Data Case Study with Novice Teachers

Martin Newton is a teacher educator at a rural branch campus of a small public university. The teacher education program uses a cohort approach where students stay together in groups as they progress through their courses which are taught by a small cadre of instructors. Therefore, the faculty develop a close relationship with students that continues into their teaching careers as they continue to serve as mentors to novice teachers.

Martin has noticed that several of the recent graduates of the program have relied on activities that require very little critical thinking in attempts to maintain classroom control, which is always a challenge for new teachers. These teachers have shared with Martin their concerns that their students aren't doing the kind of thinking they would like them to do and asked for his help.

An online search for professional development resources on critical thinking identified the free *Thinking Critically with Data* course, and Martin decided to offer it for graduate credit through his university. In addition to communicating directly with the new teachers, Martin publicized the course in nearby school districts and ended up with a class of 12 participants, half of whom were either first- or second-year teachers. The beginning teachers all had district-assigned teacher mentors, and Martin set up the course to give those mentors access so they could give their mentees feedback in the online environment.

Most of the teachers in the course taught in rural schools, so Martin chose to teach a six-week online course which he set up in his university's Blackboard platform. Principals of the schools where these teachers taught were enthusiastic about the course, feeling that many of their experienced teachers could do more with critical thinking in their classrooms. With their support, Martin was able to arrange one hour per week of released time for teachers to collaborate on their Action Plans.

Martin felt that having participants who had very recently graduated from college was an advantage in some ways because these teachers were more proficient with technology, and all of them had taken one or more online courses. Their experience with online discussions and using the features of the Blackboard platform helped bring along the less confident teachers and gave those teachers a sense of authority in the course even though they were facing the normal first-year challenges in the classroom.

The teacher education program where Martin taught has high standards for all graduate courses, so he took advantage of the relationship the university had with the local school districts to add some additional activities that required school-level support:

- Participants made a presentation on something they learned in the course at a faculty meeting.
- Teachers videotaped themselves teaching a mini-lesson on a critical thinking skill and wrote a self-assessment of their practice.
- Teachers were asked to incorporate a goal related to critical thinking instruction into their yearly professional development goals.

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Thinking Critically with Data

Martin continued to check in with the new teachers that took the course as he visited the schools to observe preservice teachers in field experiences. He found that the teachers were enthusiastic about what they had learned and were making small, but significant, changes to their instruction to develop the critical thinking skills of their students.