



SACNAS NEWS

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Building Your Individual Development Plan (IDP): A Guide for Undergraduate Students

By C. Gita Bosch, PhD

The Question

Do you know with certainty that you are on track to graduate from your undergraduate program armed with the skills you need for the next step in your career? This question is not only about academic/vocational preparedness, it is also about professional preparedness to take that next step. In addition to your instructive curriculum, you need to be armed with professional competencies that are not career specific, but rather those needed to function in any professional setting. These skills, also known as transferable skills, include proficiencies such as oral communication, writing skills, public speaking, conflict resolution, giving and receiving feedback, teamwork, management and leadership skills, organizational skills, and time management, among many others. You also must be competent in setting goals and prioritizing.

The Answer

An effective tool that you can use help ensure you acquire the academic foundation and transferable skills is to develop an Individual Development Plan (IDP), which will help enhance and improve academic and professional performance by identifying goals, assessing strengths and weaknesses, defining didactic/technical and professional skills necessary to reach those goals, the available opportunities to optimize reaching those goals, and the skills gaps that can derail your goal-oriented strategies.

An IDP serves as a strategic plan, not only for your undergraduate years, but also for your continued educational and professional careers. It can provide motivation and serve as a roadmap to your success by helping you establish realistic goals, strategies, milestones, and timelines to reach those goals. An IDP requires ongoing evaluation and assessment and is thus a dynamic document that is regularly reviewed and updated.

Individual professional development plans have been used in the corporate arena for a very long time. They are part of Performance Appraisal systems that are used to provide feedback and to set goals for individual employees. In recent years, IDPs have become an integral part of postdoctoral training in many institutions in an effort to help prepare fellows for their next steps and future careers. Recent years have also seen an increased use of IDPs for junior faculty.

Cecil Lozano, a postdoctoral fellow in the School of Computing, Informatics, and Decision Systems Engineering at Arizona State University knows firsthand the importance of developing an IDP; she did so as a participant in the SACNAS Summer Leadership Institute. She says, “The process of preparing and implementing an individual development plan not only allows for a more concrete visualization of the possibilities of a brighter future based on personal and social resources, but it also functions as a self-commitment to make them a reality. These types of tools should be used and practiced as early as possible in one’s life, but especially in college when the natural sense of search for individual growth is in place and mentorship is highly accessible. A more strategic use of goal-setting and planning can easily make a huge impact on the quality and flow of professional and personal advancements.”

Developing Your Individual Development Plan

Building an IDP can be energizing and motivating, but it requires time and effort, and has to be done with careful thought and an honest self-assessment. Engaging the help of a trusted mentor is highly recommended for this task; in fact, having a faculty mentor is a key element in this process.

The first step is to sort your career goals by long-term (15+ years), intermediate-term (5 to 10 years), and short-term (present to 5 years). Your short-term goals are further broken down to goals for the current academic semester/year, to graduation, and to your next academic/professional step. An example follows shortly.

Set Yourself up for Success...Not Failure

Simply setting goals without a plan on how you will get there, without a commitment to those goals and holding yourself accountable to them, will almost certainly lead to failure. Goals, whether long-, intermediate-, or short-term must be attainable in an established timeline, specific, definable, clear-cut, measurable, and within your control. You start setting goals by defining your mission statement. This is about what you like to do, what you are good at, and what impact you want to have on the world. It is a combination of your academic and professional aspirations, as well as your personal and social ideologies. For example, the mission in my own IDP is, “to ameliorate the human condition by advancing STEM education in the next generation of scientists and physicians.”

Elements of an Individual Development Plan

Skills/competencies can be divided into three major categories: specific academic skills, technical skills, and professional/interpersonal skills. A list of some of these skills can be found at the end of this article.

Skills Assessment

Conducting a skills assessment is necessary for you to identify gaps for those skills needed to reach your goals. By conducting an honest self-assessment, you can identify these gaps and then craft effective strategies to fill those gaps within a realistic timeframe. These strategies will include classroom activities, workshops, seminars, one-on-one tutorials, and so on.

The Timeline

An essential factor for the success of your IDP is to have a timeline to which you are committed and accountable. Ongoing review and assessment of the IDP and your progress toward your goals are essential for success. You will not develop and enhance all the skills you will need for your long-term and intermediate-term goals as an undergraduate student. This is the reason a timeline must be included for each skill that needs to be developed and/or enhanced for each goal—it will serve as your roadmap to success as you move through your academic career and into your professional working career.

Long-Term Career Goals

What are your ultimate career goals (15+ years from now)? These goals could include both professional and social goals.

For example

- I want to be a leader in cancer research by becoming head of my own laboratory in a major academic medical center.
- I want to reduce health disparities in the U.S. by serving as a role model in my community.

Remember, your intermediate- and short-term goals are steps to your ultimate goal. Therefore, it is important that you clearly articulate this ultimate goal so you can develop a logical path and direction for yourself.

Intermediate-Term Career Goals

What are your goals for five to ten years from now? Here too, you can include both professional and social goals. You will notice that as you move from the long-term goals, you will identify more specific goals.

