NAGT Geo2YC Division

FOUNDATIONS

NEWSLETTER OF THE GEO2YC DIVISION OF THE NATIONAL ASSOCIATION OF GEOSCIENCE TEACHERS
Volume V, Issue 2: May 2016

Investigate, Explore and Discover – with Earthquakes!

By Wendy Bohon and John Taber
The IRIS Consortium, Washington, DC

Do you teach about earthquakes? Are you interested in incorporating real data into your lessons or activities? Have you struggled to find visualizations for concepts like seismic wave propagation, or are you looking for lab activities or lessons for Introductory Earth Science classes? Look no further!

IRIS (Incorporated Research Institutions for Seismology) offers freely available high-quality earth science and seismology educational resources for instructors, students and the general public. Funded by the National Science Foundation, IRIS is a world leader in advancing discovery, research, and education in seismology to understand our planet and to benefit society. IRIS operates a global seismic network in collaboration with the USGS, provides portable seismic instrumentation for research and education, and enables free and open access to seismic data. In addition, the IRIS Education and Public Outreach (EPO) program is committed to advancing awareness and understanding of seismology and geophysics, while inspiring careers in the Earth sciences.

IRIS EPO has created a host of resources to aid educators in teaching earth science, seismology and geophysics. We highlight a few of these below. To browse all of the resources available from IRIS please visit www.iris.edu/educate

Classroom and Lecture Materials

These lessons and animations are designed to promote learning through hands on activities and concise explanations of key earth science topics.

Lessons

Access both individual learning resources and instructional sequences that link learning resources.

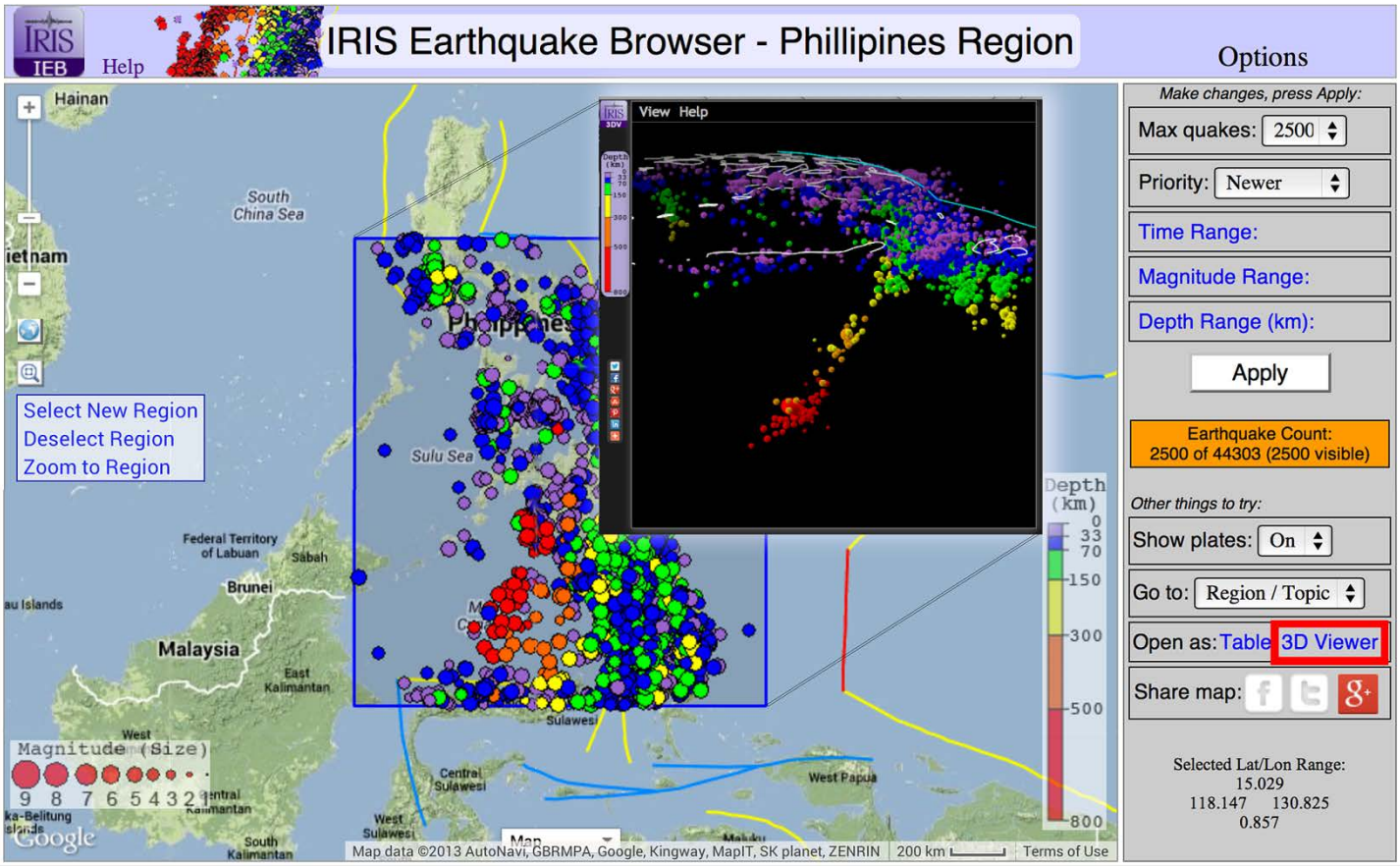
IRIS EPO has created curriculum materials that are designed using best educational practices and which involve students in the use of real data. Activities and topics designed specifically for use in the introductory undergraduate classroom range from episodic tremor and slip, to ice quakes in Greenland, to the relationship between fluid injection and earthquakes. IRIS even offers a complete set of lectures and exercises that focus on petroleum industry-related topics that are designed to introduce students to the basics of seismic processing and interpretation.

