EDITORIAL

Letter from the Vice Provost for Undergraduate Academic Affairs, Dr. A. Dale Whittaker

In 1991, the organizational psychologist David Guest introduced the term “T-shaped” to describe a person who had depth of knowledge and skills in a particular area (the vertical bar of the T) and also had the ability to collaborate across disciplines and apply knowledge in several fields (the horizontal bar of the T). These are

the type of graduates that Purdue aspires to develop and that employers want to hire. One of the most consistent and powerful ways Purdue develops these “T-shaped” scholars is through guided research.

In this third edition of the *Journal of Purdue Undergraduate Research* you will find student authors who demonstrate a deep understanding of a topic—well beyond what is taught within a classroom. In the articles, you will recognize each author’s skill of communicating clearly and directly, discussing broader implications beyond the research question, exploring ethical and economic implications, and interpreting cultural perspectives on a topic. Indeed, students who research a question and publish their findings develop “T-shaped” characteristics.

Research also develops deep thinking skills. We know that learning facts and formulas is not enough in a world where publicly available information is exploding. Anyone can access information from across time and space. In that context the value of higher education is not to provide access to information, but to develop the skills to apply

those facts and formulas appropriately, to judge the sources and quality of information, to question claims and examine evidence, and to bring ideas from several disciplines together in new ways. In fact, JPUR authors have taken advantage of the best opportunities a research-intensive university can offer to develop the deep thinking skills that will advance them and knowledge: creativity, critical thinking, and disciplined investigation of a novel idea.

Research is a collaborative activity. Often research ideas emerge from wondering “why” aloud, arguing about a claim, noticing patterns, and bringing together diverse perspectives. This intellectual fermentation almost always happens in the presence of bright, inquisitive colleagues. The authors in this journal are intellectually responsible for their work. They are scholars. But the quality of their ideas, investigation, and writing benefited from many others, especially the mentors who are highlighted before each article, as well as the faculty advisory and student editorial board members listed at the back of the journal. The role of these mentors is to challenge, suggest, nudge, teach, test, edit, encourage, stretch, and co-create with the student researchers. This is how deeper thinking is learned. I deeply appreciate the faculty, staff, graduate students, and others who commit the time to this intense and demanding teaching style.

Research and learning are inseparable at Purdue. Research is learning, and research advances the boundaries of what can be learned and considered. I encourage every student at Purdue to engage in an undergraduate scholarly project like those highlighted in these pages—to develop as a person.

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