# **An Action Research on Learning Communities -An Example of a Learning Community Organization**

Fei-Lung, Lin

Graduate Institute of Technological and Vocational Education, National Taipei University of Technology, Taipei City, Taiwan, R.O.C. t110499005@ntut.edu.tw

Abstract. Due to the impact of the online learning environment caused by COVID-19, the digitization of knowledge content has become more common. More diversified and convenient online meeting software appeared, such as Google Meet, Zoom, Microsoft teams...etc. the evolution of learning communities also began to further digitalization due to technological advances and environmental constraints during the epidemic. The main purpose of this paper is to discuss the evolution of learning communities and try to organize the homogeneity of the two. This study will use a literature review and case study to organize and summarize the characteristics of the evolution of learning communities. It also attempts to discuss the rapid and vigorous development of self-learning in Taiwan's learning communities under the influence of the 108 curriculum and the impact of the response. This paper attempts to organize the author's experience in building learning communities, as well as the interviews with participants in the learning community construction environment or the actual experience in the construction process. Based on the author's own community experience, this paper attempts to demonstrate and reflect on the failure factors, obstacles and cruxes of building learning communities in the process of building learning communities.

**Keywords:** Learning communities, lifelong Learning.

### 1 Introduction

The concept of lifelong learning, a fundamental condition for the development of a knowledge society, emerged in the 1970s. The government even announced the "Lifelong Education Act" in 1991, which explicitly promotes the concept of lifelong learning at all policy levels. Lifelong learning is the lifelong acquisition of knowledge from a variety of resources and learning opportunities (Maureen Kahlert, 2001), and it is a kind of informal education learning activity regardless of age. Prof. Yeung Kwok Tak once said, "Looking around the world, the better and more developed the foundation of the knowledge economy is, and the more obvious the characteristics of the knowledge society are, the more opportunities for education and learning there must be, and the channels through which the people can absorb knowledge are very com-

mon. This kind of education and learning opportunities and system is the lifelong learning system that a knowledge society needs." Therefore, lifelong learning is not just a concept but a crucial pillar for developing a knowledge society (Yang, 2001).

In the current time and space, since the outbreak of COVID-19 at the end of 2019, the epidemic has begun to visibly affect the learning dimensions and practices of various fields in Taiwan. After nearly three years of the epidemic's substantial impact, especially at the digital learning level, it has directly affected the broader learning community. Due to the impact of the COVID-19 epidemic on the online learning environment, the digitization of knowledge content has become more prevalent. With the emergence of more diversified and convenient online meeting software, such as Google Meet, Zoom, Microsoft Teams, etc., the evolution of the learning community has also begun to further develop digitally due to technological advances and environmental constraints under the epidemic. The concept of lifelong learning seems to have a better implementation of digital tools to be presented during the epidemic. In this study, the characteristics of learning communities will be discussed through a literature review and case studies. It also attempts to discuss the current study of learning communities in Taiwan, which are rapidly developing under the influence of the 108 school curriculum. This paper also attempts to organize the author's own experience in building learning communities with the feedback from interviews with participants in the learning community construction environment or the actual experience in the construction process. Based on the author's own community experience, the paper attempts to identify and reflect on the failure factors, barriers and cruxes of building learning communities in the process of building learning communities.

### 2 Literature Review

## 2.1 Learning Communities

A learning community is a group of people who learn together in the same way. Learning communities emphasize the interaction of members, especially in the learning process, which is driven by the exchange of knowledge and discussion among members. This leads to the positive growth of members and the community. Under the influence of Syllabus 108, professional learning communities for teachers have flourished. A large number of Professional Learning Communities (PLCs) have emerged, which are learning and growth organizations formed by a group of professional workers. "Teachers' Professional Learning Communities (PLCs) are groups of like-minded educators who share common beliefs, goals, and aspirations. They share common beliefs, goals, and visions, and through continuous learning and practice, they aim to enhance the quality of teaching and improve the effectiveness of student learning (Wu, 2010) Myers & Simpson define a learning community as "a cultural situation. Myers & Simpson define a learning community as "a cultural situation in which everyone is engaged in learning, where each individual is part of a whole group, and where each participant must take responsibility for his or her own learning and for the learning of all collectively" (Myers & Simpson, 1998).