IRIS has also developed activities geared towards middle and high school students, which can be modified to fit into the undergraduate classroom. These materials cover a wide range of more general seismological topics, including elastic rebound theory, faulting and folding, seismic wave propagation, and the discovery of the Earth's interior (IRIS activities).

Animations

Over 100 animations about earth science fundamentals

Seismology topics can be difficult to convey through text or images alone, which has led to the development of a suite of over 100 animations to illustrate fundamental concepts of seismology and earth science. These clips range from a few seconds to several minutes in length, and cover basic topics like faulting and plate tectonics to more complex



Interactive Earthquake Browser - IRIS Earthquake Browser (IEB) zoomed in to the Philippines Region. The dots are earthquakes: the color of the dot represents earthquake depth and the size of the dot shows the magnitude. The user is able to "fly" around the world exploring earthquakes, and can select interesting places to examine the earthquake distribution in 3D (inset)!

concepts such as focal mechanisms, seismic wave propagation and seismic tomography. Regional and event specific animations are also included. Animations that are paired with lessons, demos or other learning sequences can be found here on our site, and additional animations can be found on our YouTube Channel. More animations are added all the time!

Videos and demos

Concise video lectures give background information on Earth science and plate tectonics for teaching how earthquakes happen and how they are studied.

IRIS also hosts a collection of video clips and lectures designed to further enhance Earth science instructors' understanding of new science content and support their classroom instruction of earthquake science. Many of the animations and videos also have classroom-ready activities that promote active learning of key seismology topics.

