Position Summary. The Geological Society of America (GSA) encourages, affirms, and supports positive contributions of geoscientists and Earth-science educators to the public spheres. The time, effort, talent, and intellectual capital that are invested by geoscientists and Earth-science educators in public policy, education, and research on teaching and learning are critically important for educating and safeguarding local, regional, national, and global populations. GSA welcomes these professional contributions to the public sphere and encourages the broader professional community to support, prioritize, and acknowledge this vital work as scholarly activity. As such, GSA recommends that geoscientists in academia, government service, and professional practice receive formal recognition and reward for such efforts through positive performance evaluations, reappointments, promotions, and tenure reviews. GSA also encourages support, by means of appropriate reassigned time or travel assistance to conferences, workshops, and other appropriate endeavors, to those individual geoscientists engaged in substantive professional activity on issues of public policy, education, and research on teaching and learning.

This position statement (1) encourages members to involve themselves professionally in the domains of public policy, education, and research on teaching and learning; (2) advocates recognition of specific efforts by geoscientists directed toward the enhancement of Earth science in these domains; (3) advocates for the support of the valuable scholarship and professional activities of those members participating in the domains of public policy, education, and research on teaching and learning; and (4) provides specific recommendations and opportunities for advocacy and action.

CONCLUSIONS AND RECOMMENDATIONS

The Society recommends the following actions:

Geoscientists are encouraged to

- Engage in professional activities, including research, publications, and presentations on geology and public policy.
- Use place-based experiences and knowledge to engage responsibly with communities impacted by their research.
- Dedicate time to learning about and participating in initiatives that develop the geoscience workforce, especially related to diversity, equity, and inclusion.
- Participate in policy development related to Earth systems and Earth processes.
- Advance geoscience education and curricular reform and produce research, publications, and presentations on pedagogy and curricular innovation.
Supervisors, administrators, institutional/organizational leaders, and department peers are encouraged to:

- Recognize and reward efforts in geoscience public policy; education; diversity, equity, and inclusion; and research on teaching and learning through positive performance evaluations, reappointments, promotions, tenure consideration, and awards.
- Include these areas when establishing criteria for recognition, evaluation, advancement, promotion, and granting tenure.
- Support by the appropriate reassigned time or travel assistance for those geoscientists engaged in substantive scholarly and professional activity on issues of public policy, education, and research on teaching and learning.
- Be aware of the current state and value of research on teaching and learning in geoscience and its important contribution to the geoscience community.
- Discuss the benefits that professional contributions can have to your team’s work, and encourage geoscientists to use what they have learned to bring best practices into the workplace.

RATIONALE

Professional efforts by geoscientists within the realms of public policy, education, and research on teaching and learning should be valued. GSA’s recognition and support of those efforts reflect the Society’s mission to promote the geosciences. Applying the results of geoscience research in the arena of public policy, providing education at all levels, and engaging in meaningful place-based outreach and collaboration improves communities and enhances society while showing the importance of public support for research geoscientists. The National Academies of Sciences, Engineering, and Medicine recently stated, “...the complexity of scientific methods and the ways in which science progresses [can] make communicating science to the public quite difficult,” highlighting the need for scientists to find and put into practice “the most effective ways of communicating with the public under different circumstances.”

These efforts are currently undervalued in hiring decisions across academic disciplines and will only become more important in tandem with interdisciplinary work as we try to address twenty-first-century challenges like climate change.

Research on teaching and learning in the geosciences not only contributes greatly to the effectiveness and stature of geoscience education, it is a rapidly maturing research field with many external funding sources, peer-reviewed journals, and a vibrant community. The Society’s explicit affirmation of the value and importance of its members’ contributions to public policy, education, and the scholarship of teaching and learning will serve to expand and inform personnel decisions based on those activities.

Workforce development in the broader geoscience community is sorely needed, as inequities in the proportions of Ph.D. graduates of color continue to persist, and as a result structural and social factors create an environment where women, sexual and gender minorities, people with disabilities, and Black and Hispanic people leave the field at higher rates or are less likely to enter the field. It is critical that we encourage and reward participation in existing and emerging programs like the William Avrette Anderson Fund, Unlearning Racism in Geoscience (URGE), Inclusive Geoscience and Education and Research (IGER) awards offered by the International Association for Geoscience Diversity (IAGD), and many others to support an inclusive professional community. By encouraging supervisors, administrators, institutional/organizational leaders, and department peers to value these contributions and incorporate them into evaluation metrics, we support vital labor that often goes unrecognized or uncompensated. Rewarding and uplifting work to support diversity in the geoscience workforce is a key element of building anti-racism in the professional community.

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ABOUT THE GEOLOGICAL SOCIETY OF AMERICA

The Geological Society of America, founded in 1888, is a scientific society with members from academia, government, and industry in more than 100 countries. Through its meetings, publications, and programs, GSA enhances the professional growth of its members and promotes the geosciences in the service of humankind. Headquartered in Boulder, Colorado, USA, GSA encourages cooperative research among earth, life, planetary, and social scientists, fosters public dialogue on geoscience issues, and supports all levels of earth science education. Inquiries about GSA or this position statement should be directed to GSA’s Director for Geoscience Policy, Kasey S. White, at +1-202-669-0466 or kwhite@geosociety.org.
OPPORTUNITIES FOR GSA AND ITS MEMBERS TO HELP IMPLEMENT RECOMMENDATIONS

To strengthen and sustain the professional contributions of its members to geosciences public policy, education, and research on teaching and learning, the GSA recommends that members:

- Value and publicly acknowledge the contributions of their peers in these areas of scholarship.
- Continue to stress the value and importance of contributions in these areas of scholarship to internal and external institutional stakeholders.
- Serve in positions of academic or organizational leadership in order to recognize and reward contributions in these areas of scholarship.

REFERENCES