In his book *Creating Wicked Students*, Dr. Paul Hanstedt, Professor in the Department of English and Communication Studies at Roanoke College, provides the inspiration and tools for designing courses and instruction that help students gain the experiences, perspectives, and skillsets they need to engage the ‘wicked problems’ of the world when they graduate. You won’t believe me, but after adding his quote above, I found out he is leading a workshop at this year’s Conference on Higher Education Pedagogy (CHEP) here on campus in February. I can’t recommend the conference and his workshop enough!

Fortunately, from what I’ve seen so far, we are already offering some wicked learning opportunities: from poster sessions (p. 3) to virtual gallery openings to lightning talks and historical transcriptions (p. 2). Pathways instructors are ‘creating wicked students’ by offering purposeful, thought-provoking, reflective, and engaging learning opportunities… no matter the size of the course.

And the proposals keep coming! The Pathways Ad Hoc Committee, with support from the college curriculum coordinators and the Registrar’s Office, have approved over 300 courses and 13 minors to date (p. 5). As long as you keep bringing ideas forward for exciting courses and programs, we will provide the support through Pathways grants (now open, p. 4) and the Summer Institute, scheduled for June 5-6 in the New Classroom Building (p. 6).

In addition, we will do an even better job of capturing and celebrating great learning as we welcome senior International Relations and Public Relations double-major, Alexa Keeler, to our team. Read all about her on page 2.

So keep creating wicked students so they can keep finding pathways to change the world.

Stephen Biscotte
Director of General Education
VT Instructors Share Work at National General Education Conference

This year, Virginia Tech was well represented at the annual meeting of the Association of General and Liberal Studies (AGLS) in Pittsburgh, Pennsylvania, in September. Joining Dr. Stephen Biscotte at the conference were Dr. James Jewitt (CAUS) and Dr. Matthew Komelski (CLAHS), who presented overviews of the structure and objectives of the Visual Arts and Society Minor and the Disabilities Studies Minor, respectively. In addition, Dr. Trudy Harrington Becker (CLAHS), Dr. Eric Hogan (COS), and Dr. Ann-Marie Knoblauch (CAUS) led a panel session, “Bringing Active Learning to Introductory General Education Courses: 3 Different Content Areas, 3 Different Ideas” where they introduced the active learning assignments they are using in their introductory general education courses to increase student engagement, interaction, and learning.

Dr. Harrington Becker described how she has helped students make the old new again through historical transcription and commonplace book projects. Dr. Hogan explained how he has brought group projects and the lightning talk presentation format to his introductory biology course. Dr. Knoblauch showed how students engage in a virtual gallery opening to conclude her introductory art history course. Using pictures and student artifacts, these three amazing instructors showed that it is possible for students to engage in team-based projects in any discipline… at any size.

Undergraduate Education Unit Hires Student Program Assistant to Support Communications Efforts

This semester, Alexa Keeler, a senior working towards a dual-degree in International Relations and Public Relations with a minor in Spanish, was hired as a Student Program Assistant for Undergraduate Education. In this role, Alexa supports communication efforts both across the university and within the Undergraduate Education unit, which includes the Offices of General Education, First-Year Experiences, and Undergraduate Research. With respect to Pathways, Alexa is helping expand the course showcase on the website through class visits, student interviews, and photography. She is also helping to develop strategies and communication materials to spread the word about Pathways minors to undergraduates, with an emphasis on freshman and prospective students.

Alexa has a love for the environment, traveling, and community service. She hopes to use her experiences abroad and working in her local community to educate others about important issues. Alexa also works for Intramural Sports here at Virginia Tech as a Supervisor and enjoys spending time outside and being active. She is excited to be working with Undergraduate Education as a Student Program Assistant to expand her communication skills and work alongside professionals in the Virginia Tech community.
At first glance, it appears that the Graduate Life Center Ballroom is playing host to a poster session for a professional research conference. Students are wearing their most professional clothes and brightest smiles as they describe Iceland’s chief energy imports or pose opportunities for more green energy development in Brazil. The information is thought-provoking and well-researched, and the conversations between students and scientists on hand is lively.

In reality, this is the culminating project of the 1000-level science course Earth Resources, Society, and the Environment. Open to students of all majors, the course is an introduction to analysis of Earth’s resources. This includes historical, current, and predicted consideration of the social, environmental, economic, and political impacts of resource production and consumption at both a national and international level.

As students found, it is not always easy to make these socio-cultural scientific connections. As one student put it, “I was surprised to find that the official Russian government website had little information about their oil usage and holding data. I instead had to rely on the best estimates from UN documentation.”

Not formatted solely as a lecture course, there are in-class experiments and activities, group projects, and public speaking opportunities meant to engage students and teach them skills they can apply to their own major studies and beyond. John Chermak, Collegiate Associate Professor for the Department of Geosciences and professor of the course, notes that he tries to bring the “real world” into the classroom by using active pedagogies to promote student learning and keep students engaged.

