

UCGIS Education Committee Report

UCGIS Annual Symposium 2019

This report covers the activities of the Education Committee for the period of May 2018 (UCGIS Symposium in Madison, WI) to June 2019 (UCGIS Symposium in Washington, DC).

Steven Moore, University of Redlands, continued as committee chair during 2018 – 2019. Eric Shook, University of Minnesota, served as Vice Chair. The current education committee is composed of: Aaron Addison, (Washington University); Ola Ahlqvist (The Ohio State University); Forrest Bowlick (University of Massachusetts); Laure Charleux (University of Minnesota, Duluth); Jerry Davis (San Francisco State University); David DiBiase (Esri); Sven Fuhrmann (George Mason University); Lee Hachadoorian (Temple University); Paddington Hodza (University of Wyoming); Karen Kemp (University of Southern California); Helmut Kraenzh (James Madison University); Xingong Li (University of Kansas); Tim Nyerges (University of Washington); Miriam Olivares (Yale University); David Smith (University of Redlands); Nate Strout (University of Redlands); Jennifer Swift (University of Southern California); Laura Tateosian (North Carolina State University); and Danny Vandenbroucke (KE Leuven). Two members left the committee during this reporting period: Douglas Flewelling (University of Redlands) and Cuizhen (Susan) Wang, (University of South Carolina). Two new members—Paddington Hodza and Danny Vandenbroucke—joined the committee.

Major activities included the following:

1. Participating in Symposium 2018

Education Committee activity at the 2018 UCGIS Symposium included the 2018 Education Award presentation and a committee meeting held at the symposium on May 28, 2018. The meeting focused on TeachGIS.org, the geohumanities emphasis of the 2019 symposium, and priorities for the coming year.

2. Prioritizing 2018 – 2019 Activities

During the summer of 2018, the Education Committee reviewed and discussed action priorities for the coming year. The list included three primary action items:

- a. Continuing to develop TeachGIS.org as a referatory.
- b. Conducting an environmental scan of the GIS&T Body of Knowledge to evaluate how it is being used
- c. Developing educational materials that provide a geospatial emphasis for data science curriculum development

The committee decided to focus on the first two priorities and drop the third priority (Developing educational materials that provide a geospatial emphasis for data science

curriculum development). An additional priority was added during Fall, 2018 when Steven Moore assumed responsibility for conducting a workshop on updating GIS&T education challenges at the 2019 UCGIS Symposium. The annual deliberations for the UCGIS Education Award added an additional responsibility to the committee's docket. Committee efforts regarding the resulting four activities are discussed in turn below.

3. Developing TeachGIS.org as a UCGIS Referatory

During 2018 - 2019, the Education Committee discussed moving forward with the redesign of TeachGIS.org, with an emphasis on the following.

- a. Mini-templates/Web form
- b. Criteria for approval
- c. Categories (tutorials, portals, syllabi)
- d. Talking to key people (librarians) about development
- e. Connecting to the referatory educational materials produced by the Hour of Cyberinfrastructure (Hour of CI) project

As the year progressed and the emphasis on conducting an environmental scan of the GIS&T Body of Knowledge increased, the committee tabled further action on the Teachgis.org referatory until after the 2019 UCGIS Symposium.

4. Conducting an Environmental Scan of the GIS&T Body of Knowledge (BoK)

Beginning in October 2018, the Education Committee began work on the GIS&T environmental scan. Two strategies for this evaluation were pursued: (1) Review of Google Analytics for the site and (2) Development and implementation of a prospective user survey.

- a. Review of Google Analytics for the Site

With initial guidance from Eric Shook, the committee began examining Google Analytics for the BoK site (<https://www.ucgis.org/gis-t-body-of-knowledge>). Steven Moore continued this analysis and produced a rough report of statistics and graphics for the period April 1, 2018 – March 31, 2019 that was shared with UCGIS Executive Director, Diana Sinton, and John Wilson, Editor-in-Chief of the online BoK. Data and graphics from this report will be shared during the Education, Training, and the Geospatial Domain session at the 2019 UCGIS Symposium. The rough report will be polished by Steven Moore during the summer of 2019 and presented to the board.

- b. Development and Implementation of a Prospective User Survey

Steven Moore began developing the GIS&T Body of Knowledge Prospective Use Survey in November 2018. With feedback from the Education Committee, the survey

went through three iterations before it was finalized in February 2019. The survey was then shared with John Wilson, who approved its distribution. Via this link—<http://bit.ly/2GseJPI>—the survey has been distributed via the UCGIS and HigherEd-L listservs, various lists of the American Association of Geographers, and social media. As of May 31, 2019, 97 respondents have completed the survey. Results of the survey will be shared during the Education, Training, and the Geospatial Domain session at the 2019 UCGIS Symposium. A report of the findings will also be prepared and shared back to the UCGIS and HigherEd-L listservs.

5. Deliberating the 2019 UCGIS Education Award

A call for nominations for the 2019 Education Award was distributed in December 2018 and five nominations were received, including one re-nomination from last year's process. An Education Awards committee was established and chaired by Jochen Albrecht, the 2018 awardee. Members of the committee included: Paddington Hodza (University of Wyoming), Jing Li (University of Denver), Patricia Carbajales (Clemson University), and Laura Tateosian (North Carolina State University). After deliberation, the committee selected John Wilson for the 2019 UCGIS Education Award. Feedback from the committee has initiated a process by which the Education Committee will evaluate the criteria for selecting the Education Award winners, with a look towards encouraging early career educators and enhancing the diversity of the pool from which nominations are drawn.

6. Planning and Conducting GIScience Education Priorities: Mapping Out the Coming Decades... Workshop

To be held on Monday, June 10 before the 2019 UCGIS Symposium, development of the GIScience Education Priorities: Mapping Out the Coming Decades... workshop was accomplished by Steven Moore, Jennifer Swift, and Karen Kemp, with feedback by the Education Committee. The half-day workshop will focus on revisiting GIS&T education priorities proposed by UCGIS in 1997, discussing the current status of GIS&T education, and proposing new GIS&T education challenges to be addressed in the coming decades. The list of challenges identified during the workshop will be presented during the Education, Training, and the Geospatial Domain session at the 2019 UCGIS Symposium. Participants in that session will be asked to rank the challenges and suggest additional ones that the workshop participants might have missed. The ranked list of education challenges will provide the foundation for national and international discussions leading up to the 2020 UCGIS Symposium. At the 2020 symposium and beyond, the list will be fleshed out into a form that can be published and disseminated to the broader GIS&T community.

7. Conducting the 2019 UCGIS Symposium Education Session

The Education, Training, and the Geospatial Domain Session at the 2019 UCGIS Symposium will include presentations on Cyber Literacy for Geographic Information Science (Eric Shook); BoK Prospective Use Survey and Google Analytics (Steven Moore); BoK Update

(John Wilson); European BoK (Danny Vandenbroucke); GIScience Education Goals for the Future (Steven Moore, Karen Kemp, and/or Jennifer Swift); and The Future of Accreditation for GIS&T in Higher Education (Diana Sinton).

Respectfully submitted,

Steven Moore

Chair, UCGIS Education Committee

May 31, 2019