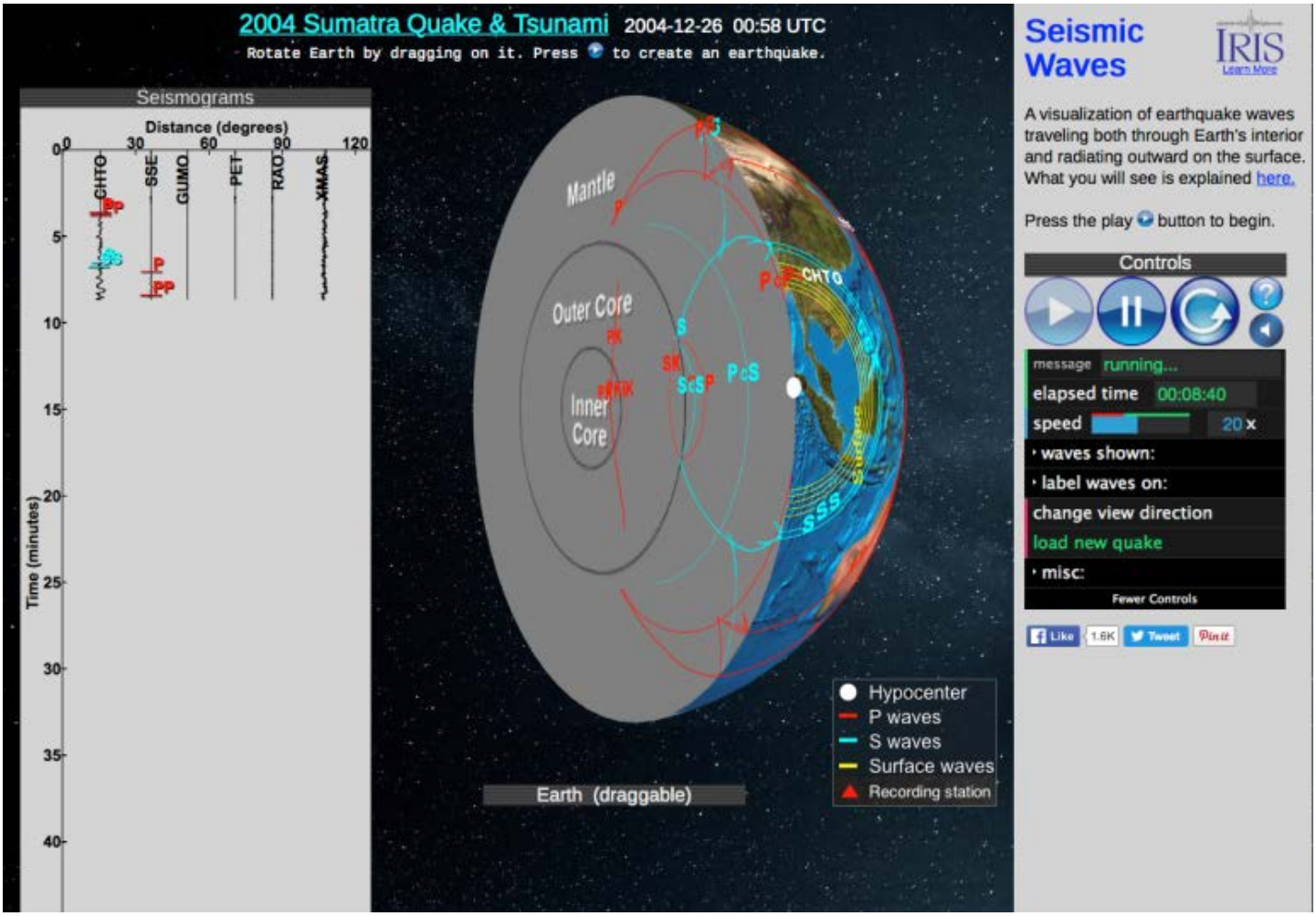
On-line Classroom Tools

These online tools are designed to promote learning by allowing students to investigate, explore and discover the Earth and its properties using real data.

Interactive Earthquake Browser

Interactive map for exploring millions of seismic events with 3D functionality.

For in-depth exploration of earthquake magnitudes and locations, the IRIS Earthquake Browser allows users to examine global, regional, and local seismicity via a Google map-based interface. The catalog contains instrumentally located events going back 50 years as well as today's earthquakes. The 3D viewer is particularly effective in helping students to understand the geometry of subduction zones, as they can easily manipulate the viewing angle.



Seismic Waves –The online tool "Seismic Waves" shows the propagation of waves from historic earthquakes through Earth's interior and around its surface. Easy-to-use controls (on right) speed-up, slow-down, or reverse the wave propagation.

Seismic Waves

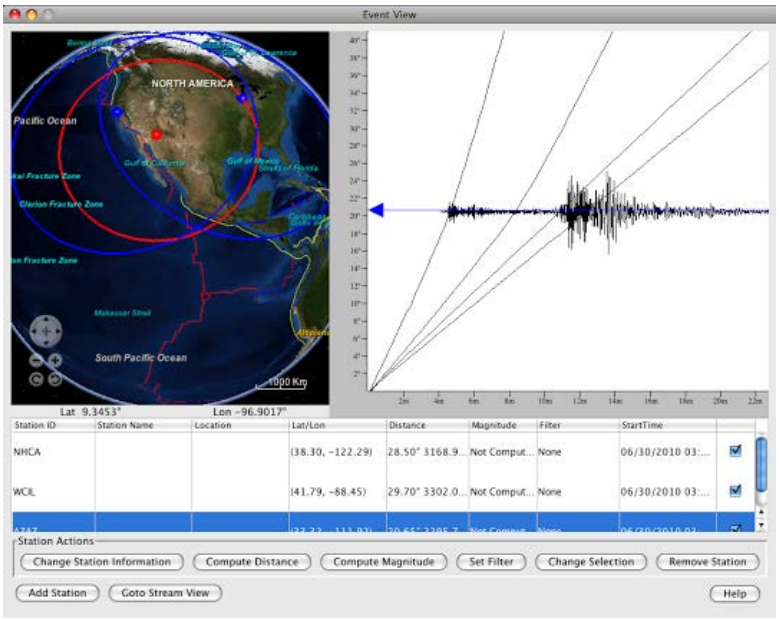
Interactive tool to visualize the propagation of seismic waves through the Earth's interior and across its surface.

