

Towards a new balance in functions of assessment

Shifting from formative and summative to a continuum of stakes

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Introduction

- Bas Agricola, PhD
- Associate professor HU University of Applied Sciences
- Research focus on feedback, feedback literacy, programmatic assessment



Marlies de Vos



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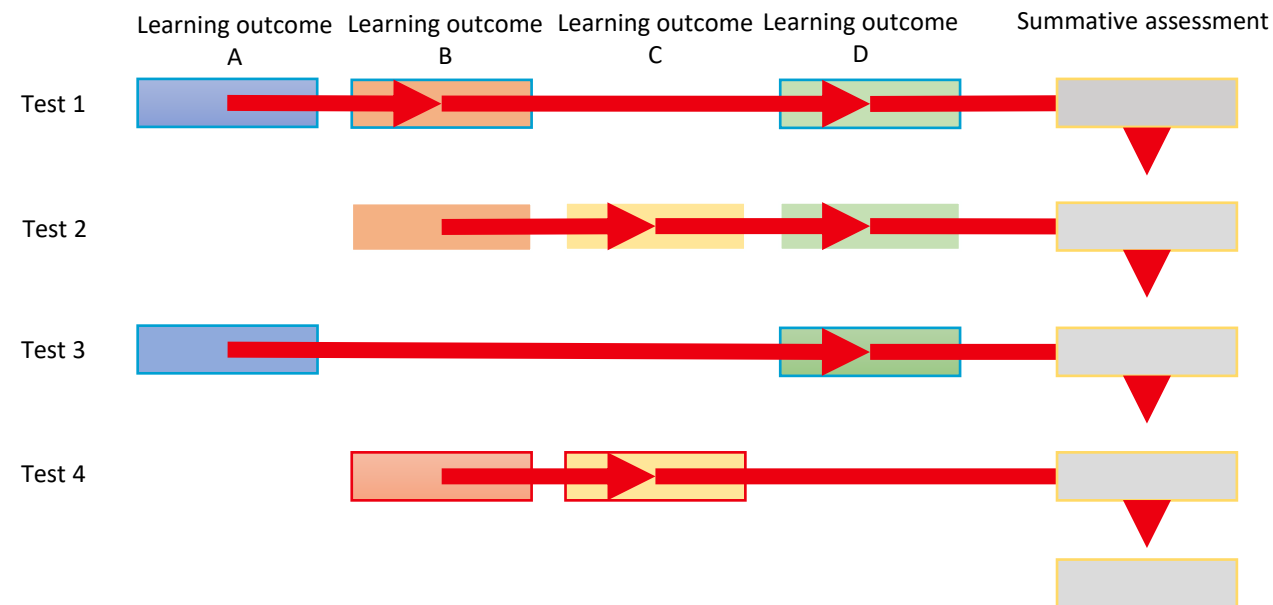
Bas Agricola



Tamara van Schilt-Mol

Conventional grading

Based on multiple tests with a focus on a fail/pass decision of each test



Source: Baartman, L., van Schilt-Mol, T., & Van Der Vleuten, C. (2022). Programmatic assessment design choices in nine programs in higher education. In *Frontiers in Education* (p. 738). Frontiers.

