

# Frequently Asked Questions (FAQs): TASO Access and Success Questionnaire (ASQ)

#### **Last updated November 2023**

#### 1. What is a validated questionnaire scale?

A questionnaire scale is a set of items, statements or questions which together capture an outcome of interest.

A validated scale has undergone a multi-step process to ensure it is user-friendly, captures the outcome it sets out to do, does so consistently, and generates good-quality data.

Validation is a complex process that requires many steps. Read the <u>validation process note</u> to understand how the ASQ scales have been validated.

#### 2. Why would I use a validated scale?

When evaluating a student access or success programme, using a low-quality questionnaire scale can generate poor-quality data, and be a barrier to gaining meaningful insights from the evaluation.

Many questionnaire scales are available, but information about their quality or their appropriateness for a specific group of learners is not always available or complete.

Using a validated scale in an evaluation contributes to good-quality data, and therefore to the quality of the insight drawn from the evaluation.

#### 3. When would I use an ASQ validated scale?

Use an ASQ validated scale when evaluating a student access or success programme and the outcomes of that programme align with the outcomes any of the ASQ scales cover.

ASQ validated scales cover outcomes that have good evidence of relevance to higher education access and success; and that the sector said were important in student access and success work.

#### 4. Do I need to use all the ASQ scales, at the same time?

Not at all. The programme being evaluated should drive the choice of outcome.

Use the ASQ scale, or scales, that are relevant to the outcomes of the student access or success programme being evaluated. If relevant, combine a validated ASQ scale with one or more other validated scales.



#### 5. What are intermediate outcomes and why do you measure them in the ASQ?

The term 'intermediate outcomes' is used to refer to outcomes that occur following a targeted intervention or activity, and may include changes in behaviour, attitude, knowledge or skill. It is important to identify empirical evidence that an intermediate outcome is associated with positive changes in the relevant long-term outcome. In the case of widening participation (WP), this is often attainment and progression to HE. However, more recently, success in HE (e.g. retention, degree classification) has also been cited as a key long-term outcome, consistent with a more comprehensive definition of HE access and success. Ensuring that we have robust measures to assess intermediate outcomes is important in understanding the impact of WP activities. For further information about intermediate outcomes and their association with higher education access and success, please refer to our rapid review of intermediate outcomes for higher education access and success.

#### 6. How did you choose the outcomes for the questionnaire?

First, we consulted the research literature to identify which outcomes to focus on. The <u>rapid evidence review</u> is a research summary about intermediate outcomes: how they are measured and the extent to which they are associated with higher education access and success outcomes.

Then we surveyed just over 50 practitioners and evaluators working in both access and student success to help us identify which outcomes were important to the sector by asking them to rank the outcomes emerging from the rapid review according to how important they were for university access and success in their own contexts.

Following on from the survey, we also spoke to 21 access and student success practitioners in a series of focus groups, to find out what outcomes they would like to see in the questionnaire, and to further understand their and their institutions' focus on specific intermediate outcomes.

Next we conducted cognitive testing, which involved speaking directly to twelve individual learners with similar characteristics as those who would eventually engage with these questionnaire scales.

Finally, we piloted the questionnaire items with learners in schools, sixth-forms, colleges, young people not in education and students in higher education. The questionnaire items were also piloted by HEPs, Uni Connect partnerships and other outreach/WP providers as part of evaluating their WP activities. The data collected was then analysed to test the internal consistency and internal validity of each scale.

## 7. How did you conduct your rapid review – what was your inclusion / exclusion criteria?

The research review focused on key terms that would help us to identify measurement studies related to attainment and higher education progression. We wanted to understand what measures already existed and what outcomes mattered for widening participation access and student success.



We searched for a broad range of outcomes that covered cognitive, social, and emotional factors. This was not a systematic review, and we prioritised recent empirical studies, published since 2010, that had been conducted in the UK, US and Europe – e.g., studies that were going to be similar to the context in which UK WP work is carried out.

We were primarily interested in quantitative studies that demonstrated Type 2 (correlational) or Type 3 (causal) evidence that would return psychometric studies about measuring intermediate outcomes.

