This tool is designed for early career STEM education researchers to offer tips for building professional networks. The advice largely comes from National Science Foundation-funded awardees and early career researchers and developers who have graciously shared information about their own networking experiences.

Why Network?

Networking is about building and sustaining relationships with people—those who contribute to your professional growth and those with whom you can work to contribute to the profession and field. Networking often occurs naturally in the course of your professional life, even when you do not realize it is happening. Building professional networks is one of the best ways for early career professionals to set themselves up for success. Learning more about others in the field ultimately makes you a better researcher. The perspectives of others can strengthen your work, and your professional relationships have the potential to create partnerships for the future. At the same time, your work, background, and perspective have much to offer your colleagues and the field.

Some reasons to form networking relationships include:

- Learning about an institution or organization
- Learning more about a person’s research/work
- Seeking specific feedback on your own work
- Exploring opportunities for collaboration

Develop a Networking Plan

Spend time developing a networking plan and strategy. There are numerous ways to connect with people in your field (e.g., via email, at conferences, or through mutual connections). Think about how you want to expand your network; consider starting small and building over time. It is important to identify your needs and set goals for what you hope to get out of and give to a networking relationship. Even when networking opportunities arise spontaneously, having a plan in place will help you get the most out of those interactions.
Identify your networking needs and opportunities. Consider questions such as:

- What are my career goals?
- How can networking help me reach those goals? What opportunities exist for me to further develop my strengths and address areas of need?
- What skills do I need to acquire or strategies do I need to implement in order to reach my networking goals?
- What types of professionals could help me? Where, when, and how can I best network with them?
- How could networking help me better contribute to the field?
- What kinds of conversations would I have with networking contacts, and what questions would I ask them, if given the opportunity?
- What would I do with their insight/advice?

You will have different networking goals at different stages of your career. As an early career researcher, you might be seeking to build a community of peers with similar passions and goals. Building that community will come more naturally if you know who you aspire to be as a scholar. Once you have started to establish yourself professionally and develop a research program, you may be networking to learn new things, find collaborators with particular skill sets to help fill in gaps, or develop relationships with people in the communities or institutions with whom you want to conduct studies.

Design your map to fit your networking needs. You can map out your entire professional network or focus in on a particular context, such as a conference like AERA, NCTM, or NARST. If you plan to attend a conference, review the program beforehand to learn who will be there. From this list, identify who you already know, who you would like to get to know better, who from your institution will be in attendance, and who you would like to meet. You might also consider reviewing your reference list and comparing it with the conference program. Conferences are a great opportunity to connect with the people who have influenced your work.

Identify people to connect with for specific reasons. Networking is not about collecting business cards; it is about making valuable connections.

Explore shared connections. If you are uncomfortable reaching out to someone directly, figure out if the two of you share a mutual connection who can introduce you in person or through email. (LinkedIn can be a good tool for this.)

Do not underestimate anyone. You do not necessarily know how important a connection is going to be in the moment, so take the time to get to know people and familiarize yourself with their work. Do not just focus on the “stars” in your field—project PIs or people with a lot of publications; rather, take an active interest in everybody, and work to build relationships over time. After all, fellow students, for example, eventually move on to positions on hiring committees, advisory boards, and review panels. Put effort into connecting with peers and near-peers in your field. You are the next generation of scholars; support one another and build a strong community.

The “Who” of Networking

Map your network. Use paper and pencil, Excel, or more-advanced digital tools (e.g., bubbl.us or Lucidchart) to record who you have in your professional network. List what you know about them, what you would like to learn, and what you have to offer them. Use this map to identify gaps in your network so you can begin thinking about strategies to fill those gaps. It can be difficult to identify the gaps if you do not yet know exactly what you need, so think of this as a working document. This map can help guide you as you continue to build and sustain your network.
The “How” of Networking

Nowadays, many networking relationships begin through email. When emailing to initiate a first meeting (whether that meeting will be by phone, virtual, or in person), briefly introduce yourself, describe your research interests and why you want to speak with them specifically, demonstrate that you are familiar with their work, and highlight ways in which the conversation could be mutually beneficial.

Keep initial conversations brief. While it is okay to see where the conversation takes you when you talk with a contact, also be respectful of their time. Have a goal for the meeting and some questions to help guide the conversation. This will help ensure you get the information you are looking for.

To break the ice with other researchers, find out what they are passionate about. Ask about their work, mention how it connects with your own, and see where the conversation goes. Show enthusiasm but do not be overly aggressive. Pick up on cues to gauge their interest.

Develop tools or “props” to aid in your networking. Draft guiding questions or sentence starters in preparation for conversations. Develop and practice your elevator pitch (a concise speech that provides an overview of your work). Create a personal webpage that is professional and tailored to your position. For academia, this might include your educational background, courses you have taught/wish to teach, your research interests, a list of your publications and awarded grants, and any honors or awards you have received.

