Developing and Optimizing the Next Generation of Experts: The Career Mapping Process

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One Problem…Attraction

► Aging and retiring national security workforce

► Historic gaps in hiring and retention as popularity ebbs and flows as a result of political priorities.

► Reduced popularity of traditionally desired STEM field focuses at many university.

► Stiff competition for those who have chosen those fields and can often get better pay in commercial industry than they can in government work.

► Lack of knowledge of career opportunities that exist in these fields in non-nuclear focused degree programs and that can provide the necessary skills to fulfill the needs of the pipeline.

Problem Two…Retention

- ► Political turbulence

- ► Rapidly changing technologies (both hardware and software) require new insights not necessarily found in historically traditional fields to address the new challenges in the modern global environment.

- ► Finding the right fit, right person to fill the position and right opportunity to inspire the person.

- ► Providing appropriate development to ensure that the individual is assured a path for growth, is inspired to innovate, and can see a future for themselves in these fields.

So, how do we develop this next generation?

► Since late 2015, PNNL has employed an experiential career mapping process with the intent to help resolve these issues.

► This process has been used successfully with a large number of interns, research associates, and post docs across national security spaces as part of their development at PNNL.

► The process focuses on developing, connecting, and empowering the individual in their personal development while also building their network, identifying advocates, providing tools to optimize mentoring, and helping to define portfolios of work that align with both their existing skills and their aspirations for future impacts.

How does it work?

▶ Personal Development Action Planning

Developmental Need	Responsible Party	Expected Action	Date of Completion
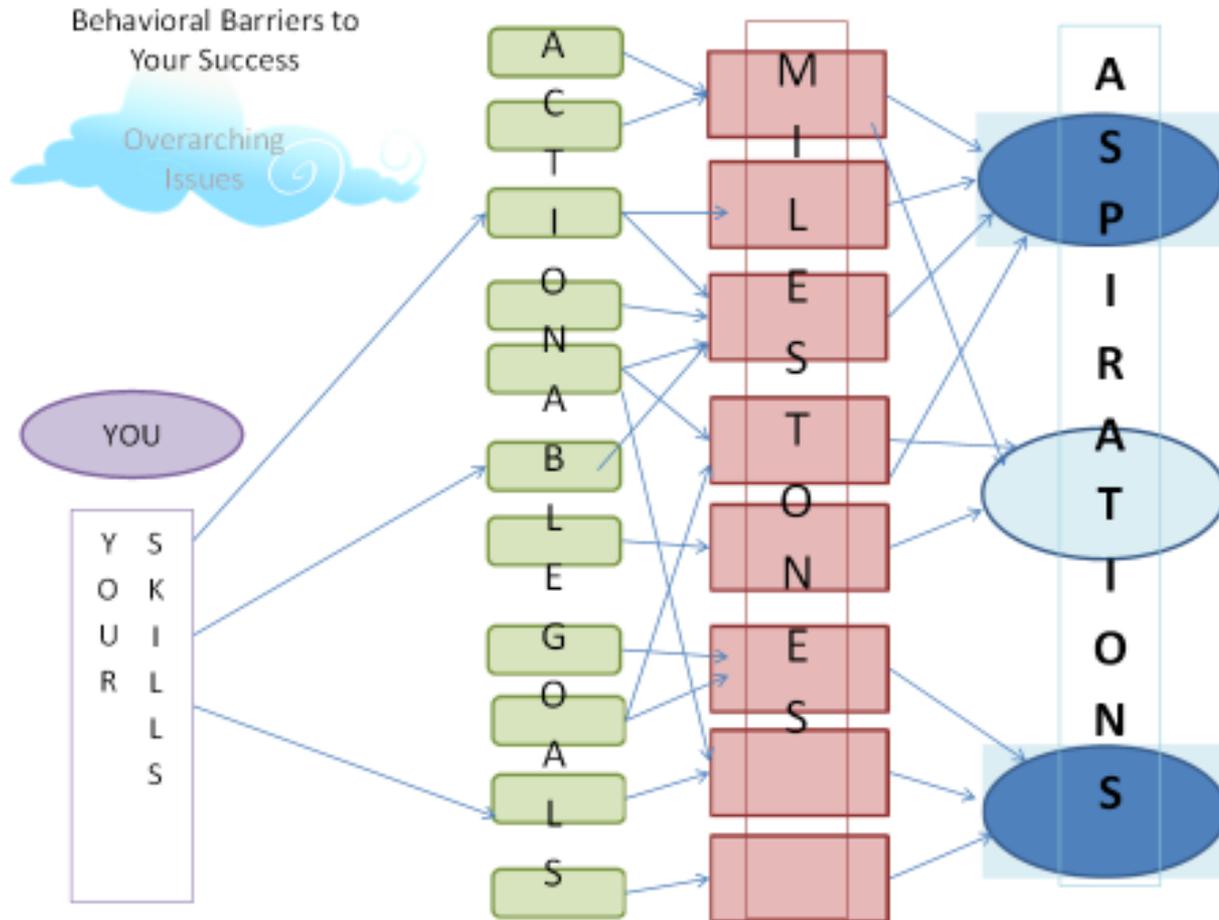
When should this be done and is it only done once?

