Conditions to implement collaborative design as a strategy for professional development

PRESENTATION · SEPTEMBER 2014
DOI: 10.13140/RG.2.1.1754.0884

1 AUTHOR:

Heleen Becuwe  
Ghent University

7 PUBLICATIONS  0 CITATIONS

SEE PROFILE
Conditions to implement collaborative design as a strategy for professional development
The case of ICT-integration in teacher education

Heleen Becuwe, Jo Tondeur, Natalie Pareja Roblin, Johan Van Braak
Ghent University
Jeroen Thys, Els Castelein
GroepT
ECER, Porto, 2014

Introduction
ICT targets and objectives in basic and secondary education

(Student) teachers with the necessary entry ICT qualifications
Teacher educators with the necessary ICT competences

ICT-integration in teacher education

BUT: a gap between ICT in teacher education and ICT expectations for future teachers (Tondeur, Pareja, van Braak, Fisser, & Voogt, 2013)

ICT-integration in teacher education institutions occurs when teacher educators develop TPACK (Mishra & Koehler, 2006)

TPACK

TDTs for ICT-integration

Developing TPACK by (re-)designing their own courses in team (cf. Alayyar et al., 2012; Angeli & Valanides, 2005; Polly, 2011)

A Teacher Design Team (TDT) = a group of two or more teachers or teacher educators who (re-)design curriculum materials together (Handelzalts, 2009)

Implementation of TDTs

Frankenberger & Auer, 1997; Tondeur, Pareja Roblin & Thys, 2012a; Truijen, Sleegers, Meelissen, & Nieuwenhuis, 2013; Handelzalts, 2009; Hord, 2007; Truijen e.a., 2013; Somech & Drach-Zivuch, 2007; Culatta, 2013; Agyei, 2012; Petrone & Ortquist-Ahrens, 2004, ...
Purpose of the study

Developing a framework of important conditions for the implementation of teacher educator design teams for ICT-integration in teacher education

Method: Delphi study (Koster, 2003)

1. consulting a mature field of researchers,
2. in an anonymous manner,
3. in different rounds,
4. with feedback of the results, and
5. the opportunity for the participants to reconsider their position

Sample

- TDT 1: media literacy
- TDT 2: digitalising media education
- TDT 3: blended trajectory lesson planning
- TDT 4: blended trajectory earth science

Sample

- Participants of a professional development project in four teacher education institutions:
  - 14 teacher educators
  - 4 coaches
  - 2 project coordinators
  - 4 coordinators of the teacher education programme
  - 8 participants of the advisory board

Instrument

<table>
<thead>
<tr>
<th>Design task</th>
<th>Coordination procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>Coach</td>
</tr>
<tr>
<td>Design activities</td>
<td>Structural conditions</td>
</tr>
<tr>
<td>Policy support</td>
<td>Team composition</td>
</tr>
<tr>
<td></td>
<td>External support</td>
</tr>
</tbody>
</table>

Delphi Ronde 1

*Required

Teamsamenstelling

De samenstelling van een TDT kan een col oprijt bij de goede werking van het team. Zo ligt de samenstelling van een TDT af van de structuur van de organisatie. Het is aan te raden om een combi-naties van verschillende niveaus en functies in de samenstelling van een TDT te gebruiken. Vooral bij het gebruik van externe medewerkers in de samenstelling van een TDT kunt gebruik gemaakt van de samenstelling van een TDT.
Results first round: the design task

5. Comprehensiveness  ‘Technology, pedagogy and content need to be integrated in the design task as much as possible.’ Participant of the advisory group (2)

6. Research and collaboration oriented  ‘They can learn that collaboration is worth it.’ Coordinator of the project (2)

7. Professional development  ‘Professionalization, both educationally and technologically, of the participants’ Coordinator of the teacher education programme (1)

8. Aligned with institutional goals and participants’ interests  ‘I think this depends mainly on the “expertise” of the TDT members, as well as where this team wants to go.’

Results first round: policy support

1. The institutional culture and structure  ‘The importance of ICT should be endorsed.’ Participant of the advisory group (2)

2. Ownership  ‘Clarify the degree of autonomy versus collaboration.’ Coordinator of the teacher education programme (4)

3. Acknowledgment  ‘An appreciative approach promotes the well-being of the team members and the team.’ Team member (13)

Conclusion and discussion

- Identification of eight important characteristics of a design task, including innovative character (cf. Handelzalts, 2009; Truijen et al., 2013) and complexity (cf. Frankenberger en Auer, 1997; Ehrlenspiel et al., 1997)
  - But, are all the identified characteristics of the design task equally important?
  - Who determines the design task? (ownership)

- Policy support appears to be crucial
  - But, how committed does the institution need to be?
  - How to balance top-down and bottom-up approaches?
References


