

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

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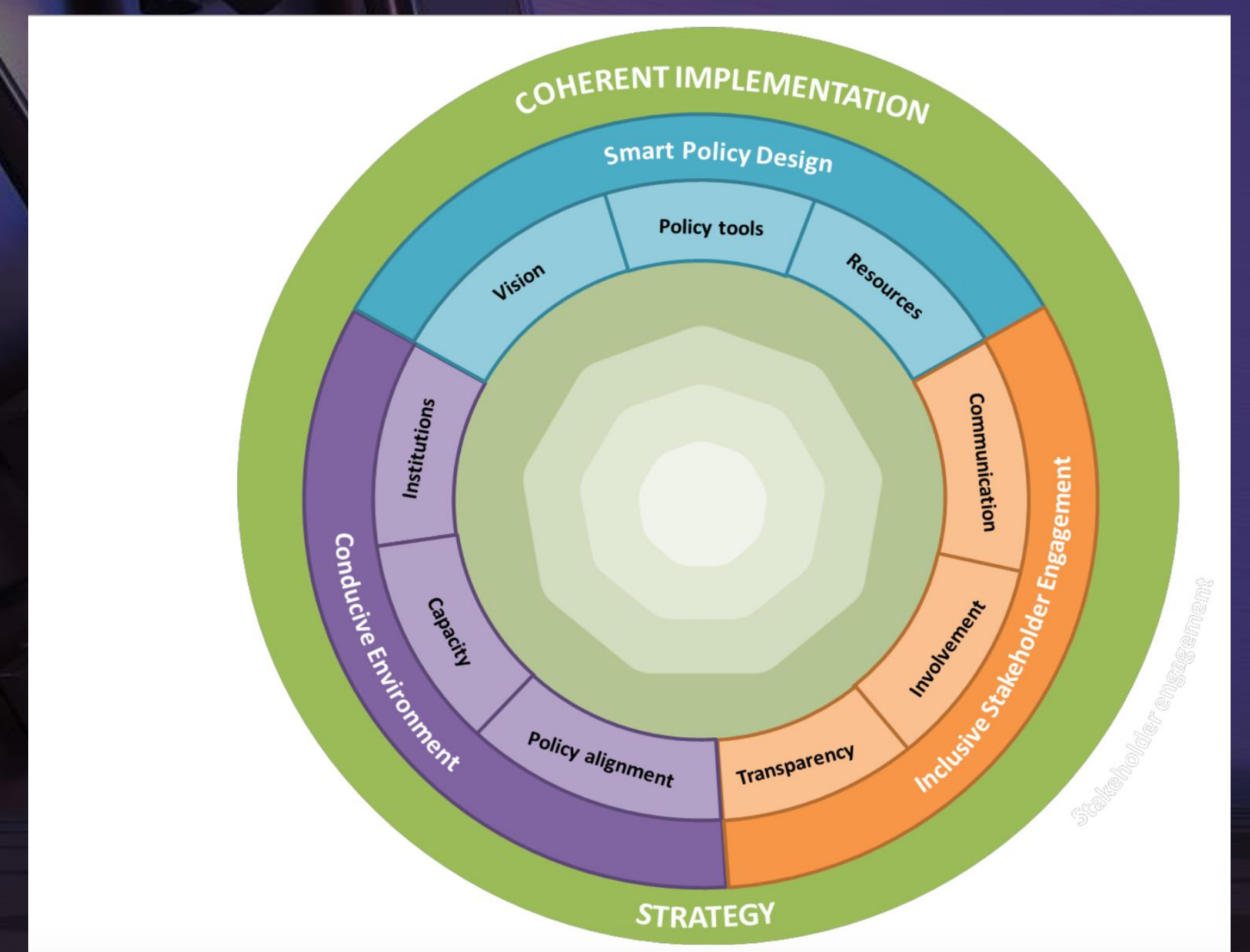
The context of our research

- (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)



