Ready, Set, Goal:

Career Planning Strategies for postdocs

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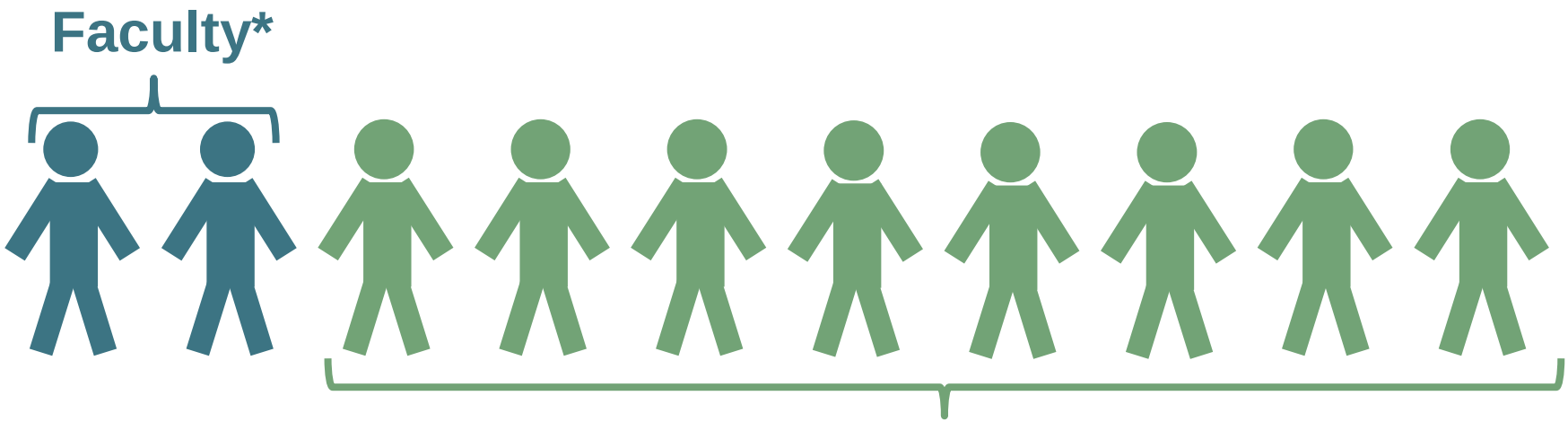
2008 employment of biomedical PhDs



Other research- and research-related careers (80%)

academic staff scientist, industry R&D, clinical research, medical writing, tech transfer, regulatory affairs, technical sales, data science, marketing, business development, consulting, venture capital, science policy, patent law, medical affairs, etc. etc. etc.

