PAPER 2 ABSTRACT

The Quest for Sustained Data Use: Developing Organizational Routines, Mireille Hubers, Kim Schildkamp and Cindy Poortman, University of Twente,

Question and conceptual approach

Data use has become increasingly important in education, as it may improve student achievement (Datnow, Park, & Kennedy-Lewis, 2013). However, teachers often do not use data effectively (Ingram, Louis & Schroeder, 2004). Therefore, several professional development programs have been developed to support schools in effective data use (e.g. Wayman, Midgley, & Stringfield, 2006). An example of such a program is the data team procedure. An important question is whether this approach leads to sustainable changes in educators’ data use (Fullan, 2007). Data use will only become and remain sustainable if it is implemented permanently (Desimone, 2009), for example by establishing organizational routines (Sherer & Spillane, 2011). Organizational routines are re-occurring action patterns, involving multiple actors (Feldman & Pentland, 2003). These routines consist of an ostensive aspect, which includes formal regulations and norms (e.g. scheduled data use meetings), and a performative aspect, which includes everyday practice (e.g. actual data use during these meetings). This results in the following research question:

• How did schools using the data team procedure sustain their data use in terms of the ostensive and performative aspect of their organizational routines on data use?

Ten Dutch secondary schools with a data team participated in this mixed-methods study. A data team consists of 4-6 teachers and 1-2 school leaders, who meet with a coach from the university twice a month for two years (Schildkamp & Poortman, 2015). During these meetings, they work with an eight-step cyclic procedure (see Figure 1, Symposium introduction) on an educational problem prevalent at their own school, such as high grade retention rates.

The ostensive and performative aspects of their organizational routines were studied over a period of three years: two years in which the coach provided support, and the year after which support was withdrawn. Each year, a questionnaire with scales on the ostensive and performative aspect of data use (Schildkamp et al., submitted) was disseminated among teachers in the participating schools, and their policy documents were collected. Furthermore, interviews were conducted with teachers, data team members and the principal at two case study schools.

Main findings and conclusion

Findings suggest that multiple types of development could be distinguished, reflected in both the questionnaire data and policy documents. For example, some schools built on their vision on data use each year, whereas this vision demised after the second year in others. Furthermore, the ostensive aspect influenced the performative aspect: when a principal did not develop a clear policy on data use, teachers were less inclined to use data in their everyday practice.

These results help us understand why data use was (not) sustained in schools. Furthermore, the results can be used to improve data use programs, and to support schools in facilitating data use.

PAPER 3 ABSTRACT

The practice of sustainable data use through data teams in our school, Anne Tappel Carmel College Salland School.

Issue and key ideas

At our school we experienced the problem that too many students transferred to a lower level of senior general education compared to the level they were assessed at finishing primary education. We approached this problem using the data team procedure (Schildkamp & Poortman, 2015), with a data team of 4 teachers, a team leader and a quality care manager. This school already had experience with a data team before, that focused on improving feedback of teachers to students.

The data team that worked on the transfer problem found that at least 70% of the students that ultimately transferred to the lower level could already be identified after the first semester. Subsequent qualitative research led to the conclusion that not only students’ own attitude, but also guidance, assessment, and the organization of lessons needed to be adjusted. One of the measures recently implemented, therefore, is training teachers in helping students to direct their learning process; and to guide students in this respect. In addition, advanced organizers with explicit learning goals are now being used in the lessons.