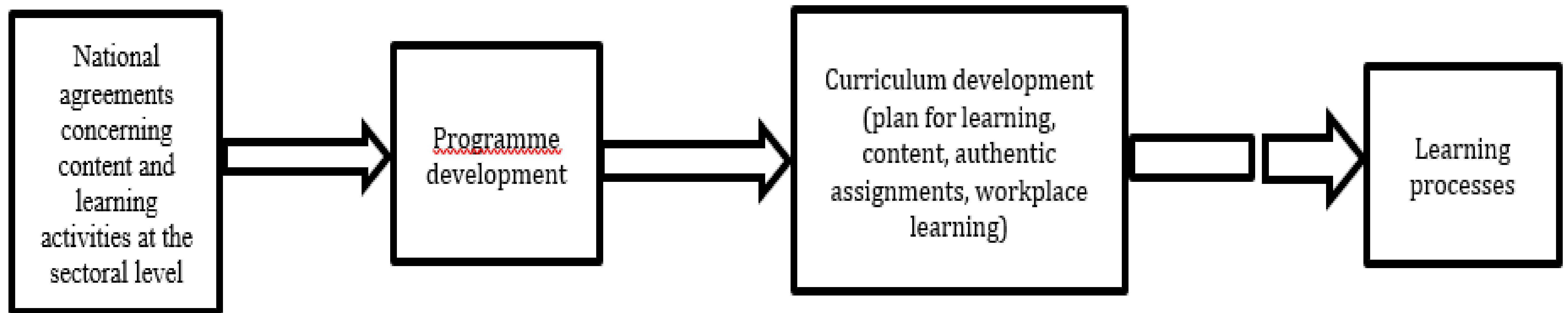


Figure 1. Linear model of curriculum development.

