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EFFECTIVENESS OF JAPANESE LESSON STUDY IN BUILDING A COLLABORATIVE LEARNING COMMUNITY IN THE SCHOOL AS A MODERN STRATEGY FOR TEACHER PROFESSIONAL DEVELOPMENT IN SAUDI ARABIA

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Abstract:

School-based professional development is an appropriate way of tailoring professional development both to the needs of the individual teacher and of the school. Lesson Study (LS) is one of the models of school-based professional development. It is a professional learning method that is based on collaboration amongst teachers, in order to improve their professional development and students' outcomes. The Saudi Ministry of Education, since 2015, started a pilot project that utilized LS in certain Saudi schools in different regions to meet professional learning needs. The purpose of this study is to understand the impact of LS as a model adopted for the professional development of Primary Schools teachers in four selected elementary schools in the Riyadh region in Saudi Arabia. The study is based on a quantitative research method using an online survey and are analysed using SPSS.

Keywords: lesson study, school-based professional development, teacher learning, Saudi Arabia

1. Introduction

Started over a century ago, the origins of Lesson Study (hereafter, LS) as a model of school-based professional development is traceable to Japan (Murata, 2011). The model, essentially, is a professional learning method that is based on collaboration amongst teachers, in order to improve their professional learning and student outcomes (Wood and Cajkler, 2017). LS has since become one of the most popular models used for professional learning for teachers globally (Warwick et al., 2016). Based on its envisaged benefits, the model is currently being implemented in a number of countries including: Singapore, China, Hong Kong, Indonesia, UK, Sweden, Norway, Spain, and the US. This

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paper is part of a bigger project that seeks to explore perceptions of teachers and principals of selected schools in the Kingdom of Saudi Arabia (hereafter, KSA) about using LS as a model of professional development. Specifically, this paper focuses on the effectiveness of LS as a school-based professional development strategy for teachers in the KSA and how this helps in building a collaborative learning community.

2. Literature Review

Similar to many school-based teaching models, LS accommodates the needs of teachers and helps to improve their teaching practices focusing on the development of their professional teaching and learning communities (Engelbrecht, Ankiewicz & Swardt, 2007). LS is also seen as an appropriate way of tailoring professional development both to the needs of the individual teacher and of the school (Gettly, 2002; Stoll et al., 2006). Further, LS has been identified as a useful tool for teacher development through learning in action also known as continuous professional development (Loucks-Horsley et al., 1998). From the student perspective, the LS model is systematic and more student need focused primarily seeking to aid teachers to improve their work practices (Fernandez and Chokshi, 2002). LS also assists teachers to identify learning challenges facing students and that are related to specified area of action, like a particular skill or field of subject content because the model is based on a critical review of student learning (Wood and Cajkler, 2017). The distinctiveness of the LS model also lies in its focus on the learning (observing pupils learning), as opposed to the performance of teachers (Stigler and Hiebert, 1999; Yoshida, 2002); and on the collective work of the teachers, instead of the performance of an individual teacher (Stepanek, et al., 2007).

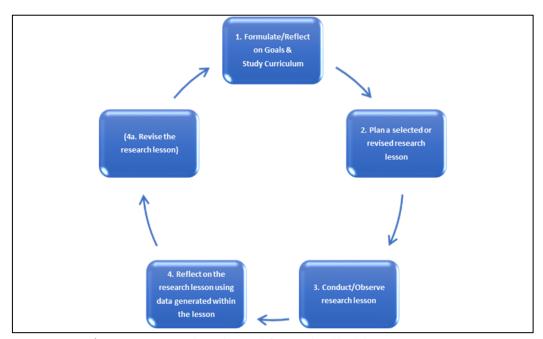


Figure 1: LS Cycle, adapted from Shuilleabhain (2015, p.7)

In the context of the KSA, the Saudi government has recently shown leadership by implementing an LS strategy, providing financial support for the project, and preparing the requisite infrastructure for the project to succeed. Figure 1 above illustrates LS into 5 steps: formulate goals and curriculum; plan a chosen or revised research lesson, conduct and observe a research lesson, reflect on the research lesson; and re-teaching a research lesson.

