Integrating Essential Skills into General Education

2019 Community College Round-up

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Topics

• Purpose of General Education (role in *Student Success*)
• Instructional goals: integration, transparency, transferability
• Sample critical thinking assignment
What is the primary purpose of general education?

- To assure a breadth of content learning (liberal arts ideal)
- Disciplinary introduction or foundation for degrees
- To make it challenging to graduate on time?
- Development of transferable skills
- Priority of the new state model
Skills-Centered

Six content areas

Communications

Mathematics

Science

Social & Behav. Sci.

Humanities

Creative & Fine Arts

Five Essential Skills

Communication

Critical Thinking

Information & Digital Literacy

Personal & Social Responsibility

Quantitative Reasoning
General education and student success

GE courses comprise one-half of a 60-credit associates degree...

GE courses are a key component of most students’ initial academic experiences at NMSU

• Students should know the purpose and value of our GE program!
• Goal today: provide a framework for communicating GE’s purpose
Opportunity!

General Education Reform:
• Emphasis on broad, transferable “essential skills”
• Institutional flexibility

NMSU LEADS 2025
• Enhance student success...
• Promote social mobility...
• Close the achievement gap...

2016  2017  2018  2019  2020
Measures of student success and social mobility

- Retention and degree completion
- Career attainment
- (small) Achievement gaps
- Social Mobility Index
- Etc.

Characteristics of a successful student/graduate?*

Transferable competencies
- Cognitive
- Intrapersonal
- Interpersonal

GE Essential Skills

Benefits of learning in multiple/varied contexts

- Groups A and B practiced as shown
- When tested later on a bucket 3 ft away, group B did best by far

"... varied practice ... improves your ability to transfer learning from one situation and apply it successfully to another."

**Instructional goals**

- *Integration not decoration.* Disciplinary context is vital
- *Transparency.* Students must know our learning objectives
- *Transferability.* Teach for "deep" (transferable) learning

"Decoration"
Integrating essential skills instruction into GE courses

1. Review GE Certification documents (available by request, see handout).
   a. Narratives
   b. Sample Assignments/Assessments
**Example narrative excerpts: Critical Thinking in BIOL 111G**

- Problem sets are ... based on *real-life situations (e.g. an authentic and scientifically-relevant problem)* that can be *grounded in a course-specific scientific topic*.

- Information is routinely provided to students in the form of data (raw or presented in charts and graphs). This provides students opportunities to practice their *data graphing, interpretation and evaluation skills*.

- *Students identify the key problems or questions.* Students then *draw a conclusion* based what they have evaluated and make *evidence-based recommendations*. 
Integrating essential skills instruction into GE courses

1. Review GE Certification documents (available by request, see handout)
2. Consider ways the skill components are already represented in your class... make the connections transparent to students.
Course description and student learning outcomes (SLOs) reflect discipline-specific skills and content.

State GE certification is based on how transferable essential skills are taught in this **disciplinary context**.

You may add “essential skill” learning outcomes that are not included in the NM CNS.
Integrating essential skills instruction into GE courses

1. Review GE Certification documents (available by request, see handout)
2. Consider ways the skill components are already represented in your class... make the connections transparent to students.
3. Develop new assignments as needed
BIOL 111G Example Assignment

• Analyze the assignment summary on the handout (Q. 2)
• Identify whether/how the assignment addresses each component of the critical thinking skill
Integrating essential skills instruction into GE courses

1. Review GE Certification documents (available by request, see handout)

2. Consider ways the skill components are already represented in your class… make the connections transparent to students.

3. Develop new General Education assignments as needed.
How we teach matters!

From NMSU LEADS 2025, our goal is to be a “Recognized leader in serving diverse students and eliminating achievement gaps”

• Currently, achievement gaps for our students mimic those that are ubiquitous in higher education nationwide

• Student success depends on a variety of cognitive and non-cognitive factors, i.e., on the transferable competencies discussed above

• Closing those gaps likely will require us to reconsider how we teach
How we teach matters!

Students prefer study strategies that...
  o give the illusion of mastery
  o don’t really help them learn

**Preferred Student Strategies (Survey Results)**

- Rereading notes or textbook (55%)
- Do practice problems (12%)
- Rewrite notes (12%)
- Use flashcards (6%)
- Memorize (6%)

Listening to a lecture or reading a textbook gives students a false perception of mastery.

Karpicke et al., Memory, 17, 471 (2009)
How we teach matters!

Students prefer study strategies that...
- give the illusion of mastery
- don’t really help them learn

Do we (faculty) prefer teaching strategies that...
- give the illusion of students’ mastery?
- don’t really help students learn?

Let’s find out what works! (Formative assessment)

Farrington, C.A. et al. (2012). *Teaching adolescents to become learners: The role of noncognitive factors in shaping school performance.*
Mindsets and Student Agency

Mindsets: “Beliefs” found to significantly influence student behavior, outcomes, and motivation

Belonging Mindset
“I belong in this learning community”

Growth Mindset
“I can change my ability and competence through effort”

Relevance Mindset
“This work has value and purpose for me”

Self-Efficacy Mindset
“I can succeed at this”
Student success depends heavily on non-cognitive factors.

Quality course design and instruction reduces achievement gaps.

Farrington, C.A. et al. (2012). Teaching adolescents to become learners: The role of noncognitive factors in shaping school performance.
Resources for GE Instructors

http://gened.nmsu.edu/Resources:

• *Introduction to teaching GE Essential Skills*, a 75-minute workshop, will be offered this fall. Dates TBD or by request.

• Certification documents are available for review. These include narratives on teaching of essential skills and sample assignments.

• (planned) A library of assignments for teaching and assessing essential skills is being created