

LEADERSHIP IN A RURAL AREA PRIVATE LEARNING CENTRE***Lam Kai Shun**

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Abstract

There was once a private learning centre that located in the rural area of Hong Kong. This paper focuses on how the computer technology was integrated to different subjects at there. Besides, it also discusses how the centre head distribute the leadership job among various administrative level. In addition, how the department heads worked cooperatively to affect the decisions of the highest centre head. Indeed, the practical difficulties of the centre was the amount of subsidy which could somehow determine the fate of the centre whether it needs to be closed or extended in the foreseeable future. It is no doubt that the centre head always has the responsibility to fight for more budget so that the centre can be continued in the coming years and serving the rural area population

Keywords: Commercial Management, Recursive Philosophy and Modelling.

INTRODUCTION

It is no doubt that ICT as a teaching and learning tool does play a significant role in Hong Kong classroom. In fact, under the backup of ICT integration with curriculum, problems associated with class can be resolved since it provides different ways of practice. It is true that through Internet, lots of useful teaching materials can be obtained by teachers. That is the teaching contents can be prepared with high quality. In an ideal case, through ICT integrated pedagogy, ideas can be developed and thus things can be made happen, different learning materials can be explored, information can be shared, reviewed and exchanged by students and teachers. However, one of a study (Fox & Herrmann, 2004) highlights the limitations of teacher and student uptake of ICT for educational purpose (Yuen, 2010). Furthermore, academic e-learning has usually focused on superficial technological adoption rather than conceptual pedagogical change process (Davidovitch, N. 2007). In other words, for Hong Kong, ICT integrated curriculum only concentrated on technical skills but not changes in pedagogy. Certainly, in perfect case, learning should be shifted from teacher-centred to learner-centred and the desire to move from the traditional transmission model to constructivist and interactionist framework (Zhang, 2003). As a result, the predicted "paradigm shift" in teaching and learning using ICT has not yet occurred (Bullen, 2007) (Cross, M., 2007), and the impact of ICT on the quality of learning and teaching needs further evidence (Yuen, 2010). How do we lead the above changes? Leadership is a critical factor determining the success of ICT integrated pedagogy. The locus of leadership influences the degree to which ICT integration can become embedded in educational institutions as well as the role of leadership in championing ICT (Niamh Brannigan, 2010). Moreover, research has found that technology leadership is an important factor for effective integration of technology in schools (Tan, 2011). Yuen, Law and Wong (2003) suggested that technology leadership practices were associated with school characteristics, such as stages of technology integration and the cultural characteristics of the school.

From a functional perspective, existing literature of technology leadership tended to focus on school principals as the central figure in leading technology change (Tan, 2010). In fact, the aim of present paper is to summarise a case study exhibiting how the pedagogy was used in a local community centre. Moreover, it also points out the achievements of the centre was mainly due to a suitable leadership.

THE LEADERSHIP AND PEDAGOGY CASE STUDY**What is the background?**

The centre was located in Tin Shui Wai with around 200 students and about 20 teaching staff. All teaching staff (teachers and school head) had at least a bachelor's degree and a teacher's certificate. Some of them even had a master degree either in education or some other teaching curriculum related fields. They were ageing from 30 to 60. In addition, the centre is equipped with Internet broadband, two computer rooms with around 70 something personal computers and other related ICT equipments such as projectors etc.

How do we implement?

The following implementation methods were used for data analysis and collection (Cher Ping Lim, 2012, Yuen, HK, 2003):

1. Review of Documents: Conference presentations and research reports were used as the main sources of documents reviewed. In fact, they were prepared by those teachers who concerned about leadership and the use of ICT integrated pedagogy in their teaching curriculum.
2. Brief interviews with teachers (including subject panel): Totally there were 6 teachers interviewed, three from Mathematics and three from English to teach seven post-form five classes. They were interviewed before their employment to find out objectives of the lesson. After that, they were requested to give comments on the level which was the target of objectives being achieved.
3. Discussion (informal interview) with ICT related teachers and principal: Totally interviewed, there were 4 teachers

and one principal, about centre's leadership and ICT integrated pedagogy according to their roles in different fields of ICT related leadership.

4. Student self-reported questionnaire: There was a self-reported questionnaire for each of the 200 students about the availability of the use of computer and frequency of ICT usage in their English and Mathematics classes.

What did we find?