Databases we searched included: Google Scholar, Taylor and Francis, EEF, RAND database and research known and / or conducted by the project team.

## 8. What was the demographic representation of the learners who tested the scales with?

The scales in the ASQ have been tested with learners and students from a range of backgrounds, including those eligible for Free School Meals, with English as a second language, and from low participation neighbourhoods (as measured by POLAR), or first in family to (potentially) attend higher education. We also made sure to include learners in a variety of settings, e.g., schools, sixth forms, further education colleges, and universities.

#### 9. What age groups can I survey using the Access and Success Questionnaire?

The Access and Success Questionnaire (ASQ) is made up of seven questionnaire scales, each of which aims to measure intermediate outcomes associated with higher education access and success. The suitable age group for the questionnaire scale will depend on the scale you would like to use in your evaluation.

'Access (pre-entry) scales' suitable for use with learners in Year 7 through to Year 13

Five of the scales are suitable for use with learners in schools, sixth-forms, colleges, or young people not in education.

- Academic self-efficacy
- Cognitive strategies
- Higher education expectations
- Knowledge of higher education
- Sense of belonging, access/pre-entry

'Success (post-entry) scales' suitable for use with students in higher education (of any age) Three of the scales are suitable for use with students in higher education and can be used to measure on-course student success interventions:

- Cognitive strategies
- Metacognitive strategies
- Sense of belonging, success/post-entry

For some of the scales, where relevant, simpler wording is provided for use with younger learners (as young as Year 7s), or any respondents you deem may benefit from this.



# 10. Do I have to use all the items in a scale even if they aren't all relevant to my programme?

Yes, to ensure the validity and reliability of the scale, all items of each scale you decide to use must be administered. You can choose, though, which scales you want to use in your evaluation, based on the outcomes that you are interested in – you do not need to administer all of the scales if they are not relevant to your WP work.

#### 11. Why aren't there more questionnaire scales about aspirations?

From the consultation, raising aspirations emerged as an important outcome of WP activities. However, the evidence shows that young people from all backgrounds have high aspirations for themselves, but that those from lower socioeconomic backgrounds have lower expectations that these will be achievable. This suggests that there is not an aspirations gap, but an expectations gap for progression to higher education. The continued use of the term aspirations is often due to differences in semantics – for example, often the WP sector talks about aspirations when they are using a definition that more closely aligns with expectations. We hope the ASQ will help clarify the definitions around certain key intermediate outcomes.

#### 12. Why aren't there more questionnaire scales about university knowledge?

From the consultation, university knowledge also emerged as an important outcome of WP activities, and we do have a knowledge of higher education scale. However, it is not designed to test students' factual knowledge of higher education admissions processes or specific knowledge about HE institutions. This knowledge changes frequently and is not well set up to be assessed through a validated scale. What we can measure is students' perceptions of whether they understand what it is like to study at university and how it differs from school.

# 13. These statements are very similar to what I am using already, can I just keep doing what I am doing?

Yes, there may be overlap with the questionnaire statements that you are already using to measure specific outcomes. However, even small differences in the statements can impact how the statement is understood by an individual.

It is important that we are confident that we are using questionnaire statements that measure the outcome that we intended it to measure – this is what the validation process achieves.

We would always recommend using validated scales which have been tested in a WP context rather than using unvalidated scales (even if the wording is similar).

#### 14. Can I use the ASQ to evaluate interventions delivered to younger learners?

As part of the validation process, we conducted exploratory analysis to see whether the scales can viably be used with younger year groups in their current format. Additionally,



we conducted cognitive testing with pre-16 learners to test their understanding of the scales and each respective item within.

Based on this analysis, we recommend that *some* of the scales in the WP Questionnaire are suitable for use with learners in schools, sixth-forms, colleges, or young people not in education. This includes learners in Year 7 through to Year 13.