To the extent that you are comfortable, consider using social media to enhance your networking. Find platforms that work for you. Facebook, for example, may connect you with a lot of users, but it requires active management, which can be time-consuming. Twitter or Instagram, on the other hand, may require less of your time and have a higher reward. LinkedIn is designed for professionals and may be particularly useful for people on a non-academic track. Academia and ResearchGate are great for people in and outside of academia. Join online groups related to your research interests. Whatever you choose, build your social media presence carefully and thoughtfully. Use social media as a member of your professional community. Do not just promote yourself and your work; engage in online conversations and support your colleagues.

Networking must be a two-way street. That is not to say that every interaction must have equal give and take, but it is essential that both people benefit from the networking relationship. Give people a reason to want to begin and continue interacting with you. If their research is meaningful to you, identify precise reasons why, and share how it has influenced your own work. Offer suggestions for how your work could be valuable for them. Sometimes, as an early career professional, it can be challenging to identify exactly what you have to offer a more experienced scholar. But your background is unique and you bring a fresh perspective to the field. Spend time figuring out what unique strengths and skills you have and how you can offer them to others. Simply exchanging ideas or discussing your shared interests can help you both identify similarities in your work that can generate new ideas. Take advantage of opportunities to learn new things and work with people in your field. You always have something to bring to the table.

Decide on your boundaries when it comes to networking. Ask your advisor or others you trust what is appropriate to share with new contacts. Consider sharing, for example, only part of a chapter of your dissertation. If they use it, they should cite you. Consider PDFing the documents you share.

The “What” of Networking

ELEVATOR PITCHES

Decide how you want to present yourself and your research, and how you might change this message depending on who you are talking to. Identify the most important points you want to convey. It can be challenging to condense your research into sound bites, but decide what you most want to convey about yourself and your work, and let that be the substance of your pitch. Adapt this pitch for different audiences. For example, if you are speaking with people who have expertise in your area of
study, contextual information probably is not necessary; you can dive into the specifics and begin discussing your work immediately. If you are conversing with someone less familiar with your field, you will need to set the stage: a brief description of your area of study, the need, and how your work addresses that need. To make your pitch more accessible, think of concrete examples that illustrate the need for this type of work. In addition, you will need to adapt your pitch for different time frames—figure out what points you want to highlight in a two-minute pitch, a one-minute pitch, and a 30-second pitch. The order and structure will vary, but make sure you are communicating your key points consistently.

Structure your elevator pitch in a way that sounds most authentic to you. If you prefer, you can offer a brief introduction to your work, and then turn it over to the other person and ask questions to learn more about their work and interests. This is particularly relevant if you are someone who is more comfortable listening than talking. After your conversation, take time to think about what you have in common and how you could benefit from a continued relationship. Pose this in your follow-up with them. Make sure the person knows what you are interested in, how your interests intersect, and that you are eager to work together.

TOPICS OF CONVERSATION

✔ Pose questions that arise as you review the literature in your field.

✔ Ask about their writing process or a project management strategy; these are areas of interest most scholars have in common and can be an opportunity to exchange best practices.

✔ Take a genuine interest in their work. Ask about how they are addressing their research questions or what they are doing in the classroom.

✔ Connect over a shared cultural identity.

✔ Ask how they navigate bridging two fields (e.g., science education and EL).

✔ Discuss different perspectives on your area of research, particularly from people with similar interests but whose work is grounded in different theories.

✔ Do not just talk about research; get to know each other as people. People are complex, with many intersecting identities and interests. Do not let the desire to form professional connections allow you to overlook personal connections.

The “Where” of Networking

NETWORKING AT CONFERENCES

If you are attending a conference, try to be proactive in setting up networking opportunities with people of interest. Set networking goals for conferences, such as a specific number of new people you want to meet. You can approach them once you arrive or contact them by email before the conference to inquire about setting up a one-on-one meeting. If you are unable to work out a time to meet, briefly introduce yourself when you see them, keep the conversation short, and ask if you can follow up with them via email or over the phone. At a minimum, use the conference interaction to plant a seed, share a business card, and then plan to follow up at a later date.

Manufacture opportunities to build community. If your goal is to make connections and develop relationships, set up specific times and places to meet with people during the conference and invite others to join you.

Sign up for a mentor at conferences if you have the option. This can help with visibility and making connections. At a minimum, mentors typically introduce mentees to the conference, describe the structure, and introduce them to other scholars. You can come into the conference with your own agenda to ensure that you get what you want/need out of the relationship. It is possible that you may continue this relationship beyond the conference.

Connect with people during your conference presentations. Those attending your session likely have interests that overlap with yours. You may come from different backgrounds but share a similar professional or research goal. Not only can attendees offer valuable feedback on your work, but you might identify places where
your work intersects, which can lead to ideas for future collaboration on papers or projects.

Be strategic in deciding which sessions to attend. If your goal is to make connections and develop relationships, think about attending roundtables, workshops, and sessions with several talks happening in the same room. Support other early career researchers by attending their sessions. If you have a genuine interest in the panelists’ work, ask questions, stay after to introduce yourself, or invite them to coffee if you would like to learn more.

Attend conference poster sessions. Poster sessions provide a great opportunity to engage in authentic dialogue. The environment tends to be more relaxed than formal presentations, and the poster itself offers substantive talking points to help begin a conversation.