Seismic Waves is a browser-based tool to visualize the propagation of seismic waves from historic earthquakes through Earth's interior and around its surface. Easy-to-use controls speed-up, slow-down, or reverse the wave propagation. By carefully examining these seismic wave fronts and their propagation, the Seismic Waves tool illustrates how earthquakes can provide evidence that allows us to infer Earth's interior structure.

jAmaSeis

Obtain and display real-time seismic data from seismic stations around the world.

jAmaSeis is freely downloadable software that allows you to stream real-time seismic data into your classroom from seismometers around the world. Students can also use the software to analyze



jAmaSeis – Screen shot of jAmaSeis software showing how students can choose wave arrivals on a seismogram and determine the location of an earthquake.

an earthquake to determine its location and magnitude.

Earthquakes in the News!

Strike while the iron is hot! These resources are designed to give instructors access to up-to-date scientific information about geologic events as they unfold.

Recent Earthquake Teachable Moments
Capture that unplanned opportunity to bring knowledge, insight and critical thinking to the classroom following a newsworthy earthquake.
Newsworthy earthquakes can capture the attention and imagination of students. In the classroom, this increased attention manifests as a "teachable moment" or an unplanned opportunity to increase students' understanding of both a specific event and broad seismology concepts. IRIS EPO, in collaboration with the University of Portland, produces a rapid response resource following large newsworthy earthquakes called "Teachable Moments". Teachable Moments provide PowerPoint slides of interpreted US Geological Survey tectonic maps and summaries, animations, visualizations, and other event-specific information necessary for educators to explore the unique storyline of a newsworthy earthquake with their students. Each Teachable Moment is prepared within 24 hours of the event in both English and Spanish.

Social Media
IRIS has an active social media program that features earthquake news and information, educational materials, and general science news. Click the buttons to like or follow us today!

The above products have been created by the IRIS EPO team: Wendy Bohon, Tammy Bravo, Mladen Dordevic, Perle Dorr, Michael Hubenthal, Jenda Johnson, Danielle Sumy, John Taber, Russ Welti.

IRIS is funded primarily by the National Science Foundation (NSF).

Wisdom from the Crowds: Recommendations and Thoughts on the Geo2yc Job Interview Process

by Kaatje Kraft
Whatcom Community College, Bellingham, WA

A few weeks ago I asked folks for advice to those applying for jobs at two-year colleges and responses I received were amazing. There were some clear and common themes: How jobs are posted, how you present yourself as an applicant, awareness of the type of institution, tips on the teaching demonstration, and links to some digital resources that are already out there.

How jobs are posted: Some folks talked about how the job is posted to begin with. Remember to work with your Human Resources to consider how it's listed. The language can result in hidden messages that will deter people with disabilities and more diverse candidates. Consider having your hiring committee go through implicit bias training prior to starting the hiring process.

How you present yourself as an applicant: The real question being asked at every interview is "Will you be good at your job, or drag us down? Will you be a good coworker, or a pain?" as one person stated. However, the interview process is generally a fairly predetermined and rigid process, so there are constraints on what we can actually ask you. The questions are very commonly standardized and how you respond is compared to other interviewees. In order to prepare for the interview, learn about the campus, learn about the types of students who attend the school. Being a T.A. is nice, but experience as an adjunct faculty at a 2yc holds a lot more weight when it comes to considering experience. Be prepared for questions that get at both your philosophy of teaching and how you

handle challenging scenarios including classroom management issues. When you have experience in those domains, speak to them in your interview. Are you passionate about the population of students that 2yc's serve? As another person stated, "I want people who are going to be able to get down there with folks who are struggling in both academic and personal ways and be willing to help lift them up." Make sure how you answer questions and present yourself in your CV makes that passion and knowledge clear.

Awareness of type of institution: Remember that this is a teaching institution. Do your research about what matters to this institution. You may be asked to teach outside of your area of expertise (depending on the size of the institution) and even your domain, be prepared for that. Guided pathways is the current buzz at 2ycs, you may want to learn more about it.

Teaching Demonstration: You will commonly be asked to do a teaching demonstration. The point of this is to both determine your knowledge of the content and, even more importantly, get across your teaching philosophy and approach to the committee. They want to know that you won't just lecture at them for the 10-15 minutes that you're provided. Treat the committee like they're students, demonstrate how you actively engage your students in learning. Demonstrate that you know about effective pedagogy.