- Academic self-efficacy
- Cognitive strategies (note, this is also suitable for use with students in higher education)
- Higher education expectations
- Knowledge of higher education
- Sense of belonging (pre-entry)

The other scales on the WP Questionnaire are not suitable for use with younger learners. This is either because the intermediate outcome which the scale aims to measure is not relevant to young learners or because the items in the scale did not perform well in cognitive testing or analysis of data collected with young learners.

15. Is there a reason why the metacognition scale can only be asked of higher education students and not learners in schools, sixth-forms, or colleges?

Metacognition is a multi-faceted construct, and it covers two broad components: metacognitive knowledge and metacognitive regulation. Metacognitive knowledge includes knowledge about study strategies and when and why to use these strategies. Metacognitive regulation involves awareness of task performance and evaluation of learning processes and strategies. Metacognition is a developmental process, meaning that as learners get older their range of metacognitive processes usually increases – therefore, a staged approach to its measurement is also needed. You can read more about this in section one of the rapid review of intermediate outcomes for higher education access and success.

In the ASQ, there is a cognitive scale that can be used with learners in schools, sixth forms, or colleges – the cognitive strategies scale. Using effective cognitive strategies is a key part of developing metacognition (e.g., metacognitive knowledge about study strategies) and therefore cognitive strategies can be considered as a metacognitive outcome. Using this scale would be an appropriate part of a staged approach to measuring metacognitive outcomes.

The scale in the ASQ labelled as 'metacognitive strategies', which relates to monitoring and planning approaches to learning, did not perform well when tested with younger learners and is therefore only suitable for use with students in higher education. It should be noted that measuring metacognition at different ages, given its complexity, continues to be a challenge not just for widening participation but for the education sector more widely. The cognitive strategies and metacognitive study strategies scales that we are validating in this project marks a significant step forward for measuring metacognition.

16. What's the difference between the cognitive strategies scale and metacognitive strategies scale



From a theoretical perspective, cognitive strategies and metacognitive strategies overlap partly, so you may notice similarities in the definitions and items used for the two scales. The cognitive strategies scale is about the extent to which learners use effective cognitive strategies. Whereas the metacognitive strategies scale focuses more on how learners monitor and adapt their own learning to their context. Metacognition is a developmental and multi-faceted process and therefore learners would need to achieve high levels of both cognitive strategies and metacognitive strategies to be considered as having achieved high levels of metacognition. Therefore, each of the two scales on their own provides robust insight into the strategies used by learners.

## 17. Is there a reason you removed the 'critical engagement with information scale'?

The data we obtained from higher education providers and other organisations deploying this scale as part of the testing of the partially-validated questionnaire released in November 2022 offered a set of insights about this scale that did not meet expectations in terms of the quality of the scale. This included its internal consistency, the way the individual items of the scale related to each other, and the way the scale performed for sub-groups. These results were taken very seriously, because they emerged from data collected as closely as possible to how the ASQ would be deployed by its intended users. As a result, despite earlier encouraging results prompting its inclusion in the partially-validated questionnaire, this scale was not ultimately included in the ASQ

18. Raising attainment is a key long-term outcome for me and other higher education providers working in the pre-entry access space. How does the ASQ help me to measure the impact of attainment-raising activities?

This ASQ is useful for measuring the impact of attainment-raising activities – this project has focused on a range of cognitive, social, and motivational outcomes that are strongly correlated with access and student success outcomes - principally attainment-raising.

This means that the intermediate outcomes measured by the scales in the ASQ are closely related to attainment and, if the outcomes are relevant to your work, using the scales in your evaluation can provide you with a proxy measure for attainment.

The outcomes that are most directly associated with attainment are cognitive outcomes. Further information about the extent to which the intermediate outcomes are associated with attainment can be found in the rapid review.

# 19. What should I do if the programme or work I'm evaluating isn't looking to affect any of the outcomes captured in the ASQ?

The ASQ covers a range of intermediate outcomes which the wider literature has shown to be associated with student access and/or success. It may be, however, that the programme or activity you're evaluating isn't looking to affect any of these intermediate outcomes. To identify the outcomes that your programme or activity aims to achieve, start by developing a <a href="Theory of Change">Theory of Change</a>.