Relation between leadership and pedagogy: According to Yuen, Law & Wong, 2003, there are three types of schools. They are technological adoption model, catalytic integration model and cultural innovation model. In the community centre, it did not belong to the technological adoption model. It was because most teachers had achieved certain levels of technological skills. In addition, the ICT usage did not just try to enhance the effectiveness of information presentation and stimulate student interest using good multimedia, especially graphics and animation, but at the same time, most teachers could engage in the process of change (Yuen, Law & Wong, 2003). That was during teaching and learning using ICT, teachers' interest focused on ICT which supported the curriculum reform and had more interesting use of ICT. It was good that for those teachers to have an understanding of how essential the use of ICT integrated pedagogy practices. They were implemented in enabling an effective teaching and learning experience for both teachers and students during lessons. In this study, we want to examine the pedagogical approaches for the teaching of English and Mathematics with information and communication technology in a community education centre (Cher Ping Lim, 2012). In addition, its purposes are to investigate the character of using ICT integrated pedagogy throughout a class and how teachers and principal lead and set up an innovative change example in an educational organisation. To cite an example, in the centre, each subject had its own online quizzes. For the case of English and Mathematics, the online management system of the school contained the online quiz module. It was used as a feature to facilitate students' learning of the subjects. As found in the interviews, marking time was significantly reduced due to its self-marking function. Furthermore, the quiz gave a fast and accurate picture about student's understanding of knowledge in the content being taught. At the same time, students could give simultaneous feedback to teachers from their responses. Therefore, they could easily evaluate and provide corresponding actions to handle misconceptions. Content knowledge learned could easily be reinforced and practiced through the attempts by students in online quizzes. In other words, a more transmissive pedagogical approach was provided. In practice, since Mathematics needs good basics in conceptual knowledge and procedural skills, it is more popular to be used than English. In fact, grammar items taught in English can also be quizzed (Cher Ping Lim, 2012). Although the centre did not employ strong historical and cultural foundation, students were still given opportunities to initiate new ideas with ICT themselves and realisation of students' individual potential and development of self-actualisation (Yuen, Law & Wong, 2003). For example, one of a mathematics teachers interviewed used the program Scratch as a way to introduce computer programming for students. By analyzing the survey and scratch projects from students, it had evidence to show that computer programming could equip youngster (most of them do not have programming background) with skills to solve problems and literacy in

digital fields (for those capable ones, he taught them Java Programming). The above is a good example of using constructionist pedagogy in the form of learning with ICT (Cher Ping Lim, 2012). Besides, students were engaged to create one's digital story which is a key pedagogy for language learning and skills for media literacy. In fact, it requests the creation of digital story by using suitable software application from students. The story contains text, sound recording and digital images. Scaffolding tasks would be given to pupils where group wise brainstorm ideas or characters in form of pairs for profiles, outlining a story and their narration stories were recorded. Teachers' feedback would be given. The whole digital stories would then be uploaded to the school network. This process of using colourful visuals and music would excite and engage students. Hence, ICT can facilitate them to present digital stories which can easily be refined and create their stories. At the same time, they can learn from one another during the process of creation. Multiple readings and recordings are required. That is students are facilitated to learn with ICT-collaboration and production. From the above examples, we find that the centre fits the requirements for the second category (since it embeds ICT pedagogy into its curriculum) as well as it has some characteristics of category three (since it encourages creation of new ideas by students). However, what is the relation between leadership and ICT integrated pedagogy? Actually, according to Yuen, Law & Wong, 2003, corresponding to three models of schools' key ICT using characteristics, there are three leadership strategies.

They are top-down management, visionary leadership and multiple leadership. In the centre, it can be described as both visionary and multiple leadership. It was because the principal had a vision in using ICT integrated pedagogy. That is he played the critical role of curriculum leader in engaging staff in the process (Yuen, Law & Wong, 2003). In addition, he went on one further step to achieve some genuine integration. For example, he promoted teaching not only by using powerpoint or flash as presentation tools but also by establishing a private school social discussion network for students to perform online discussion with teachers about lesson's content. Hence, through online discussion, they could further develop and construct new ideas for different subjects like Mathematics and got into deep understanding for subjects like English grammar. Besides, teachers were requested to ask students to search knowledge through the web and share their findings with other classmates. All the above ICT supported pedagogical practices tended to focus more on student-centred approaches and frequently to involve staff collaborations and curriculum innovations that were part of the bigger reform projects (Yuen, Law & Wong, 2003). At the same time, teachers had freedom to implement new ideas in a supportive and enhancing culture (Yuen, Law & Wong, 2003). For example, one Mathematics teacher had the freedom to choose Scratch program as a means to introduce basic concepts of computer programming to those students without them. In fact, Scratch is quite a new programming language developed by Massachusetts Institute of Technology. This shows that the management can accept new ideas and allow lots of freedom to teachers in ICT integrated pedagogy.