Links and Resources: Even more eloquently than I've stated, here are a few digital resources that are worth sharing:

- Eric Baer of Highline College put together the following resources in the Early Career Section of NAGT: The Job Search Preparation, The Interview, and Interview Questions.
- Steve Shimmrich at SUNY Ulster County Community College wrote about this topic a while back in a blog.
- Bob Blodgett from Austin Community College recommended that every applicant be familiar with *Building a Career in America's Community Colleges* by Robert Jenkins; as Bob put it, "it is a synthesis of his excellent articles in the *Chronicle of Higher Education* about interviewing for and obtaining a 2YC faculty position."

Thanks again for the great response! There are more details that I will put together for a page on our website. My hope is that we can continue to add to this collection (and thinking process) to make sure it stays current and relevant.

EarthCube: Helping Sift the Mountains of Geoscience Data

by Jamie Ryan
Earthcube Office,
Tucson, AZ

As we have entered the 21st century, we have gone from molehills to mountains in terms of the amount of geoscience data available: knowing where to start digging has become a daunting task. Enter EarthCube, an NSF-funded initiative seeking to provide simplified and centralized access to the ever-growing catalog of geoscience databases and applications.

EarthCube is a community-driven cyberinfrastructure project, a collection of applications and software that will seek to make finding, acquiring, sharing, and using geoscience data more accessible for everyone. While still in its infancy, EarthCube now has more than 40 funded projects and over 2500 members from academia, industry, and the public sector working together towards this common goal. Projects funded under EarthCube range from tools that handle real-time data streams in the cloud to coordination networks focused on developing best practices for long-term data collection, storage and access.

One of EarthCube's premiere outreach programs is "Doing Geoscience with EarthCube Tools," a webinar series envisioned and created by volunteers within the community. The main goal of the webinar is to invite the developers behind newly designed tools to explain their potential impact and use to EarthCube's end-users, researchers and instructors.

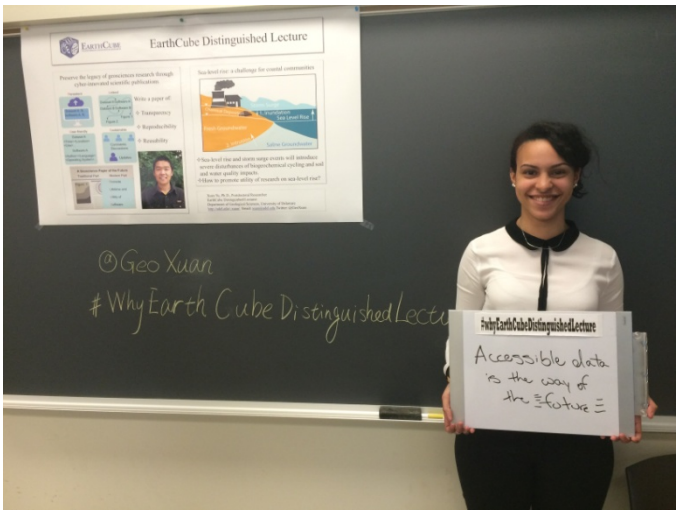
Additionally, webinar attendees learn about new developments in software tools that help scientists report, access, or visualize data. For instance, one of the webinars introduced Flyover Country, a free app that pulls data from several mapping databases and allows offline storage in a smartphone for later access and display. Originally designed for use on airplanes, hence the name, it can also be an invaluable tool for instructors running field trips.

Opening title slide from the Flyover Country webinar presentation on February 5, 2016.

Webinar attendees are encouraged to ask questions during 15-minute Q&A sessions following each presentation. All of the webinars are uploaded to EarthCube's public YouTube channel, and further interaction with the project's developers is strongly encouraged.

The next webinar in the ongoing series covers GeoDeepDive on Friday, June 6 at 2 PM EDT (11 AM PDT). GeoDeepDive is a project that works on recovering geoscience data found in the text, tables, and figures of scientific literature (frequently called "dark data"). A list of webinar titles and presenters, past and future, can be found on our website here.

EarthCube resources are constantly increasing, and most are accessible at EarthCube.org. For those interested in becoming members, the website has information on EarthCube Committees and Teams that serve as channels for feedback and new ideas. Some of these Committees and Teams also have ongoing funding opportunities: the Distinguished Lecturer Program, for instance, provides support to institutions to have geoscientists or cyberscientists



A student response to the question "Why does EarthCube's Distinguished Lecturer Program matter?" after hearing from Xuan Yu, one of EarthCube's sponsored presenters.

present their research and discuss how EarthCube can empower your program.

Engage with members of EarthCube through social media; join us on Twitter, Facebook, YouTube, or with the EarthCube group on LinkedIn, by clicking the buttons below.