**tenured and tenure-track faculty*

Source: 2012 NIH Biomedical Workforce report

PLANNER CALENDAR
SUNDAY
MONDAY
TUESDAY
WEDNESDAY
THURSDAY
SATURDAY
schedule
timeline
memo
1
2
3
4
5
6
7
8
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10
11
12
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Coffee with MSL
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SEMINAR
@ New York
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PhD Career Conections
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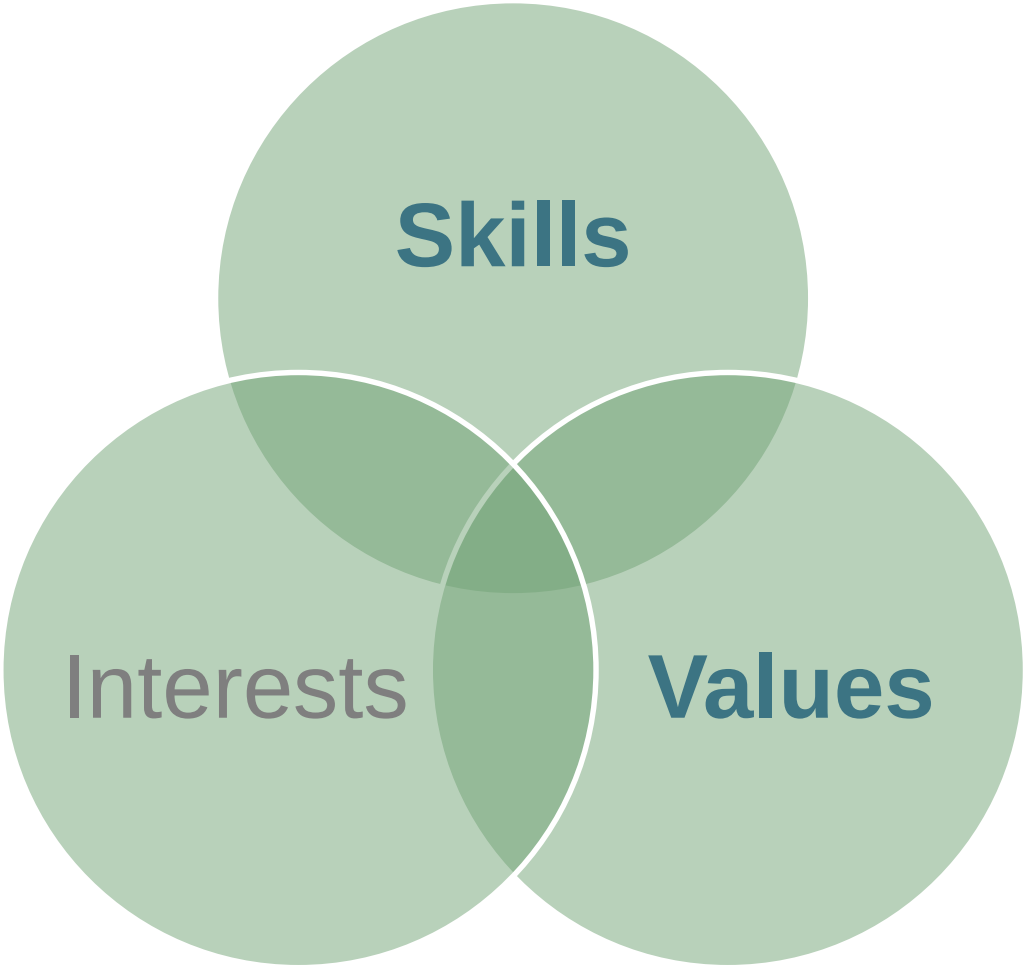
Career planning process

Self-assessment helps us understand our:



Benefits of self-assessment

- Ask better questions about career options.
- Focus exploration & skill-building on careers that fit
- Convey strengths and interests to current and future employers

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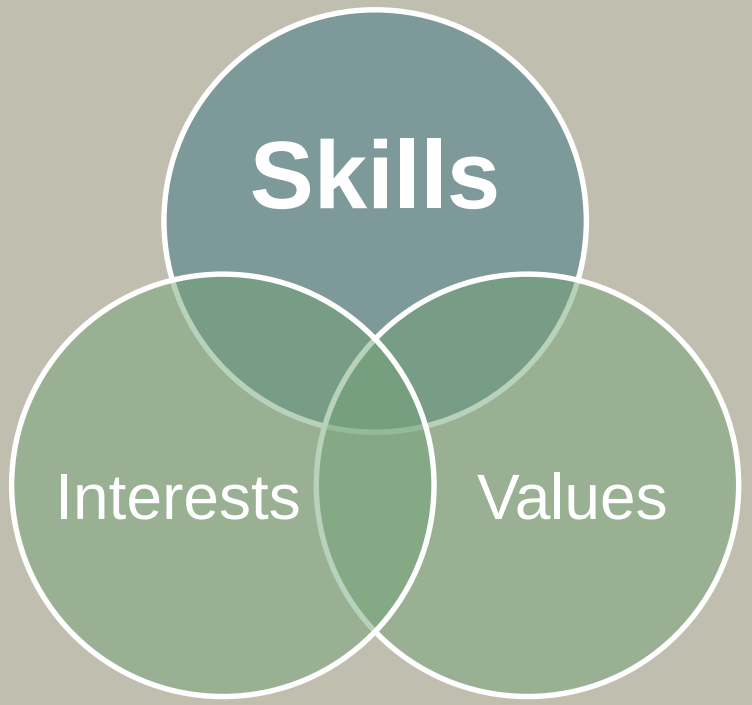

Skills

What are you good at doing right now?

Exercise #1: Recruit your replacement

- **The scenario:** You're finishing your postdoc soon. Your advisor asked you to identify things you do that the new postdoc will need to do when you leave.
- **2 minute brainstorm:** List the tasks you perform and things you do as a postdoc.

