Dear Friends of the TILL,

In this edition of TILL Talk, we introduce you to the TILL’s 2022-23 Faculty Fellow, Dr. Abby Koenig. We also offer five strategies to increase diversity, equity and inclusion in your courses. From course design and grading to facilitating equitable class participation, small tweaks can promote student learning and build a welcoming classroom environment. Additionally, we recognize the 2022 TILL Innovation Award winners.

Meet the TILL Faculty Fellow

The TILL is delighted to welcome Dr. Abby Koenig from the College of Business as its 2022-23 Faculty Fellow! The TILL will support Dr. Koenig’s research project to revise
Increase Retention, Student Engagement and Belongingness

Whether you are designing a course for a future semester or seeking to further engage the students you have right now, these five ideas can help increase diversity, equity and inclusion for all learners.

1. **Choose course content that reflects a variety of perspectives and backgrounds.** Sometimes the canonical work of an academic discipline is limited in the number of identities it represents. Interrogate and expand the representation of identities in course materials as you choose textbooks and journal articles, while also considering how you can use videos, websites, blogs and digital multimedia sources. Including images of authors in PowerPoint slides to highlight their visual diversity will help make them more concrete to students.

2. **Be clear about expectations.** A description of an assignment can be strengthened when accompanied by indicators of success. Depending on students’ academic backgrounds, their assumptions about what constitutes quality work may vary widely. Help your students identify what
success in a course assignment looks like by providing rubrics with specific criteria that differentiate between “poor,” “fair” and “good” academic work. During class, model how you will use your rubric to assess a sample assignment. Posting anonymized examples of student work (with students’ permission) also helps to clarify expectations.

3. **Encourage multiple ways of engagement.** In face-to-face courses, speaking up may be difficult for some learners. Consider including **active learning strategies** like Minute Papers or Muddiest Point exercises where students write independently for one to five minutes in response to an open-ended question. These activities can help give a voice to students who are usually quiet in class.

4. **Engage with your learners as individuals first.** Experiences within any identity group are diverse such that no one person can act as spokesperson. Explicitly invite students to speak about their individual experiences and perspectives rather than on behalf of an entire group or on visible perceptions of identity.

5. **Create diverse groups.** Rather than allowing your students to decide, survey students prior to forming groups or use an idea line-up activity to ensure heterogeneity in factors that are relevant to a course’s learning objectives. Whether the factor is travel experience in a geography course, years of speaking a foreign language in a Spanish course, or demographic markers in a sociology course, separating students across groups can enhance learning for all. But, be sure to avoid isolating individual students from underrepresented identities within a team. Teams of three to five students are usually more inclusive and equitable than larger teams.

**Recognition**

**2022 TILL Teaching Innovation Award Winners**
We were so impressed by the response to 2022 TILL Teaching Innovation Award!

This award, now in its second year, offers individual recognition to instructors who explore new methods for fostering learning; grants winners $1,000; and provides the opportunity to share their work at the annual Celebration of Teaching and Learning Conference.

Read on for a summary of each winning innovation, and find additional information on the TILL Teaching Innovation Award webpage.

**Dr. Natalie Christian, Dr. Rachel Pigg, Dr. Mikus Abolins-Abols, and Dr. Jeffery Masters, Biology**

Teaching Innovation: Redesigning the Introductory Biology Laboratory Experience with Course-based Undergraduates Research Experiences (CUREs)
Course-based undergraduate research experiences (CUREs) expose a greater number and diversity of students to authentic, inquiry-based research. The core purpose of this team’s innovation was to redesign the introductory biology laboratory experience at UofL as a two-semester, sequential CURE. Now, learners conduct authentic research in molecular biology in their first semester, then connect their work to biodiversity and landscape ecology in the second semester. This teaching innovation models how authentic inquiry and research can be incorporated into the curriculum, even in large introductory courses.

**Dr. Danielle Franco, Chemistry**

**Teaching Innovation: Using Online Simulations and Virtual Reality to Teach Chemistry**

VR is a powerful tool to help students visualize and assimilate concepts in an innovative and engaging way. Dr. Franco recorded content for asynchronous classes using 3D models in VR to explain course components like atomic structure and covalent bonds. In addition to the recordings, she created her own virtual content and workshops online, where collaborative learning assessments offered students hands-on experience and practice by teaching each other the course content. This innovation serves as a model for how instructors across content areas can embrace virtual and augmented reality tools.

**Dr. David Johnson, Public Health and Information Sciences**

**Teaching Innovation: Operationalizing the Paul-Elder Model: Assessment and Evaluation Design to Develop Critical Thinking**

Dr. Johnson created the Intellectual Standards Rubric for Critical Thinking (ISRCT) from the principles of the Paul-Elder model for critical thinking. The rubric provides students with descriptions of behaviors that correlate with critical thinking and examples of how those behaviors are demonstrated when completing an assignment. Dr. Johnson integrated the rubric with Blackboard
so it can be deployed within minutes in any course, regardless of modality, discipline or assignment design. Once graded, students can click a link in their gradebook and review how they scored against each standard, all within a matter of seconds. This real-time feedback helps students remember which standards they demonstrated well and where they need to improve.

**Dr. Daniela Terson de Paleville, Health and Sports Sciences**

**Teaching Innovation: Flipped Classroom, Team-Based Active Learning with Immediate Feedback**

Dr. Terson de Paleville uses team-based active learning to teach her anatomy and physiology course using a 4-step model including (1) preparation, (2) in-class readiness, (3) assurance testing and (4) application-focused exercises. One example of a team-based activity is an assignment on glucose metabolism. Each team was provided with a box comprised of Lego bricks, coins, small toys, magnets and laminated labels. They built a model, identified different stages and enzymes involved in glucose metabolism and then created a five-minute video or podcast to discuss their work. Other activities used in this class include interactive pre-recorded lectures, warm-up quizzing games using Quizlet Live and Poll Everywhere, Visible Body Anatomy Atlas and the Visible Body Anatomy and Physiology.
Images illustrating models from Dr. Franco’s virtual reality simulations.