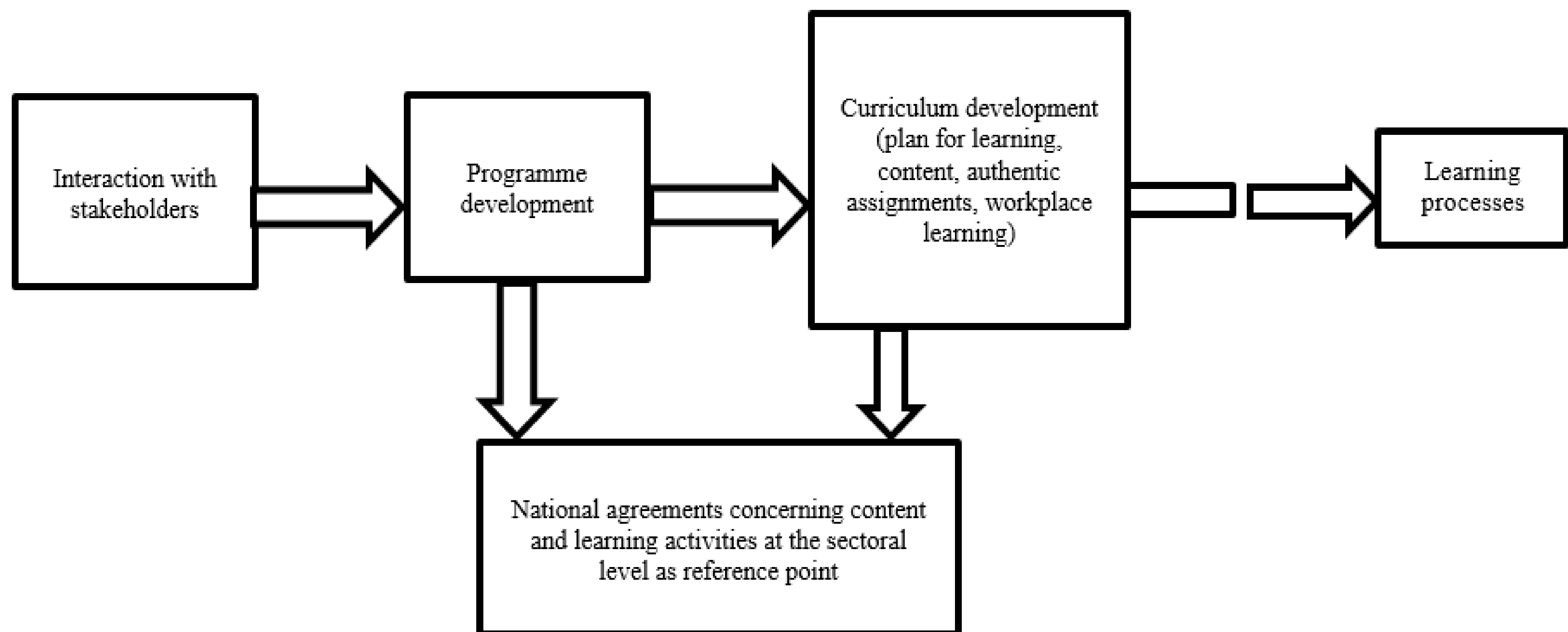


Figure 2. Interactive model of curriculum development.

Research Questions

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

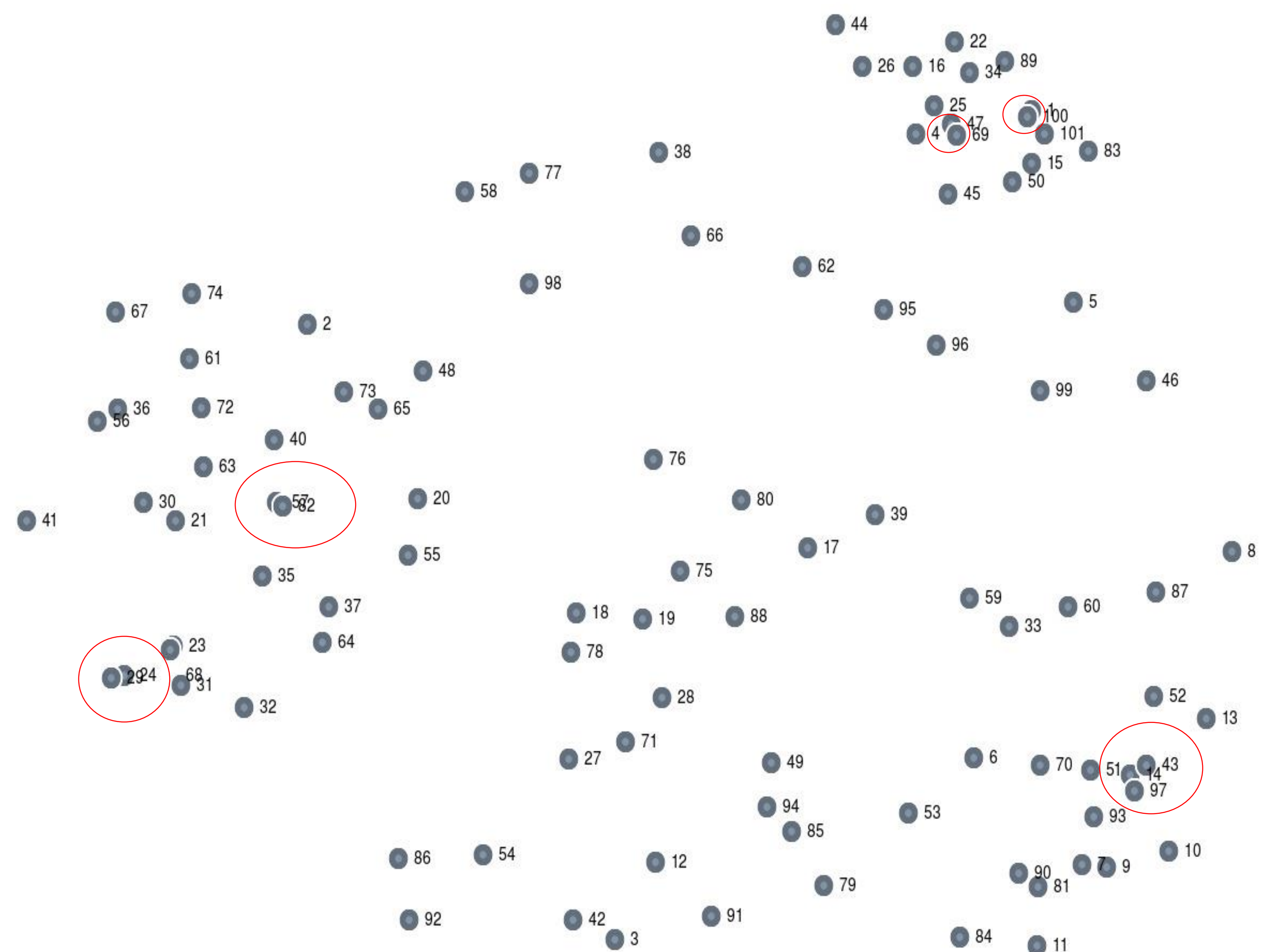
(2) How do experts value these (f)actors in terms of importance and feasibility?