3 types of skills

Knowledge skills	Personality traits	Transferable skills
Work content skills needed to do a certain job	Personal qualities needed to succeed in a job	Skills learned in one setting that can be applied in a different setting
Usually nouns, e.g. *microscopy*	Usually adjectives, e.g. *persistent*	Usually verbs, e.g. *analyze*

Richard Bolles, *What Color is Your Parachute?*

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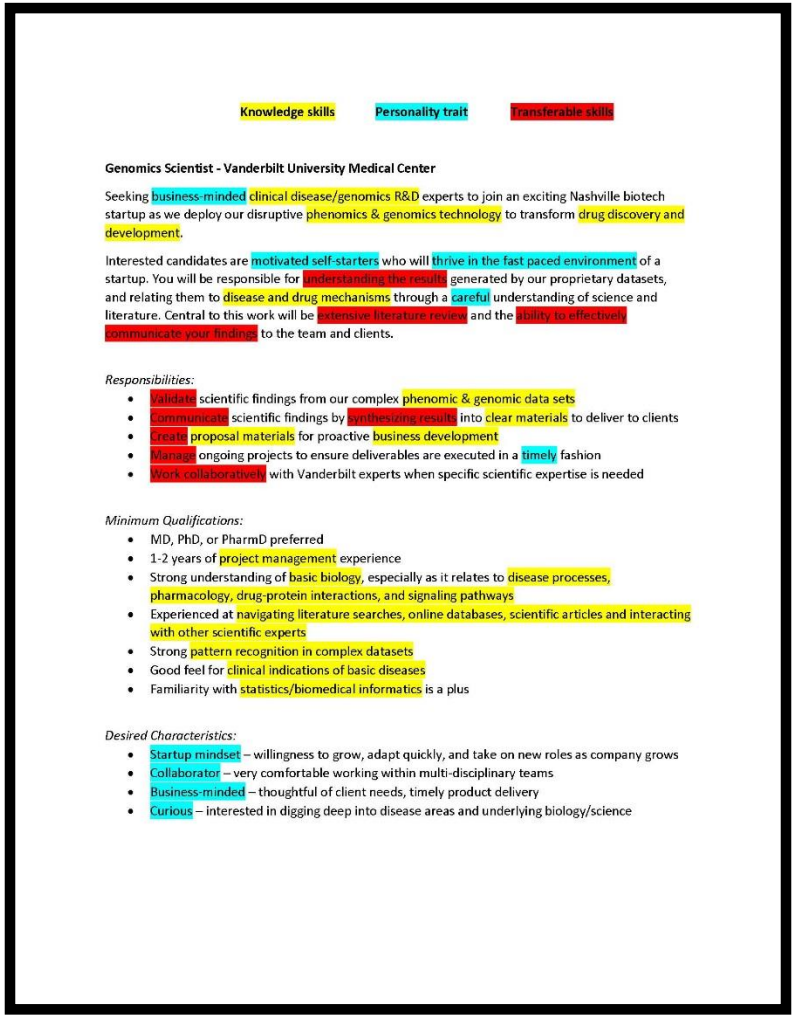
- **The scenario:** You're finishing your postdoc soon. Your advisor asked you to identify things you do that the new postdoc will need to do when you leave.
- **2 minute brainstorm:** List the tasks you perform and things you do as a postdoc.
- **Categorize your task list:**
  - K = knowledge skills (usually nouns)
  - P = personality traits (usually adjectives)
  - T = transferable skills (usually verbs)

Applying the “3 types of skills” concept



Knowledge skills Personality trait Transferable skills

Genomics Scientist - Vanderbilt University Medical Center

Seeking business-minded clinical disease/genomics R&D experts to join an exciting Nashville biotech startup as we deploy our disruptive phenomics & genomics technology to transform drug discovery and development.

Interested candidates are motivated self-starters who will thrive in the fast paced environment of a startup. You will be responsible for understanding the results generated by our proprietary datasets, and relating them to disease and drug mechanisms through a careful understanding of science and literature. Central to this work will be extensive literature review and the ability to effectively communicate your findings to the team and clients.

Responsibilities:

- Validate scientific findings from our complex phenomic & genomic data sets
- Communicate scientific findings by synthesizing results into clear materials to deliver to clients
- Create proposal materials for proactive business development
- Manage ongoing projects to ensure deliverables are executed in a timely fashion
- Work collaboratively with Vanderbilt experts when specific scientific expertise is needed

Minimum Qualifications:

- MD, PhD, or PharmD preferred
- 1-2 years of project management experience
- Strong understanding of basic biology, especially as it relates to disease processes, pharmacology, drug-protein interactions, and signaling pathways
- Experienced at navigating literature searches, online databases, scientific articles and interacting with other scientific experts
- Strong pattern recognition in complex datasets
- Good feel for clinical indications of basic diseases
- Familiarity with statistics/biomedical informatics is a plus

