Critical At-Risk Behaviors that Impact College Success

from Horton, J. (2015) Identifying at-risk factors that affect college student success. *International Journal of Process Education, 7*(1).

PERSEVERANCE

Lacks Self-Discipline
Easily distracted by social situations & opportunities for immediate gratification, putting off critical work

Procrastinates
Puts off all work that doesn't need to be done immediately

Irresponsible
Blames others for personal faults or failures; relies on others to make their decisions (helicopter parents)

Afraid of Failure
Shies away from situations where expectations are challenging & the probability of meeting them is low

No Sense of Self-Efficacy
Often feels overwhelmed, powerless, and/or victimized; "There's nothing I can do to change things"

ACADEMIC MINDSET

Financial Constraints
Often runs out of money; doesn't appreciate opportunity costs (e.g., getting a job to obtain more money means less available time for things like school)

Unmotivated
Listless and disinterested, finding little meaning in current activity and work

Aimless (No Clear Direction/Goals)
Deals with life reactively, hoping and wishing for change, but never planning or working for it

1st Generation College Student
Uses high school experience as the basis for setting expectations for college (parents are unable to provide a frame of reference for a realistic college experience)

Fixed Mindset
Accepts current performance level as permanent; lives up/down to projected performance/labels (e.g., "C-student")

LEARNING STRATEGIES

Teacher Pleasers
Constantly seeks direction from authority/teacher in order to please them; uses compliments to make the teacher happy and generous with grades (i.e., brown nosing)

Unchallenged (bored)
Feels that the learning challenges are far beneath their level of ability

Memorizes Instead of Thinking
Sees knowledge as sets of facts and data that should be memorized

Doesn't Transfer/Generalize Knowledge
Approaches each learning challenge as new & unique; fails to recognize old knowledge in new contexts

Highly Judgmental/Negative of Self
Constantly self-critical, seeing only mistakes and failures; not appreciating growth or improvement

Minimal Metacognitive Awareness
Unaware of one's own thought process; cannot articulate the process/approach to making decisions/solving problems

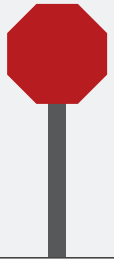
SOCIAL SKILLS

Non-Team Player
Disrupts groups, becoming either antagonistic/argumentative or silent (disengaged)

Insecure Public Speakers
Afraid of speaking in public; avoids speaking out in class

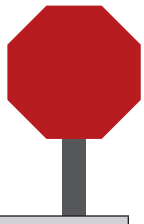
Lacks a Support System
Does not engage with others to address current or future social/psychological challenges; engages in negative behaviors (e.g., alcohol or drug abuse, violence, crime, etc.); "I'll solve my own problems"

Lacks Mentors/Role Models
Has no one from whom to seek advice or who could assist with career direction and educational goals



Risk Factors Specific to ENGINEERING

This set of risk factors is built upon the scholarship of general collegiate risk factors. We focused on the risk factors that would have the greatest negative impact on the success of ***engineering*** students. (In other words, students who would be successful in college, unless they were majoring in engineering.)



Risk Factor	*Description*
Struggles with Mathematics	*Inability to comprehend mathematical relationships, especially the why behind the mathematics related to understanding the functional behaviors*
Memorizes Instead of Thinking	*Sees engineering knowledge as a set of memorized rote processes/ algorithms that, with practice, can be temporarily retained to be reproduced on exams*
Doesn't Transfer or Generalize Knowledge	*Approaches learning new engineering as a unique challenge and fails to recognize and use prior knowledge because they have not previously generalized the knowledge*
Trouble Reading Engineering	*Students who can't prepare for class by reading their textbooks, leaving faculty with little choice but to take class time to explain the information*
Managing Frustration and/or Anxiety	*Inability to address past failures, accept negative feedback, or take on future challenges without being overwhelmed by emotions*
Minimal Problem Solving Experience	*Students have minimal experience in solving multiple step engineering problems in new situations with multiple pieces of knowledge*
Isolated Learner	*The student tries to go it alone because they are uncomfortable in re-lating with others, especially in groups; isolation worsens as they get further behind*
Fixed Mindset	*Accepts current performance level as permanent; if their transition to college is smooth and they start getting Cs and Ds, they believe they're doomed (instead of believing they can persist and succeed)*
Concrete Thinker	*Unwilling to let go of specifics in a situation/environment in order to focus on just the essence or what really matters*
Confused About the Engineering Discipline	*Their image of an engineer is that of a technician rather than an engineer*