Consider pre-conference workshops and special interest group events. These sessions can be good spaces to meet people with similar research interests. They often include a mix of professionals—from PIs and more established scholars to up-and-coming researchers and graduate students—which provides you with access to an array of perspectives and expertise. Becoming involved in leadership for these groups can offer even greater opportunities to connect with others in the field. Attending graduate-student or other themed events are also great ways to meet new people.

Take advantage of informal opportunities! A lot goes on at a conference outside of the official program of events, and networking opportunities are all around you. Engage in casual conversations at the café during breaks or over lunch/dinner. Attend social events arranged by the host organization and others. Get to know people on a more personal level in a relaxed atmosphere. Signing up to volunteer at a conference is another great way to meet new people.

Do not forget about small conferences such as single-discipline STEM conferences or practitioner-focused regional and national meetings. Large events can be overwhelming, with so many activities and distractions. People can be more relaxed at smaller conferences, which can allow for less hurried, more organic conversations.

Take the time to jot down a few notes about your interactions. In a notebook or on the back of your contact’s business card, write down a few key words and/or ideas to help jog your memory about this person later. Begin drafting a follow-up email with key points from your conversation or record a message on your phone as you are walking to your next location. Keep in mind that if you know their name, you can find information about them online, or you can revisit the conference program later to refresh your memory.

NETWORKING AT OTHER VENUES

Serve as a reviewer for an academic journal or for NSF, or join a committee related to your field of study. This could allow you to gain new experience, demonstrate your expertise, learn from others with different backgrounds and interests, and get to know editors, program directors, and committee members.

Pay attention to events happening at other universities and organizations in your area. Events at neighboring institutions can bring together people outside of your network and provide opportunities to connect with new peers. Pay attention to school or community events as well, particularly if your work involves building community partnerships.

Invite guests to lead a brown bag discussion at your organization or to speak in your classroom, whether virtually or in person. Not only will you be able to learn more about this scholar’s work and start to build a professional relationship, but your students or colleagues will also have an opportunity to make a connection and expand their networks as well.

Sustaining Networking Relationships

Keep track of your contacts. Do not let business cards pile up with no plan to use them. Consider keeping a spreadsheet with the names and contact information of those you meet. Include columns to describe the context of your meeting, what was discussed, who connected you (if applicable), the date of your last contact, and follow-up goals.

Always follow up after you have made a connection. It is important to thank the person for their time and to
communicate why the interaction was beneficial. If you see an opportunity for future collaboration, let them know this is something that interests you (e.g., “Keep me in mind for work in this area,” or “I am happy to be an extra set of eyes”). If face-to-face interactions are nerve-wracking for you, take extra care to shine in your follow-up message.

When you do establish meaningful connections, work to keep those relationships going. Take time to think about the potential benefits of a connection with a particular person and what about their work appeals to you as a professional. Is it the content of their work? their methodology? Are they publishing in journals that interest you? Follow up if you have additional questions or want feedback based on your most recent conversation. Share with your new contacts interesting articles or new resources that become available. Think of creative ways to keep in touch. For example, if you see they have a recent publication, promotion, or major life event, send them a congratulatory email! Similarly, put effort into maintaining the connections that people initiate with you.

Do not reach out to people only when you want or need something. Consider what you can offer others. Remember that networking should not benefit just you. Think about how you can make connections that are beneficial for both parties and for improving STEM education.

If you are unsatisfied with the quality of an interaction, think to the future. The STEM education world is relatively small; you will likely have other opportunities to connect with that person.

Sometimes you receive great advice in short, spontaneous interactions; take it for what it is. It is not always necessary to continue a networking relationship.

Just Do It!

Understand that networking is something you learn and improve on as you go. If networking feels awkward to you, know that it does get easier with practice. Take into account your personality type, and be strategic about making meaningful connections in a way that feels right for you. At a minimum, show enthusiasm and keep an open mind. Be able to summarize your research for maximum effect, and be willing to answer questions about your work. Listen intently as your contacts discuss their work with you, and try to identify places where your interests intersect.

Focus on forming and cultivating authentic relationships. Follow the work. If you desire to learn more about each other’s work, it is an authentic connection. These are the relationships you want to invest in.

Remember that in many cases, your reputation as a researcher and the quality of your work precede you. As you continue to progress in your field, you will have more and more opportunities to connect with others. Keep doing thoughtful and creative work that you are passionate about, and you will have plenty to offer your peers!

Additional Resources

- 6 Networking Tips That Work for Me
- 7 Tips to Supercharge Your Academic LinkedIn Profile
- 15 Helpful Questions to ask in an Informational Interview
- 20 Ways to Network That Do not Feel Like Networking
- A Brief Guide to Research Collaboration for the Young Scholar
- Academic Self-Branding
- Authentic Networking: 9 Questions to Ask to Discover Who is in Your Network
- How Leaders Create and Use Networks
- How to Maintain Your Professional Network Over the Years
- How to Make the Most of Academic Conferences—Five Tips
- The Elevator Pitch: Presenting Your Research in Conversation

Additional resources available at cadrek12.org.