Where There’s Will, They’re Away!

The Importance of the Conative Domain for First-Year College Success and Beyond

Professor Emeritus Tom Reeves
The University of Georgia, USA
The University of Georgia
Keynotes should:

• Challenge assumptions

• Raise questions

• Promote change
The End of College
Creating the Future of Learning and the University of Everywhere
KEVIN CAREY

“Thought-provoking, fascinating.” — The Washington Post

College (Un)bound
The Future of Higher Education and What It Means for Students
JEFFREY J. SELINGO
Editor at Large, Chronicle of Higher Education
• Learning
• Relationships
• Expectations
• Alignment
• Improvement
• Leadership
It’s all about student learning.
Four Troup Students
Fired 3 Stage Rocket

Recently, four Troup High Students, (Bryant Fuller, Willie Hart, Doug Mote, and Tommy Reeves), entered upon an extensive long range program of study in the field of rocketry.

Tommy Reeves and Doug Mote are involved in the study of the effects of rocket flight on the learning capabilities of white rats. On March 7, 1966 they launched a trained rat in a three stage rocket powered by three factory built solid fuel rocket engines. The rocket traveled at an average speed of 150 m.p.h. and reached an altitude of over 2000 feet. The rat was physically unharmed but the full mental effect has not been determined.

Willie Hart is engaged in the development of a remote control system. He hopes to be able to use a small radio transmitter, to direct the rocket in flight from the ground.

Finally, Bryant Fuller has been launching picture-taking rocket very successfully with the exception of the last flight in which the camera was smashed when the parachute failed to open.

These four boys are now collaborating on the development of their own fuels.
21st Century Learning Outcomes

– Accessing and using information
– Communicating across cultures
– Demonstrating effort and commitment to high quality work
– Applying rules and procedures
– Being creative
– Thinking critically
– Making sound judgments
– Problem-solving
– Life-long learning
– Exhibiting intellectual curiosity
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Traditional Learning Domains

- Cognitive
- Affective
- Psychomotor
Cognitive Domain

- Remembering
- Understanding
- Applying
- Analyzing
- Evaluating
- Creating
Cognitive Domain

What we say we value

- Creating
- Evaluating
- Analyzing
- Applying
- Understanding
- Remembering
Cognitive Domain

- Creating
- Evaluating
- Analyzing
- Applying
- Understanding
- Remembering

What we say we value

What we teach and assess
Affective Domain

- Receiving
- Responding
- Valuing
- Organization
- Characterization by Value Set
Psychomotor Domain

Non-discursive Communication

Skilled Movements

Physical Activities

Perceptual Skills

Basic Fundamental Movement

Reflex Movement
Unfortunately, most people ignore an entire domain of learning.
Conative Domain

• Will
• Action
• Self-determination
• Level of effort
• Mental energy
• Drive
• Striving
• Intention
Orexis: (Greek) Striving; desire; the conative aspect of mind

Aristotle
cognitive

affective

conative
Cognitive – Affective – Conative

- To know
- Thinking
- Thought
- Epistemology
- Knowing

- To desire
- Feeling
- Emotion
- Esthetics
- Caring

- To do
- Willing
- Volition
- Ethics
- Doing
Grit Scale

Angela Lee Duckworth

University of Pennsylvania
West Point Cadets

- Grit scale predicts retention more than:
  - high school rank,
  - SAT,
  - leadership potential rating,
  - physical aptitude,
  - and other measures
Grit

• Perseverance and passion for long-term goals.
• Strong predictor of the accomplishment of high-achievers in many fields.
• Not positively related to IQ.
“Grit is living life like it’s a marathon, not a sprint.”

~Angela Lee Duckworth
Do today’s entering students have sufficient Grit?
“The Net Generation has arrived... combining demographic muscle with digital mastery... who in profound and fundamental ways learn... very differently than their parents.”
“The technology that was supposed to make young adults more astute, diversify their tastes, and improve their minds had the opposite effect.”
The Myth of the Digital Native
24th Annual NMC Summer Conference
The Global EdTech Forum for Higher Ed, Museums, Libraries, and Schools
June 13-15, 2017 — Boston, Massachusetts
Students Say They Are Not as Tech Savvy as Educators Assume
TIME
THE
ME ME ME ME GENERATION
Millennials are lazy, entitled narcissists who still live with their parents
Why they’ll save us all
BY JOEL STEIN
In the 1950s, only 12% of young teens agreed with the statement “I am an important person” whereas by the late 1980s, 80% claimed they were important.
In 2002, 74% of high school students admitted to cheating whereas in 1969 only 34% admitted such a failing.
In the 1960s, 42% of high school students expected to work in professional jobs whereas in the late 1990s, 70% of high school graduates expected to work as a professional.
In 2004, 48% of American college freshmen reported earning an A average in high school whereas in 1968 only 18% of freshmen reported being an A student in high school.
Are today’s undergrads academically engaged?
• Work expectations for students:
  – 10-15 hrs. in class
  – 25-30 hrs. studying
- 20% study 5 hrs. per week or less
- 25% 6-10 hrs.
- 48% 11-30 hrs.
- 7% > 30 hrs.
what the best college teachers do
KEN BAIN
Knowledge is constructed, not received.
Mental models change slowly.
Teaching is about asking the right questions.
Learners must care.
How can we get students to care?
Create learning experiences wherein they grapple with the major challenges of our times.
The Race between Machine Learning and Human Learning.
Artificial Intelligence
The promise and the peril
Rise of the Robots

