

To: Project Partners, Learning Connections
From: J. Crawford, Project Manager
Re: Reducing Total Occupation Pool per O*NET Experts
Date: 14 June 2017

Background: O*NET Technical Officers Phil Lewis and David Rivkin, as well as Lead Consultant on Occupational Taxonomy, Dr. Christy Gregory, met with us to discuss paring down our occupation pool.

On Grouping Occupations: Lewis & Rivkin strongly advised again “rolling up”, or grouping, occupations thematically (e.g. “Taxi Driver” and “Truck Driver” categorized as “Driver”) for the following reasons:

- 1) Negates benefits of the API by requiring consistently-high maintenance, viz.
 - a. ~100 new occupations to be added in July, 2017
 - b. Several occupations are slated for removal in 2018, e.g. “Radio Operator”

“You don’t want to get into where you’re having to do your own roll-ups and calculating data and whatnot. That is not a simple way of doing things. It’s also difficult to maintain for the future... So you’re better off sampling or making rules about which occupations you’d include.” (Lewis)

On Paring Down Occupation Pool: Both officers strongly advised against paring down the occupation pool too much, especially given the number of assessments, for the following reasons:

- 1) O*NET occupations are already reduced significantly
 - a. Dictionary of Occupational Titles (DOT), O*NET’s predecessor, listed 13,000+ occupations
 - i. *“When there were forty different kinds of sewing machine operators.” (Lewis)*
 - b. O*NET only lists 974 occupations, with 667 broad, less-detailed (SOC-Level) occupations
- 2) Assessment results act as filters – with more filters, there are fewer, or sometimes no results
 - a. Very few “Investigative” or “Enterprising” occupations, e.g., exist in lower “Job Zones”

“If you go down to 200, my concern is that you’re going to have a lot of those filters show up with one or none, or one or two. So why not let the filters work? The filters alone are going to get you down to a manageable [list]... If you put together two or three filters... it’s going to happen.” (Lewis)

- 3) More assessments may mean increased psychometric precision, but not what end users want
 - a. The officers’ “classic example” being “Funeral Director” or “Morgue Attendant”

“It can have the most psychometric assessment quality behind it, but the bottom line is that if they just don’t like those two, you’re going to have a way to let them see more.” (Lewis)

Rules-Based Filtering Alternatives: By design, the website will be reactive to changes in the O*NET Database via API. In order to leverage these benefits fully, rules-based filters (similar to that which we applied to education, experience, and training) would be most efficient. Rules may include:

- 1) **Taxonomy:** Filtering based on degree of specificity, i.e. removing “overly specific” occupations
 - a. Detailed “O*NET-SOC” occupations are identified within their IDs and easily removable
 - b. By keeping less detailed, “SOC Level” jobs, we can compare them with non-O*NET data
- 2) **Career Clusters:** Filtering occupations by pre-defining groups using CareerTech.org
- 3) **Wage:** Filtering non-“SOC Level” occupations allows comparisons with Bureau of Labor data (BLS)
- 4) **Employment Projections:** Like wage, BLS data allows removing low-demand occupations
- 5) **Specific O*NET Elements:** Filtering by a particular “Skill” or “Ability”