In addition, according to Crawford, Krajcik, and Marx (1999), the basic elements that make up a learning community include having authentic tasks and interdependent relationships with group members, as well as negotiated understanding, open sharing, and collaboration with experts.

The organization of the above scholars and their concepts will be described as follows.

- 1. Real tasks
  - meaning that a real task should be created and an environment that is relevant to the interests of community members
- Interdependence
   which means that community members work together on the basis of sharing,
   discussing and debating ideas in order to promote mutual connections.
- 3. problem solving in which members of the learning community interact and negotiate to focus on dispersed knowledge.
- 4. open sharing members share and revise their original concepts, community members and experts must be open to the concepts and ideas in order to discuss and evaluate the process so that the results of the learning process are more knowledge-rich.
- expert cooperation collaborate with experts can receive direct guidance, so as to obtain cognitive effects.

A learning community is organized as a collection of similarly-minded people, that is, a team. A team is a group of people gathered together to work towards a common goal (Tuckman, 1997), which summarizes the team development model. Teams go through five stages of development: exploration, conflict, adaptation, coordination, and integration before the team's performance can be truly realized, and may eventually be disbanded or changed due to the end of the task. However, leaders can make use of Tuckman's "Team Development Stages Model" to determine what stage of development the team is in, and provide appropriate resources and leadership to help the team create value.

The five stages described in the model are

- 1. Forming: Individuals who have just gotten together with a common goal.
- 2. Storming: Individuals who are in conflict and are in the process of bonding.
- 3. Norming: Consensus, rules, trust, and leadership.
- 4. Performing: Effective and efficient in response.
- 5. Adjourning: Reorganization, zeroing in again.

# Tuckman's Team & Group Development Model Performing Forming Storming Performance of Team Performance of Team

Fig. 1. Tuckman's Organization Development Model.

With respect to the discussion of Figure 1, the position of Endpoint 1 shows that the organization is positively developed and has formalized and effective operations to sustain its operations. Endpoint 2 is the valley of death that most organizations are unable to cross. In this stormy stage, the organization loses a large number of members or becomes a silent diver, the organization is unable to develop positively and actively, and the organization will naturally die out.

# 3 Research Methodology

### 3.1 Research Process

In order to understand the process of learning community development and its benefits in practice, and to fully explore the idea of group formation, the case study method will be used. In this study, the case study method is used to explore the actual process of setting up a learning community, together with in-depth interviews with community members, to explore and deconstruct the motivation behind the learning community. According to the objectives of the study, the development process of learning communities will be explored in terms of the motivation of the members, the background of the community, the stage of the project, the operation of the community, and the interaction and behavioral characteristics of the members. The difficulties encountered in the process of establishing the community will also be explored, and the benefits that can be generated for the members of the community will be discussed after a period of time of development of the community.

Introduction to Case Studies

Big Hands Small Hands Love the Earth Community is a learning community established for the purpose of this research and action research operations. The establishment of the community is described as follows.

- 1. Origin of the community: With the accelerated pace of life, the parent-child relationship has become a major challenge that modern families must face. At the same time, the introduction of literacy education further enriches the connotation and demand of parent-child education.
- 2. Community Purpose: The purpose of establishing this community is to promote the spread and implementation of parent-child education based on "environmental literacy". To provide an online learning space for those who want to learn and create together, with the theme of parent-child education and environmental issues, to have communication, discussion, sharing, and learning with each other.
- 3. Community Target: Anyone who is interested in parenting education and environmental issues. Especially for those who have children between the ages of kindergarten intermediate and elementary two (ages 5 to 9, both boys and girls). Community members include parents.
- 4. Community Events: The main activities of the community are based on keywords such as parent-child, science popularization, and environment and include the sharing of curriculum resources, expert presentations, and outdoor activities. The activities are divided into two main themes: online courses and offline activities.

