



Tool nr. 106 - material

Developed by: Catholic Education Flanders, inspired by Lorna Earl

Name of the material

What are reference points, reliability, validity

Sources

Earl, L. and Katz, S. (2006), *Leading schools in a data-rich world, harnessing data for school improvement*. California: Corwin Press.

Purpose of the material

For teachers, when they are doing practitioner inquiry, this material gives a clear definition on what is meant by reference points, reliability and validity.

Material

Reference points

Any kind of measurement refers to reference points in order to interpret the results. When carpenters measure distance, they use meter, centimeter and millimeter. Meteorologists refer to temperature in relation to the freezing point of water (0° c). Restaurant reviewers rate the food in restaurants based on quality, originality, presentation ... In education the reference points fall into three categories:

- Norm-referenced: in relation to the performance of other people in a defined group;
- Criteria or outcomes-referenced: in relation to some predetermined criteria, outcome or expectation;
- Self-referenced: in relation to progress or performance at a prior time.

Reference points are used to make sense of any new data, and is important to identify which reference point(s) are being used in interpreting information.

(Source: Lorna Earl in *Leading schools in a data-rich world*, p. 57)

Reliability

Reliability addresses the following questions:

- How sure are we?
- How confident are we that these data provide enough consistent and stable information to allow us to make statements about it with certainty.

When you are using data, you are make inferences about what you know and might do from the evidence that is available to you. If you are unsure or wonder about whether your judgments could be compromised by inconsistencies or problems with the data, there is a question about reliability, and you need to take this into consideration in your interpretation.

(Source: Lorna Earl in *Leading schools in a data-rich world*, p. 57)



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Validity

Validity refers to accuracy of the interpretation and use of the data and answers the following questions:

- How well does the data measure what we are trying to understand?
- Does the interpretation of the data lead to appropriate conclusions and consequences?

The focus in validity is on the inferences that are drawn and the consequences of these inferences. When the interpretation of any data does not reflect what was actually being measured, people can come to inaccurate conclusions.

(Source: Lorna Earl in Leading schools in a data-rich world, p. 57)

How you can use this material in your practice

Debrief - reflection and metacognition

Feedback on the use of the tool