**DART Mentorship Program Guidelines and Materials:**   
**For Graduate Students**

**Overview**

An Individual Development Plan (IDP) is a personal action plan designed to help you take ownership of your training and professional development, set and achieve realistic goals, and clarify your academic responsibilities and expectations. You can tailor your IDP to your individual needs, with input and advice from your mentor. It can also be a useful launching point for discussing your long-term career interests.

Completion of your plan and assessments are considered mandatory as part of the DART Broadening Participation and Mentorship Plan, and progress related to this program will be included in each year’s annual report to NSF. If you have any questions about these materials or the program in general, please contact Brittany Hillyer at [Brittany.Hillyer@ArkansasEDC.com](mailto:Brittany.Hillyer@ArkansasEDC.com)

**Process & Timeline**

The first step is to complete the pre-survey form below to assess your skills and articulate your goals. Please submit your completed pre-survey to [Brittany.Hillyer@ArkansasEDC.com](mailto:Brittany.Hillyer@ArkansasEDC.com). Next, you will work with your mentor to make an action plan by setting specific goals and milestones to help you be more deliberate about your professional development and stay on track. At the end of the designated time period, you will complete a post-survey to assess your progress and help you plan for the future. The plan template should be completed within 2 months of your DART participation start date and uploaded to your profile page in [www.dartreporting.org](http://www.dartreporting.org). The post-survey should be completed within one month of the completion of your DART participation end date and submitted to [Brittany.Hillyer@ArkansasEDC.com](mailto:Brittany.Hillyer@ArkansasEDC.com).

**Tips & Best Practices**

* Self-assessment: Try to be realistic when identifying your strengths and defining the areas that need development. Be sure to ask your mentor or other colleagues familiar with your work for feedback!
* Identify the skill sets you will need to pursue opportunities that interest you. What are your main priorities and how will you develop the necessary skills? What resources are available to help you? (Consider resources in your department, professional organizations, online courses/webinars, etc. If you can’t find what you’re looking for, ask around – your peers and your mentor may have ideas.)
* The best milestones are SMART:
  + Specific (Is the milestone focused and unambiguous?)
  + Measurable (What product or outcome will show you have achieved the milestone?)
  + Actionable (What action is required on your part?)
  + Realistic (Considering difficulty and timeline, is the milestone achievable?)
  + Timely (By what date will you complete the milestone?)

**Project Website**

Information about the DART project can be found on the website [www.dartproject.org](http://www.dartproject.org)

**Step 1: Self-Assessment Pre-Survey**

Review the questions in each section and respond in the space provided. Don’t overthink it. Then, rate your skills on the scale given at the bottom of the page. After you have completed the written self-assessment, use it to complete your plan template.

**Teaching & Mentoring** (use the following prompts to reflect, you don’t have to answer each question)

What are your teaching and mentoring goals? Have you ever taught, guest-lectured or served as a TA, or plan to in the next 12 months? What feedback have you received on your teaching? What teaching skills or knowledge would you like to improve? Have you ever served as a mentor? What qualities/skills do you associate with good mentoring? What mentoring skills would you like to improve?

|  |
| --- |
|  |

Please evaluate your skills and abilities in the area of teaching and mentoring.

Use a scale of 1 (not at all proficient) to 5 (highly proficient). If something is not applicable, type N/A

|  |  |
| --- | --- |
| **Competency or Skill** | **Score** |
| Familiarity with best practices in pedagogy |  |
| Encouraging student participation |  |
| Use of instructional technologies |  |
| Providing constructive feedback |  |
| Thoughtful listening |  |
| Providing a culturally inclusive and supportive environment |  |
| Providing career guidance |  |
| Serving as a role model |  |
| Seeking teaching/mentoring help when needed |  |

**Research** (use the following prompts to reflect, you don’t have to answer each question)

What are your research goals? How do your research goals/objectives/activities contribute to DART’s research themes (model interpretability, big data management, security and privacy, workforce development and education)? What research-related skills have you acquired to date? What research related skills would you like to develop or improve? What feedback have you received on your research project(s)?

|  |
| --- |
|  |

Please evaluate your skills and abilities in the area of research.

Use a scale of 1 (not at all proficient) to 5 (highly proficient). If something is not applicable, type N/A

|  |  |
| --- | --- |
| **Competency or Skill** | **Score** |
| Awareness of how your research contributes to DART |  |
| Knowledge of concepts/theories related to your project |  |
| Knowledge of past and current literature related to your project |  |
| Laboratory skills |  |
| Programming Skills |  |
| Project management |  |
| Data analysis including statistics |  |
| Critical evaluation of data |  |
| Creativity in designing experiments and new research directions |  |
| Seeking research help/feedback when needed |  |

**Collaboration** (use the following prompts to reflect, you don’t have to answer each question)

What leadership experiences have you had (e.g., organized a workshop, chaired a meeting)? What leadership experiences would you like to have? What collaborations have you established in the past? What new collaborations could benefit your research? How can you pursue them? What experience do you have with negotiation and conflict resolution?

|  |
| --- |
|  |

Please evaluate your skills and abilities in the area of collaboration.