Technology and the Threat of a Jobless Future

Richard Susskind and Daniel Susskind

The Future of the Professions

How Technology Will Transform the Work of Human Experts
Christmas Fun with Electronic Robots

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35 CENTS

Hi-Fi from Your Ceiling • Long-Wave Set

Electronic Simulators Train Jetliner Pilots
Revolution in Egypt

Joe Klein: What the U.S. should do

On the Street: Hope meets anxiety

Muslim Brotherhood: What it wants

Oscars: Portraits of star power

FEBRUARY 21, 2011

Time

2045
The Year Man Becomes Immortal

BY LEV GROSSMAN

*If you believe humans and machines will become one, Welcome to the Singularity movement
Rise of the Robots
Technology and the Threat of a Jobless Future

Martin Ford
THE SECOND MACHINE AGE
WORK, PROGRESS, AND PROSPERITY IN A TIME OF BRILLIANT TECHNOLOGIES

ERIK BRYNJOLFSSON
ANDREW MCAFEE
Ideation
Broad-frame pattern recognition
Complex communication
We must design authentic learning opportunities that require more of students.
GO AUTHENTIC!
Authentic contexts
Authentic tasks
Expert performances
Multiple roles and perspectives
Collaborative construction of knowledge
Reflection
Articulation
Coaching and scaffolding
Authentic assessment

Authentic learning design principles
Undergraduate Engineering Education
Five Intro Engineering Courses
Failed to think like engineers
Authentic learning design principles

- Authentic contexts
- Authentic tasks
- Expert performances
- Multiple roles and perspectives
- Collaborative construction of knowledge
- Reflection
- Articulation
- Coaching and scaffolding
- Authentic assessment
Taking on a realistic role → Member of Mars Mission Team
Authentic tasks

Doing real-life tasks

• Get to Mars
• Establish base
• Develop power source
Access to expert performances
Multiple roles and perspectives

- Communications
- Construction
- Research
Collaborative construction of knowledge
Articulation
Coaching and scaffolding
Authentic assessment

Individual or Group reports on authentic tasks

Participation in Discussion Forum

Formal staff briefings

Peer and expert review

Real and computer-based artefacts

Learning Diaries
High levels of engagement AND positive learning outcomes

- Enhanced problem solving
- Richer mental models
- Improved communication skills
- Enhanced research skills
- Better team skills
- Commitment to good work
First-Year Authentic Projects
How else can we support conative growth?
DARING TO LEARN HOW TO LEARN

https://pursuit.unimelb.edu.au/articles/daring-to-learn-how-to-learn
Failing Well Program

Certificate of Failure

Be it known that __________________, is hereby certified to screw up, bomb or otherwise fail at one or more relationships, hook-ups, friendships, emails or texts, papers, exams, classes, extracurricular activities, or any other choices or decisions associated with college herein wherefore and forevermore...and still be a totally worthy, utterly excellent human.

DATE

FACILITATOR
The Resilience Consortium
CLASS OF 2025
HOW THEY'LL LEARN AND WHAT THEY'LL PAY

BY JON MEACHAM
We tell our children they can be anything they want to be.
Perhaps we should tell them they can be anything they want to be only if they have grit.
53% of Recent College Grads Are Jobless or Underemployed—How?

By Jordan Weissmann

A college diploma isn't worth what it used to be. To get hired, grads today need hard skills.
Committee on Australian Universities Report of 1957

Sir Keith Murray
Murray review gave 7 reasons for individuals’ inability to progress through higher education:

• inadequate preparation,
• the different learning environment,
• higher standards of assessment
• the teaching ability of lecturers,
• lack of student engagement,
• the pace and quantum of learning, and
• high student staff ratios.
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• inadequate preparation,
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60 years later, we can do better.
Enhancing conative drive requires:

- Authentic tasks
- Problem-based learning
- Project-based learning
Don’t waste Your life.

“Go Authentic!”
Thank You!

Tom Reeves, The University of Georgia
treeves@uga.edu, www.evaluateitnow.com