



Individual Development Plan (IDP): Guidelines for Graduate Students & Postdocs

Summary of forms:

- Form 1 (Self-Assessment)
- Form 2 (Individual Development Plan)

Introduction

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 research advisor and/or other mentors. It can also be a useful launching point for discussing your long-term career interests with your advisor/mentor(s).

The IDP includes six suggested core competencies: Research, Teaching & Mentoring, Leadership & Teamwork, Oral & Written Communication, Place & Culture, and Career Development. The first step is to assess your skills in these areas (Form 1) and identify those most relevant to achieving your goals. Next, you will make an action plan by setting specific milestones to help you be more deliberate about your professional development and stay on track (Form 2). This action plan will be revisited and updated regularly throughout your appointment. The best milestones are SMART:

- **S**pecific (Is the milestone focused and unambiguous?)
- **M**easurable (Can you measure whether you have achieved the milestone?)
- **A**ctionable (Is there an action required on your part?)
- **R**ealistic (Considering difficulty and timeline, is the milestone achievable?)
- **T**imely (By when will you complete the milestone?)

Preparing an IDP

(Suggested timeline in parentheses)

Step 1 <i>(within 10 days)</i>	Complete self-assessment (Form 1) and share with advisor/mentor(s)
Step 2 <i>(within 30 days)</i>	Draft IDP (Form 2) and get feedback from advisor/mentor(s)
Step 3 <i>(within 45 days)</i>	Revise IDP based on feedback, submit final IDP
Ongoing <i>(once per semester)</i>	Each semester, meet with advisor/mentor(s) to review progress and outline future activities. Revise IDP (Form 2) and resubmit. Re-do Self-Assessment (Form 1) annually.

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 advisor 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 at UH or 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 advisor/mentor may have ideas.)

- Make sure your milestones are **S**pecific, **M**easurable, **A**ctionable, **R**ealistic, and **T**imely (SMART)! Vague goals like “get better at programming” or “practice public speaking” are good intentions, but hard to act on. Instead, pick specific milestones that help you practice those skills (e.g., “develop Python code to <plot/analyze/etc> by Oct 31”, or “give a department seminar in the spring”). Ask for help if you’re having trouble identifying specific actions you can take.
- Your IDP is an *evolving document* – update as needed based on your goals and discussions with your advisor/mentor. Re-doing the self-assessment (Form 1) annually will help you gauge your progress and re-prioritize as needed. Don’t hesitate to ask your advisor/mentor for help if you feel stuck or confused.

Resources

Self-assessment and planning your IDP

- Science Careers: <http://myidp.sciencecareers.org/>
- Fiske, P.S. (2001) Put Your Science to Work: The Take-Charge Career Guide for Scientists. American Geophysical Union

Teaching & Mentoring

- Carl Wieman Science Education Initiative: <http://www.cwsei.ubc.ca/>
- Science Education Resource Center: <http://serc.carleton.edu/index.html>
- National Academies of Sciences, Engineering, and Medicine (2019) The Science of Effective Mentorship in STEM. Washington DC: The National Academies Press. <http://nap.edu/25568>

Leadership & Teamwork

- Linsky, M, Heifetz, R.E. (2002) Leadership on the Line: Staying Alive Through the Dangers of Leading. Harvard Business Review Press
- Sapienza, A.M. (2004) Managing Scientists: Leadership Strategies in Scientific Research. Wiley-IEEE, Inc.
- Myers, B. (2011) Take the Lead. Atria Paperback. Simon & Shuster, Inc.

Oral & Written Communication

- Day, R. and Gastel, B. (2011) How to Write and Publish a Scientific Paper. Greenwood
- Browning, B. (2008) Perfect Phrases for Writing Grant Proposals. Madison, Wisconsin: CWL Publishing Enterprises
- Olson, R. (2009) Don’t Be Such A Scientist. Island Press

Place & Culture

- Clark, J.R.K., Hawai’i Place Names (2002). University of Hawai’i Press
- Morgan, J.R., Hawai’i: A Unique Geography (1996). Bess Press
- Pukui, M.K., Elbert, S.H. (1986) Hawaiian Dictionary. University of Hawai’i Press
- Sterling, E.P, Summers, C.C. (1978). Sites of O’ahu. Bernice Pauahi Bishop Museum

Career Development

- Bolles, R.N. (2002) What Color is your Parachute? A Practical Manual for Job-Hunters and Career-Changers. Ten Speed Press
- Robbins-Roth, C. (2006) Alternative Careers in Science – Leaving the Ivory Tower. Elsevier
- Careers in Science and Engineering (1996) A Student Planning Guide to Grad School and Beyond. National Academies Press

Form 1: Self-Assessment

Self-Assessment: For each core competency, review the questions and respond in the space provided. *Don't feel obligated to answer them all; just answer the ones that seem most relevant.* Record your immediate thoughts; 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, share it with your advisor/mentor and ask for their feedback.