The online program is a self-supported service provided by the core members of the community, which is intended to enable everyone to quickly understand the program and content of the platform system. After the completion of the community activities, we compare the differences between the community members (parents) before (participation expectations) and after (real experience), and conduct in-depth interviews with the parents in order to find out the feelings and feedbacks of the community members (parents) in participating in the community activities.

### 3.2 Research Coding

The evaluation methods used in this study are before, during, and after program implementation and impact evaluation. Process evaluation refers to the supervision and measurement of the program from the beginning of the program to the end of the program implementation, which aims to find out what are the strengths and weaknesses of the program in the usual service delivery process or the overall service encounter process, and how to improve the service process (Chen, Yujia, and Huang, 2012).

Table 1. Basic information for the first interview

Code	First Inter- view	Background	Pre-Event Attitude	Gender
T1	2022.11	Parent (Primary 3)	expect	male
T2	2022.11	Parent (child's kindergarten class)	expect	female
C1	2022.11	Children (Kindergarten) T2's daughter	not expecting	female
Т3	2022.11	Child's Parent (Primary 5)	expect	male
T4	2022.11	Same issue as the others.	expect	male

Table 2. Basic information for the second interview

T1	2022.12	Parent (Primary 3)	Still have expectations	male
T2	2022.12	Parent (child's kindergarten class)	Still have expectations	female
C1	2022.12	Children (Kindergarten) T2's daughter	not expecting	female
Т3	2022.12	Child's Parent (Primary 5)	Still have expectations	male
T4	2022.12	Same issue as the others.	not expecting	male

### 3.3 Research Limitations

First, the sample size was limited by the activity schedule of the parent-child learning community and the size of the community. Secondly, there is a strong personal subjective perception of preferences for parent-child learning community activities. Therefore, after in-depth interviews, it is difficult to fairly measure individual subjective perceptions. Finally, due to the short period of time when the learning community

was set up, the differences in the interview results were small due to the small sample size, and the homogeneity was high.

### 4 Research Results and Discussion

In order to understand the operation of the learning community and the evaluation of its service process, the researcher interviewed the parents of the learning community for about three months and organized the interviews. After about three months of the operation of the Learning Communities, the researcher conducted in-depth interviews with the parents of the participating communities, organized the interviews, and attempted to deduce the results of the operation and the opinions of the parents.

### 4.1 About the motivations

Before the community activities, the community activity members (parents) were more expectant in their attitudes and ideas about parent-child literacy education and learning. Most of the respondents (parents) showed a high level of expectation towards parent-child community activities before participating in the community activities. If we read the reasons for such anticipation, we found that most of the community members (parents) had the expectation of learning and acquiring more knowledge about the key vocabulary of parenting literacy. On the other hand, for the community members (children), it is because they want to have fun during the program.

Overall, parents have positive expectations of the community, want to learn and learn new areas of knowledge, and want to meet new people on common topics.

[T1]

I am looking forward to increasing my knowledge in parenting, and it would be great if there were physical activities to arrange so that I can learn about environmental issues and grow with my children.

[T2]

I am looking forward to learning new knowledge (about how to teach children), and I am also looking forward to other parents sharing their experiences so that we can exchange our parenting experiences with each other.

C1] I hope the activity will be fun and I hope to meet new friends (play games together).

[T3]

Love for the Earth is a good topic, especially for children who need more knowledge about environmental conservation. I hope this community can help both parents and children to learn about the environment.

[T4]

I am interested in parent-child issues and environmental issues, and I am also interested in community management and creation. I hope that by participating in and initiating this learning community, I can learn and grow from the experience of running a community.

### 4.2 Thoughts After Participation

In general, after participating in the community activities, the community parents may feel a sense of loss towards the community, and the original hope of learning and absorbing new knowledge areas has also fallen short of expectations (lack of development of knowledge in the environmental field), especially the community members have not basically completed the acquaintance of the community members because most of them are still unfamiliar with each other.

