Collaborative design as a form of professional development

Citation for published version (APA):

Voogt, J., Laferrière, T., Breuleux, A., Itow, R., Hickey, D., & McKenney, S. (2015). *Collaborative design as a form of professional development: in the context of curriculum reform*. Poster session presented at 2015 Annual Meeting of the American Educational Research Association, Chicago, Illinois, United States.

Open Universiteit

www.ou.nl

Collaborative Design as a Form of Professional Development

in the context of curriculum reform

Theoretical underpinnings
(based on Greeno et al, 1998; Engeström 1987; Miettinen 2013)

Three features of collaborative design that promote teacher learning:

Situatedness of activity: Teachers engaged in the creation of curricular activities and materials. As the teachers interact in their design communities, they share knowledge, exchange perspectives and tap into each other's expertise.

Agency in collaborative design: The active, agentive role on the part of the teachers during collaborative design, is consistent with literature on teacher professional development.

Cyclical nature of learning and educational change: The learning and change processes taking place in teacher design activities are cyclical in nature. It is a sequence of actions, that offers opportunities for learning.

Three cases: USA, Africa & Canada

Key features	Participatory professional development (USA) PD at single site	Teacher Design Teams (Africa: Ghana, Ethiopia, Tanzania) PD in different settings	Remote networked schools (Canada) PD at different system levels
Similarities	Differences		
Situatedness Creation of new curricular materials for own classroom practice	Teachers integrate situated and participatory practices into curricular designs in the context of their own classroom Revisions based on observations / student feedback	Professional development situated at the workplace Collaboration with peers and experts during design and enactment	Learning at the sites in teacher teams and/or mixed teams Onsite/online university-school collaboration Yearly national knowledge transfer session
Agency Teachers' voice	Teachers debate relevance of new concepts and curricular designs Teachers are part of the research team	Ownership of problem and solution through involvement in context and needs analysis and collaborative design process	Shared transformative agency within and between schools and university-school partnerships Online repertoire of activities within and between networked classrooms
Cyclical Nature of Learning and Change Cyclical approach to design	Cyclical, iterative approach to both design of professional development and curricular modules	Learning about technology-enhanced learning as a cyclical approach Involvement of relevant stakeholders beyond teachers in each cycle	Several cycles per research-intervention phase in each local setting

Technology use in the cases

- To facilitate knowledge transfer (Canada, USA, Africa)
- To scale the reform: sustained partnerships (Canada)
- To develop competencies in using technology in teaching/learning (Africa)

A research agenda

	Individual teacher learning	Team learning	System learning
Situatedness	Impact of **external priorities/practical concerns** on teacher learning.	**Team composition** affecting collaborative (re-design) (using social network analysis).	How situatedness affects **scalability.**
Agency	Identification of situated contexts that increase the chance to create authentic and meaningful designs as they move beyond a teacher's **individual beliefs**.	Factors that affect **agency of teams** (a) culture and social interaction (b) community (c) cultural apprenticeship and guided participation.	From the perspective of **sustainability** understanding the position of collaborative design teams in their school and other partnerships.
Cyclical nature of learning and change	The **mutual relationship** of enactment in design and enactment for learning.	The **interaction** between the design task and the collaborative team process performance (using team mental models).	Factors that hinder/ facilitate the **transferability** of the knowledge and skills acquired.

Authors: Joke Voogt (NL), Therese Laferrière (CAN), Alain Breuleux (CAN), Rebecca C. Itow (USA), Daniel T. Hickey (USA) & Susan McKenney (NL)