research snapshot

Teachers' Collaborative Inquiry and Professional Growth: Should We Be Optimistic?

What is this research about?

This study examined the transformative potential of collaborative inquiry in relation to collective activities, questions raised, and knowledge generated by teams engaged in the process. In studying science and mathematics teachers' participation in collaborative inquiry in three schools, the researcher revealed three different trajectories of Professional Learning Communities (PLCs) by highlighting the contrasting outcomes based on whether or not a group assumed an inquiry stance.

What did the researchers do?

The researcher examined observation records, interview transcripts, and audio and video recordings from three collaborative inquiry teams during a second year of implementation. Key elements of each model was a) the inquiry focus was determined by teachers; b) grounded in their classrooms; and c) based on student learning needs which were identified through the examination of a variety of student learning data/evidence. Each in-depth case studied had some facilitation support for developing PLCs utilizing a collaborative inquiry approach. While the inquiry cycle was provided to teams in this study as an organizational framework, the researcher was open to understanding ways in which the teacher did or did not follow the process.

What you need to know...

In one school the team's collective activities shifted from inquiry to curriculum alignment. Dialogue predominately focused on collectively planning and implementing lessons. PLC members opted to share previous experiences in teaching units "rather than critically examine the effectiveness of those activities" (p. 562). Subsequent to determining the inquiry focus, the team did not examine classroom data to understand learners nor to inform decisions.

In the second school, the team tried something at each phase of the inquiry cycle however, friendly, congenial dialogue prevailed ("playing nice" was one of the group norms) and this culture of niceness seemed to inhibit the team's "willingness or abilities to question each other's stated beliefs" (p. 567). In addition, this team struggled in determining what qualified as data and how to effectively collect it. As a result, the team's attention was predominately on data collection rather than on analyzing the evidence for links between teaching and learning.

In the last school studied, the team made "recursive loops" (p. 570) back through different phases of the inquiry cycle and, based on the instructional changes made, collectively analyzed classroom data multiple times in relation to student learning. Each time the team collectively analyzed student data, they adjusted their instruction accordingly. Dialogue predominately focused on "reflecting both on the impact of their actions on student learning as well as what to do about their still existing questions" (p. 557). "They continued to discuss and, more importantly, implement strategies that would address different students' needs. Their focus was not only on students who struggled in science; they also considered how to help those already meeting the standard to go beyond" (p. 574).

What did the researchers find?

Each PLC revealed differences along four dimensions:
- their collective orientation as learners;
- their dialogic stance as questioning or sharing;
- their collective actions;
- their development of a common vision associated with their inquiry focus.

The researcher credits the third team's move to "collectively looking at student work early in the year as a key component in their progress toward re-culturing the nature of their professional activities" (p. 576). The researcher concluded that dialogue characterized by an inquiry stance "contributes to transformative learning with impacts on classroom practice and student learning" (p. 578). The cases in the first two schools demonstrated that the "development of an inquiry stance is neither automatic nor easy" (p. 575). The researcher noted that "teachers need support for both the processes of inquiry and for the creation of an environment that models, nurtures, and embeds an inquiry stance. Targeted support is critical to move teachers past problematic areas: refining ambiguous inquiry questions, developing the trust needed to share student work, making sense of that student work in relation to their instructional decisions, classroom practices, and student learning" (p. 579).

learning forward
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QUESTION: How can you encourage collaborative inquiry teams to collectively analyze evidence of student learning?