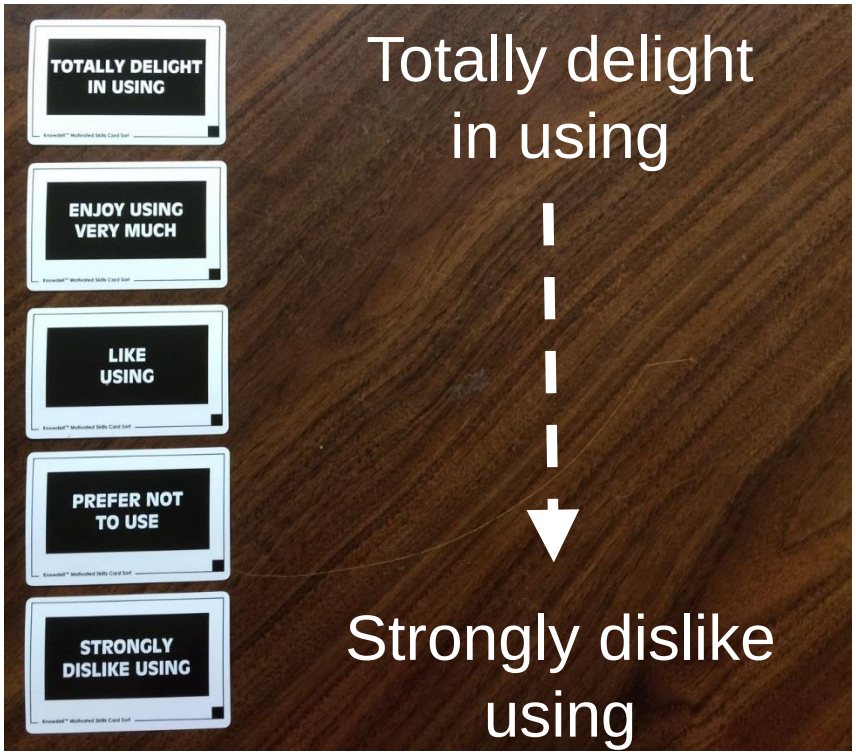
Desired Characteristics:

- Startup mindset – willingness to grow, adapt quickly, and take on new roles as company grows
- Collaborator – very comfortable working within multi-disciplinary teams
- Business-minded – thoughtful of client needs, timely product delivery
- Curious – interested in digging deep into disease areas and underlying biology/science

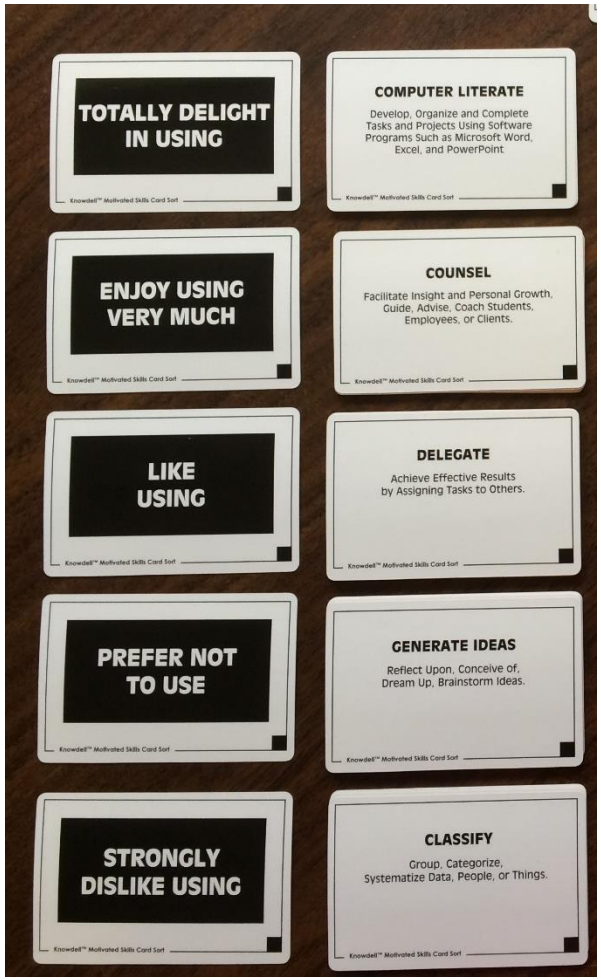
- Evaluate career paths
- Break down job descriptions and tailor your resume

Exercise #2: Knowdell skills card sort

- Focuses on transferable skills
- Helps us identify:
  - What do we do well?
  - What do we enjoy doing?
- Deck contains 48 skill cards



Exercise #2: Knowdell skills card sort (cont.)