Use a scale of 1 (not at all proficient) to 5 (highly proficient). If something is not applicable, type N/A

|  |  |
| --- | --- |
| **Competency or Skill** | **Score** |
| Identifying possible collaborations or collaborators |  |
| Identifying support for collaborations |  |
| Strategic planning or project management |  |
| Ability to work in a team |  |
| Ability to lead and motivate a team |  |
| Respecting contributions and ideas of others |  |
| Dealing with and resolving conflict |  |
| Negotiating with a peer |  |
| Negotiating with a more senior person (e.g., advisor) |  |

**Communication & Dissemination** (use the following prompts to reflect, you don’t have to answer each question)

What writing or presentation skills would you like to improve? What resources are available? What research papers, proposals, or fellowship applications would you like to write in the next 12 months? Where could you present your research to peers within the next 12 months (e.g., at a lab meeting, seminar, conference)? Where could you present your research to a general audience within the next 12 months (e.g., blog, outreach event, local school presentation)? Do you use social media professionally?

|  |
| --- |
|  |

Please evaluate your skills and abilities in the area of communication.

Use a scale of 1 (not at all proficient) to 5 (highly proficient). If something is not applicable, type N/A

|  |  |
| --- | --- |
| **Competency or Skill** | **Score** |
| Communicating effectively in everyday conversation |  |
| Presenting research to peers (e.g., seminar) |  |
| Sharing research with a general (non-specialist) audience |  |
| Effectively writing under time constraints |  |
| Writing a peer-reviewed publication on your research |  |
| Giving peer feedback on communication |  |
| Receiving peer feedback on communication |  |
| Social media communication & etiquette |  |
| Writing a grant proposal or fellowship application |  |
| Seeking communication help/feedback when needed |  |

**Professional Development** (use the following prompts to reflect, you don’t have to answer each question)

What is your long-term career goal (e.g., college professor, environmental consultant, researcher in a government lab)? If you aren’t sure, what information would help you decide? Are your CV and professional webpage up to date? Are you prepared for a job interview? If not, what should your next steps be to prepare? Are you aware of grant opportunities and how to submit proposals? Are you confident in your grant writing ability? Do you evaluate your past performance and consciously think about self-improvement? Do you reflect on your feelings and reactions to your work and work environment?

|  |
| --- |
|  |

Please evaluate your skills and abilities in the area of career development.

Use a scale of 1 (not at all proficient) to 5 (highly proficient). If something is not applicable, type N/A

|  |  |
| --- | --- |
| **Competency or Skill** | **Score** |
| CV/Resume writing |  |
| Establishing career goals |  |
| Grant writing and proposal development |  |
| Awareness of career opportunities in your field |  |
| Networking inside your academic environment |  |
| Networking outside your academic environment |  |
| Carving out time for career development |  |
| Interviewing for a job |  |
| Negotiating a job offer |  |
| Self-reflection and evaluation |  |
| Seeking career-related help/guidance when needed |  |

**Diversity, Equity, & Inclusion** (use the following prompts to reflect, you don’t have to answer each question)

What does diversity mean to you? When have you or someone you know been treated inequitably? How can you help others to feel included/valued? How has your background or identity influenced your research? What implicit biases have you identified in yourself? What viewpoints do you tend to be dismissive of, and what resources would help you better understand those viewpoints? What would you like to learn about other cultures/viewpoints in your community? What do you wish people outside your community knew about your culture?

|  |
| --- |
|  |

Please evaluate your skills and abilities in the area of DEI.

Use a scale of 1 (not at all proficient) to 5 (highly proficient). If something is not applicable, type N/A

|  |  |
| --- | --- |
| Communicating respectfully with others |  |
| Awareness of one’s own worldview/identity |  |
| Knowledge of & respect toward other worldviews/identities |  |
| Cultivating awareness of one’s own implicit biases |  |
| Seeking out opposing viewpoints to improve understanding |  |
| Effectively contributing to an inclusive work climate |  |
| Incorporating cultural protocols and ethical standards into your research |  |
| Awareness of DEI concerns in your discipline/community |  |
| Familiarity with your organization’s diversity office and code of conduct/related policies |  |
| Seeking help/guidance on DEI issues when needed |  |