For example

- I want to successfully complete a top-notch doctoral program, focusing on translational research in cancer biology.
- I want to become a postdoctoral fellow either in a major cancer center or at the NIH.
- I want to become involved in the local community of my graduate school.
- I want to work with young underserved students to promote STEM education.

Short-Term Career Goals

What are your goals for the next five years? Here you begin to break down your goals by short, specific time blocks. What are your goals before you graduate? What are your next-step plans after you graduate? Just as in the longer-term goals, you can include both professional and social goals.

For example

- I want to graduate with a 3.87 GPA.
- I want to take and do very well on the GRE/MCAT.
- I want to complete an excellent and competitive application package to my top-choice schools.

- I want to matriculate in a top-notch doctoral program in cancer biology.
- I want to take some arts and humanities classes before I graduate.

Build Your IDP

Now that you have begun to define your goals, it is time to put a timeline in place. Create a table with the goals in one column and the dates you want to reach those goals in another. The next step is to figure out what skills/competencies/support you need for each goal and what strategies are needed to develop those skills. It is essential that you have a trusted mentor working with you on this so they can help you identify the needed skills and steps necessary to reach your goals. It is also a good idea to seek advice from your academic and research advisors, your peers, your professors, and others who have followed a similar career/professional path.

At this time, you do not need to fill in much of the details for the specific skills needed and strategies for the long-term and intermediate-term goals. But you do need to have details for your short-term goals. [Click here for an example of a goals worksheet \(Table #1\).](#)

For each goal, there will be many steps that have to be identified. For example, to enter a top laboratory as a postdoc, you need an excellent graduate record, which will include a publications record. So getting published should be listed as a goal while you are in graduate school. In addition to the laboratory work, you will need manuscript writing skills for this goal. Another goal during graduate school will be presenting your work at major discipline meetings. For this, you will need excellent presentation skills as well as networking skills to make the most of the meeting. As you can see, for each academic or professional goal you identify, there will be many sub-goals.

Skills Self-Assessment

Once you have identified the list of skills, you have to figure out which ones you have, the ones that need some development, and ones that you do not have at this time. You should rate your skill level on a 1 to 5 scale, with 1 = lowest level of proficiency (needs improvement) to 5 = highest level of proficiency (does not need improvement at this time). Remember, you will more than likely have the same skill listed for more than one goal; you will need different levels of development at different stages of your career. Because the IDP is a dynamic document, you will regularly (about once each semester) review and update it.

As you continue to develop your IDP, you will need to add columns to your goals chart and continually update your skills assessment. For this exercise, this will be shown in a new grid to highlight the types of skills you should be thinking about. On the sample skills assessment, specific strategies for just a few of the skills are shown to give you an idea of how to proceed with your IDP. A deadline to acquire each skill for which there is a gap should be included in your IDP based on the timeline of your goals. [Click here to view a sample skills assessment \(Table#2\).](#)

Some Undergraduate Core Competencies

Some competencies that are generally relevant for undergraduates are listed below. [View another, more comprehensive list \(page 3\)](#) showing some competencies that should be developed as you proceed through the various stages of your scientific career.

These lists are not complete and some of the items listed are very broad. For each skill, there are detailed elements that should be explored. For example, working with others is identified as a Communications skill. Nested under the skill of working with others, we can identify more specific skills such as conflict resolution, trust, reliability, ability to work in a team, collegiality, collaboration, and so on. This applies to almost every item on these lists.

Conclusion

An IDP has to be well thought out and very detailed. Of course, there will be many more detailed steps and strategies for your short-term goals than for your longer-term ones. You should have clearly defined strategies for everything from now to graduation. As time goes on and your intermediate- and long-term goals become short- and intermediate-term goals, you will add more details and definition. Regular review and updates are essential for the successful implementation of your IDP. This should be done about once each semester.

Creating an effective IDP requires you to think about your big audacious goals and how to realistically reach them. Instead of being a spectator in your life, you become the driver. You are no longer a bystander in your life: you take ownership, responsibility, and accountability, for your future. Google Maps requires that you enter a starting point and an ending point to provide directions. This is what the IDP does—you are here and you want to go there. Your IDP lets you create a road map to navigate your way; and even if along the way you encounter detours caused by one's personal life (marriage, birth, death, etc.), you hold your destination in sight at all times.

About the Author

Dr. C. Gita Bosch has twenty years academic leadership experience and seven years biomedical research. She is the Associate Dean of Diversity, Inclusion and Community Engagement at Jefferson Medical College, Thomas Jefferson University in Philadelphia. Dr. Bosch is deeply committed to increasing diversity in the STEM workforce; for almost twenty years, she has been working with organizations such as ABRCMS (formerly NMRS), SACNAS, and MHPF. She currently serves on External Advisory Committees for PREP, MARC, and RISE Programs.

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Related Resources

- Article Supplement: Sample Tables and Information on IDPs
<https://docs.google.com/file/d/0B6jsUuSJqdDackxTMVp5eks2X2M/edit?pli=1>
- Article Supplement: Professional Development Competencies for Trainees
<https://docs.google.com/spreadsheet/ccc?key=0AqjsUuSJqdDadGVHejNRTFd5MIR4V25xM0pHaWQ4S1E#gid=0>
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