

Tips for Pursuing Non-Academic Careers

This tool is designed for early career STEM education researchers and developers to offer tips for pursuing careers outside of academia. The advice largely comes from National Science Foundation-funded awardees who have graciously shared information about their own career pathways, work experiences, and perspectives.

Paths to Non-Academic Careers **A**

The large and diverse field of education offers many career possibilities. While many early career education researchers choose to pursue careers in academia, others prefer to establish careers outside of a university setting. The possibilities include public sector departments (federal and state departments of education, county and local school districts, or policymaking organizations), research and development groups and think tanks (nonprofit organizations or for-profit companies), cultural organizations and out-of-school programs, and a variety of start-up companies. Some professionals cite collaborative work environments and flexibility as reasons for pursuing careers outside of academia. Ultimately, you have to decide which path is right for you. You want to be in a place where there are good ideas and you can make a difference in implementing those good ideas. Sometimes it is hard to know early in your career exactly what you want to do, and it can be challenging to plan in advance when there are so many options. Often it is a matter of being in the right place at the right time and having different experiences so you can assess your interests, performance, and career satisfaction. For most people, it is about defining your professional agenda (e.g., research, professional development, curriculum development, assessment, evaluation, instructional design, specific grades levels, or school-to-work), deciding how best to develop yourself professionally, and taking advantage of different opportunities to pursue that work. It is important to be driven by the excitement of the work, wherever that takes you.



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Finding a Position

PREPARING FOR THE JOB SEARCH

Engage in reflection and self-assessment. Ask yourself:

- What kind of work do I want to do? Am I interested in foundational research, policymaking and advocacy, professional development, and/or curriculum development?
- Why do I want to do this work?
- What do I need to be able to do this work?
- Who is doing related work I think is important?

Graduate students are socialized for an academic position. If you get the sense that academia might not be right for you, think about the parts of your work that make you feel the most energized and excited and what that work could look like in a non-academic setting. Consider what you would be giving up by not going the academic route, and ask yourself whether you are okay with that.

IDENTIFY ORGANIZATIONS THAT ARE A GOOD FIT FOR YOU

Research the types of organizations and groups that do the kind of work that most interests you. Unfortunately, there is not one particular clearinghouse to help you zero in on specific organizations; searching may require a lot of time and effort. You can start with internet searches, exploring websites of organizations you have identified, searching sites such as LinkedIn, or going directly to HR departments of particular organizations. You might think about accessing social media sites to find colleagues who work at or know of organizations that may interest you.

Think about your identity as a STEM education professional and whether an organization will allow you to work in an area that aligns with your knowledge, skills, interests, and goals. Compare your career goals and, if appropriate, research goals with the mission and strategic goals of the organization. Know what supports are in place to help you develop the skills necessary to do this work. Understand how the organization staffs projects. What is the process for continuing a strand of work? How likely is it you could be focusing on work that does not align with your professional goals?

Network. Networking is one of the best ways to figure out if a career path, organization, or job is right for you. Identify individuals who are doing work that interests you and get in touch with them through email or at conferences. As you identify organizations and specific STEM education leaders, set up informational interviews to learn more about the work of the organization, and gauge whether it might be a good fit for your professional pathway. However, only reach out to people if you are truly interested in their work and/or the work of the organization.

Keep informational interviews short. Aim for about 20-25 minutes. If you find you have a lot to discuss, it is okay to let the conversation run longer, but be respectful of the other person's time. Set a goal for the conversation, and develop a list of clear, targeted questions to help you get the information you need.

The best time to reach out and make connections is before you are on the job market. Getting your name out there early can be advantageous when your job search begins. People will be more likely to speak with you if they do not feel pressured to offer you a position.

Ask your contacts at organizations that interest you if you can submit your resume to them. If they think you are a good fit with an organization, those contacts will often pass around your resume to other colleagues even if they do not have an open position at that time. Keep in touch with your contacts to learn about upcoming job opportunities. In the meantime, and if you have some time to spare, ask your contacts about volunteer opportunities. Volunteering can help you get a sense of whether an organization is right for you.

JOB POSTINGS

Most organizations include job listings on their websites and other job boards. Professional associations sometime promote job postings through databases and e-lists. Public sector jobs in education are listed on state department of education websites. Some organizations will allow you to submit a resume or CV online and will contact you if positions become available that align with your skills.

The job outlook varies, particularly in the nonprofit sector. At organizations funded through “soft money” (i.e., grants, contracts, etc.), employment opportunities are dependent on the needs of individual projects, and hiring often occurs on a rolling basis. For some organizations, new projects are often announced in the fall. For school district positions, the goal is to hire before school begins; for policy positions, before the legislative session starts. Overall, the hiring process tends to be quicker for non-academic positions.