Core Competency 1: Research

- What are your research goals? 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)?

Response:

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, select N/A

	1	2	3	4	5	N/A
<i>Knowledge of concepts/theories related to your project</i>						
<i>Knowledge of past and current literature related to your project</i>						
<i>Laboratory skills</i>						
<i>Computer skills</i>						
<i>Fieldwork skills</i>						
<i>Data management</i>						
<i>Data analysis including statistics</i>						
<i>Critical evaluation of data</i>						
<i>Creativity in designing experiments and new research directions</i>						
<i>Problem solving/troubleshooting</i>						
<i>Seeking research help/feedback when needed</i>						

Core Competency 2: Teaching & Mentoring

- 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?

Response:

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, select N/A

	1	2	3	4	5	N/A
<i>Familiarity with inquiry-based learning</i>						
<i>Familiarity with active learning strategies</i>						
<i>Encouraging student participation</i>						
<i>Use of instructional technologies</i>						
<i>Providing constructive feedback</i>						
<i>Careful listening</i>						
<i>Respecting diversity</i>						
<i>Providing career guidance</i>						
<i>Serving as a role model</i>						
<i>Seeking teaching/mentoring help when needed</i>						

Core Competency 3: Leadership & Teamwork

- 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?

Response:

Please evaluate your skills and abilities in the area of leadership. Use a scale of 1 (not at all proficient) to 5 (highly proficient). If something is not applicable, select N/A

	1	2	3	4	5	N/A
<i>Establishing effective collaborations</i>						
<i>Ability to work in a team</i>						
<i>Ability to lead and motivate a team</i>						
<i>Respecting contributions and ideas of others</i>						
<i>Leading a field campaign, research project, etc.</i>						
<i>Chairing a meeting</i>						
<i>Dealing with and resolving conflict</i>						
<i>Negotiating with a peer</i>						
<i>Negotiating with a more senior person (e.g., advisor)</i>						
<i>Managing projects</i>						
<i>Managing people</i>						

Core Competency 4: Oral & Written Communication

- 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)?

Response:

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, select N/A

	1	2	3	4	5	N/A
<i>Communicating effectively in everyday conversation</i>						
<i>Being an active listener</i>						
<i>Presenting research to peers (e.g., seminar)</i>						
<i>Sharing research with a general (non-specialist) audience</i>						
<i>Effectively writing under time constraints</i>						
<i>Writing a peer-reviewed publication on your research</i>						
<i>Writing a grant proposal or fellowship application</i>						
<i>Social media communication & etiquette</i>						
<i>Giving peer feedback on communication</i>						
<i>Receiving peer feedback on communication</i>						
<i>Seeking communication help/feedback when needed</i>						

Core Competency 5: Place & Culture

- How does place and/or culture influence your identity? How has place and/or culture influenced your research? Do you feel connected to the community you live in? What would you like to learn about Hawaiian language, places or culture? What opportunities or resources would help you to integrate place and/or culture into your research (if relevant)?

Response:

Please evaluate your skills and abilities in the area of cultural competence. Use a scale of 1 (not at all proficient) to 5 (highly proficient). If something is not applicable, select N/A

	1	2	3	4	5	N/A
<i>Communicating effectively and respectfully with people of different cultures</i>						
<i>Awareness of one's own cultural worldview</i>						
<i>Knowledge of other cultural worldviews</i>						
<i>Respect/openness toward other cultural worldviews</i>						
<i>Awareness of Hawaiian cultural protocols (e.g., for field research)</i>						
<i>Pronunciation of Hawaiian words and place names</i>						
<i>Respect for Traditional Knowledge</i>						
<i>Integration of Traditional Knowledge into your research</i>						
<i>Seeking culturally related help/guidance when needed</i>						

Core Competency 6: Career Development

- 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? What personal & professional traits do you have that will help you attain your career goal? What skills/experiences do you need? 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?

Response:

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, select N/A

	1	2	3	4	5	N/A
<i>CV/Resume writing</i>						
<i>Establishing career goals</i>						
<i>Awareness of career opportunities in your field</i>						
<i>Networking <u>inside</u> your academic environment</i>						
<i>Networking <u>outside</u> your academic environment</i>						
<i>Carving out time for career development</i>						
<i>Conducting an informational interview</i>						
<i>Interviewing for a job</i>						
<i>Negotiating a job offer</i>						
<i>Seeking career-related help/guidance when needed</i>						