Analysis of different types of leadership: While twenty-first-century schools require new forms of learner-centred leadership, they also necessitate a reconfiguration from principal-centred to distributed leadership (Heck and Hallinger 2009; Spillane and Diamond, 2007). According to Tan, 2011,

there are three types of school leadership: Top-down, Segmentation distribution and Functional differentiation distribution. In the centre, the principal did not know much about ICT but he had the vision to integrate ICT into curriculum and he adopted functional differentiation distribution model. Therefore most of the ICT related work was handled by the ICT departments. The ICT head as well as the ICT coordinator worked together to set up directions for ICT and technology related integration. The department consisted of four sub divisions, they were: student development, staff development, special projects and infrastructure. While the heads of the other department took care of various subject disciplines, they also worked for the individual plans for departments' ICT integration. Other expert teachers were considered as senior teachers and they also participated in planning some key ICT programmes. To cite an example, a programme called "Cyber-wellness" was jointly operated by a senior teacher with the help of the ICT head and Career Guidance department. That was the model which offered distribution at more than three levels. In addition, teachers communicate well with each other. They could try new things such as teaching programming by using Scratch after discussion. Hence, it is a whole-school model which is greatly different from the first two models. In fact, for the top-down model, it is non-distributed and leadership resides mainly in the ICT head (Tan, 2011). For the segmentation distribution, it is distributed at two levels. Heads of different departments and project leaders are involved in the integration (Tan, 2011).

DISCUSSION OF RESULTS

According to Yuen, Law and Wong (2003), if the schools are in the beginning stage of ICT implementation, they tend to focus on developing students' JCT competencies and enhancing teaching effectiveness; a top-down management from principals who could help both teachers and students to achieve the minimal level of JCT competencies. If we look at the centre's case, the principal was a retired technology department head from a vocational training school. Thus, he had a vision in using JCT for education. He was also willing to lead the centre in a distributed model. He tried to create a networked organisation to fulfil requirements in the knowledge era. The whole school worked cooperatively and communicate with each other. Although for some new policies, there were resistances from experienced teachers (e.g. They were against the use of Scratch as an introduction to programming and stated the disadvantages of it). After detailed discussion, they agreed to teach (test) it in one class and compared with traditional programming such as Java. In some sense, they worked as a whole system cooperatively for the test. Besides, there were also links and connections to cross traditional boundaries since teachers from various subjects guided learning based on an integrated curriculum. For example, subject English provided lots of chance in using online discussion forum. Moreover, students were welcomed to participate in school decision. Actually, many factors affect the centre not just principal and teachers. In addition, there were continued educational reforms in the centre. For instance, teachers were discussing about the use of smart phone during lessons: "Should they completely ban the use of smart phones during classes or just ask students to turn it off?"

Furthermore, in the centre, a higher degree of distributed leadership was achieved by functional differentiation approach

such as four different functional sub units mentioned above and have corresponding functionalities. Hence, they encouraged a better school-wide ICT integration. From Luhmann's explanation, "only complexity can reduce complexity" (Luhmann, 1995). Complex changes will happen when a school engages in school-wide ICT integration. Thus, holistic changes will also cause systemic reaction mechanisms. It is focused more in the functions for new units. The strong inter-dependency between these units will result better coordination. Due to complexity, a leader cannot provide direction and hence supervise different functionally subunits. In the case, each unit call for a higher level of empowerment from principal and result in a deeper level of leadership for distribution. From the above, we observe that the centre was operated in a distributed leadership model through networking mode. Teaching tasks (no matter traditional or changing teaching methods) could be implemented differently and hence had a comparison. Teachers were accessed and led by different levels of administration such as panel heads, ICT coordinators and senior teachers. The leadership had the characters of collaboration, sharing, democratic, distributive and dispersed. At the same time, teachers worked as a whole without a strict boundaries. Moreover, there were no linear causality since the same task could be done differently. There were usually some changes in the centre no matter in teaching method or leadership. Although from the administrative view, it could be broken down and understood by organisation charts, it was difficult to show the networked relation among teachers. These tell us it was operated in a networked mode. Hence, new ICT integrated pedagogy will be created and implemented successfully.

CONCLUSION

In a nutshell, there are still some rooms of improvement for both the leadership and ICT integrated pedagogy in the centre. For the successful integration of ICT to be implemented, teachers should first have an initiative sense and sufficient support. To cite an example, centre's teachers should search and find out new kinds of teaching such as the use of Scratch. In addition, they should provide more support to it. Besides, under the help of a broader range of personnel in policy and decision making, the principal can play a more critical role in the commitment, vision and belief in the use of ICT across the school. In fact, the principal is willing to promote ICT among different subjects (i.e. he has a vision and supports the use of ICT in teaching) but he should commit more (such as fought more funding for the use of ICT and provided suitable ICT pedagogy training for ordinary teachers) and share his belief (such as what direction should the ICT pedagogy transfer to - using more online application or introduced mobile devices) more with other staff. Finally, choosing a suitable person for the ICT pedagogy leadership is a key for integrating effectively of supporting ICT in learning. In fact, ICT coordinator, subject panels and senior teachers could work together cooperatively in different aspects of leadership (as discussed in the distributed leadership) for the above goal and hence create a better environment for using ICT learning.

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