

AN INTERACTIVE COMPETENCY APPROACH TO CAREER EXPLORATION AND IDP IMPLEMENTATION

Jose M. Barral¹, David W. Niesel¹ and Garth A. Fowler²

¹Graduate School of Biomedical Sciences, The University of Texas Medical Branch and

²American Psychological Association

Background

The paucity of academic positions has resulted in increasing numbers of PhD graduates from a wide spectrum of disciplines pursuing careers outside of traditional academia¹⁻³. Scientific and professional societies, academic institutions, advocacy groups and for-profit organizations have designed and implemented robust initiatives to alert and expose PhD trainees to a variety of non-academic career paths available to them⁴. Many of these efforts have converged on the use of an Individual Development Plan (IDP) as a tool that drives and supports career exploration^{4,5}. In general, IDPs *should be* reflective instruments that allow students to: assess their abilities, values, interests and personality traits; explore compatible career paths; and set goals to advance their skills and abilities. Implementation of the IDP, with the assistance of mentors, is a part of an iterative 'Career Decision-Making Cycle' through which students improve their skills and refine their selections. Our over-arching goal was to begin to identify and develop the competencies that facilitate finding employment in a fulfilling career.

Needs Assessment

IDPs help trainees focus on skills, knowledge, and abilities (SKAs) needed for career success. They generally consist of iterative cycles of: self-assessment → career exploration → goal setting → plan implementation → self-assessment. However, successful career progression requires the development of competencies— the effective use of knowledge, and minimal level of skill performance that results in securing a job, improving abilities, and advancing in a chosen career. In addition, competencies vary among careers: for example a career in science policy requires knowledge integration across multiple fields, while a career in R&D at a biotechnology company requires focused knowledge and highly defined skills. *It would be optimal for graduate students and postdoctoral scholars to identify early in their training not just SKAs, but to efficiently utilize IDPs to help them understand the required competencies and to take steps to achieve them.*

Our Approach

We developed a process aimed to promote (a) active reflection of trainees' own current SKAs, interests and values; (b) thorough exploration of potentially compatible current and future career choices; and (c) realistic goal setting. The process culminated in a two-day career forum that incorporated an "element of surprise" to increase trainee engagement, via the following activities:

- (1) Prior to the career forum, trainees completed an abbreviated online survey to assess their SKAs, interests and values (modified, with permission⁶, from myIDP.sciencecareers.org).
- (2) At the beginning of the forum, each trainee received a graphical representation ('radar plots') of their survey answers (see Figure) printed on one transparency sheet and a one-page worksheet.
- (3) Trainees compared their 'radar plots' with those of twelve career forum panelists (established academicians and professionals from diverse fields who completed identical surveys in advance) by physically overlaying their transparencies with those of the panelists. However, the identities of the panelists were blinded during the first forum day.
- (4) Trainees utilized their worksheets to identify which panelists (identified only by letters A – F) best match their SKAs, interests and values.

(5) The following day, identities of the panelists were revealed, and trainees attended interactive sessions with them. Trainees utilized their worksheets to set realistic goals and progress measures, based on their interactions with the panelists.

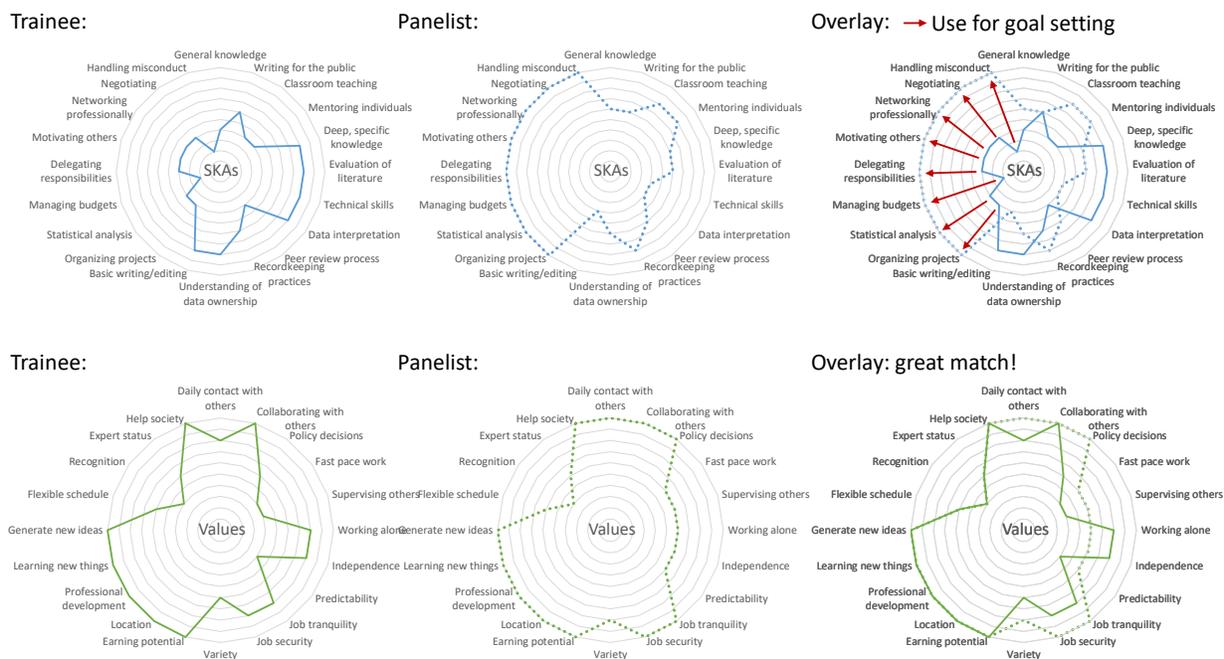


Figure: Graphical representation of trainees' and panelists' SKAs and values. Comparison identifies of compatible values and allows realistic goal setting.

References

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