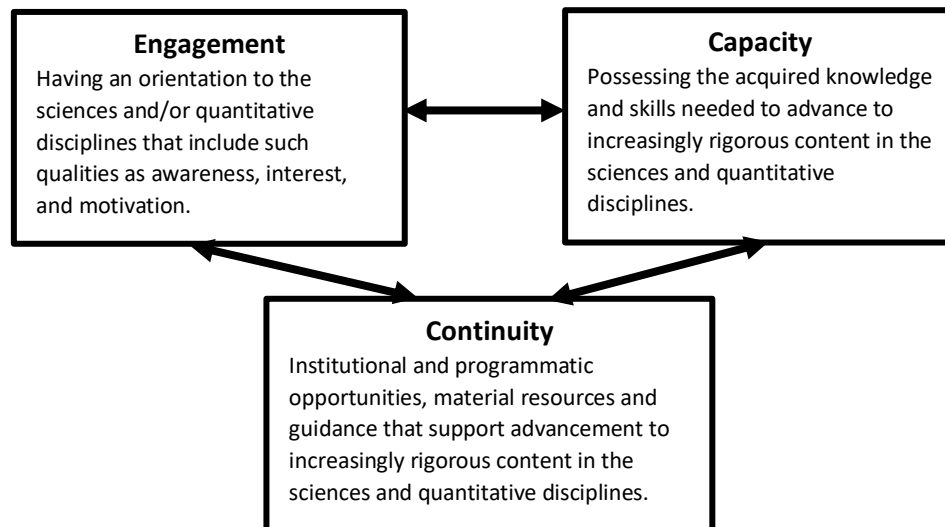


# Jolly Trilogy Model

From Doser presentation: [https://serc.carleton.edu/integrate/workshops/twp\\_support\\_students/index.html](https://serc.carleton.edu/integrate/workshops/twp_support_students/index.html)

Summary prepared by Gary Weissman for the 2019 Earth Educators' Rendezvous

The Jolly et al. (2004) Trilogy model describes a support system that has been used to help all students thrive in academic programs in STEM, and it has been found to be especially helpful for students from underrepresented minorities. The model consists of three interlinked strategies – Engagement, Capacity, and Continuity. Many programs address one of these strategies, but Jolly et al (2004) and Campbell and Jolly (2014) found that all three must be present to support students.



## Engagement:

- Behavioral (relevance to social circumstances).
- Emotional (fun, intriguing, intellectually rewarding).
- Cognitive (willingness to master complexity, sense of when something has been mastered).
- Vocational (fulfilling long-term aspirations)
- Belief or confidence in ability to pursue STEM
- **How to increase:** include socially relevant activities (outreach, service learning), career counseling, alumni interactions.

## Capacity:

- Logical-mathematical skills
- Spatial skills
- Naturalistic skills (recognize and classify objects)
- Linguistic skills
- Becoming a life-long learner
- **How to increase:** allow students to demonstrate what they know and can do; include teamwork; open-ended questions; less emphasis on speed/timed exams; provide hands-on, real-world experiences.

## Continuity:

- Pathways or systems with resources for advancement.
- Structure needed for a student to flourish
- **How to increase:** make aware of required higher-level courses; what they need to do to position themselves for career or 4YC; opportunities for scholarships, internships, financial support, tutoring, counseling, and other support systems.

## References

Campbell, PB, and Jolly, EJ, 2014, Ten years of engagement, capacity and continuity: Reflections on a trilogy for student success. Creative Commons.

[https://d32ogoqmya1dw8.cloudfront.net/files/integrate/workshops/twp\\_support\\_students/trilogy-10-year-reflection..pdf.pdf](https://d32ogoqmya1dw8.cloudfront.net/files/integrate/workshops/twp_support_students/trilogy-10-year-reflection..pdf.pdf)

Jolly, EJ, Campbell, PB, and Perlman, L, 2004, Engagement, Capacity and Continuity: A Trilogy for Student Success, GE Foundation,

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