Extended Abstract

Introduction
The past decades, the nature of teacher communities has been expanded from face-to-face networks to also include online networks. Online communities provide teachers the opportunity to easily share knowledge and practices with colleagues outside the institute (Lantz-Andersson, Lundin, & Selwyn, 2018; Macia & Garcia, 2016). A specific use of teacher communities that benefits from online collaboration across institutes, are communities that focus on Open Educational Resources (OER). OER are resources that are shared and made available freely to others through the use of open licensing. Most OER initiatives however cease to exist after the initial project funding due to challenges with increasing the size of the user group and a central control of OER quality (Orr et al., 2015). Thus, the challenge is to establish continuous collaboration across institutes despite the sociocultural differences that may exist at the boundaries (Akkerman & Bakker, 2011). Coordinators can contribute to this critical aspect of cultivation, especially within distributed communities in which ties need to be created to connect several local groups into one community (Wenger, McDermott, & Snyder, 2002). Terms such as brokers, boundary crossers and boundary workers are often used to denote these individuals that act as a bridge between sites (Akkerman & Bakker, 2011). Research on brokering and boundary crossing shows that brokers have a valuable, yet difficult position. Within the context of teacher communities on OER, still little insights are available to understand the particular complexities associated with the role of brokers. This qualitative case-study will contribute to this by illuminating the role of brokers within the social context of an inter-institutional teacher community collaborating on sharing OER, practices and knowledge. In this study, the community of practice (CoP) consisted of teachers from 17 Dutch universities of applied sciences, engaged in a Bachelor Nursing program. Since brokers are positioned within and between activity systems, we applied the theoretical framework of cultural-historical activity theory (CHAT) (Engeström, 1987). We formulated the following research questions to guide us:
1. How did brokers experience the actions they have undertaken to cultivate the OER community?
2. Which perceived effects and contradictions are discernible based on brokers’ reflections?

Method
A total of 12 brokers completed a reflective report, 7 brokers also participated in an online focus group meeting. Additionally, an analysis was conducted on documents that were created during the course of the project. This includes project management documents, minutes of meetings and process reports that were filled in by brokers during the course of the project.

Findings
To foster the transition from the historical system to the envisioned system, a temporary activity system was set up to achieve sharing and reuse of OER within an active professional community of teachers across institutes. Brokers were positioned within this temporary activity system to endorse the project objectives within their institute. We described the temporary activity system into detail to illustrate the complex content in which the brokers are positioned. The goal of brokers’ actions was to elicit expansive learning within the activity system of their institute in accordance with this temporary project system. To realize the object, brokers applied a wide array of actions within the institute. Based upon our analysis, four focus areas could be defined: incite teachers, use of OER repository, use of online community and organizational. Brokers perceived the most effective actions to applying small-scale and individual approaches. By doing so, brokers could transfer their own enthusiasm about the project to others in an individual and personal way. Retrospectively, four main themes of perceived effects could be discerned in the brokers’ data: effects at the national, at the institute, at the project and
at the teacher level. However, brokers also experienced tensions and challenges in relation to institutional support, their role and limited endorsement of the project within the institute. Based upon our findings, we formulate the following practical recommendations to support brokers in their role to cultivate inter-institutional collaboration on OER:

- Address the multi-voicedness of the object since ‘expansive learning is an inherently multi-voiced process of debate, negotiation and orchestration’ (Engeström & Sannino, 2010, p. 5) by discussing the object regularly with all stakeholders. If necessary, let go of the initial object and alter it to align it with the local context to realize sustainable practices (Marz et al., 2018).
- Brokers personal enthusiasm to employ small-scale and individual approaches to incite teachers by focusing on the ‘what’s in it for me’ from a teacher perspective is essential, yet this is a time-intensive undertaking. A broker should therefore be facilitated by their organisation in both time and organizational support to expand participation within their institute.
- Additionally, a broker might decide to discontinue their role if tensions or challenges arise. We would recommend to diminish this reliance by circulating brokers over the course of the project (Akkerman and Bruining, 2016) or by dividing actions among a larger number of brokers.
- Since higher education is increasingly engaged with collaboration between institutes as well as with society, teachers should learn how to cross boundaries. Or as Oonk and colleagues (2020) advocated, boundary crossing competence and the competency ‘stimulating a collaborative learning attitude’ should be incorporated in teacher competence profiles.

We hope the findings and the affiliated recommendations for practice may be useful for other higher education institutes and will ultimately contribute to more sustainable initiatives on adoption of OER.

**Interactivity**
Within this interactive activity we will provide attendees with a short presentation (max 5 minutes) to introduce the context of the study and the interactive elements of our session. Additionally, attendees are able to learn more about the design and findings of the study in a poster that we will post online. Afterwards, we will seek interactions with attendees by (1) providing statements based upon our findings to evoke discussion and by (2) asking for specific feedback and/or related experiences of the attendees so that we can improve our understanding of brokers within inter-institutional OER collaborations.