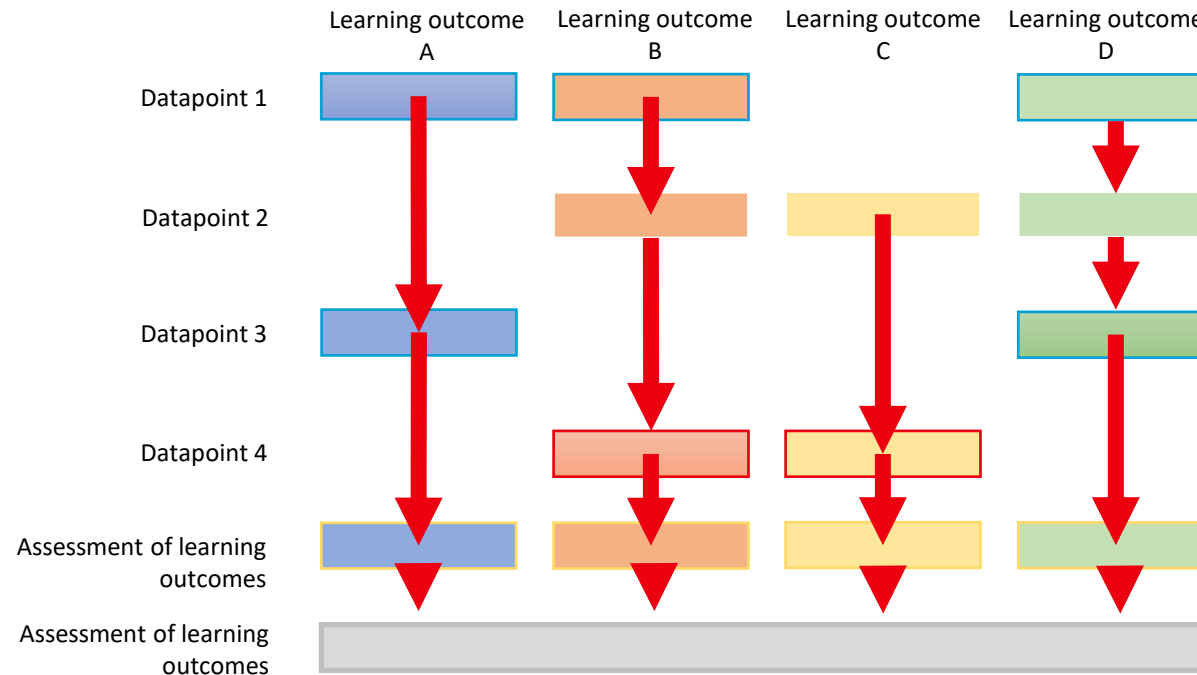
Summative assessment

- Focus on fail/pass decisions
- Stimulate learning for the test
- Create high marking workload
- Divide teaching and testing



Programmatic assessment

Based on information of students' performance with a focus on learning outcomes



Source: Baartman, L., van Schilt-Mol, T., & Van Der Vleuten, C. (2022). Programmatic assessment design choices in nine programs in higher education. In *Frontiers in Education* (p. 738). Frontiers.



Low stakes



Medium stakes



High stakes

1 data point

Multiple data points

Many data points

Focus on feedback

Focus on diagnosis, new
learning goals

Focus on decisions

Principles of programmatic assessment (Heeneman et al., 2021)

Table 2. Final Ottawa 2020 consensus principles of programmatic assessment after input of the expert group and Ottawa attendees, changes as compared to Table 1 are indicated in bold.

| | |
|----|---|
| 1 | Every (part of an) assessment is but a data-point |
| 2 | Every data-point is optimised for learning by giving meaningful feedback to the learner |
| 3 | Pass/fail decisions are not given on a single data-point |
| 4 | There is a mix of methods of assessment |
| 5 | The method chosen should depend on the educational justification for using that method |
| 6 | The distinction between summative and formative is replaced by a continuum of stakes |
| 7 | Decision-making on learner progress is proportionally related to the stake |
| 8 | Assessment information is triangulated across data-points towards an appropriate framework |
| 9 | High-stakes decisions (promotion, graduation) are made by in a credible and transparent manner, using a holistic approach |
| 10 | Intermediate review is made to discuss and decide with the learner on their progression |
| 11 | Learners have recurrent learning meetings with (faculty) mentors/ coaches using a self-analysis of all assessment data |
| 12 | Programmatic assessment seeks to gradually increase the learner's agency and accountability for their own learning through the learning being tailored to support individual learning priorities |

Source: Heeneman et al. (2021) Ottawa 2020 consensus statement for programmatic assessment – 1. Agreement on the principles, Medical Teacher, 43:10, 1139-1148, DOI: 10.1080/0142159X.2021.1957088

Research question

Which design choices do higher professional education programs make when implementing programmatic assessment?