3. Materials and Methods

The study used a quantitative method approach based on a questionnaire. The questionnaire was developed by the researcher and distributed among a sample size of 50 participants consisting of teachers and principals of primary schools who have used and are still using the LS model. All the research participants were provided with an information pack about the study and their written and signed consent obtained before their participation. The eligibility criteria were basically being a teacher or principal of the selected primary schools who was willing to participate in the project from start to finish.

4. Results and Discussion

The questionnaire sought to measure teachers' perceptions regarding the use of LS in building a collaborative learning community in the school, of which the results is presented in table 1 below.

Table 1: The use of LS in building a collaborative learning community

Item No in the Ques	Statements	Mean	SD	Attitude	Rank
1	Collaboration with colleagues	4.50	.953	SA	2
8	Exchange of knowledge and experience with colleagues	4.64	.776	SA	1
15	Alleviating my sense of isolation at school	4.06	1.268	SA	6
16	The lesson study model helps team members work together	4.34	1.062	A	4
19	The lesson study model enables team members to observe each other to improve their respective teaching practices	4.30	1.015	A	5
24	The lesson study model enhances the collaborative work culture at school	4.38	1.048	SA	3
Overall		4.37	.889	SA	

As shown in Table 1 above, the overall teachers' perceptions regarding the effectiveness of using LS model in building a collaborative learning community in their schools is high with the mean score of (4.37) and SD (0.889). Further, the responses from the research participants appeared to suggest a ranking in their perceptions of the effectiveness of the

LS model for building a collaborative learning community in their schools. For example, the question of teachers' "Exchange of knowledge and experience with colleagues", was ranked top most in the teachers' perceptions regarding the effectiveness of LS for building a collaborative learning community in their schools with mean (4.64) and SD (0.776). At the other end was the question of "Alleviating the sense of isolation at school", which was ranked bottom with mean (4.06) and SD (1.268). In between these two ends were questions about their: "collaboration with colleagues" (ranked 2nd); "The LS model enhances the collaborative work culture at school" (ranked 3rd); "The LS model helps team members work together" (ranked 4th); and "The LS model enables team members to observe each other to improve their respective teaching practices" (ranked 5th).

Overall, the evidence in the results of the questionnaire revealed that most participants scored the scale items as "strongly agree". This means that there was a general positive attitude towards the adoption and use of the LS model in building a collaborative learning community in the school. This research outcome is consistent with outcomes from a good number of previous studies across the world. For instance, this research out reflects the works of Lawrence & Chong (2010) and Cajkler et al. (2014) which suggest that LS is a tool that brings together teachers to work together. Further, Chokshi and Fernandez (2004) have also made claim to the positive impact of the LS on the interpersonal relationships of teachers. Additionally, Cajkler, et al., (2014) in their report on the feasibility and value of collaborative LS as a vehicle for teacher learning development has indicated that the programme strengthens students' understanding, help teachers to develop less-teacher-centered approaches, and develop a stronger sense of teacher community. More so, it has been suggested that LS has positive impacts on teachers professionally by enhancing their science CK, improving their teaching strategy and skills, enhancing their engagement in collaborative work, and creating a sense of an indigenous paradigm (Handayani et al., 2019).

5. Recommendations

It is argued in the literature that the use of the LS model as a professional development tool is directly related to its efficacy in meaningful ways in building a collaborative learning community in the school (e.g. Lewis & Perry, 2017; Shuilleabhain, 2016). However, there is still room for improvement in its adoption and usage depending on the context. In this study, the following recommendations are made for both policy and practice in the KSA going forward:

- Increment in budgetary allocation and the provision of adequate instructional materials to all schools for the implementation of the LS model.
- Development of a comprehensive and orderly expansion strategy for in the implementation of LS in Saudi Arabia.
- Collation between implementing schools and the authorities under the Saudi Ministry of Education.