DEVELOPING YOUR APPLICATION

Hiring is usually done by project staff rather than the human resources department, so knowing someone at an organization is beneficial. Hiring is typically a group decision, and committees can include representatives from the different areas within the organization with whom you will interact on the job.

Hiring committees are interested in well-rounded applicants whose expertise can be broadly applied across a variety of projects and roles. Think about how to present yourself in the best light, which may mean demonstrating deep knowledge in one area but also experience in, understanding of, and interest for other areas. Having a diverse background can make you a competitive candidate. Hiring committees want to understand an applicant’s vision. They want to see a commitment to professional growth and have a clear sense of what you hope to accomplish in your profession. This will help them assess whether the position or organization is a good match.

Organizations are interested in hiring people at different stages of their career trajectory. If a position calls for a doctorate degree, employers will sometimes consider an applicant who will soon graduate. Depending on the position, there may be organizations specifically looking for recent graduates. It is also possible to begin the interview process while you are still a student with the expectation that you will begin working after graduation. It is worth it to begin making connections early rather than waiting until you are on the job market.

RESUMES AND CVS

Depending on the job description and the type of organization you are applying to, some things to highlight on your resume/CV might include:

- ✓ Relevant degrees
- ✓ Professional training
- ✓ Research experience
- ✓ Content knowledge
- ✓ Relevant skill sets
- ✓ Evidence of experience applying knowledge and skills in a similar setting
- ✓ Publication record (experience with writing, publishing, and dissemination)
- ✓ Teaching experience
- ✓ Methodological skills
- ✓ Evidence of leadership
- ✓ Technical skills
- ✓ Fundraising experience
- ✓ Evidence that your work is contributing to an area of STEM education research, development, practice, and/or policy.

This list is tailored primarily to early career individuals looking for research positions, so adjust accordingly. For instance, if you are applying for a position to lead professional development, include information on sessions you have led or instructional guides you may have created. If you are looking for a position in policymaking, emphasize your knowledge of state and federal STEM education legislation.

COVER LETTER

Compose a strong cover letter to make your application stand out. Be sure to highlight the skills and experience they are looking for; you can tailor your letter to the position using language from the job posting. With the advent of electronic applications, it can be tempting to get lazy with your letter. Do not let this happen. Be creative. Your cover letter is often what sets you apart from other applicants and conveys your personality. The goal is to get an interview.

If you are truly interested in a position, submit an application even if you do not have all of the required qualifications. Sometimes organizations need to hire a specific person with a specific skill set; other times they are looking for a well-rounded candidate to join a research team. You won't necessarily know which type of candidate they are looking for from the job description. In your cover letter, highlight all of the preferred qualifications you have and indicate that you are working toward the required qualifications that are missing. Show that you are willing to grow into the position. It may also help to note any unique skills or experiences you have that may set you apart from other applicants.

PREPARING FOR AN INTERVIEW AND/OR JOB TALK

Be willing to travel for an interview if you can. Most organizations will conduct at least one phone or virtual interview first and then follow up with an in-person interview if they are interested in you as a candidate. Virtual interviews are limiting, and your willingness to travel shows dedication and commitment. However, there are many examples of excellent candidates, with positive results, who interviewed online. Therefore, if you do not have travel funds, do not let it stop you from pursuing an interview.

Ask the hiring committee about the format for the interview beforehand. The expectations for interviews and job talks vary by organization and position, so understanding those expectations will help you prepare.

For research positions, a job talk is often part of the interview process. This will be an opportunity to showcase your main research thus far and how it fits into a larger research agenda. For early career professionals, the substance of your job talk often comes from your dissertation work. Be prepared to discuss what motivates your research, describe your methodology, and communicate your findings. Hiring committees are looking to assess the quality of the work you have done, understand whether your empirical skills align with the work of the organization, and find out how well you understand the policy or other contextual implications of your work.

Be prepared to speak about how you can contribute to the culture of the organization. In addition to

assessing your scholarly qualifications for the position, hiring committees also want to assess whether you are a good fit for the organizational culture. They may be looking for people who can work independently as well as in teams, who are good communicators, and who have experience in diverse workplaces. A history of building strong relationships with colleagues and external partners is a plus for many positions.

In both the interview and the job talk, describe what you can offer the organization as well as what you can learn from it. Convey why hiring you will be mutually beneficial.

