

The validity of scenario-based assessment: measuring complex constructs

Challenge of validating

Take the complex structure of the assessment into account in the measurement model.

What type of measurement models is flexible enough for complex constructs? Bayesian Networks (BN; de Klerk et al., 2015)

How to conduct model criticism analysis within BN?

Model criticism methods for BN are underdeveloped (Crawford, 2014).

WHAT HAVE BEEN DONE:

- Literature review: + methods for checking local independence violation for observable variables;
- a method specified on relationship across latent variables.

- The analysis of the data gathered from 2C administration

The expected structure has been partially confirmed by confirmatory factor analysis for the whole model; and partially by BN.



WHAT TO DO NEXT:

- Extend model criticism methods for the analysis of the relationship between latent variables within BN.

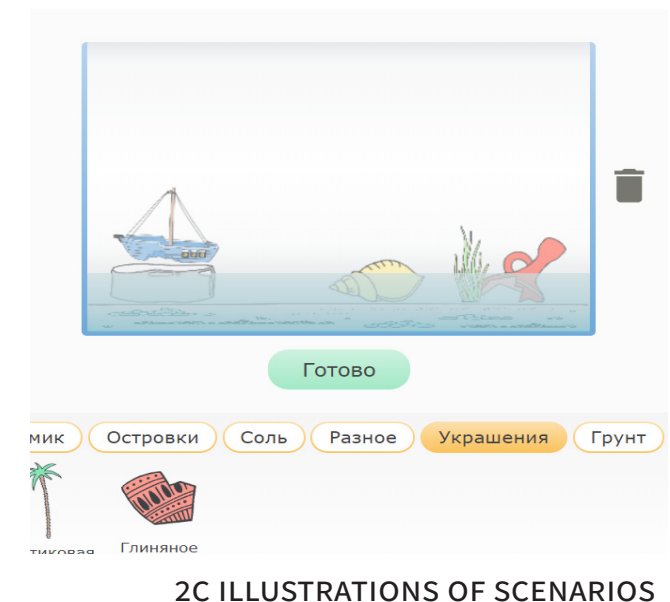
- Analyze the relationship between latent variables within 2C assessment.

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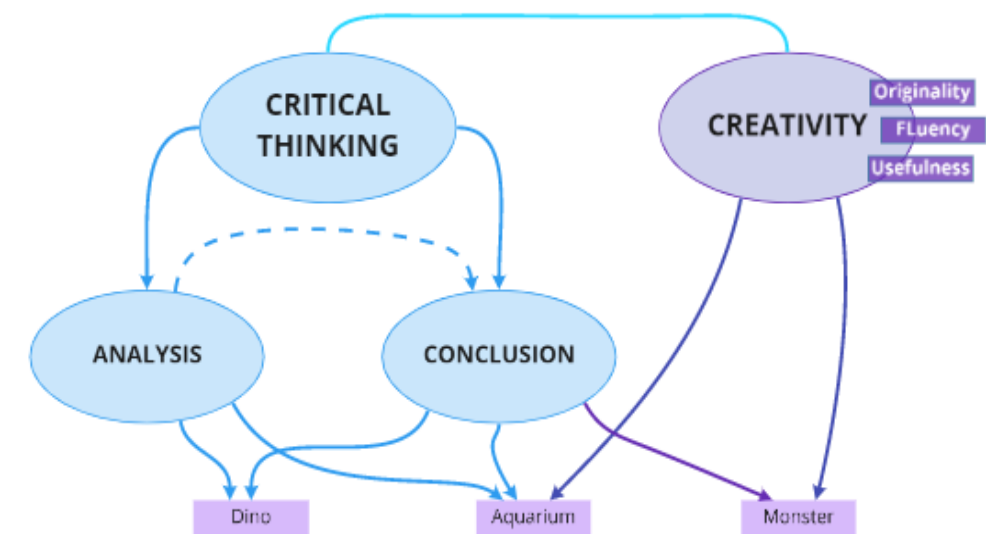
Example: 2C

2C in an assessment for primary school students:

- 3 scenario-based tasks mimicking real-life situation.
- to assess creativity and critical thinking skills.



2C ILLUSTRATIONS OF SCENARIOS



2C EXPECTED STRUCTURE

The research question:
Is the theoretical expected structure confirmed by empirical data?

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