


COMMENTARY

Going upstream: Recommendations for training the next generation of I-O influencers

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Rogelberg et al. (2022) presented many valuable recommendations to help *established* industrial-organizational (I-O) psychologists bring the science of I-O psychology to the public sphere. However, we advocate for the need to go upstream and address science communication as part of the I-O graduate training process at both the master's and doctoral levels. The Society for Industrial and Organizational Psychology's (SIOP) *Guidelines for Education and Training in I-O Psychology* (2016) call for training students consistent with the scientist–practitioner model, which is a cornerstone of our field. Communication skills are listed as a primary competency for students as they transition into their roles as new I-O professionals. We assert that graduate school is an ideal time to develop science communication skills and ultimately enhance the utility of our research across settings and audiences.

Developing science communication skills may also be more difficult after graduation, especially when there may be fewer resources available (e.g., time or access to relevant experts). Yet, it is our ethical responsibility as researchers and practitioners to share the knowledge we gain through research with the individuals and organizations that can benefit from it. Therefore, we offer suggestions for building the skills necessary to share our science with the public through I-O coursework, university resources, and graduate training milestones.

I-O graduate training: Opportunities for science communication

Below we describe possible I-O graduate training opportunities that can facilitate skill development for science communication.

I-O coursework

An important starting point is to promote students' science communication skills through alternative or additional assignments:

1. For longer assignments such as final papers, have students focus on writing in an engaging, clear, and concise manner (e.g., executive summary or white paper).
 - An *executive summary* should quickly grab readers' attention, analyze and/or summarize the issue in accessible language, draw conclusions, and provide practical recommendations in a complete but brief synopsis (1–2 pages).
 - *White papers* are longer than executive summaries (typically 4–5 pages) but are also clear and concise summaries of research that offer practical recommendations.

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When incorporating these formats, develop a plan for disseminating students' work rather than burying them in a folder after submission. One possible avenue is to connect with relevant SIOP committees, such as the SIOP International Affairs Committee that publishes white papers and the SIOP Visibility Committee that publishes the Visibility Committee Hot Topic white papers.

2. For shorter or weekly submissions (e.g., discussion board posts), develop assignments in which students create content for a single article or small set of articles on a tightly focused topic (e.g., science summaries, social media posts, or infographics).
 - A *science summary* may include a brief (1–2 paragraph), jargon-free description of an academic article that was read for class.
 - A *social media post* (e.g., tweets, TikToks, memes, Instagram slides or stories) should help students learn how to make content both accurate and appealing to stand out from unsolicited advice on psychology, management, and business that is prevalent on social media platforms. These skills are invaluable for sharing I-O research with the public.
 - An *infographic* is a visually appealing graphic depiction of the main points from research.
3. Adopt more layperson-friendly class presentation formats such as those used in TED talks or the Three Minute Thesis (3MT) presentations, which emphasize concisely breaking down technical ideas/jargon for lay people.
4. Encourage unconventional, creative communication, such as poems, cartoons, music, or other art forms that convey information about I-O topics.
5. Develop science communication lectures and activities within an I-O course. For example, one of the authors delivered a science communication lecture with hands-on activities in their research orientation course for master's students. They covered why science communication skills are important and what some of the challenges are, and then the students chose a topic from a list, a goal for the communication, and a target audience. Students went into breakout groups to create an Instagram story on Canva.com for their topic, goal, and audience.
6. Build in applied opportunities or practicum projects for students to work directly with organizations on relevant projects. Deliverables for these projects may include providing executive reports or presentations for clients.

Beyond I-O coursework

Some colleges or universities may have readily available courses that students can take to learn more about methods for effectively disseminating scientific or other technical information to the public. We see the benefits of these options as twofold: I-O psychologists develop new skills by learning from experts and individuals from other disciplines gain exposure to I-O psychologists.

1. Encourage students to take classes offered by different departments (e.g., communications, journalism, public health) that focus on developing communication skills for interacting with nonacademic audiences, increasing media literacy (i.e., effectively communicating across different mass media platforms, like television, radio, newspapers, magazines, podcasts, and social media), and/or public speaking.
2. Encourage I-O students and faculty members to engage in university-sponsored media training.
3. Outside of the classroom, students can give back to their communities and develop client-facing communication skills by participating in Volunteer Program Assessment (VPA, vpa.unc.edu), which provides pro bono consulting projects for local nonprofit organizations, or other similar supervised consulting experiences.

4. Invite guest speakers with relevant expertise (e.g., a podcast host, university media professional, or local journalist) to program or department meetings, colloquia, or “brown-bag” talks.

Graduate training milestones

Students can further develop and practice science communication skills during their graduate training milestones: master’s theses, comprehensive exams and projects, and doctoral dissertations.

