## Chapter 5

## Conclusion and Recommendations

## 5.0 Conclusion

The survey results from the participating schools indicate that generally the management of the schools is aware of the importance of the ICT. As indicated in chapter 4, they are also providing guidance in the area of technology plan and usage of this new technology. The lower percentage of schools' management using internet or email was primarily due to the lack of Internet access and also the expertise in handling the networking of the communication technology, which is clearly indicated by almost all schools that they need expertise in the area of computer and network technician. The schools are not updating homepage regularly; this indicates an important information communication technology's tool is not used fully by the schools. More than 80% of the schools indicated that the homepage is updated monthly or yearly.

The teachers are in a similar position as the schools' management, where they are aware of the technology and its need in teaching but lack the facilities in schools and also skills in using the technology. Most of them have indicated that they are interested in information and communication technology and agree with the government's policy on the ICT implementation. This can be seen as most of them are keen to learn more complex software such as Database Management System and also the Internet. Lack of skills and facilities is seen as the main reason why the usage of ICT in class rooms is less than 32% (figure 17). The survey indicated that financial aspect is not the major reason

for lack of facilities. Expertise and proper software is the main problem faced by the teachers in using ICT. Many schools have also indicated that the teachers and parents associations are playing an important role in getting more hardware for the schools.

The lower percentage of email used by public in communication with the schools administrative and the teachers, or vise versa indicates the parents, administrative and the teachers are unfamiliar with ability of the technology or uncomfortable with the mode of communication. If the teachers are unfamiliar or uncomfortable with technology, they will not be seen using it as an effective teaching tool. Although the percentages of teachers interested in computers (98%) and having computers at home are high (88%), it is doubtful that significant improvements will occur in teachers technology staff development programs, teachers' uses of information communication technology, and technology budget allocations until both percentages are closer to one hundred percent. The principal is the figure of leadership in curriculum development and staff development. Until the principal recognises the importance of the communication technology, an instructional tool and as an integral part of the student's academic and social development, there will be little motivation for teachers to improve their abilities to use and integrate information communication technology in their personal and professional lives.

This study indicates that the secondary schools surveyed with in the Petaling Jaya area are still lacking in using ICT either for the operation, teaching or communication process.

The eight schools use for the study is located in the urban area, and being in urban area it

is assume that these schools have better financial, capability and influence on implementing new technology compare to schools in the other parts of Petaling Jaya district. This finding can also be assumed that the ICT usage in secondary schools of the whole district would be equal or lower than this 8 schools surveyed in this study.

This study was originally intended to illuminate ten secondary schools in Petaling Jaya area; however the final survey included only eight secondary schools within the urban area of Petaling Jaya. Despite its limited view of ICT usage in secondary schools, this study is useful for comparative purpose for study on similar subject on different geographical area.

## 5.1 Recommendations

Current management philosophies advise and recognize lateral and "the inverted pyramid" channels of authority as an influence. However, as with any major change, it is critical that the top authorities be advocates of the changes, or the reins of the progress will be held in place. It is the principals, who have the power to influence change. They establish the policies, plans, curricula and budgets. For those schools that have established budget for technology, greater attention needs to place training the staff and teachers, infrastructure and upgrades. The general rule for technology obsolescence cited in the technology industry has been upgraded every four years. For this the fundraising should be used as a supplement to the technology budget, not as a substitute for a technology budget.

However to get more accurate results in terms of numerical figures or in specific scales to show the level of information communication technology usage in the secondary schools in Petaling Jaya area, a more detailed survey has to be conducted specially on details of the hardware available in class rooms and computer laboratories. The study should also be extended to other peripherals used in teaching process such as LCD panel, or LC projectors and printers.

Another very important element that can be the limiting factor on usage of the ICT is the available of software that covers the curricula of the secondary school system. The schools surveyed in this study were not check on the time allocated for computer or Internet usage by the student. This is a another area that require further research and to be more specific it is important to know on how much time is allocated on computer or Internet skill.

For future success of ICT in secondary schools depend to large extent on the school receiving good training and support, and being able to budget for a sustainable level of hardware resourcing. Continue government support to teachers by providing quality staff development will help teachers to integrate ICT into their classroom effectively. The schools can also look for non government sources of contribution to sponsor and aid various sources within the community. These include the corporate sector and Parent and Teachers Association.