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

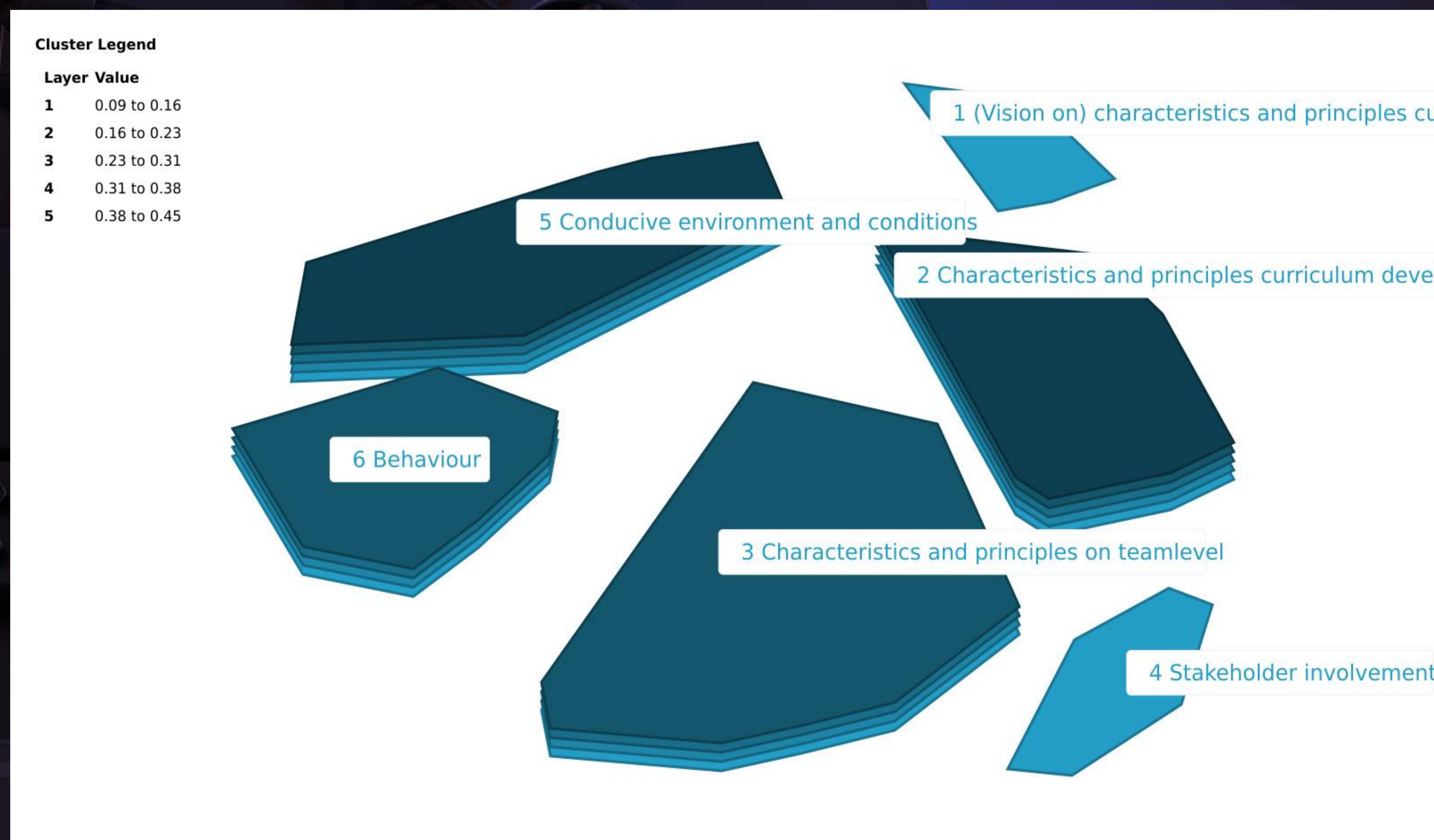
- Participants generated 101 unique statements
- MDS: stress index = .24 (satisfying reliability)
- Point map:



