

24.27 Upskilling and related earnings increase

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Upskilling & related earnings increase	New Economic Opportunities and Green Jobs
Description and justification	This indicator provides information about the change in an individual's skills and related earnings potential arising from activities directly related to the NBS. It is envisioned that this would arise from opportunities for people to receive training in new ('green job'?) skills via participation in activities organized directly by the NBS promoter or by organisations that are providing training at the behest of the NBS promoter.
Definition	This indicator is divided into two parts: one is a measure of training provided and/or skills acquired by individuals and the second is a measure of the increased earnings arising from the training/skills. Note that the earnings increase may be reported on either/both an actual or potential basis.
Strengths and weaknesses	<ul style="list-style-type: none"> + The indicator provides a direct measure of the increased economic opportunities available to individuals arising from NBS activity + The indicator is a meaningful and comparable at multiple levels of aggregation - Data collection is a bespoke process (not generally collected) and may be costly to produce measurements on an ongoing basis
Measurement procedure and tool	<p>This is essentially a 'before-after' indicator that captures the impact of training and/or 'on-the-job' skills development opportunities afforded to individuals by the NBS. If the change in skills is being directly measured, then a baseline measurement of the relevant skills level(s) should be collected from all individuals participating in the training activities. Note that only training activities directly provided via the NBS promoter – or by third-parties at the behest of the NBS promoter – should be included. A base line earnings level (current salary / earnings from work) should also be gathered from individuals participating in the training.</p> <p>There are numerous ways of measuring skills levels – more even that the range of different skills that are possible to define given that there are many composite measures of skills. In public reporting,</p>

	<p>measurements of qualifications achieved (level of education) are often used as a proxy measurement for skills in the population (See Eurostat 2016). There has also been a significant body of work on defining and measuring “21st Century Skills” or ‘competencies’ – which has been particularly active in the United States and Asia (Soland et al 2013). This has generally been applied at primary and secondary school levels. The measurement tool can only be determined by the NBS promoter based on the type of training being provided. References for the above tools / approaches are found at the end of this fact sheet.</p> <p>If the administration of a skills assessment is not deemed necessary or feasible, then a proxy for this component of the indicator may be the number of training / ‘on-the-job learning’ hours provided (usually within a calendar year) to individuals by NBS-related entities. This is generally more easily captured than before/after skills measurements, but is not as meaningful as it represents inputs to skills-development which may – or may not – result in the target skills development.</p> <p>As mentioned above, current or most recent salary levels should be collected from individuals prior to their training / work opportunity and again following completion of the training programme. This is best done twice: once relatively soon after the training (within 6 months of completion) and again after a few years have passed to assess the long-term impact on earnings. This approach to data collection will provide ‘actual’ change in earnings information, but may be difficult to capture from individuals.</p> <p>If actual data are not available, then estimated earnings impact may be calculated by using salary /earnings averages for the jobs for which individuals with the target skills are qualified and using this as a proxy for the earnings potential of these individuals. The (actual / potential) change in earnings is then calculated by subtracting the baseline earnings / salary from the post-training actual or potential earnings / salary. If this is measured at two different periods then then the length of time between post training earnings measurements should be reported.</p>
Scale of measurement	Site / individual specific – may be aggregated by programme over time.
Data source	
Required data	<ul style="list-style-type: none"> - Training hours provided by NBS-related organisations - Skills assessments of individuals before / after participation in NBS training / work - Self-reported actual earnings by individuals before / after participation in NBS training / work - Average earnings for specific jobs in the relevant area
Data input type	Quantitative

Data collection frequency	Ideally, at least 3 times: 1) prior to the NBS training (skills and earnings); 2) immediately (within 6 months of completion) following the training (skills and earnings); 3) several (3-5) years following completion of training (earnings only)
Level of expertise required	High – significant expertise is needed for the design / administration of the skills assessment (e.g., survey method, question selection). Once the initial data is collected, though, it is relatively straight-forward to repeat the data collection processes and analyse the data.
Synergies with other indicators	Synergies with <i>GDP, Jobs and Income/Disposable Income per capita</i> indicators.
Connection with SDGs	SDG 1 No Poverty; SDG 8 Decent Work and Economic Growth; SDG 10 Reduced Inequality
Opportunities for participatory data collection	Unknown
Additional information	
References	<p>Elliott, D.S., Levin, S.L. and Meisel, J.B., 1988. Measuring the economic impact of institutions of higher education. <i>Research in Higher Education</i>, 28(1), pp.17-33</p> <p>Eurostat (2016) <i>Statistical Approaches to the Measurement of Skills</i> – may be accessed at https://ec.europa.eu/eurostat/documents/3888793/7753369/KS-TC-16-023-EN-N.pdf/438b69b5-2fcb-4923-b9e2-fa7b59906438</p> <p>Martinaitis, Ž., 2014. Measuring skills in Europe. <i>European Journal of Training and Development</i>, 38(3), pp.198-210</p> <p>Soland, J., Hamilton, L.S., Stecher, B.M. (2013) "Measuring 21st Century Competencies: Guidance for Educators" Rand Corporation, accessed 1 July 2020 at http://asiasociety.org/files/gcen-measuring21cskills.pdf</p>