Responsive Curriculum Development: Which (F)actors Support Breaking Through Institutional Barriers?

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• Context of our research
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The context of our research

- (Higher) Professional Education in the Netherlands
- Curriculum development in this context
Theoretical framework

• Curriculum development for higher professional education (Goodlad et al., 1979)
• Responsive curriculum development processes (Nieuwenhuis et al., 2021; Vreuls et al., 2022)
• Factors of influence on this process (Anakin et al., 2018; Viennet and Pont, 2017)
Figure 1. Linear model of curriculum development.

Figure 2. Interactive model of curriculum development.
Research Questions

(1) Which different (f) actors play a role in the entire responsive curriculum development process according to experts?

(2) How do experts value these (f)actors in terms of importance and feasibility?
Method

• Group Concept Mapping (Rosas & Kane, 2012)

• Five steps:
  (1) preparation by the researcher;
  (2) brainstorming by the participants;
  (3) structuring / editing of the generated statements by the researchers;
  (4) thematic sorting of the statements by the participants;
  (5) evaluation by the participants.

• Analysis
Results step 2

- Participants generated 101 unique statements
- MDS: stress index = .24 (satisfying reliability)
- Point map:
Results step 4

- HCA: 6 cluster solution
Bridging values in this cluster solution varied between 0.09 and 0.45 (Cut-off point for our decision was <0.50).
<table>
<thead>
<tr>
<th>Factor</th>
<th>Sub-topics</th>
<th>Illustrating statements</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>(1) Characteristics and principles of the</em></td>
<td>Curriculum vision, desirable content, coherence, and structure of the</td>
<td>“Focus on constructive alignment (the coherence between learning objectives, assessment methods and learning activities).” (69)</td>
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<tr>
<td><em>curriculum (product)</em></td>
<td>curriculum.</td>
<td>“Determine not only the content, but also the desired depth of curriculum components.” (1)</td>
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<td></td>
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<td>“An open curriculum” (4)</td>
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<td><em>(2) Characteristics and principles of</em></td>
<td>Smart policy design and policy</td>
<td>“Including examination boards in the curriculum development.” (59)</td>
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<td><em>curriculum development process</em></td>
<td>alignment, continuous, iterative- and participatory development process</td>
<td>“Curriculum development is an iterative process”. (96)</td>
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<td>“Participative design with all parties involved (the professional field, students, teachers, users).” (33)</td>
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<td>Factor</td>
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<td>(3) Characteristics and principles on team level</td>
<td>Ownership, team composition, team competencies, communication, team behaviour</td>
<td>“Ownership of the entire team.” (19)</td>
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<td>“Curriculum development with teams consisting of a mix of didactic, educational, assessment experts, and professionals from the associated professional practice requires good communication to keeping them connected.” (28)</td>
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<td>“Stay ahead! Ensure that all stakeholders of the curriculum participate in future-oriented developments in professional practice.” (79)</td>
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<td>(4) Involving stakeholders</td>
<td>Which stakeholders to involve, when to involve them, and sustainable relations</td>
<td>“Build sustainable relationships with internal and external stakeholders.” (81)</td>
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<td>“Develop in co-creation; involve all (internal and external) stakeholders from the outset: in needs analysis, trend analysis, design, development, implementation and evaluation.” (97)</td>
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<td>(5) Conducive environment and conditions</td>
<td>Knowledge and professional development, (financial-) resources, (measurable) results, flexibility in and/or letting go of existing doctrines, principles and frameworks, tranquillity</td>
<td>“Letting go of existing doctrines.” (65)</td>
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<td>“Ensure sufficient knowledge- and professional development of the team and team members. Combine curriculum development with professional development of the team.” (98)</td>
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<td>“Facilitate teams in time and (financial) resources.” (72)</td>
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<tr>
<td>(6) Behaviour</td>
<td>Self-efficacy, flexibility and flexible mindset, vigour, willingness to change, leadership, the grit to go beyond sacred cows</td>
<td>“Knowledge, self-efficacy, capacity and flexibility of teachers.” (82)</td>
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<td>Demonstrate educational leadership by letting go of existing ‘doctrines’.” (31)</td>
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<td>“Flexibility in mindset.” (57)</td>
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Rating
Importance and feasibility (RQ2)

• All clusters important ($M= 3.95-4.13$);
• All clusters neutral or moderate on feasibility ($M= 2.48-3.34$);
• *Behaviour* is considered the most important cluster ($M= 4.13$) but rather difficult to implement ($M= 2.48$);
• *Involving stakeholders* easiest to implement ($M= 3.34$) but (relatively) least important ($M= 3.95$);
• High negative pearson product-moment ($r= -.82$) (negative correlation between importance and feasibility).
<table>
<thead>
<tr>
<th>Significant differences between importance and feasibility</th>
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<tr>
<td><em>(Vision on)</em> characteristics and principles of the curriculum (product)</td>
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<tr>
<td>Characteristics and principles of the curriculum development process</td>
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<tr>
<td>Characteristics and principles on team level</td>
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<tr>
<td>Involving stakeholders</td>
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<tr>
<td>Conducive environment and conditions</td>
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<tr>
<td>Behaviour</td>
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</tbody>
</table>
Importance 4.13

Behaviour

Feasibility 3.34

Stakeholder involvement

Characteristics and principles curriculum development process

(Vision on) characteristics and principles curriculum product

Characteristics and principles on team level

Conducive environment and conditions

Characteristics and principles curriculum development process

Stakeholder involvement

Conducive environment and conditions

Behaviour
Conclusion 1

• At least 6 factors of influence (RQ1)
• Factors confirmed theoretical frameworks: shared vision, open curriculum structure, smart policy design, involving stakeholders, ownership, conducive environment
• And broaden theoretical frameworks: Team characteristics, and behaviour (innovative behaviour/mindset/agency).
Conclusion 2

• Most important factors were least feasible (RQ2)
• Supporting teams in responsive curriculum development requires a multiple phase approach (based on go-zone)
Discussion

- Limitations
- Future research
Closing remarks

• Questions?
References