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).



Factor	Sub-topics	Illustrating statements
(1) Characteristics and principles of the curriculum (product)	Curriculum vision, desirable content, coherence, and structure of the curriculum.	<p>“Focus on constructive alignment (the coherence between learning objectives, assessment methods and learning activities).” (69)</p> <p>“Determine not only the content, but also the desired depth of curriculum components.” (1)</p> <p>“An open curriculum” (4)</p>
(2) Characteristics and principles of curriculum development process	Smart policy design and policy alignment, continuous, iterative- and participatory development process	<p>“Including examination boards in the curriculum development.” (59)</p> <p>“Curriculum development is an iterative process”. (96)</p> <p>“Participative design with all parties involved (the professional field, students, teachers, users).” (33)</p>

Factor	Sub-topics	Illustrating statements
(3) Characteristics and principles on team level	Ownership, team composition, team competencies, communication, team behaviour	<p>“Ownership of the entire team.” (19)</p> <p>“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)</p> <p>“Stay ahead! Ensure that all stakeholders of the curriculum participate in future-oriented developments in professional practice.” (79)</p>
(4) Involving stakeholders	Which stakeholders to involve, when to involve them, and sustainable relations	<p>“Build sustainable relationships with internal and external stakeholders.” (81)</p> <p>“Develop in co-creation; involve all (internal and external) stakeholders from the outset: in needs analysis, trend analysis, design, development, implementation and evaluation.” (97)</p>

Factor	Sub-topics	Illustrating statements
(5) Conducive environment and conditions	Knowledge and professional development, (financial-) resources, (measurable) results, flexibility in and/ or letting go of existing doctrines, principles and frameworks, tranquillity	<p>“Letting go of existing doctrines.” (65)</p> <p>“Ensure sufficient knowledge- and professional development of the team and team members. Combine curriculum development with professional development of the team.” (98)</p> <p>“Facilitate teams in time and (financial) resources.” (72)</p>
(6) Behaviour	Self-efficacy, flexibility and flexible mindset, vigour, willingness to change, leadership, the grit to go beyond sacred cows	<p>“Knowledge, self-efficacy, capacity and flexibility of teachers.” (82)</p> <p>Demonstrate educational leadership by letting go of existing ‘doctrines’.” (31)</p> <p>“Flexibility in mindset.” (57)</p>

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).