- Putting in place culturally appropriate systems that can help in evaluating the effectiveness of the LS model as a professional development model.
- Promoting further research in the use of the LS model across schools throughout the KSA.

6. Conclusion

This study contributes to the literature on the implementation of LS in countries other than Japan. Given that Saudi Arabia is different from Japan in terms of geopolitical as well as socio-cultural terms, the findings of this study will help support the implementation of LS in cultures similar to that of the KSA.

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References

- Cajkler, W., Wood, P., Norton, J., & Pedder, D. (2014). Lesson study as a vehicle for collaborative teacher learning in a secondary school. Professional development in education, 40(4), 511-529.
- Chokshi, S., & Fernandez, C. (2004). Challenges to importing Japanese lesson study: Concerns, misconceptions, and nuances. Phi Delta Kappan, 85(7), 520-525.
- Handayani, R. A. D., Wilujeng, I., Prasetyo, Z. K., & Triyanto. (2019). Building an indigenous learning community through lesson study: challenges of secondary school science teachers. International Journal of Science Education, 41(3), 281-296.
- Engelbrecht, W., Ankiewicz, P. & de Swardt, E. (2007). An industry sponsored school focused model for continuing professional development of technology teachers. South African Journal of Education, 27, 579-595.
- Fernandez, C. & Chokshi, S. (2002). A practical guide to translating lesson study for a U.S. setting. The Phi Delta Kappan, 84(2), 128-134.
- Gettly, M. F. (2002). Rigtingwysers vir die indiensopleiding van onderwysers. DEdproefskrif. Johannesburg: Randse Afrikaanse Universiteit.

- Lawrence, C. A., & Chong, W. H. (2010). Teacher collaborative learning through the lesson study: Identifying pathways for instructional success in a Singapore high school. Asia Pacific Education Review, 11(4), 565-572.
- Lewis, C., & Perry, R. (2017). Lesson study to scale up research-based knowledge: A randomized, controlled trial of fractions learning. Journal for research in mathematics education, 48(3), 261-299.
- Loucks-Horsley, S., Hewson, P., Love, N., & Stiles, K. (1998). Designing professional development for teachers of science and mathematics. Thousand Oaks: Corwin Press.
- Murata, A. (2011). Introduction: Conceptual overview of lesson study. In L. C. Hart, A. Alston, & A. Murata (Eds.), Lesson study research and practice in mathematics education: Learning together (pp. 1-12). London: Springer.
- Shuilleabhain, A. N. (2015). Lesson study as a form of in-school professional development: Case studies in two post-primary schools. School of Mathematical Sciences, University College Dublin.
- Shuilleabhain, A. N. (2016). Developing mathematics teachers' pedagogical content knowledge in lesson study. International journal for lesson and learning studies.
- Stepanek, J., Appel, G., Leong, M., Mangan, M., & Mitchell, M. (2007). Leading lesson study: A practical guide for teachers and facilitators. Thousand Oaks, CA: Corwin Press.
- Stigler, J. M., & Hiebert, J. (1999). The teaching gap: Best ideas from the world's teachers for improving education in the classroom. New York: Free press.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M. & Thomas, S. (2006). Professional Learning communities: A review of the literature. Journal of Educational Change, 7, 221-258.
- Warwick, P., Vrikki, M., Vermunt, J. D., Mercer, N., & van Halem, N. (2016). Connecting observations of student and teacher learning: an examination of dialogic processes in Lesson Study discussions in mathematics. ZDM, 48(4), 555-569.
- Wood, P. & Cajkler, W. (2017). Lesson study: A collaborative approach to scholarship for teaching and learning in higher education, *Journal of Further and Higher Education*, DOI: 10.1080/0309877X.2016.1261093.
- Yoshida, M. (2002). *Overview of lesson study in Japan*. Paper presented at lesson study conference, New Orleans. Retrieved 14 July 2017, from Research for Better Schools: http://www.rbs.org/Special-Topics/Lesson-Study/Lesson-Study-Conference-2002/Overview-ofLesson-Study-in-Japan/206/printstyle--true.

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