1. Establish expectations that I-O graduate students will share the findings from their completed research projects (e.g., published papers, theses, dissertations) with broader, nonacademic audiences.
 - a. This can be achieved both formally (e.g., dissemination plans in defense documents) or informally (e.g., conversations about dissemination during defense meetings, highlighting dissemination examples on program websites).
 - b. Opportunities for students to share their research may include interviews on a podcast, connecting with a science writer or university public relations specialist at their institution, writing an Op-ed for a national or local newspaper, writing an article for an industry or trade journal, writing a blog, posting a Twitter thread or TikTok video, or creating an infographic to share on social media platforms. Thus, students would have substantial flexibility in how they choose to meet expectations related to sharing their research with the public. Additionally, students may want to consider including these experiences in a “Science Dissemination” section of their resume or CV.
 - c. I-O faculty can model these behaviors by making science dissemination a habit in their research agenda, too.
2. I-O program comprehensive (i.e., “comps”) requirements provide another avenue for developing science communication skills during graduate school. Interestingly, in a survey of I-O program directors, communicating I-O science to the public was not explicitly mentioned as one of the intended purposes of comprehensive requirements (Brossoit et al., 2021).
 - a. Students’ ability to translate I-O research clearly and concisely can be assessed in comprehensive exam questions or in dissemination deliverables (e.g., a blog or TedTalk related to a core I-O topic).

Anticipated barriers

Intentionally building science communication into I-O graduate training holds substantial promise for increasing the public’s knowledge and use of best practices within our field. However, several important barriers are worth noting:

1. When working with science writers or journalists, graduate students are at the risk of being misquoted or having their research portrayed inaccurately. The trade-off between the accuracy and accessibility of I-O science is one that we must continue to grapple with. Media training, or working with public relations specialists, may help to combat this.
2. The use of social media for science translation may blur personal and professional boundaries. We encourage graduate students and faculty alike to thoughtfully consider their preferences in managing these boundaries and use social media in ways that align accordingly (e.g., creating separate profiles for personal and professional use).
3. Communicating science to the broader public may make I-O psychologists vulnerable to harsh and public criticisms. However, this may lead to growth opportunities for I-O

psychologists to expand their perspectives. Moreover, assignments during graduate school designed to practice these skills will enable students to build confidence in their science communication abilities and receive feedback when the stakes are considerably lower.

4. Given the rapid pace media platforms change, I-O psychologists will need to continuously adapt and modify their approaches to science communication, both throughout and following graduate school. By training future I-O professionals to adapt to such platform changes early in their careers, we can help mitigate the challenges associated with establishing a public presence later.

Conclusion

Graduate school is an opportune time to develop science translation, communication, and dissemination skills, particularly through coursework (within and outside of I-O psychology classes) and graduate school milestones. Creating opportunities for students to gain these skills during their graduate training will help establish norms for communicating our research findings to public audiences early on and address the need to share our work with those who can benefit from it. The platforms for information dissemination will continue to change, but the expectation to communicate I-O science and best practices should persevere.

References

- Brossoit, R. M., Wong, J. R., & Fisher, G. G. (2021). Same degrees, different requirements: The variety of comprehensive ("comps") in I-O psychology master's and doctoral programs. *The Industrial-Organizational Psychologist*, 56(4). <https://www.siop.org/Research-Publications/TIP/TIP-Back-Issues/564/ArtMID/24926/ArticleID/5238/Same-Degrees-Different-Requirements-The-Variety-of-Comprehensive-Requirements-%e2%80%9cComps%e2%80%9d-in-I-O-Psychology-Master-%e2%80%99s-and-Doctoral-Programs>
- Rogelberg S. G., King, E. B., & Alonso, A. (2022). How we can bring I-O psychology science and evidence-based practices to the public. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 15(2), 259–272.
- Society for Industrial and Organizational Psychology, Inc. (2016). *Guidelines for education and training in industrial-organizational psychology*. <https://www.siop.org/Events-Education/Graduate-Training-Program/Guidelines-for-Education-and-Training>

Examples and Additional Resources

- APA Psych Learning Curve Series (Blog): <http://psychlearningcurve.org/tag/i-o-psychology/>
- Example Infographic: <https://twitter.com/SDSUIOPsyGrad/status/1365455651015565312>
- Example Instagram Slide Deck: <https://www.instagram.com/p/CLxk40xltN/>
- I-O Article Haiku #1: https://twitter.com/dr_lbarber/status/1286740141336272896?s=21
- I-O Article Haiku #2: https://twitter.com/dr_lbarber/status/1321511407263780864?s=21
- I-O Psych Memes Instagram: <https://www.instagram.com/iopsychmemes/>
- OpEd Project Resources: <https://www.theopedproject.org/resources>
- Paul Spector's Blog: <https://paulspector.com/blog/>
- Science Communication Lecture PowerPoint: https://docs.google.com/presentation/d/1q4KrhOTLY4d_AiwX92Ro_95HA3zvhhVY/edit?usp=sharing&ouid=107395981316655931464&rtfpof=true&sd=true

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