This approach seems to be paying off, as one student majoring in political science points out: “Dr. Chermak knows some of us don’t want to be here in the sense that we are just taking this class for a science credit. But he’s so passionate about the subject and appeals to different learning preferences, which keeps everyone interested.” Several students described the course as highly relevant in bringing together societal issues, scientific concepts, and their own personal lives.
2019 Pathways Annual Grant Program is NOW OPEN!

Read all about the program scope, goals, and funding details down below. Visit [www.pathways.prov.vt.edu](http://www.pathways.prov.vt.edu) for forms.

**Deadline for submission**: March 1

**Overview**:

In April 2015, Virginia Tech approved Pathways, a new general education curriculum that guides students in integrating ways of knowing across disciplinary traditions and articulates learning outcomes relevant for the 21st century. Students will be able to complete their general education program through a distribution of courses, an interdisciplinary Pathway minor, or an innovative alternative Pathway. Ethical reasoning and global and cultural awareness is integrated across the curriculum. The arts, design thinking, computational thinking, and national issues of identity and equity are emphasized, with an opportunity for more advanced learning, especially in discourse and quantitative reasoning.

In support and recognition of the scope of these curricular changes, the Provost’s Office has committed additional base funding to support the transition to Pathways. This Request for Proposals describes the grant process that will be used to invest these new resources strategically to ensure that students have access to innovative and experiential learning across the Pathways curriculum.

**2019 Grant Goals**:

1. To support the development and delivery of courses in areas of need: advanced/applied quantitative and computational reasoning, arts, design thinking, advanced/applied discourse, and identity/equity in the United States.
2. To scale up best practices in general education to reach a greater number of students.
3. To support the incorporation of engaging pedagogies and informative assessment strategies across the Pathways curriculum.
4. To increase the incorporation of high-impact practices such as undergraduate research, project-based learning, education abroad, and service learning (Kuh, 2008) in Pathways courses and minors.
5. To support the development and delivery of Pathways minors, particularly those that span multiple colleges.

**Funding Details**:

Pathways Grants will support the work of an individual or a team of faculty members in designing or redesigning courses, minors, or alternative pathways. Pathways Grants for an individual will be awarded at a maximum of $10,000. Pathways Grants for minors will be awarded a maximum of $30,000. However, multiple courses must be included in this level of work and must be offered across AT LEAST two different colleges. Priority will be given to work that aligns with concepts of greatest need to this point (see goal 1).

**Mini-Grants**:

Just need a bit of money to incorporate an innovative pedagogy or project into an existing Pathways course? (e.g. poster printing, software subscription, set of books, conference attendance to learn a new pedagogy, etc.) You can use this same proposal process to make that request... just ask for a smaller amount of one-time money.

[www.pathways.prov.vt.edu/grants](http://www.pathways.prov.vt.edu/grants)
To Date, the Pathways Ad Hoc Committee Has Approved Over 300 Courses and 13 Pathways Minors

Currently approved minors include:
- Civic Agriculture and Food Systems
- Disabilities Studies
- Global Food Security and Health
- Innovation
- Organizational Leadership
- Pathways to Sustainability
- Philosophy, Politics, and Economics
- Science, Technology, and Law
- Strategic Communication
- Visual Arts and Society

Newly approved minors completing governance process:
- Community Systems Engagement
- Ecological Cities
- Event and Experience Management

Detailed information about approved minors
www.pathways.prov.vt.edu/minors
The Office of General Education would like to thank the members of the Pathways Ad Hoc Committee for their continued efforts in reviewing proposed courses and minors.

This committee consists of representatives from Undergraduate Curriculum Committee (UCC), University Curriculum Committee for General Education (UCCGE), University Libraries, University Studies, and each academic college, with support provided by the Registrar’s Office and Office of General Education.

We would like to acknowledge the returning members of the Pathways Ad Hoc Committee:
• Mary Kasarda
• Bob Rogers
• Julia Feerrar
• Kim Carlson
• Earl Kline
• Kerry Redican

We would also like to welcome new members to the committee:
• Ben Tracy
• Paul Deck
• Zack Underwood
• Michelle Moseley-Christian
• Sara Arena
• Jessie Chen-Yu

Thanks also to others who support the Ad Hoc Committee’s efforts:
• Gary Costello and the Registrar’s Office staff
• Curriculum Coordinators from each College
  • College of Agriculture and Life Sciences - Anna Taylor
  • College of Architecture and Urban Studies - Robert Jordan Jacks
  • College of Engineering - Tracy Sebring
  • College of Liberal Arts and Human Sciences - Lisa Kathleen Burns
  • College of Natural Resources and Environment - Cathy Barker
  • College of Science - Robin Kay Panneton
  • Pamplin College of Business - Julia Acton
  • University Honors - Sara Vandyke