Hiring committees will sometimes request a writing sample in addition to a job talk. This allows them to assess how well you present your work both orally and in writing.

Always follow up after the interview. Take the time to thank the members of the hiring committee for meeting with you. Remain in communication with your contact on the committee. Remember that while this job might be highest on your list of priorities, members of the hiring committee are juggling the hiring process with many other professional responsibilities. Do not be pushy, but remaining in contact will help the committee remember you and will show your continued interest in the position.

Considering a Job Offer

Explore whether there is likely to be a fundraising aspect to the position. If so, you will need to think strategically about how to obtain and sustain funding for your work, particularly if the organization operates primarily on external funding, or soft money. You have to enjoy that aspect of the work and be confident that you can do it well.

Learn if there are ups and downs in terms of funding cycles. Some positions require paying attention to funding trends and ensuring that your organization is positioned to be competitive. You must be prepared to deal with funding uncertainties; only you can decide if you are comfortable with this situation. Organizations that depend

on external funding are not able to make a long-term commitment to you (e.g., public-sector positions that may require the passage of legislative or school committee budgets).

Do research to learn the typical salary range of someone in your position. Talk to people in your network. Ask about starting base salary ranges as they relate to position, education level, professional experience, and geographic location. Advocate for yourself. Do not be afraid to ask for what you think you are worth, but be informed about what is common. Make sure you also understand the opportunities and expectations for advancement within the organization.

Make sure you understand the benefits package. Benefits, such as vacation or sick time, are typically non-negotiable. There is no harm in asking the human resources department specific questions about benefit flexibility, but be careful not to seem too pushy with the hiring committee.

During the negotiation process, explain what is important to you and what you need to be successful. Be open about your needs, but approach the negotiation as a flexible discussion rather than a demand or deal breaker. Sometimes non-academic organizations do not have as much flexibility when it comes to negotiations, but they might be able to offer help with moving expenses, attending conferences, or professional association memberships. Make sure you understand the organization's policies regarding flex time, working remotely, or part-time work and how those policies apply to you.

If you interview for a job at an organization you like but are not hired the first time, do not give up. There are new projects beginning all the time, and it helps to have already made a connection with that organization. Your persistence demonstrates that you are genuinely interested in the work of that organization.

After You Are Hired

Always think about what comes next and how to position yourself well to continue doing the work you care about. Once you are hired at an organization, there will likely be opportunities to move around within the organization.

Organizations often post jobs internally first and try to match people based on their research interests. Still, do not give the impression that you are accepting a position that you are not really interested in just to get your foot in the door. When considering future opportunities, make sure you are continuing to build your portfolio in a way that is consistent with your career goals.

Maintain and expand your networks. Creating and sustaining partnerships is an essential part of much of the work in STEM education; make sure to keep in touch with colleagues from different types of institutions (e.g., academic, nonprofit, private sector) and continue to build new relationships.

If you think you might be interested in eventually pursuing an academic career, stay informed about what is expected in order to enter academia and work to remain eligible. It is challenging, but not impossible, to transition from a non-academic to an academic position. Keeping up with publishing in the non-academic world is difficult, but it is easier at some organizations than others. Ask about institutional support for this. For example, is publishing a requirement for promotion? If you write grants, include funding for manuscript preparation, publishing, and dissemination in your proposals. Presenting at conferences and writing conference papers can help you keep your name and work in the field. Collaborating with partners at academic institutions is another way to keep a foot in both worlds. Knowing what is expected in both non-academic and academic fields can help you make professional decisions that won't limit your options later on.

Understand that workloads can ebb and flow. Very few professional careers allow you to keep a 9-to-5 schedule. Try to figure out the work schedules of people with whom you will be collaborating most closely. Do they have busy periods and lighter periods? During the busy periods, do they stay late at the office? Do they work at home in the evenings or weekends? Are there times that are more and less busy? Decide whether this aligns with the level of work-life balance that you want to maintain. Realize that you may need to say "no" to some opportunities in order to maintain that balance. Most likely, there will be other opportunities. With time and experience, you will have a better sense of your capacity to take on additional tasks, but do not stretch yourself too thin early on.

Additional Resources

- [20 Transferable Skills for PhDs](#)
- [An Academic's Guide to Getting a Non-Academic Job](#)
- [Converting a Curriculum Vitae to Resume](#)
- [Top 10 Nonprofit Job Hunting Tips](#)
- [Why it's Not a 'Failure' to Leave Academia](#)
- [Working in Industry vs Academia: Which is Right for You?](#)

[Additional resources](#) available at cadrek12.org.