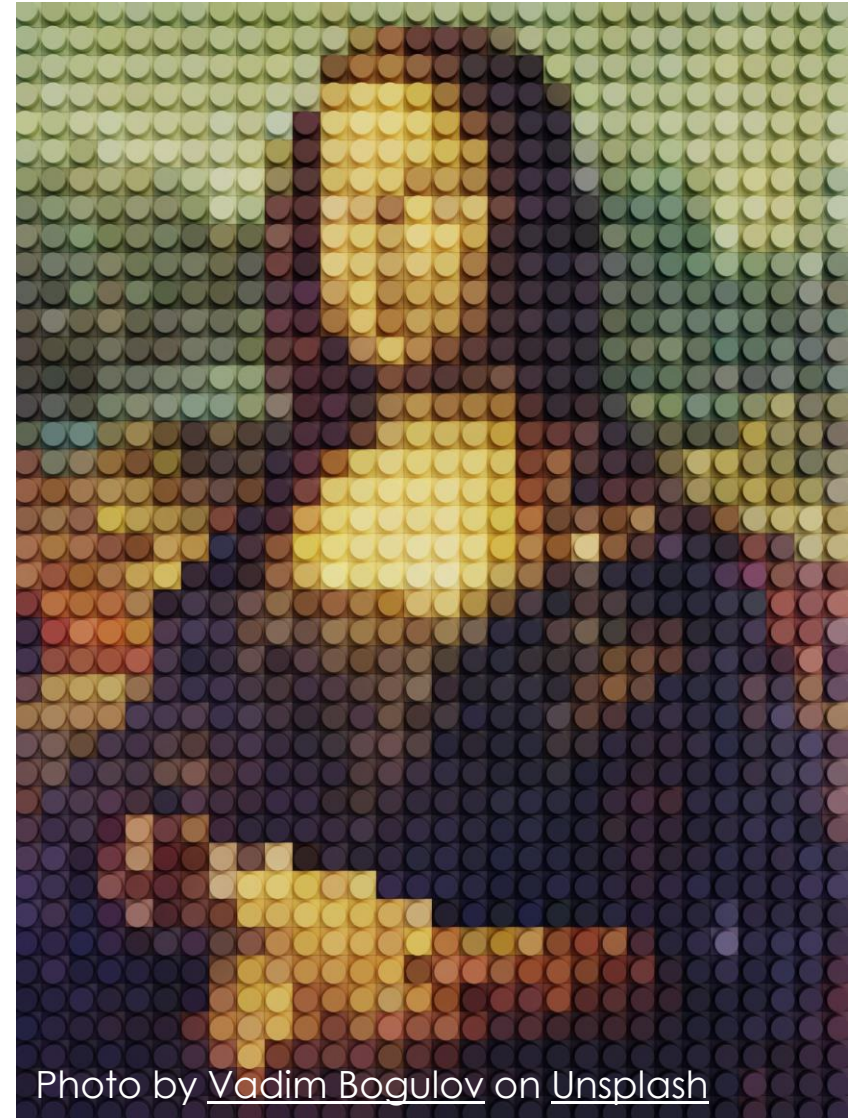
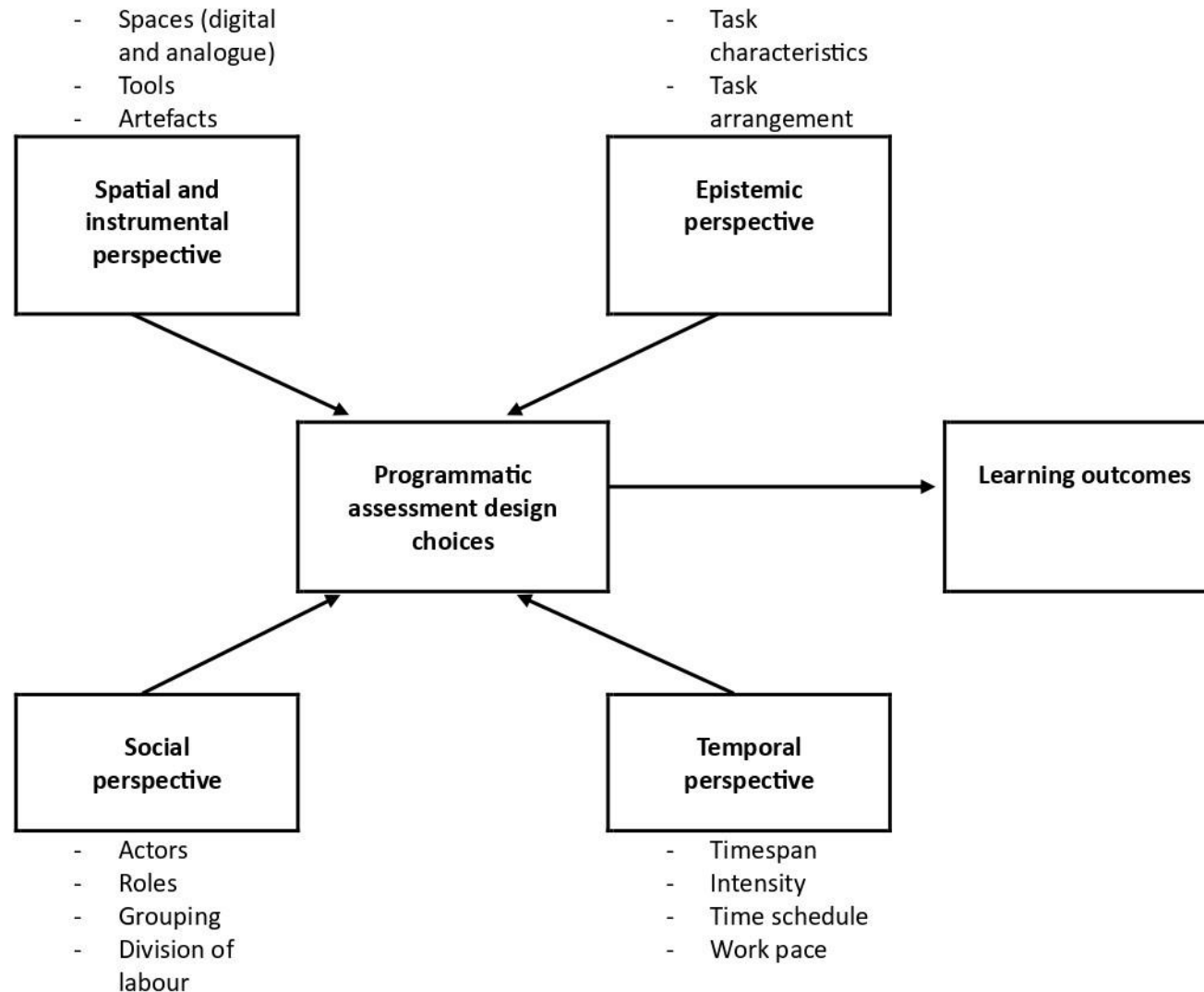