EarthCube is a growing project, and one still early in its life cycle. In its first five years, EarthCube sought to, and succeeded in, creating a governance structure that encouraged significant input and feedback from the geoscience community. More voices and new ideas are always welcome, and participants can play an exciting role in shaping the future of geoscience!

Congratulations Pat Pringle!

On behalf of the NAGT Geo2YC officers a huge congratulations to Pat on receiving the Washington State Association of College Trustees 2016 Faculty Member Award for demonstrated excellence in teaching in the community and technical college system (full report here). Pat is faculty at Centralia College.

Release of White Paper on Geoscience Transfer

By
David Voorhees[1], Mike Phillips[2], and Cheryl Resnick[3]
[1] Waubonsee Community College, Sugar Gove, IL
[2] Illinois Valley Community College, Oglesby, IL
[3] Illinois Central College, East Peoria, IL

In March of 2015 we hosted a SAGE 2YC (Supporting and Advancing Geoscience Education in Two-Year Colleges) supported workshop at Illinois Valley Community College. The 16 workshop attendees were from Two-Year Colleges (2YC's), Four-Year Colleges and Universities (4YCU's) and the Illinois State Geological Survey. Participants discussed best practices for improving the preparation of 2YC students as they transfer to 4YCU's. After a morning of workshopping that identified and prioritized the challenges for a successful transfer and the best practices to enable that successful transfer, there was an engaged roundtable discussion on how best to implement these ideas in Illinois. During that discussion, a team of 2YC and 4YCU representatives agreed to write a white paper to assist counselling staff and geoscience 'majors' at 2YC's design a successful transfer to their chosen 4YCU. The final document is intended to keep students from falling into many of the transfer pitfalls that were identified and discussed during the workshop.

We have recently finished that document, and have made it available by posting to the very new Illinois Association of Geoscience Instructors (IAGI) website, under the 'For Faculty' tab. It is our hope that geoscience faculty at 2YC's will share it with their students. Most importantly, we hope that 2YC faculty will forward it to their college's counseling department so that they may use it in their conversations with existing and potential geology majors. Parts of the white paper are focused on Illinois issues, but we think that much of it can be applied to most any 2YC.

We decided to limit this document to geology majors, as adding counseling advice for geographers, meteorologists, astronomers, oceanographers, etc, would add many more pages and complexity to this document. We wanted it to be most effective, and if it is 20 to 30 pages, it might not be as effective as intended. If someone is interested and willing to write a similar document for other disciplines that are part of the geosciences, we would be happy to assist.

For questions or comments, please contact either Dave Voorhees (dvoorhees@waubonsee.edu) or Mike Phillips (Mike_Phillips@ivcc.edu) or Cheryl Resnick (cresnick@icc.edu).

President's Column

by Kaatje Kraft
Whatcom Community College,
Bellingham, WA

Congratulations for many of you completing another successful academic year, for those of us on the quarter plan, we're almost there! I've had the great privilege of working with some of my other fellow "twobies" (those of us in our second year of full time employment at our institution) on exploring and researching how to ethically and critically foster a growth mindset with our students and at our institution. For those who aren't aware of mindset, someone who has a growth mindset is more likely to see failure as a learning opportunity as opposed to someone who has a more fixed mindset and sees failure as evidence that they aren't born with some innate talent. Carol Dweck is the dominant researcher around this work, and some of the simple interventions that she and her research team have tested have demonstrated some powerful impacts on how students view their approach to learning. I bring this up because as students are approaching the end of their academic year and struggle with so many structural inequities outside of the classroom, it's important to think about how we can support our students to learn from failures, but still support them in an effort to ultimately meet with success. As an organization (NAGT/Geo2YC), we've had failures, but we're learning from them and are managing to move forward. We learned that the transition from one treasurer to the next is a very challenging process

and we need to better prepare to assure that future transitions happen more smoothly. As a result of that failure, we have dropped the ball on sufficiently supporting our Outstanding Adjunct Faculty awardees. This is something we should FINALLY be rectifying and honoring our commitment to providing membership for them. Failure is hard to admit, but we need to de-stigmatize the word if we want our students to truly be successful and learn. And I know our organizational failures will allow us to move forward as a stronger organization overall.

One outcome of our OAFA debacle, is that we've decided to move from a four-awardees a year to three so as not to saturate the pool and still celebrate the outstanding adjunct faculty with whom we all have the privilege of working. In addition, I'm pleased to report that even though there has been change in the leadership at Pearson, they have agreed to continue to support our OAFA annual winner. So please keep those nominations (including self-nominations!) coming—let's celebrate our colleagues!

