

# Interpreting Quality Indicator data

This guide suggests different ways in which you can assess and interpret AQTF 2007 Quality Indicator data.

## Quality indications

Information from the AQTF 2007 Quality Indicators provides an overall picture of the outcomes being achieved by the RTO and how well training is meeting client needs.

This evidence on training outcomes is intended to assist RTOs with continuous improvement processes. Along with other data, it contributes to risk assessments by registering bodies and informs decisions concerning the frequency and targeting of audits.

This guide outlines general strategies that can be used to interpret Quality Indicator data. The strategies are themselves indicative, because data interpretation is a complex and contextualised science that integrates various forms of analysis and review. The same strategies are equally useful for both internal and external assessment given the common goal of stimulating continuous quality improvement.

The principles outlined in this document will be applied by registering bodies in undertaking risk assessment based on continuous improvement strategies.

## Analysis strategies

The strategies sketched below are designed to guide analysis of Quality Indicator data.

### Are data available for evidence-based continuous improvement?

Collecting data is a basic condition for subsequent analysis and action. If data do not exist, there is a risk that evidence-based change is not taking place.

The level of such risk may be gauged by exploring the nature of any quality improvement strategies which may be documented and in place, the nature of any data collection systems, and what data, if any, may be used for quality assurance.

### What contexts should inform the interpretation of results?

Numbers carry an allure of certainty. But the validity and reliability of results depends on the contexts that surround the design and collection of data.

Pertinent contexts can come to light during data analysis. Other contexts may need to be considered before starting analysis.

An important context is provided by the various data that may be available for analysis. This may range from data on learner or organisational characteristics, or broad perspectives on an RTO's training and commercial environment.

Context analysis may result in:

- the production of explanatory statements
- shaping the nature of assessment processes or
- defining standards and criteria against which evaluative decisions are to be made.

### Is the data on which decisions are to be made sound?

Evidence-based decisions based on poor quality data may not lead to improvement.

Examining the veracity of data can be time consuming and complex, but a few general considerations may be considered:

- How has the target population been defined?

- Have data been collected in a robust and contextually appropriate fashion, either via a census of the whole population or through sampling selected respondents?
- Have survey instruments been deployed in appropriate ways, either online, by post or onsite administration?
- Are response rates at least 50 per cent, or on par with expectation?
- Do responses cover the full range and level of areas in which training is being delivered?
- How does the coverage of survey responses compare with competency completion data?

## What do scale average scores suggest?

Learner and employer survey scale scores are reported on a 0 to 100 point metric.

Scale scores are calculated by coding the four response categories for each item as strongly disagree (0), disagree (33), agree (67) and strongly agree (100) and averaging item results within each scale.

Much can be gained through examination of scale averages, keeping in mind relevant caveats and assuming that data and results are sound.

Score differences can be interpreted in several ways. In general, differences of around 10 scale points may represent a 'meaningful educational effect'. Given the scoring of the response categories, a difference of 33 points reflects a switch between response categories.

A learner survey score of 30.0 for Trainer Quality, for instance, indicates that average responses lie between strongly disagree and disagree. An average employer survey scale score of 53.3 for Trainer Quality means that responses hover between disagree and agree. These results suggest that employers may see trainers as being of higher quality than do learners.

An average learner score of 66.7 for Effective Support indicates that learners generally agreed that training staff respected their backgrounds and needs, that training was flexible enough to meet their needs, and that the training organisation had a range of services to support learners.

It is best to make comparisons between like groups or for the same group over time. Comparisons across scales may be misleading because the scales measure different phenomena, and certain phenomena may simply be easier or harder to agree with than others.

## How do results vary across groups?

Variation can provide as much, if not more information about training quality than average scores.

Large variations in feedback within or between groups, for instance, suggests that training may not be managed in consistent ways across the organisation.

Variation can be studied in two main ways, by reviewing:

- variation in average scores across groups
- the variability of results within groups.

If comparisons are to be made across groups, then the selection of groups is governed by their relevance for continuous improvement, and the validity of the proposed comparison.

Comparisons between large and small RTOs providing training in different industries may not be valid, for instance, if it is deemed that RTO size or industry contexts do not provide direct comparison.

Considerable value may be derived, however, by making comparisons between scale averages for RTOs that are judged to have similar business or training profiles.

Continuous improvement at one RTO, for instance, may be propelled by comparison against other RTOs with like business or training profiles.

The variability of feedback within a group may also be examined in addition to looking at variation across groups. Average variation statistics provide insight into the consistency of views held by learners or employers in that group.

An average variation of 5.0 scale score units in one group, for instance, suggests that feedback is much more homogeneous than in a group in which scale scores vary around 17.5 scale score units.

#### How do results compare against relevant criteria?

A wide range of criteria may be defined to provide points of reference against which scale scores can be considered.

Criteria may derive from prior expectations, business or educational assumptions, other data or reports, community or business standards, or from a similar but non competitive organisation.

Such 'criterion referenced' comparisons can be particularly informative because they move focus beyond average and variation scores to consider what scores mean in context.

For instance, an RTO may network in a group of RTOs who exchange information about quality and performance. The RTOs in this group may generate group reference scores that provide a foundation for identifying RTOs with noticeably higher or lower scale scores. Analysis of the training contexts linked with higher scores may help tease out the characteristics that shape effective learning and outcomes.

Alternatively, after assessing their current performance, an RTO may set aspirational targets that provide a foundation for stimulating improvements in practice. They may choose, for instance, to develop operations so that 80 per cent of their employer stakeholders are satisfied with the quality of skill development.

#### How do results vary over time?

The most informative assessments may result from tracking trends in scale scores over time.

Comparisons made across time can help identify and document areas of growth or decline.

Links might then be made to relevant organisational or training characteristics or conditions which might be further analysed and replicated, or be the subject of focused improvement activities.

Of course, it is important to keep in mind that changes in learner or employer cohorts or in relevant operating environments may shape the kind of data and results that are generated.

#### Forming a view

Well designed and managed assessment of Quality Indicator data should provide insights that help shape an informed perspective on the quality of an RTO's education and training.

These insights need to be read in terms of other evidence and contexts that may be relevant to consider.

The diagnostic process should involve cross-validating emerging interpretations against other preferably independent sources of evidence.

It is these insights that provide the basis for identifying areas of good practice as well as those in need of improvement, and for developing evidence-based strategies for change. These strategies can inform and stimulate each RTO's continuous improvement activities.

#### Things to do

1. Look at what data are available for evidence-based continuous improvement.
2. Examine what contexts should inform the interpretation of results.
3. Consider whether the data on which decisions are to be made are sound.
4. Analyse scale average scores.
5. Chart how results vary across institutions.
6. Compare results against relevant criteria.
7. Track how results vary over time.

## About this guide

This Continuous Improvement Guide forms part of the AQTF 2007 Quality Indicators Resources Package. This package contains information and materials for Registered Training Organisations (RTOs) to use to collect, analyse and act on data about their training and assessment.

The Australian Quality Training Framework 2007 (AQTF 2007) Quality Indicators are part of the AQTF 2007 Essential Standards for Registration for training organisations that wish to deliver nationally recognised vocational qualifications and competencies. Three Quality Indicators have been endorsed by the National Quality Council (NQC): Learner Engagement, Employer Satisfaction and Competency Completion. These are designed to help RTOs conduct evidence-based and outcomes-focused continuous quality improvement, and assist Registering Bodies assess the risk of an RTO's operations.

Visit [www.training.com.au](http://www.training.com.au) for further information on AQTF 2007 or the Quality Indicators Resources Package.