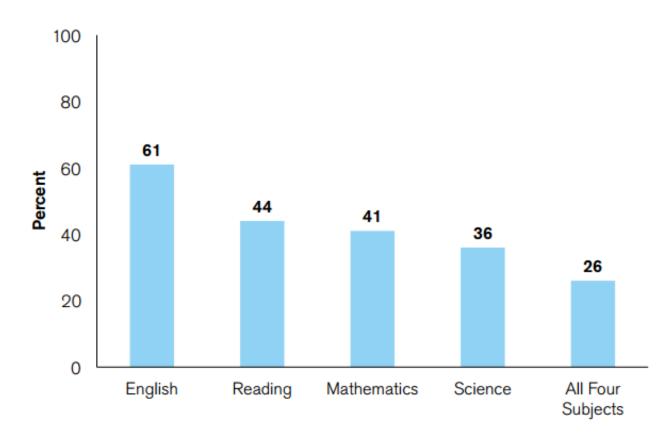
Science: Gathering and interpreting observations, experimental data, and disciplinary content knowledge in order to predict and explain phenomena.



Research on Core Academic Skills

Core Academic Skills

Percent of 2016 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Subject

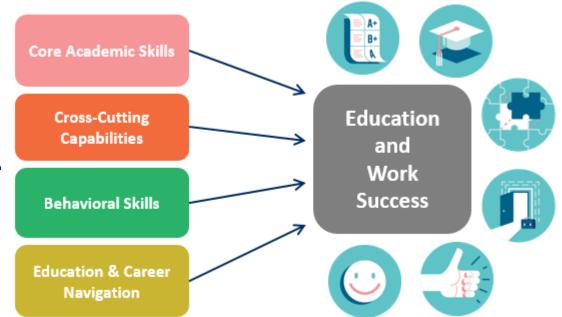




Cross-Cutting Capabilities

Cross-Cutting Capabilities:

general knowledge and skills necessary to perforr essential tasks *across* academic content areas.







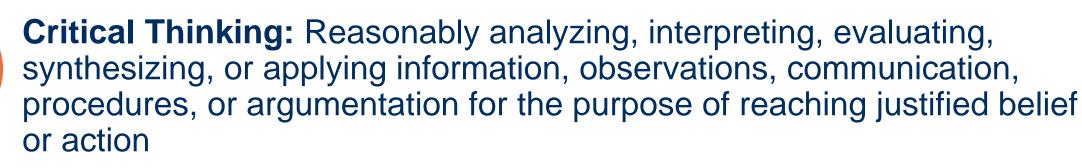
Collaborative Problem Solving: The skills necessary to use problem solving and behavioral strategies to collaborate with a group to solve a problem



Learning Skills: Strategies and methods to effectively facilitate and manage learning.



Information and Communication Technology: Technology knowledge and skills necessary to effectively acquire and apply information.





Research on Cross-Cutting Capabilities

- In a survey of post secondary instructors, respondents were asked to identify areas that, if weak, would be a barrier to success.
- Post secondary instructs rated the following skills *above content knowledge* in terms of their impact on success:
 - Learning Skills
 - Critical Thinking
 - Problem Solving
 - Conscientiousness (Behavior)
 - Creative Thinking (thinking and imagining)



Behavioral Skills



Acting Honestly: valuing and adhering to ethical and moral standards of behavior, as well as personal level of humility.



Maintaining Composure: working on staying calm, serene, and able to manage emotions effectively.



Getting Along Well with Others: interacting positively and cooperating with others; generally kind, friendly, and tactful.



Socializing with Others: preferred level of social interaction, behavior in interpersonal situations, and optimism.



Keeping an Open Mind: openmindedness and curiosity about a variety of ideas, beliefs, people, and experiences.



Sustaining Effort: developing diligence, effort, organization, self-control, and compliance.





Self-knowledge: Perceptions of one's own abilities, interests, skills, values, etc. that contribute to understanding the self.



Environmental Factors: Information, conditions, and experiences related to education and work acquired from external sources and surroundings.



