

Social Integration in an Academic Community: Metacognition and Cross-Campus Collaboration

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Introduction

Articulating our campus goal to raise student retention rates, the Chancellor cites a key finding of local and national research: students leave in large part because their experience teaches them that no one on the campus cares about them (“Student Success”, n.d.). Joshua Firestone’s white paper also addresses this issue, citing the results of the campus climate survey and the Chancellor’s response to it (Firestone, 2017). This finding should not surprise us, because students are human beings with profound social and emotional needs. Any proposal claiming to offer a blueprint for our Academic Future must foreground this fundamentally *human* foundation of our educational endeavor.

Students who don’t connect socially are much less likely to persist to graduation. Students who don’t connect their core academics to their social worlds are much less likely to succeed.

As we re-think the university and the needs of students, now and in the future, there is a single concept that can be easily incorporated into courses, advising, and collaborative processes that makes all the difference for CU students and those of us working with them. This strategy is *metacognition* and the vehicle is *self-reflection*.

Metacognition – thinking about thinking – can help students understand themselves as learners, critical thinkers, and, increasingly on campus, learning assistants and researchers in their own right. It is inquiry-based learning at its most personal. We argue that metacognitive practices create positive relationships between and among faculty, advisors, other mentors, and students.

Metacognition

Activities that support metacognition reflect on two critical areas: a student’s understanding of their own learning processes and a student’s sense of purpose and belonging. SUEP and SASC courses integrate both types of metacognitive practices. These include journaling, silence for reflection, interviewing, storytelling, and mindfulness practices designed to help students engage with their motivation and sense of purpose in an academic environment, as well as directing students to understand how they are engaging with course materials and instruction in learning strategies tailored to each course. Key elements of metacognition include asking open-ended questions, being curious about one’s experience, and seeing the self as not just the subject, but as the *object* of study.

Pedagogy

Direct instruction in both types of metacognition builds capacity in academic skills and learning strategies. While many social science and humanities courses include reflection as part of the learning process, these strategies are not often included in STEM coursework, despite evidence that a focus on

students' ability to monitor their own learning processes improves outcomes for STEM majors. For example, successful interventions in chemistry (Zhao, 2014), biology (Stanger-Hall, 2012), and physics (Taasobshirazi, 2013) show improvement in student engagement and motivation, indicating that a shift in pedagogy beyond course content is required to retain students in STEM fields.

Metacognition also plays a pivotal role in developing a more equitable campus climate. Dr. Sandra McGuire visited the CU campus this fall as part of the Office of Diversity, Equity and Community Engagement's inclusive excellence project. In her workshops on teaching students how to learn (McGuire, 2015), she indicates a direct relationship between metacognitive practices and exam performance for many students. Based on her work, CU-Boulder's CHEM 1113 (a gateway course taken by first-year students) incorporated metacognitive reflections in its large lecture section this fall semester. Students report that they enjoy and benefit from these activities. If students sense that faculty are interested in their learning process and invested in their academic growth throughout the semester, they are more likely to visit office hours and continue developing that relationship.

Advising

In advising relationships, metacognitive questions that draw students' attention to their own values, goals, and funds of knowledge not only communicate care for and interest in students as whole people, but also help students understand themselves as learners, thinkers, and practitioners in a field, both within their chosen major and in the professions to which they aspire. In the context of what Baxter Magolda and others call "self-authorship" — a lifelong process that resonates strongly during the college years — metacognition is absolutely essential to student and human development (Magolda, 2007).

Recommendations

As practitioners in long-standing learning communities on campus that engage undergraduate students across all four quartiles of academic performance and socio-economic standing on this campus, we have learned the value of focusing on metacognition and self-reflection throughout our work with students in the classroom, in the advising relationship, and in co-curricular community events.

Specifically, we recommend the following:

- Encourage the incorporation of metacognitive practices for students in all classrooms by training faculty and staff on these practices, particularly those interacting with freshmen.
- Encourage the incorporation of metacognitive practices for faculty by training faculty on self-reflection for assessment purposes.
- Adopt Lisa Severy's white paper proposal to add career exploration to the core curriculum, because for most CU students, career development is central to their decision to pursue and complete an undergraduate degree; incorporating this as part of the academic core assures students that we respect and support their goals (Severy, 2017).
- Build a library of reflective practices for anyone in an advisory position to use in their appointments with students, and encourage those advisors to employ strategies which address the whole student.

- Invest in a teaching and learning center which facilitates cross-collaborations. The center could host workshops, store a library of best practices, support faculty self-assessment, and create communities of practice such as a faculty scholar’s groups or inclusive excellence practitioners.

Collaborations

Academic Affairs & Student Affairs

One of the great divides at the university is exemplified by the titles of its two student-centered communities of practice: *Academic Affairs* and *Student Affairs*, as if any student needs were strictly *non-academic*. Because metacognitive practice addresses the whole student, it has the power to ease the barriers between these two units whose collaborative support of undergraduate students is essential to holistic definition of academic success and personal well-being.

Students move through their CU experience in connection with their family members, workplace colleagues, and social networks – parallel worlds in which they find and make meaning that interacts with their primary role as learners engaged in academic study. SASC and SUEP have developed co-curricular events, including extended first-year orientations, that provide occasions for students to integrate these parallel worlds through self-reflection. Specifically, infusing self-reflection into both academic and co-curricular programming contributes to an integrated student experience.

Faculty & Staff

Students need mentors and coaches in many crossroads moments at CU, and training all of us to ask the right kinds of questions, and to build occasions on which students can engage one another in meaningful self-reflection and community-reflection, encourages greater collaboration between faculty and staff toward achieving social integration of students into the learned work of the university.

Emphasizing the importance of metacognition and self-reflection can also facilitate faculty and staff to reflect on their own practices geared toward better outcomes for students. The university has invested resources to develop a culture of teaching improvement through evidence-based formative assessment, but faculty resistance to assessment when tied to promotion and tenure outcomes, signals the need to redirect our efforts to improving learning outcomes.

Self-reflection, in which faculty themselves own the tools and data of assessment (Martin et al, 2017), in which their own goals and values are central to the project, will move our teaching culture more quickly and more authentically in the direction of student success.

Citations

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