Significant differences between importance and feasibility

(Vision on) characteristics and principles of the curriculum (product) $t(32) = 10.29, p < .000$

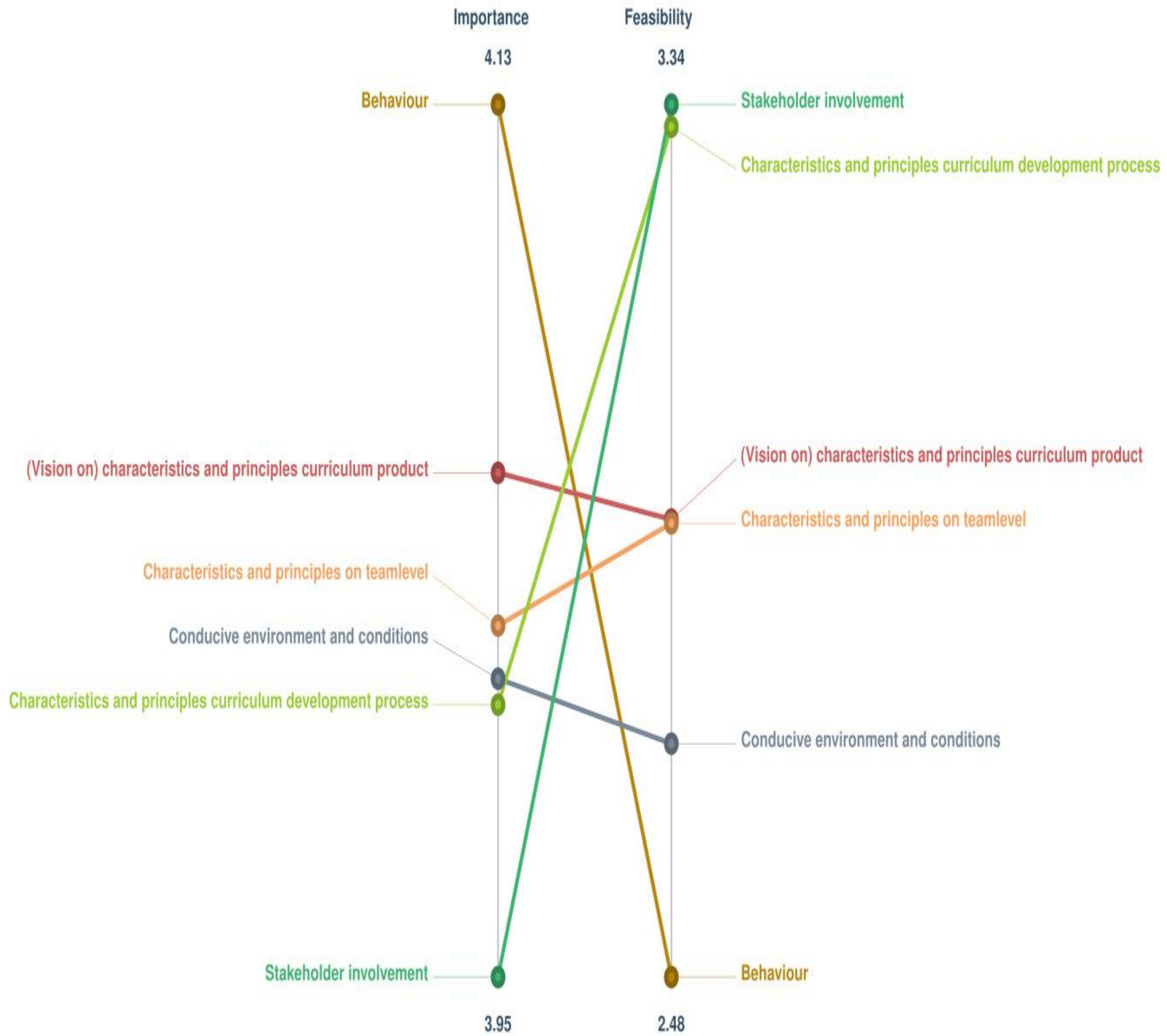
Characteristics and principles of the curriculum development process $t(20) = 4.89, p < .000$