Remember that the outcomes you measure and how you measure them depends on your institutional approach to evaluation and the programmes that you deliver. To measure outcomes that are not included in the ASQ, TASO recommends:

- Using other pre-existing validated scales
- Make modest changes to the wording and structure of existing scales to improve their usability in your context
- Consider developing bespoke, validated, scales specifically for the constructs you are interested in. You can refer to TASO's guidance on how to validate scales.

To find other pre-existing validated scales, there are a couple of resources you might find helpful:

- The Education Endowment Foundation's <u>SPECTRUM Database</u> is a very useful systematic tool review with an accompanying online database of measures and an associated guide for their selection, deployment and interpretation
- The <u>Toolkit for Access and Participation Evaluation</u>, also referred to as TAPE, is a validated survey toolkit developed by Dr Matthew Horton which includes items on HE intentions, attitudes, and knowledge.
- The summary table in TASO's <u>rapid review of intermediate outcomes for</u> higher education access and success outlines relevant scales.

#### 20. How big should my sample be to use these scales?

Your sample size, that is the number of students completing the questionnaire scales, will vary depending on your intervention or activity. The scales can be used with smaller and larger samples.

How big the sample needs to be depends on the type of analysis that you will want to run. Questions about sample size usually relate to <u>statistical power</u>. Different research designs need different size samples to be viable and robust. For example, you can't use some types of quantitative designs with really small sample sizes. The correct sample size depends on the type of evaluation and the planned analysis.

## 21. How does the ASQ work in collaboration with the HEAT evaluation plans tool?

HEAT's Evaluation Plans Tool guides you through recording a Theory of Change, identifying appropriate outcomes and linking those outcomes to the methods you will use to measure them. If you choose an outcome with an associated ASQ scale, you will be able to record this method of data collection in your Plan and then find the relevant ASQ scale in HEAT's Survey Tool under Public Templates.

The Evaluation Plans you record on HEAT can then be linked to your Activity and Student records, including any Survey data which your Students have responded to. Linking your Evaluation Plans to your Activities and Students will allow you to monitor collection of survey data, ensuring that the data you set out in your plan is available when you come to analyse and report.



## 22. Some HE providers are too small to use HEAT. Are you going to provide opportunities for small and/or specialists to use the ASQ?

Yes absolutely, the ASQ is freely available for everyone to use regardless of the size or specialism of the provider - it can be accessed on the TASO website.

#### 23. Can the ASQ success scales be used with mature learners?

The ASQ was validated with university students up to the age of 22 years old. Therefore, the ASQ has not been tested with mature learners, beyond the age of 22. If you would like to use the scales with older age groups, we'd suggest, as a first step, to undertake cognitive testing with this group of learners to get their feedback on the relevance of the statements. Further information about this, and the steps needed to validate a scale for a specific population can be found in this guidance:

# 24. Are there any plans to develop a version of the ASQ for use with primary learners or scales relating to employment/employability?

TASO does not plan to develop additional validated scales in the coming year. However, we have published guidance on the steps needed to validate a scale for a specific population - found on the TASO website.

25. Which sense of belonging scale would you recommend for use with first year new starters at registration for students entering into higher education?

If students are yet to start university, then the pre-entry sense of belonging scale should be used.

26. We have some interventions which are geared towards specific degree subjects like Medicine and Dentistry. What are your opinions on adjusting the wording of some of the scales to reflect that subject? E.g. I am confident that I can get the grades required to progress to medicine.

For the scales to be considered fully validated, we would not advise any wording changes to be made to the items. That said, tweaking a validated scale to your context is preferable, when compared to using scales that have not been through any validation process.

## 27. Are you tracking the respondents to establish the links with the longer term outcomes?

TASO's intention is for the sector to widely adopt the ASQ in its evaluation of student access and success activities. Overtime, as more research and evaluation teams use the scales, particularly via platforms like the Higher Education Access Tracker (HEAT), there will be an opportunity to track students through the lifecycle, linking intermediate outcomes (measured by the ASQ) with longer term outcomes such as attainment, access to HE, continuation rates and degree completion.