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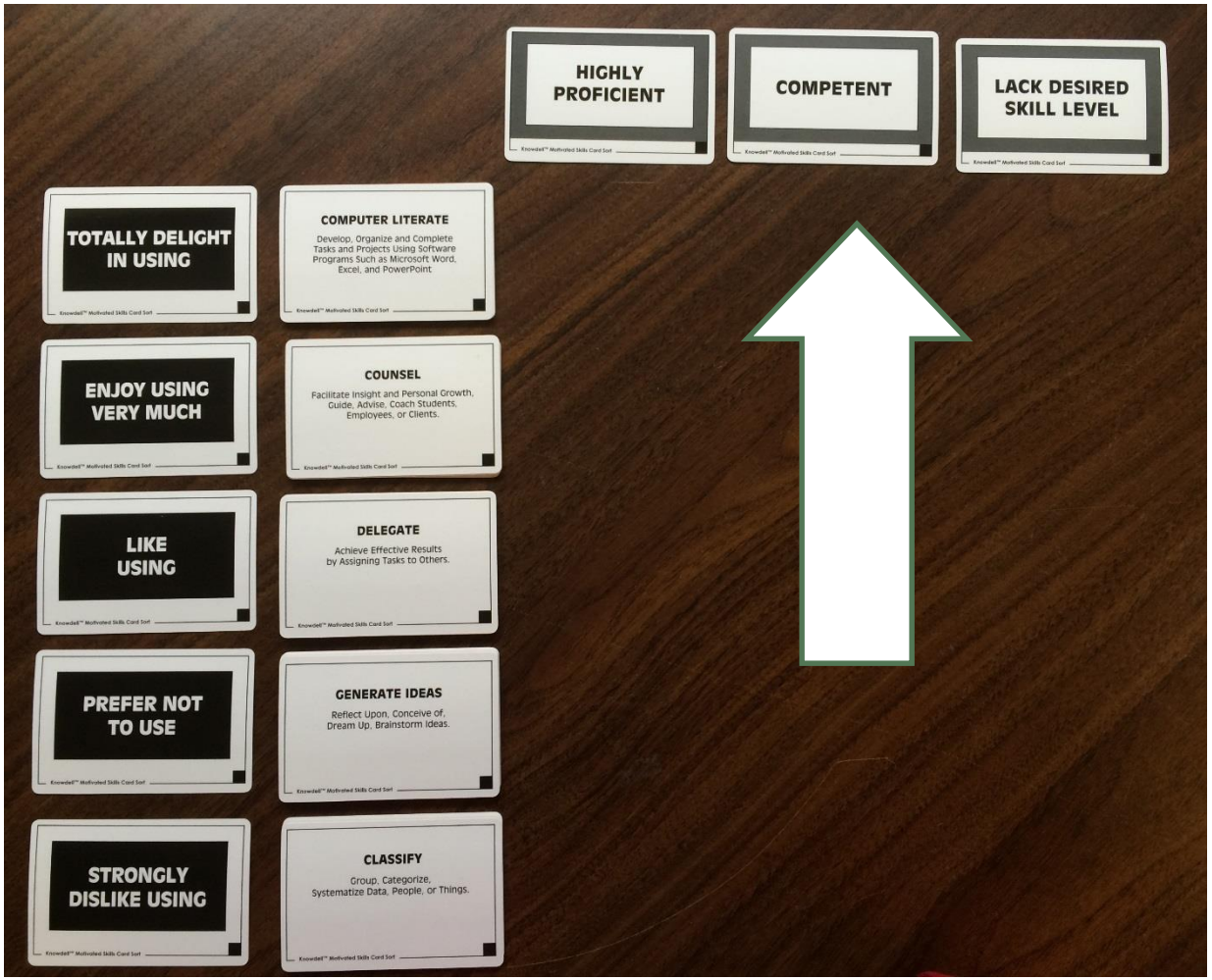