Photo by [Vadim Bogulov](#) on [Unsplash](#)

Design perspectives (adapted from Bouw et al., 2021)



Source: Bouw, E., Zitter, I., & De Bruijn, E. (2021). Designable elements of integrative learning environments at the boundary of school and work: a multiple case study. *Learning Environments Research*, 24(3), 487-517.

Method study A

- Sequential mixed method design (Morse, 2010): A-B
- Step 1. Coding of principles of programmatic assessment (Heeneman et al., 2021)
- Step 2. Coding of design perspectives (Bouw et al., 2021)
- Step 3. Thematic analysis of programmatic design choices
- Sources: 19 publications of professional practice of programmatic assessment
- Software Atlas-ti

Result of Principles PT x Design perspectives

| | Design perspectives | | | | |
|---------------------------------------|---------------------------|--------------------------------|--------------|----------------|-------|
| | A. Content- related | B. Spatial/ instrumental | C. Social | D. Temporal | Total |
| Principles of Programmatic Assessment | | | | | |
| 1. No pass/fail, but feedback | 53 | 65 | 81 | 14 | 213 |
| 2. Mix of datapoints | 103 | 62 | 19 | 17 | 201 |
| 3. Backbone | 176 | 22 | 2 | 9 | 209 |
| 4. Guidance | 25 | 7 | 99 | 13 | 144 |
| 5. Student ownership | 34 | 25 | 81 | 14 | 154 |
| 6. Medium stake | 33 | 31 | 48 | 19 | 131 |
| 7. Proportionality | 14 | 9 | 1 | 25 | 49 |
| 8. Aggregation | 30 | 56 | 2 | 7 | 95 |
| 9. High stake | 107 | 85 | 103 | 30 | 325 |
| Total | 575 | 362 | 436 | 148 | 1521 |

11 Design choices in Programmatic Assessment

1. There are only fixed data points / there is an opportunity for free data points.
2. All feedback perspectives are prescribed / students can choose feedback perspectives themselves.
3. The submission opportunities for feedback are fixed / have been left free.
4. The programme does / does not have self-assessment as a data point.
5. Knowledge tests are /are not programmed as data points.
6. There is an assessment instrument that differs per data point / is the same for all data points.
7. A medium stake moment has been set up to map out students' learning progress only / to make a decision (e.g. about remediation and/or admission to high stake decision).
8. During the high stake decision, *each* learning outcome is assessed at a satisfactory level / learning outcomes are assessed *holistically*.
9. During the high stake decision, in addition to the portfolio, a performance of the student (criterion oriented interview and/or presentation) is / is not taken into account in the high stake decision.
10. The teacher who supervises the learning process (e.g. mentor or coach) does / does not play a role in the high stake decision.
11. The high stake decisions take place every teaching term (quarterly) / every semester or year.

Method Study B

Study B

- Design: explorative casestudy
- Participants: five (of nineteen) programs of study A
- Instrument: semi structured interview protocol
- Measures: considerations and experiences with the 11 programmatic design choices
- Analysis: deductive thematic analysis

Results: Quote Opportunity Free Datapoints

“We have fixed data points because there are minimum requirements that the professional must meet. These requirements are determined by professional practice. But we also have free data points, mainly because we have a relatively high amount of group work. Those free data points are then extremely suitable for allowing students to excel individually.”

Questions?

Who wants to collaborate with us
in a PLC programmatic
assessment?



Questions?
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IMPACT YOUR FUTURE

Results: Quote Self Assessment as Datapoint

“Our program has chosen to use self-assessments as a data point. The aim of these datapoints is to find students who are underestimators and overestimators. Our lecturers meet students who think they are fantastic, while the lecturer thinks well, I just don't know yet. You can help these students to provide insight into what constitutes good quality work. On the other hand, you can also give underestimators confidence that they are on the right track and don't have to be so insecure.”

Results: Quote Performance of Student during High Stake Decision

“Our students are no longer expected to make an effort during the high stage decision, because the student's effort must have been made in the previous six months and not in some sort of final sprint between medium stake decision and high stake decision. We have deliberately not opted for a Criterion Based Interview because it is an enormous stress test for our students. Perhaps it is suitable for the Law program because the high pressure is part of giving a closing argument. But for us it has no added value.”