▶ With the interns, research associates, and staff who experienced experiential mapping thus far, the process establishes a baseline understanding of their personal self-concept and where they see themselves connecting within the field. With interns and research associates, this is as near to the beginning of their employment as possible. This baseline is simply a starting place.

▶ For research associates and permanent staff, follow-up mapping should be conducted after approximately six months.

Benefits 1: Address engagement issues

► Global epidemic of employee disengagement

- According to Harvard Business Review, organizations are spending millions of dollars on employee engagement programs but engagement survey scores remain abysmally low (Harvard Business Review, 2017).

- According to Gallup's December 2017, _State of the Global Workplace_ report, 85% of employees are not engaged or actively disengaged at work (Gallup, 2017).

- Human capital is the next great global resource, but mechanisms that currently exist do not help employees engage of feel fulfilled by their careers (Gallup, 2018).

- Workplaces only see gains in employee engagement when they make long-term behavioral changes that create environments where people want to work, not just need to work (Harvard Business Review, 2017).

- Even the Fortune 100 and "Best Places to Work" list organizations received very low survey scores in the three environments that matter most to employees "culture, technological and Physical" (Harvard Business Review, 2017).

# Benefit 2: Reduced negative productivity impacts associated with disengagement

► Disengaged employees are costing organizations [34% of their salary](#) because of lost productivity, missed shifts, chronic tardiness, and disrupting others by spreading negativity throughout the company (Shiftboard, 2018).

► In 2015, LinkedIn wrote that disengaged employees were costing U.S. companies $550 billion annually.

► While many like to think this is a U.S. problem, the UK is in the same boat. The Haygroup states that employee disengagement is costing UK companies 340bn GBP annually.

► Actively disengaged employees are miserable in the workplace and destroy the positive benefits engaged employees work so hard to build for the company.

Benefit 3: Addresses human need gaps

▶ Maslow's hierarchy of need identifies three levels of human need in his five-tiered pyramid:

- ■ **Fundamental human need** - safety and security: the bottom two tiers of the Maslow's pyramid, and the easiest things to satisfy with pay, benefits and safe spaces to work.

- ■ **Optimization needs** - the top two tiers of Maslow's pyramid, including the establishment of self-value and the achievement of self actualization. These are not needs that someone else can satisfy, they are actually the result of experiences that allow the individual to feel both included and confident.

- ■ **Psychosocial needs** - the center layer of the Maslow's pyramid, where gaps between the foundation and the pinnacle exist and where this experiential process focuses.

Self Actualizaton
Importance
Belonging
Security
Survival
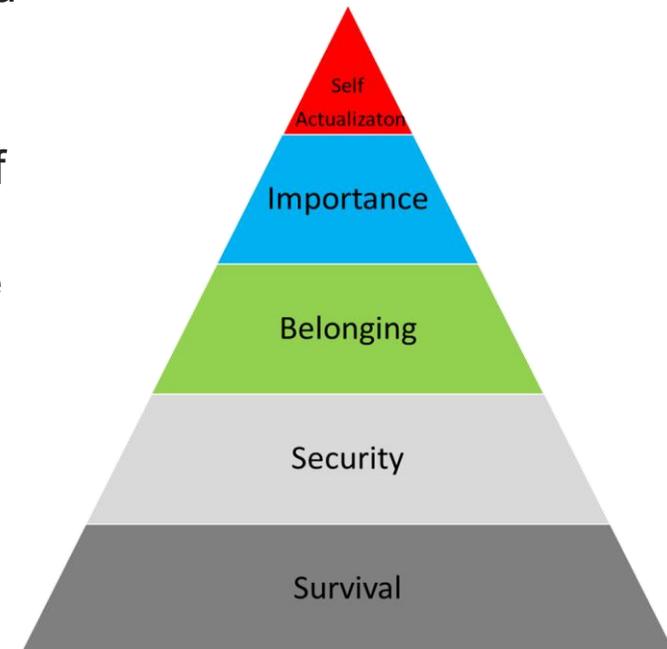
► A new understanding of who you are and your ability to actively pursue your aspirations.

► A strategic plan for your success.

► A list of potential advocates and topics of conversation to inspire that advocacy.

► An understanding of who you are, where you fit, and why. Fit is not necessarily a single-faceted thing, and at PNNL we encourage innovation and cross-pollination.

► A tool to provide inputs for your organizational development plans.

Questions?