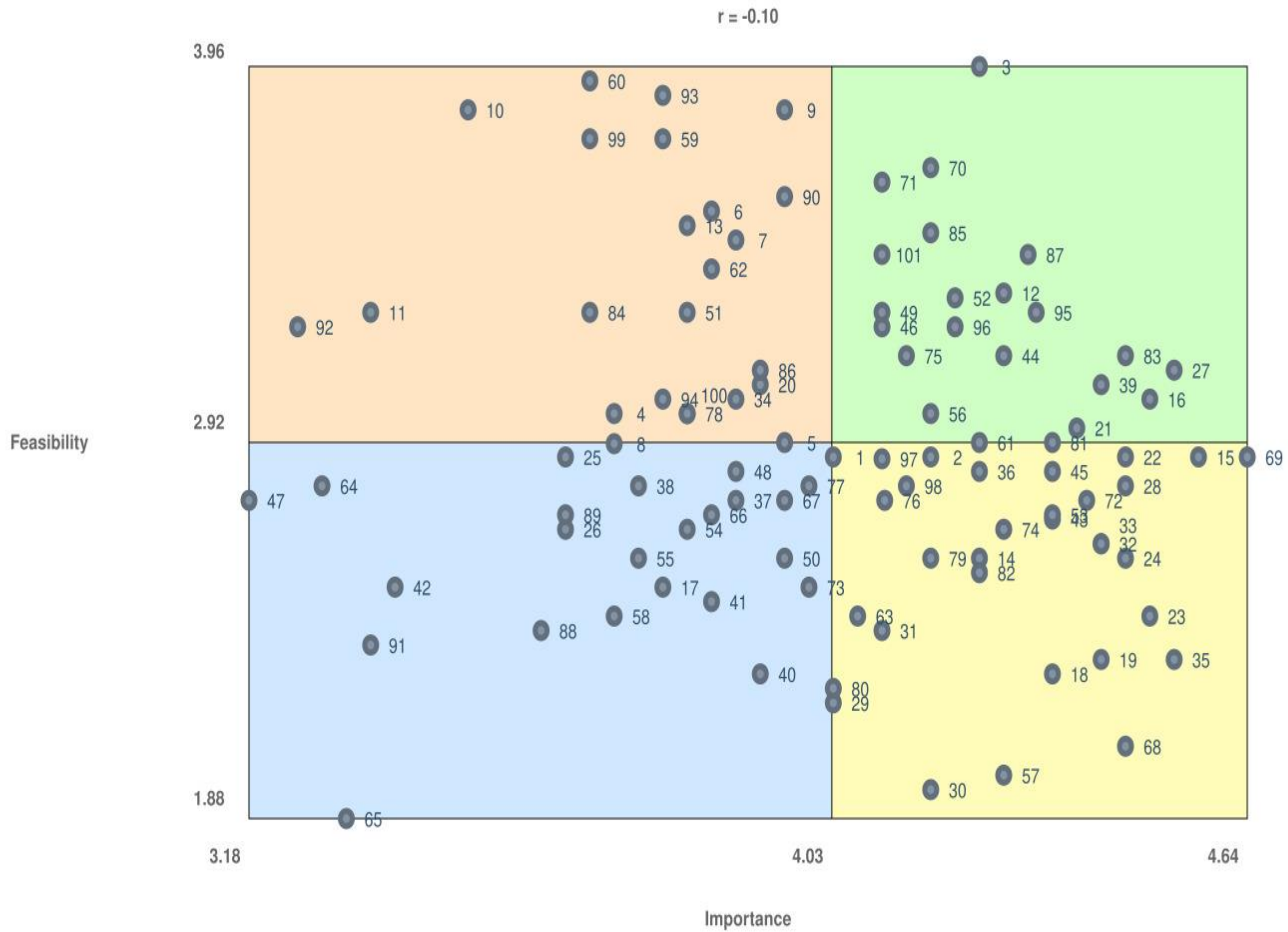
Characteristics and principles on team level $t(48) = 9.47, p < .000$

Involving stakeholders $t(28) = 4.78, p < .000$

Conducive environment and conditions $t(28) = 13.45, p < .000$

Behaviour $t(34) = 16.02, p < .000$





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?



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