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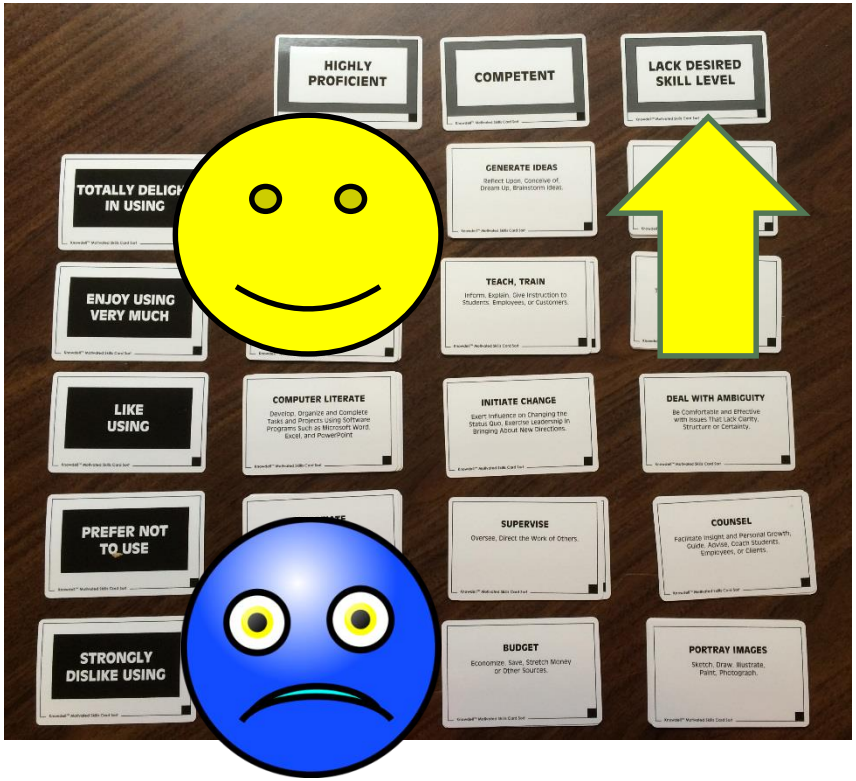


Motivated skills

Areas for development

Burnout skills

Follow-up questions to ponder

1. Review skills you enjoy/don't enjoy using. What patterns emerge?
2. What areas of strength emerge in the "highly proficient" column?
3. Scan the "Little" or "No Skills" column. Which skills should you improve to broaden your career opportunities or success?
4. Does your current work align with your motivated skills?
5. Are any of your "burnout skills" required for success in your future career? How can you accommodate this or minimize them?

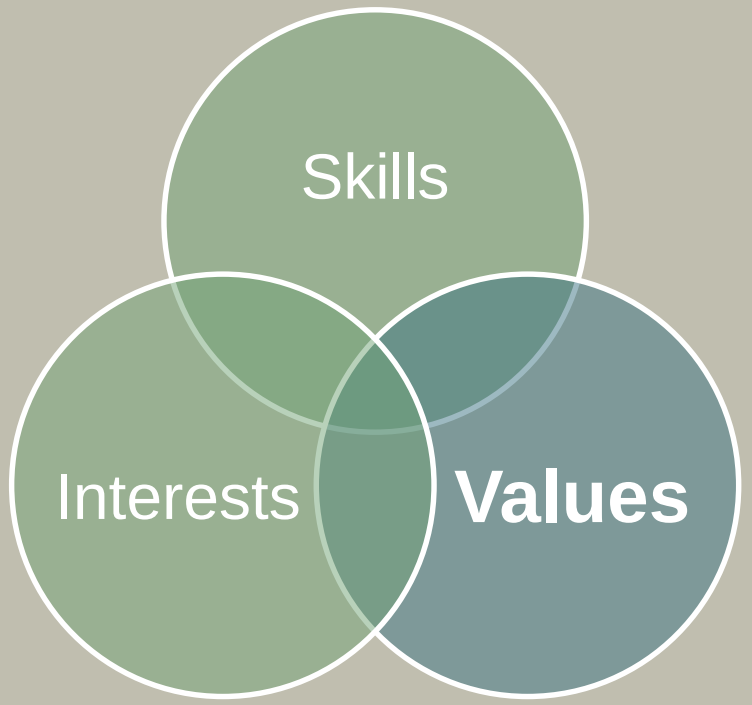
Employers value transferable skills!

From NACE Job Outlook 2016 Employer survey

Skill/Quality	Avg rating*
Ability to verbally communicate	4.63
Ability to work in a team structure	4.62
Ability to make decisions & solve problems	4.49
Ability to plan, organize, and prioritize work	4.41
Ability to obtain & process information	4.34
Ability to analyze quantitative data	4.21
Technical knowledge related to job	3.99
Proficiency with computer software programs	3.86
Ability to create/edit written reports	3.60
Ability to sell/influence others	3.55

*5-point scale, 1=not at all important to 5=extremely important

Values



What is important to you in your work?

