60-Second SoTL

Episode 9 – Undergraduate Research and Student Well-Being

(Piano Music)

00:03

Jessie L. Moore:
How does engaging in authentic, mentored undergraduate research contribute to student well-being? That's the focus of this week's **60-second SoTL from Elon University's Center for Engaged Learning**. I'm Jessie Moore.

00:15

(Piano Music)

00:18

In "How does engaging in authentic research at undergraduate level contribute to student well-being," published as an open access article in *Studies in Higher Education*, Helen Walkington and Belinda Ommering draw on both a framework for authenticity in research-based learning and Self-Determination Theory to explore how mentored undergraduate research embedded in the curriculum can promote student well-being.

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Walkington and Ommering focus on Wald and Harland's 2017 framework for authenticity in research-based learning to highlight key elements of mentored, authentic undergraduate research that contribute to student well-being. Authentic undergraduate research relates to the real world, enabling students to experience knowledge production as they'll encounter it in their future professions. Second, it helps students develop self-identity through ownership of their research. Third, authentic undergraduate research fosters personal meaning as students explore questions important to them.

01:15

Drawing on Ryan and Deci's Self-Determination Theory, the authors discuss how eliciting and sustaining intrinsic motivation can foster well-being. Intrinsic motivation requires autonomy, a feeling of competence, and relatedness – or connections with others.

Walkington and Ommering suggest that authentic undergraduate research promotes autonomy by giving students a sense of ownership of their independent research. *Mentored*, authentic undergraduate research promotes competence as mentors validate students' mastery of research processes. And participating in undergraduate research as part of a research community promotes relatedness.

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Given the potential impact of mentored, authentic undergraduate research for student well-being, Walkington and Ommering advocate embedding it in the curriculum for every student, and they offer two examples of mentored, course-based research experiences from the Netherlands and the U.K.

The first focuses on a mandatory research course for first-year medical students at Leiden University Medical Center. Mentored by a clinician, academic, or graduate students, students formulate a question, gather data from real patients, and present their results.

The second example focuses on a multi-semester research project embedded in a three-year undergraduate honours degree in Geography at Oxford Brookes University. Students work in small teams to design their research, collect data, analyze the data, and write reports, which they can opt to publish in a journal article. They are mentored by advanced peers and faculty.

In both examples, students experience autonomy, competence, and relatedness with high-quality mentoring that supports intrinsic motivation, and in turn, well-being.

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The authors extend their discussion of authentic, mentored undergraduate research by exploring how Ommering and colleagues' twelve tips for designing course-embedded research-based learning, paired with the salient practices for effective research mentoring can enhance authenticity, thereby contributing to students' well-being. Learn more about the salient practices at www.CenterForEngagedLearning.org/salientpractices.

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To learn more about embedding mentored, authentic research experiences into the undergraduate curriculum, follow the link in our show notes to read the open-access article.

03:33

(Piano Music)

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Join us next week for another snapshot of recent scholarship of teaching and learning on **60-second SoTL from Elon University's Center for Engaged Learning.** Learn more about the Center at www.CenterForEngagedLearning.org.

03:49

(Piano Music)