I'm excited for this summer (once I get past that giant pile of grading) as I'll have the opportunity to be a faculty mentor on a STEMSEAS transit, but unfortunately, as a result will be missing the Earth Educators' Rendezvous. There's been an overwhelming response to this year's program, and I hope many of you are able to attend. One of my favorite researchers will be giving one of the plenary talks, Becky Packard from Mt Holyoke College. Her research on the transition of 2yc students in STEM programs was inspirational (and depressing) as I worked on my dissertation.

I do plan to be at GSA this year, and look forward to seeing many of you there. I want to thank our volunteers who have stepped up to run for office this year. In addition, I want to thank the large number of responses I received in request for hiring practices, I'm exciting to share highlights in this newsletter—but I also plan to put together a more permanent (but always amendable) webpage as a resource for our community. If you have other ideas of what you'd like to see us do for our community, as a community or resources to support our community, please don't hesitate to contact me. I'll be back in touch as soon as I unbury from the end-of-the-quarter pile. Have a rejuvenating and rewarding summer!

Nominate your Outstanding Adjunct Faculty
http://nagt.org/nagt/students/ta.html

Outstanding Adjunct Faculty Quarterly Honoree: John Maher

by Karen M. Layou
Reynolds Community College
Richmond, VA

The OAFA Committee is pleased to recognize John Maher of Johnson County Community College in Kansas as our newest Quarterly Honoree. Mr. Maher teaches Physical Geography lectures and labs, as well as World Regional Geography.

Lynne Beatty, who nominated Maher, writes, "John has been invaluable to our small Geoscience Department. He volunteers! This year he has used his own free time to become certified to teach online classes, while teaching face-to-face versions as well. Due to staffing changes, he also stepped up and volunteered to teach the physical geography lab even though labs do not receive equal pay for hours taught versus lecture classes. He is his own lab assistant as well, prepping and taking down equipment.

John also represented JCCC at the Kansas Core Outcomes Group, a state-wide course assessment committee. He did not have to do any of these things to keep teaching at JCCC; yet he did. He gives so much of himself to our college and our students. John Maher is definitely worthy of the Outstanding Adjunct Faculty Award."

We agree! Thank you John, for being an active member of your department, and being willing to serve your college and students as needed. We are pleased to support John with a one-year complimentary membership to the NAGT Geo2YC Division, and he will be entered into the pool of quarterly honorees under consideration for the

Annual Outstanding Faculty Award, which is sponsored by a professional development stipend of up to $750 from Pearson Publishing.

If you are an adjunct faculty working to enhance your classrooms or department, or if you have adjunct colleagues who are doing great things the Geo2YC community should know about, please consider completing a nomination form.

AGU's Virtual Poster Showcase

By Pranoti Asher
Education and Public Outreach Manager, American Geophysical Union (AGU)

Dear Geo2yc colleagues,

Are you in the process of redesigning your fall courses? Have you considered having your students present posters about their research beyond the classroom, on a larger scale, where they can engage with peers from other institutions and gain a deeper understanding of the science? Will you be working with students this summer on research projects? Make sure to have those students present the outcomes of that research this fall, whether it's at the AGU Fall Meeting or in the Virtual Poster Showcase (VPS).

An easy and cost-effective option for presenting student research is through the 2016 Fall Virtual Poster Showcase, which enables students to present without having to travel. The showcase features an easy-to-use interface where undergraduate (and graduate) students are guided through:

* Writing and submitting an abstract
* Preparing a poster and accompanying video presentation
* Evaluating the work of peers
* Receiving and responding to feedback on their own posters

You can view posters and presentations of the best-ranked posters from the 2015 showcases. The spring 2016 showcase winners will be added soon.

Please contact me at pasher@agu.org if you are interested in a demonstration of the interface, or ways to simplify implementation of VPS in your fall course for all of your students. I can also work with individual faculty to create coupon codes for your students (so that you are invoiced for the abstracts and your students don't have to use their own credit cards to pay the abstract fee). We have also created a video tutorial to help students and faculty understand a little bit more about the showcase and all the steps it entails.

New and limited offer for this fall only for 2yc geology students** The first 100 abstracts submitted by two-year college students for the undergraduate showcase in the fall will be at no cost to you or your student on a first come first served basis (you will need to contact me in July to set this up when you have a better sense of how many students you will likely have participating in the showcase).

Nominate your Outstanding
Teaching Assistants
http://nagt.org/nagt/students/ta.html
Deadline is June 15th!