Exercise #1: Values card sort

ALWAYS VALUED	OFTEN VALUED	SOMETIMES VALUED	SELDOM VALUED	NEVER VALUED

- Sort deck of cards into five categories.
- Limit the ALWAYS and NEVER categories to 10 cards

Exercise #2: Forced selection

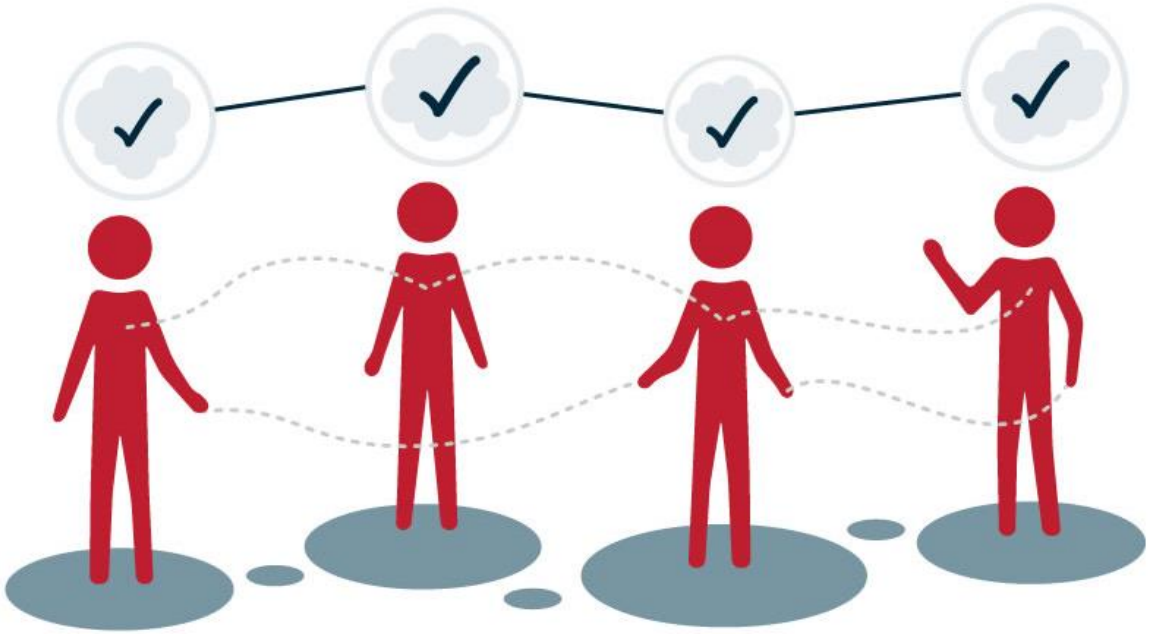


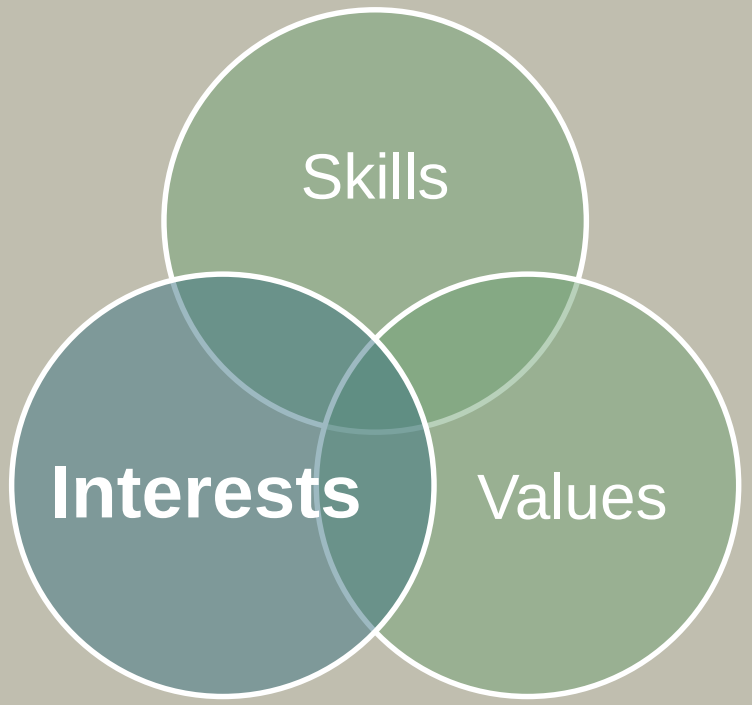
Photo Credit : Venessa Miemis via Compfight cc

Your top values

cc Mikecogh for Compfight

When thinking about values…

- Why is this value important to me?
- What price am I willing to pay to hold onto a value?
- How might my values be different in the future?
- How important are my values compared to each other?



