

## 60-Second SoTL

### Episode 70 – Student Project Ownership in Vertically Integrated Projects

#### Featured Article

Wozniak, Kasey L., Anna S. Grinath, Heather J. Ray, and Devaleena S. Pradhan. (2025). “Cultivating Student Project Ownership: Recommendations for VIP Instructors.” *Scholarship and Practice of Undergraduate Research* 8 (3), 38-48.

#### Transcript

(Music)

0:10

**Jessie L. Moore:**

How can Vertically Integrated Projects—VIPs—be designed so students don’t just *participate* in research, but feel genuine ownership of it? That’s the focus of this week’s 60-second SoTL from Elon University’s Center for Engaged Learning. I’m Jessie Moore.

(Music)

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In “Cultivating Student Project Ownership: Recommendations for VIP Instructors,” Kasey Wozniak, Anna Grinath, Heather Ray, and Devaleena Pradhan examine how one biology VIP course supported undergraduates in developing project ownership—especially through agency, mentorship, and problem-solving. Their article appears in *Scholarship and Practice of Undergraduate Research*.

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The authors start from a well-established idea in undergraduate research: ownership matters. When students feel they can shape the work, they’re more likely to persist, build science identity, and envision future pathways. But access to traditional lab research can be limited by time, confidence, and structural barriers—so course-based research models are one way to expand opportunities. The twist here is that VIP courses—multi-semester, team-based research communities—have been studied less often than CUREs—course-based undergraduate research experiences.

This study focuses on a specific VIP course: VIP–Gene Regulatory Networks, or VIP-GRN, in a biology department at Idaho State University. These VIPs begin as 200-level courses with no prerequisites, and they’re advertised broadly—to science majors and undecided students—as a way to explore research. Students can continue across

semesters, and as they do, they “move up” in level: continuing undergraduates may progress into 400-level courses, and graduate students enroll at the 500-level.

VIP-GRN centered on a multi-semester research problem: understanding mechanisms related to phenotypic plasticity in a sex-changing fish. Importantly, the instructors—two faculty co-leads—were collaborating on a novel research problem that didn’t sit squarely inside one faculty member’s established lab pipeline. The authors suggest that this “not already owned” space may create room for students to feel like they can truly take ownership, rather than just contribute to a predefined faculty agenda.

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To study student project ownership in the VIP, the researchers used a case study approach spanning two semesters, fall 2023 and spring 2024, the third and fourth semesters of the course’s implementation. The researchers used semi-structured interviews with seven undergraduate students and both faculty co-instructors. The undergraduates varied in prior research experience, from none to a summer research program, and their time in VIP-GRN ranged from one to five semesters, which mattered because longevity is a core feature of the VIP model. Interviews with them focused on project ownership questions: What are you proud of? Did you have opportunities to make decisions? And so forth. Interviews with the faculty co-leads focused on course design evolution.

3:24

For analysis, the authors used ATLAS.ti to code interview transcripts. They began with a coding framework from Hanauer and colleagues’ 2012 work on project ownership in undergraduate research. That framework includes design elements such as:

- facilitating personal agency,
- supporting personal significance,
- ensuring scientific value,
- providing mentorship and social interaction, and
- engaging students in problem-solving.

But the team also coded openly for VIP-specific elements that emerged in the data—because VIP wasn’t part of the original Hanauer study.

Two researchers independently coded one-third of the interviews, resolved disagreements, and refined the codebook with clearer application rules. One researcher then coded the remaining transcripts while consulting on questions and clarifications.

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Three design features emerged as especially important for project ownership in this VIP.

First, the vertical structure: Because students enter at different points and stay for multiple semesters, roles shift over time. Newer students learn how the work is organized and find an entry point; continuing students start to anticipate what future teammates will need, and they create systems—like data organization and training

processes—that outlast them. Instructors even noticed students worrying about “who will carry the torch” when people graduate—an unexpected sign of emotional investment.

Second, research poster design and presentation in a supportive departmental setting: A spring poster session—designed as low-stakes—became a turning point. When a data collection instrument broke and lab work paused, the faculty offered students the option to present preliminary work. Students collaboratively drafted an abstract and poster structure. Both faculty and students described the poster process as strengthening shared purpose and helping students understand the larger project—not just their individual tasks.

Third, instructor flexibility to foster agency: The faculty described planning carefully—especially early in the semester—while still staying responsive to student interests and the reality of research. Flexibility wasn’t “anything goes”; it was structured through goals, reflections, and iterative planning based on student feedback. And that flexibility helped turn a setback into an authentic research move: shifting focus, making backup plans, and seizing an opportunity to communicate science publicly.

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So what does this mean for VIP instructors—or anyone designing multi-semester, team-based research courses? Be explicit that roles evolve: help students plan how they’ll move from learner to mentor. Build low-stakes opportunities to present—even early—because communication and synthesis can accelerate ownership. And design structures—like goal-setting and reflective self-assessment—that keep student agency at the center while still providing enough scaffolding for meaningful progress.

In short: when VIPs combine vertical mentoring, authentic circulation, and structured flexibility, students are more likely to say, “This is *our* project”—and mean it.

To learn more about this study, visit our show notes for a link to the article. In addition, the next episode of the Making College “Worth It” podcast features an interview with one of the study’s authors, Kasey Wozniak, so keep an eye out for that episode in early February 2026, wherever you listen to podcasts.

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Jessie Moore:

Join us for our next episode of 60-second SoTL from Elon University’s Center for Engaged Learning for another snapshot of recent scholarship of teaching and learning. Learn more about the Center at [www.CenterForEngagedLearning.org](http://www.CenterForEngagedLearning.org).

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