Invitation to Present

By Callan Bentley
Northern Virginia Community College, Annandale, VA

How is technology changing your geoscience teaching or your students' learning?

We seek your stories of challenge, success, and even getting dragged into the 21st century, kicking and screaming. Please consider sharing insights from the digital realm at our session at the GSA annual meeting in Denver. Our session, sponsored by the NAGT Geo2YC division, is:

T88. Technological Innovation in Geoscience in Two-Year Colleges
Two-year colleges (2YCs: community, junior, city, and technical colleges) are a prominent part

of the national educational landscape. About 40% of all undergraduate students in the US currently attend a 2YCs, including students with diverse backstories – low-income, first in their family to attend college, or ex-students who return for a second (or third) try. Faculty backgrounds vary a lot as well, and they orchestrate learning in institutions with disparate structures and availability of resources. Teaching these classes in an engaging way, in person or online, is a challenge that may be addressed through the novel application of emerging technologies. Because providing formative learning experiences in undergraduate STEM courses not only increases a student's retention of information but their interest in the discipline, this session seeks to explore successful application of technology to the setting of geoscience courses at 2YCs. Potential topics might include: Virtual field experiences, virtual specimens, Google Earth, facilitating access for students with disabilities, infusing technology into field work, leveraging students' personal technology as class tools, mobile apps, drones, microscopy, strategies for coping with the unequal access to technology that students with low incomes face, technology as a bridge between 2YCs and 4YCs, tech-savvy approaches to authentic undergraduate research, and successful recruiting and retention of geoscience majors.

Poster or oral presentations are acceptable. Abstracts are due at midnight on July 12, so now's the time to be thinking about it!

Thanks! We (Callan Bentley, Pete Berquist, and Joshua Villalobos) look forward to learning from you. Get in touch if you have any questions about the session.

Editor's Note:
NAGT Geo2YC are also sponsoring the following topical sessions at GSA's annual meeting in Denver. Please consider submitting abstracts to these sessions before the July 12th deadline:

T84. Planning to Make a Difference through the Next Generation Science Standards: Part 1 K–12 Initiatives
Michael J. Passow, Belinda E. Jacobs, Carla McAuliffe, Cheryl L.B. Manning
As states and school district prepare to adopt/adapt the Next Generation Science Standards (NGSS), it becomes important to consider how changes in Earth and Space Science will be different this time from past educational initiatives.

T85. Planning to Make a Difference through the Next Generation Science Standards: Part 2 Undergraduate and Teacher Training Initiatives
Michael J. Passow, Belinda E. Jacobs, Carla McAuliffe, Cheryl L.B. Manning
What adaptations should Higher Education and Informal Educational Institutions create to facilitate implementation of the NGSS? How best can teacher preparation programs empower pre- and in-service educators with skills to succeed under the NGSS?

T86. Supporting Geoscience Student Transfer Between Institutions and Transitions into the Workforce: Pathways for Success
Eric M.D. Baer, Norlene R. Emerson, Allan Ludman
Topics might include advising/support strategies; bridge programs; cross-institutional collaborations including recruitment and student research projects, field trips, and 2YC-4YCU faculty interactions; articulation agreements; curricular and extra-curricular experiences, transfer patterns , and impact on broadening access.

T87. Supporting Students with Disabilities: Innovations and Strategies for Geo-Success
René A. Shroat-Lewis, Wendi J.W. Williams
This session is aimed at sharing effective geology classroom (fully face2face, hybrid, online formats), laboratory, and field experience strategies for students with disabilities (to include Universal Design applications, too).

Letter from the Editor

by Tom Whittaker
Temporarily unaffiliated
thomasewhittaker@gmail.com

Dear Colleagues,

Summer is upon us, and for many that might mean heading to workshops, conferences, the field, or simply vacation. I would like to remind you that wherever you may travel to please bring along your Geo2YC pencil (if you have not got one we will have them available at the Earth Educator's Rendezvous this summer). If you snap any pictures, with your pencil as scale, please consider submitting them to the newsletter along with a brief description of the location and lat-long coordinates. See the December 2015 issue of the newsletter to get an idea of what I mean.

Beyond that, if you have questions or comments about the content of FOUNDATIONS, or have suggestions for future newsletter items please contact me at my new e-mail address (see above).

Thank you!

Callan Bentley (Northern Virginia Community College), Ander Sundell (College of Western Idaho), and Ralph Dawes (Wenatchee Valley College) represented the Geo2YC community on a field trip along the Salmon River / Sr 0.0706 isopleth in western Idaho after the Rocky Mountain section meeting of GSA in May.