Interests

What do you like to do?

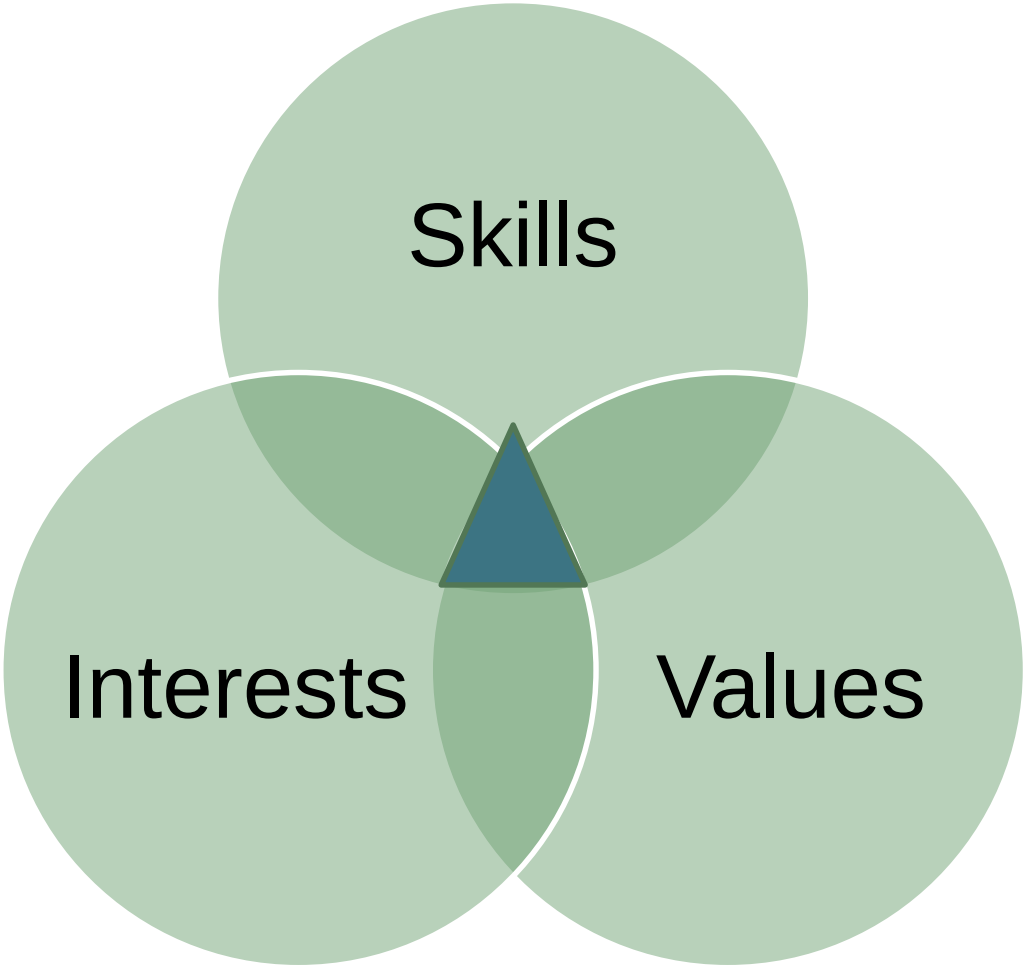
-See handout from University of Illinois

-Read career books, websites, etc. What sounds interesting?

Other self-assessment tools

- *ScienceCareers myIDP* (**skills, values, interests**; free online and customized to scientists)
- MnCareers interest assessment (**interests**; free online from MnCareers)
- Brainstorm your experience alongside a job description (**skills**)
- Ask a trusted mentor or colleague for feedback (**skills**)
- StrengthsFinder 2.0 (focused on **personality traits/skills**; ~$15 through amazon)

Career satisfaction lies at intersection of S-V-I



What do you (dis)like about your current work?

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Acknowledgements

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- University of London/Careers Group of London (Coursera “Enhancing Your Career and Employability Skills”)
- Richard Bolles *What Color Is Your Parachute?*