JOURNAL OF CHEMICAL EDUCATION

Editorial

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American Association of Chemistry Teachers: A New Layer of Support for Teachers of Chemistry

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ABSTRACT: This editorial outlines the impetus, goals, and benefits of the newly launched American Association of Chemistry Teachers.

KEYWORDS: *General Public, Elementary/Middle School Science, High School/Introductory Chemistry*

The year was 1876. As John William Draper delivered his inaugural address to the small collection of colleagues that composed the nascent American Chemical Society (ACS), he outlined a formative agenda. "The progress of science among us", he said, "very largely depends upon two elements: first, on our educational establishments. Second, on our scientific societies."[1]

These two elements combine in the American Association of Chemistry Teachers (AACT), which offers a new model for supporting and engaging K−12 teachers of chemistry under the auspices of ACS.

WHY AACT?

In the most recent National Assessment of Educational Progress, only 34% of students in grade 4, 30% of students in grade 8, and 21% of students in grade 12 were found to be "proficient" or better in science.[2] In addition, a study by the National Science Foundation shows that the number of students enrolling in high school chemistry has increased by more than 10% in the past decade.[3]

Compounding these challenges is the fact that teachers are likely to be younger and less experienced than they were a generation ago, a status quo created by high turnover rates due to a lack of professional support, according to a report by the Carnegie Foundation for the Advancement of Teaching.[4] And many teachers—experienced or otherwise—grapple with an increasing focus on standardized testing and a shift away from demonstrations or hands-on instruction due to concerns about cost, liability, and connections to learning objectives.

AACT was created to help meet these challenges. Some initial responses to the creation of AACT have been published in this *Journal*.[5−8] We at AACT believe that by supporting teachers who first spark in students a passion for science, chemistry education is made more innovative, relevant, and effective. As the first national association by and for K−12 teachers of chemistry specifically, AACT will support teachers of all chemistry backgrounds, provide professional development opportunities, and create and disseminate high-quality resources.

SHARING, CONNECTING, SUCCEEDING

These goals follow from extensive research about the needs of the K−12 chemistry teaching community. In multiple surveys conducted over several years, more than 20,000 teachers of chemistry were asked to share what they expected from a national teacher's association dedicated to chemistry. Overwhelmingly, their suggestions fell into three categories: resources, networking, and professional development.

For resources, AACT members receive a subscription to *ChemMatters*, an award-winning magazine published by the ACS Education Division; access to a collection of online member-only teaching resources, including hundreds of lesson plans from top educators across the country and multimedia series; and access to *Chemistry Solutions*, a periodical focused on the practice of teaching chemistry in the K−12 classroom that complements the *Journal of Chemical Education*. As this collection of resources grows, we hope it will become an indispensable and trusted repository that saves teachers time, sparks new instructional ideas, and helps them take advantage of the practice of their peers.

The AACT Web site, teachchemistry.org,[9] allows members to comment on resources and access a suite of social media spaces, both of which will be continually updated and improved in the coming months. We understand the feeling of isolation reported by many teachers of chemistry, especially those at the beginning of their careers, and are committed to addressing it directly through ample high-quality opportunities for teachers to connect with one another.

For professional development, AACT offers webinars on a variety of topics each month. In the future, AACT will coordinate on-site opportunities around the country, connect teachers with unique experiences through partnerships, and organize a national conference.

All of these benefits are simply a starting point. We look forward to an active and ongoing dialogue with the K−12 chemistry education community about how best to meet its needs.

AN INCLUSIVE CHEMISTRY EDUCATION COMMUNITY

Although ACS already produces resources aimed at K−12 teachers of chemistry, AACT will add a critical layer of support by connecting these offerings and channeling them through a customized professional home. Its reputation for excellence and

DOI: 10.1021/acs.jchemed.5b00035
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necessary infrastructure make ACS a logical incubator for AACT, and its longstanding commitment to education, as outlined in its charter and strategic goals, makes it the ideal progenitor.

In his great distillation of Aristotle, scholar Will Durant wrote, "We are what we repeatedly do." AACT is an opportunity for ACS and the entire chemistry community to honor a proud tradition by continuing it. Recalling the words of the ACS national charter, we look forward to working together with the chemistry community at large to advance chemistry through AACT "in the broadest and most liberal manner".[10] To learn more about how to get involved with AACT, including how to join or how to sponsor membership for others, please visit us on the Web at teachchemistry.org.[9]

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Notes

Views expressed in this editorial are those of the author and not necessarily the views of the ACS.

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DOI: 10.1021/acs.jchemed.5b00035
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