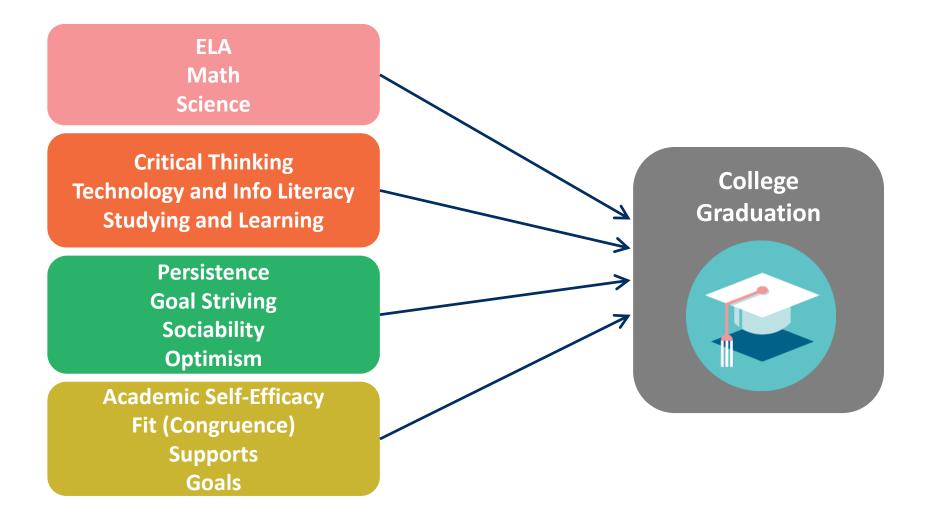
Integration: Ongoing process of combining self-knowledge and environmental factors to form personally-relevant knowledge to evaluate information and plan courses of action.



Managing Career & Education Actions: Ongoing process of implementing plans and enacting purposeful behaviors to facilitate education and occupation progress.



Example: ACT's Holistic Model of College Success





Current Applications of Holistic Framework

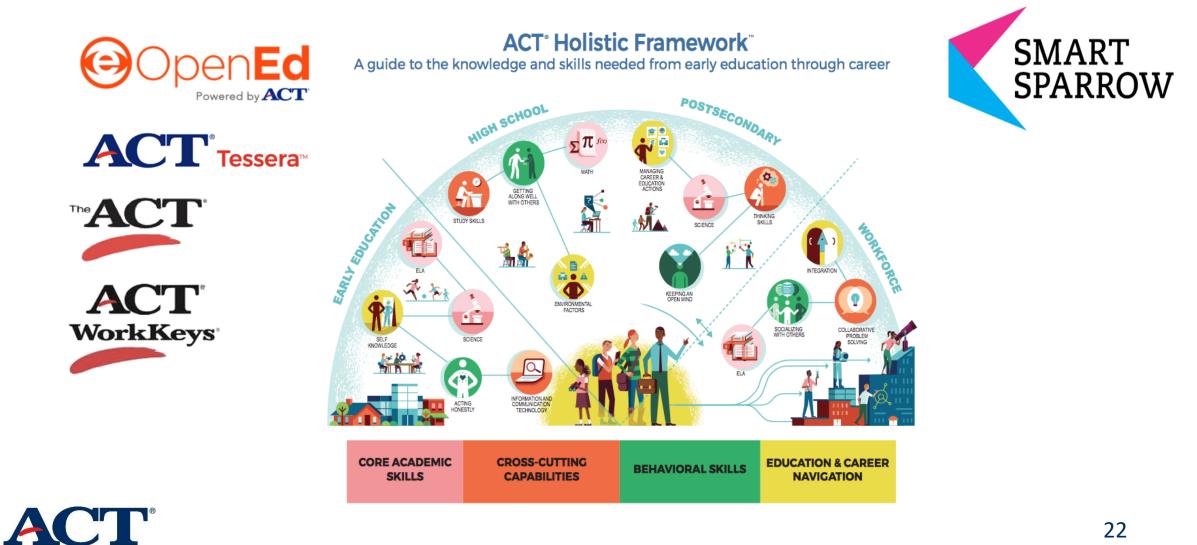
- Assessments
- Curriculum
- Interventions
- Serious educational games

Revamping Exam Standards!

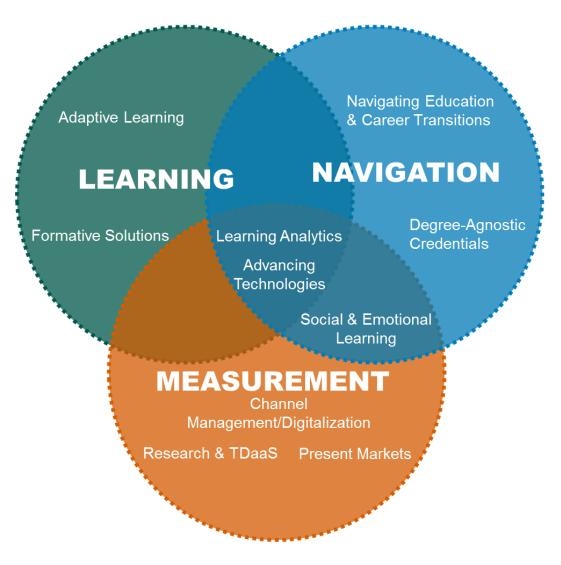


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ACT Transformation





Recap – Holistic Framework



Thank you!

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