Science in Seminaries: 8 new findings and 5 next steps for schools to engage

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Building upon the results of a recent survey of 739 faculty members at 186 ATS member schools (see "Engaging Science in Seminaries: 10 things our faculty are telling us," Colloquy Online, April 2017), ATS staff and research consultants have



completed further work to determine institutional perceptions about science engagement and to examine documents that reflect engagement already underway.

The topic could not be more timely. The most frequent reason given for science being a significant issue for theological education can be found in the words of one interviewee, "We live in a time when natural science, social science, engineering, and technology are among the primal shapers of our civilization." Another participant added, "It is, without a doubt, a bigger issue than declining enrollment in churches, etc." And when only one in five faculty believe their students are equipped to engage science upon graduation, clearly more needs to be done.

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> science, social science, engineering, and technology are among the primal shapers of our civilization."

To further the Science in Seminaries initiative, ATS first commissioned a follow-up study involving in-depth interviews with 29 administrators and

faculty at a diverse cross section of Protestant schools. Through a total of 1,682 combined interview minutes, this investigation confirmed many of the findings outlined in the faculty survey.

The interviews focused on three topics: (1) clergy preparation and culture, (2) science relevance and incorporation on seminary campuses, and (3) science resources. Collectively, they revealed the following perceptions:

Most key informants rank science very high among current cultural issues that are relevant to clergy preparedness, noting the implications of the relationship science has with how people view, care, and manage everyday life. Interviewees understand that science, as a

> subjective entity in itself, has the capacity to effect change in the subjective realities of faith, theology, religious practices, and the church, and to experience this mutual exchange is a welcome venture.

Most Protestant seminaries have faculty who engage science in the classroom. The highest quality engagement occurs through faculty with scientific backgrounds, guest science lecturers, and adjunct/visiting faculty teaching elective courses on science-theology topics.

Incorporating science and technological studies into core courses produces results that have a positive effect on the quality of seminary education, namely, theological reflection, student responses, and faculty development.

Because interviewees want to engage science, because they are convinced that science-theology exchanges must involve more than a select few, and because they see theology and faith richer for science, interviewees are vocal about science fitting into their pedagogical aims and commitments.

5 Faculty are the key gatekeepers for engaging science in seminaries. They can serve as promoters of scientific engagement, stemming from interest and background, as well as barriers to scientific engagement, rooted in competing interests, priorities, and the lack of greater institutional support.

Interviewees expressed a distinction about areas of science. More specifically, there is the sense that certain fields (e.g., psychology) are more compatible with and beneficial to pastoral ministry.

For students, the science-theology interface is not simplistic and not merely a cognitive activity. It involves more than their intellect and touches upon Christian faith commitments.

The implicit and explicit concerns about science in theological education urge caution in the ongoing exploration about science's place in theological education. The history of science in the western world—and, more specifically, how it has been used to justify inequality, oppression, and the mass destruction of people groups—must serve as a critical caveat to any deliberations about the interface between science and theology.

The conversation around science and theology is multifaceted and warrants an open mind. It is especially valuable to underscore the fact that the voices representing different schools understand the numerous cultural milieus in which their teaching and exploration exists. And despite the accompanying pressures and risks to viability and sustainability for some, there is the commonly held recognition that science and theology can no longer co-exist on separate islands.

Document review

To discover just how schools are putting their commitment to science engagement into action, the research team also conducted analyses of 421 course syllabi as well as public lectures, collaborations and partnerships, and the websites of 28 representative seminaries. Findings suggest there is a rich and vibrant landscape for broadening science engagement in seminaries.

Next steps

Embedded seminaries within research institutions are particularly successful with offering science-related degrees, as this study found, and they are worth a closer look to learn how other institutions might expand exposure by similarly incorporating science into degree tracks. The following steps are recommended for those—faculty, administrators, denominations, and donors—who seek to increase science engagement in North American seminaries:

Refer to science explicitly. In many cases, the level of science integration could be increased if documents or webpages used explicitly scientific language. As an example, a course in "Biblical Interpretation and Social Experience" could refer to just a few scientific factors that shape individual experience—like socioeconomic status, genetics, and ethnocentrism—which in turn can also influence biblical interpretation.

Enhance current efforts. In general, theology appears to have a proclivity toward soft science, specifically the mental health sciences. This is demonstrated in the courses offered, the kinds of soft science lectures conducted, and the therapy and counseling collaborations and webpages. This affinity for the psychological sciences, however, could be an opportunity for hard science integration. An institution that is comprehensively strong

in psychology, for example, could build on its current efforts with an adjacent hard science, like neuroscience or neurobiology.

Better integrate the hard sciences that are already compatible with theology, such as the topics of origins of the universe and ecology. By far, the most frequently cited hard-science course or lecture puts science and theology in conversation over cosmology and the environment. Often, even the general mentions of "science" can imply exploring things like evolution, biology, and physics. For centuries, theologians have asked questions related

to existence, and many of these hard sciences seek to understand and explain those questions. At the very least, this dialogue can be incorporated into systematic theology courses, Old Testament courses, and church history.

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could be linked across ATS seminaries. And, of course, some full-time seminary faculty have science specializations. Whether modifying hiring practices to deliberately procure individuals with science backgrounds or tapping into science networks, attempts to draw from science experts are well worth the effort.

If science is to take its place as an important dialogue partner with theology, then intentional effort is needed. Theology and science today are asking many of the same questions—they are both seeking truth, whether it is singular or manifold. Both disciplines have much to offer

each other. Science can reframe the theological conversation, making it more accessible to others and allowing theology to explore even further beyond the roadblocks of the discipline.

In turn, theology can shape scientific inquiry to explore evidence of how God might be working in creation, and that includes in natural and social ecology. And with an increased interest in the entwined relationship between science and religion comes a better future.

The research findings of the various components of the Engaging Science in Seminaries initiative will be detailed in a forthcoming issue of *Theological Education*, the ATS journal.

(Please note: The views expressed herein do not represent the views of the authors' institutions.)

Incorporate scientific assignments. Dozens of courses in the sample offer characteristically scientific assignments, such as conducting interviews, ethnography, and case study research and exploring scientific theory for explanations for observed phenomena. Even a short reading on how to conduct such field research could not only expose students to empirical methods but also challenge them to think scientifically (e.g. hypothesis testing) and in terms of evidence.

Integrate experts. Time and again the importance of science experts makes the difference for the level of science integration in seminary venues. Science experts serve as co-teachers or guest lecturers in seminary courses. And they can be key components in some collaborations; AAAS, for instance, has science advisors who



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