OECD SKILLS PROFILING TOOL

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OECD Skills profiling tool

Help training or career guidance providers assess what people can do and offer better guidance

OCD **Skills profiling tool**

- Derives a skills profile of the individual by assessing:
  - Technical skills
  - Literacy and numeracy
  - Digital skills
  - A set of transversal skills

- Allows users to compare their skills profile with their country, education level or age group and with different occupations.

- Suggests ideas of occupations matching the skills profile to occupations using O*NET.

Skills profiling tool assessment
(approximately 25 minutes)
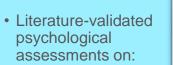
Results

Background information

- Nationality, age, sex, education, languages, main occupation.

Technical skills

- Skills, abilities and knowledge areas obtained from the O*NET database using main occupation.
- For those without previous occupation, skills derived from questions about informal work (e.g. care taking, cooking meals for family, etc.)

Literacy, Numeracy and Digital skills

- Skills use questions

Soft skills

- Literature-validated psychological assessments on:
  1. Customer and personal service
  2. Time and self-management
  3. Motivation and commitment
  4. Originality

What is your skills profile?

How do your skills compare to those of other people?

How do your skills compare to occupations?

Occupation ideas based on your skills profile

Development of the OECD Skills profiling tool

- About 11 months (April 2021-February 2022).

Tool development	Tool testing	Tool refining
8 months (April-November 2021)	5 months (August-December 2021)	2 months (January-February 2022)

Development of the OECD Skills profiling tool

1. Tool development
   1. Selecting a skill taxonomy, the relevant skills and instruments.
   2. Deciding the tool's output and functionalities.
   3. Collecting feedback on the questionnaire and planned tool output.
   4. Developing the algorithm.
   5. Developing a beta version of the tool.

Tool development

1. **Selecting a skill taxonomy, the relevant skills and instruments.**

   – Skill taxonomy: O*NET vs ESCO

   – Relevant skills:

      • Occupation-specific skills: information provided by O*NET (with the option to update)

      • Foundational skills: Literacy, numeracy and digital skills

      • Non-cognitive skills: Using Lightcast's online job postings information in the US in 2019, we selected skills among the most cited for which academically-validated tests existed.

   – Instruments: Quick to complete and reliable/academically-validated tests

      • For foundational skills: Skill-use questions adapted from PIAAC.

      • For non-cognitive skills: Selected from the academic literature based on their high Cronbach's alpha value and acceptance.

Tool development

2. **Deciding the tool's output and functionalities.**

    – Depends on the information available (and budget and data privacy policy).

    – In our case: Skills profile, option to compare skills profile to other users and to occupations, ideas of occupations.

3. **Collecting feedback on the questionnaire and planned tool output.**

    – From the target users themselves or from career guidance advisors that work with target users.

    – In our case: From career guidance advisors and other specialists from the piloting institutions.

Tool development

4. **Developing the algorithm.**
   - Defining the skills profile:
     - Match skills measured to skills, abilities and knowledge areas in O*NET
     - Decide how to match scores in each individual test to scores in O*NET.
     - If no previous occupation, decide how to match experience in daily activities to O*NET skills, abilities and knowledge areas and their levels.
   - Matching to occupation ideas:
     - Decide the distance measure to select the occupations closest to the individual's skills profile.
     - Decide how to use education and training information and user interests, if included.
     - Decide how to treat skills, abilities and knowledge areas for which there is no information.

5. **Developing a beta version of the tool.**
   - Work with a web developer to develop the web application.

Development of the OECD Skills profiling tool

2. Tool testing (pilot):

   1. Selecting piloting institutions.

   2. Piloting the tool.

   3. Collecting feedback from the piloting institutions and participating counsellors and users.

Tool testing

1. **Selecting piloting institutions**.
   – SENCE (Chile), SENA (Colombia), Servicio Nacional de Empleo (México) and Ministerio de Trabajo y Promoción del Empleo (Perú) piloted the SPT.

2. **Piloting the tool.**
   – 38 career guidance counsellors used the SPT with 270 users.
   – Participating counsellors were trained in the use of the tool and on the interpretation of its results through an online webinar.
   – Instruments to gather feedback as well as the information we wanted to obtain from the pilot were also discussed during the webinars.

Tool testing

3. **Collecting feedback from the piloting institutions and participating counsellors and users.**

   – Feedback was collected through:
     - A macro where counsellors entered users' information, user's satisfaction and comments and how long the user took to complete the questionnaire.
     - A questionnaire in which counsellors shared their impressions of the tool.
     - Meetings with groups of counsellors (5-10) to discuss their feedback and agree on changes to implement to the tool.

Development of the OECD Skills profiling tool

1. Tool refining:

   1. Implementing feedback.

   2. Developing the tool in additional languages.

   3. Launching the final version of the tool.

Conclusions of the SPT pilot

- Counsellors thought that the tool was very useful to better understand the profile of the career guidance user, especially for users without a clear career path.

- Importance or the role of the counsellor: counsellors should discuss the proposed occupations with the user.

- If feasible, users could complete the questionnaire in advance to the career guidance session.

- Users appreciated that the questionnaire was short and quick to complete.

- Colombia, México and Perú are planning to continue using the tool. México was considering linking the tool to existing job vacancies.

Challenges and potential extensions

- Length of the questionnaire (under 30 minutes).
  - Could have gathered information on interests.
  - Could have used more precise assessments.

- Lack of precision of occupation ideas for workers without previous occupation.

- Data privacy concerns.
  - Could not gather or store personal information, which could be used to produce a CV.

- Data management concerns.
  - The tool stores a lot of data. Storage, maintenance and data security must be taken into account.

- Arbitrariness and subjectivity of some matching decisions.
  - Importance of piloting the tool to ensure that results are reasonable.

Thank you

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Website: http://www.oecd.org/employment/skills-and-work.htm

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OECD Skills Profiling Tool

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Correspondence between skills assessed by the SPT and skills, abilities and knowledge areas in O*NET

Skill Measured by the Skills Profiling Tool	Corresponding skill, ability or knowledge area in O*NET
Empathy	Social perceptiveness (skill)
Literacy	Reading comprehension (skill)
Numeracy	Mathematics (skill)
Digital skills	Computer and electronics (knowledge area)
Conscientiousness	Time management (skill)
Grit	Active learning (skill)
Creative personality	Originality (ability)