

Applying Program Theory-Driven Approach to Design and Evaluate a Teacher Professional Development Program

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Abstract : Japanese Scholar Manabu Sato has been advocating the Learning Community, which changed Japanese fundamental education during the last three decades. It was also called a “Quiet Revolution.” Manabu Sato criticized that traditional education only focused on individual competition, exams, teacher-centered instruction, and memorization. The students lacked leaning motivation. Therefore, Manabu Sato proclaimed that learning should be a sustainable process of “constantly weaving the relationship and the meanings” by having dialogues with learning materials, with peers, and with oneself. For a long time, secondary school education in Taiwan has been focused on exams and emphasized reciting and memorizing. The incident of “giving up learning” happened to some students. Manabu Sato’s learning community program has been implemented very successfully in Japan. It is worth exploring if learning community can resolve the issue of “Escape from learning” phenomenon among secondary school students in Taiwan. This study was the first year of a two-year project. This project applied a program theory-driven approach to evaluating the impact of teachers’ professional development interventions on students’ learning by using a mix of methods, qualitative inquiry, and quasi-experimental design. The current study was to show the results of using the method of theory-driven approach to program planning to design and evaluate a teachers’ professional development program (TPDP). The Manabu Sato’s learning community theory was applied to structure all components of a 54-hour workshop. The participants consisted of seven secondary school science teachers from two schools. The research procedure was comprised of: 1) Defining the problem and assessing participants’ needs; 2) Selecting the Theoretical Framework; 3) Determining theory-based goals and objectives; 4) Designing the TPDP intervention; 5) Implementing the TPDP intervention; 6) Evaluating the TPDP intervention. Data was collected from a number of different sources, including TPDP checklist, activity responses of workshop, LC subject matter test, teachers’ e-portfolio, course design documents, and teachers’ belief survey. The major findings indicated that program design was suitable to participants. More than 70% of the participants were satisfied with program implementation. They revealed that TPDP was beneficial to their instruction and promoted their professional capacities. However, due to heavy teaching loadings during the project some participants were unable to attend all workshops. To resolve this problem, the author provided options to them by watching DVD or reading articles offered by the research team. This study also established a communication platform for participants to share their thoughts and learning experiences. The TPDP had marked impacts on participants’ teaching beliefs. They believe that learning should be a sustainable process of “constantly weaving the relationship and the meanings” by having dialogues with learning materials, with peers, and with oneself. Having learned from TPDP, they applied a “learner-centered” approach and instructional strategies to design their courses, such as learning by doing, collaborative learning, and reflective learning. To conclude, participants’ beliefs, knowledge, and skills were promoted by the program instructions.

Keywords : program theory-driven approach, learning community, teacher professional development program, program evaluation

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