- [T1] I was still looking forward to increasing my knowledge in parenting, but the interaction of the community members was not enthusiastic, so I didn't have much time to interact with them, and there were some discrepancies between the topics of the online course and my imagination, so my harvest was limited.
- [T2] The threshold for logging in is very high. It takes a long time to download the software to log in, and it takes a lot of time to get help to get online. Moreover, there is no interaction between parents in the community. It is also difficult to listen to all of the lessons, which are a bit long.
- [C1] Not interested in listening to online courses.
- [T3] It is not easy to log in, and it seems that the organizer has not paid attention to the topic of love for the earth and environmental protection. I hope that this community can add some topics and environmental knowledge in this area.
- [T4] Tried to interact with many parents in the community, but there seemed to be no response from them, and there seemed to be no response from parents to the online course content. After reflection, perhaps we need to inject more interactive elements or arrange more active activities to revitalize the community.

### Conclusion

This study attempts to understand the participation status of the community members, to provide appropriate guidance on login and caring interactions, and to help explain the concept of community activities. Finally, the following conclusions were drawn after in-depth interviews with the Big Hands, Small Hands, and Love the Earth community, which is still in operation. Generally speaking, the operation of the Big Hands Small Hands Love the Earth community is not smooth, and there are the following difficulties: 1. Difficulty in recruiting community members, and the number of members cannot be increased effectively; 2. Low interaction rate of community members, and there cannot be a warm atmosphere for discussion; 3. Attempts to bring community members closer together through physical activities, but it is difficult to organize physical activities.

After this operation, the following points are made for discussion, and the following dilemmas should be suggested to be prioritized for consideration. (1) The number of members in a learning community is the highest priority. If the number of members cannot grow, it is questionable whether the community can exist in the future, and the

core members of the community must have the ability to recruit a continuous stream of members. (b) The creation of a cooperative learning atmosphere in a learning community is very important, how to effectively guiding the community members to participate in the heat, and to heat up the emotion for the core members of the community to operate the necessary key abilities.

### References

- Crawford, B. A., Krajcik, J. S., & Marx, R. W. (1999). Elements of a community of learners in a middle school science classrooom. Science Education, 83(6), 701-723
- 2. Kurland, Norman D. (1982), "The Scandinavian Study Circle: An Idea for the U.S. Lifelong Learning".
- 3. Maureen Kahlert, (2000.11) "Lifelong Learning-A Public Library Perspectives," .
- 4. Tuckman, B. W. and Jensen M. A. C., "Stages of Small Group Development Revisited, Group & Organization Management
- Myers, C. B., & Simpson, D. J. (1998). Re-Creating schools: Places where everyone learns and likes it. Corwin Press
- 6. Titmus, C. (1981), "Strategies for Adult Education: Practices in Western Europe", Chicago: Follett Publishing Company.
- 7. http://www.alia.org.au/conferences/alia2000/proceedings/maureen.kahlert.html
- 8. Yang, K. D. (2001). "Continuing Education in the Knowledge Society". Adult Education No. 62.
- 9. Wong, S. L. (2012). Social Work Program Design and Management, pp. 147-164
- 10. Andrade, M. S. (2007). Learning communities: Examining positive outcomes. Journal of College Student Retention: Research, Theory & Practice, 9(1), 1-20.
- 11. Kowch, E., & Schwier, R. (1997). Considerations in the construction of technology-based virtual learning communities. Canadian Journal of Educational Communication, 26(1), 1-12
- 12. Thornton, K., & Cherrington, S. (2014). Leadership in professional learning communities. Australasian journal of early childhood, 39(3), 94-102.
- 13. Teague, G. M., & Anfara Jr, V. A. (2012). Professional learning communities create sustainable change through collaboration. Middle School Journal, 44(2), 58-64.
- 14. Dingyloudi, F., & Strijbos, J. W. (2020). Community representations in learning communities. Scandinavian Journal of Educational Research, 64(7), 1052-1070.
- Prenger, R., Poortman, C. L., & Handelzalts, A. (2019). The effects of networked professional learning communities. Journal of teacher education, 70(5), 441-452.