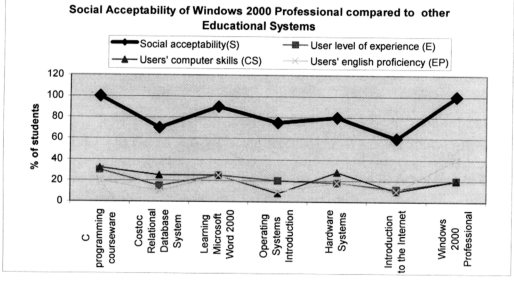
# CHAPTER 7 CONCLUSION

## 7.1 Introduction

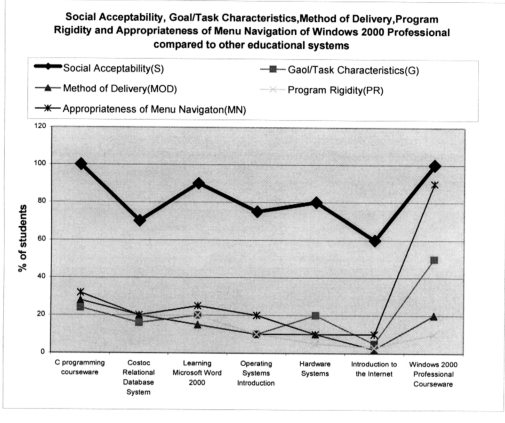
This chapter summarizes the results of the prototype evaluation. It compares the feedback given by students who evaluated the six educational systems in Chapter 4 with the feedback given by students who evaluated the Windows 2000 Professional prototype. The comparisons are displayed in Graph 7.1, Graph 7.2, Graph 7.3 and Graph 7.4. Graph 7.5 shows the acceptance of the socio-constructivist learning strategy in the context of Malaysian tertiary levels students.

## 7.2 Critical Analysis

### 7.2.1 Comparison of Social Acceptability



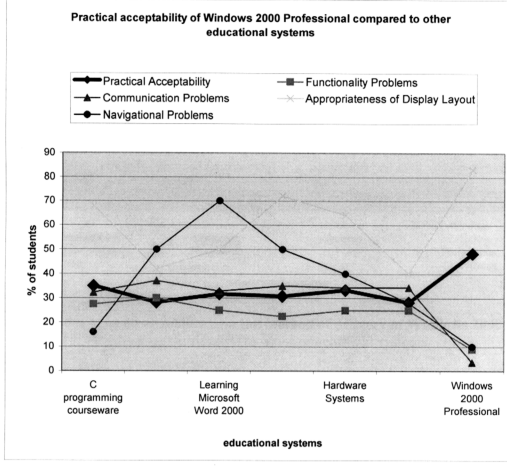

**Graph 7.1 - Social Acceptability of Windows 2000 Professional compared to other Educational Systems**




**Graph 7.2 - Social Acceptability, Goal/Task Characteristics, Method of Delivery, Program Rigidity and Appropriateness of Menu Navigation of Windows 2000 Professional compared to other educational systems**

From Graph 7.1 and Graph 7.2, we could see that the Windows 2000 Professional courseware is accepted by all **(100%)** the students evaluated it. According to Graph 7.2, the menu navigation of this courseware is higher than all the other courseware. Besides that, it is also less rigid and students could derive their goals by using the Windows 2000 Professional courseware. All these issues makes the courseware more accepted by the students.

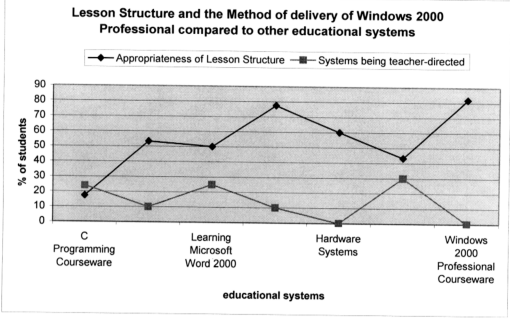
### 7.2.2 Comparison of Practical Acceptability




**Graph 7.3 - Practical acceptability of Windows 2000 Professional compared to other educational systems**

According to Graph 7.3, the Windows 2000 Professional courseware seems to be more practical to use compared to all the other courseware. The practical acceptability is **50%.** As we see in Graph 7.3, the Windows 2000 Professional courseware has very few or minimized communication, navigational and functionality problems. It also has a good display layout. All these issues make the Windows 2000 Professional courseware more practical to use, compared to the rest of the educational systems evaluated in this research.

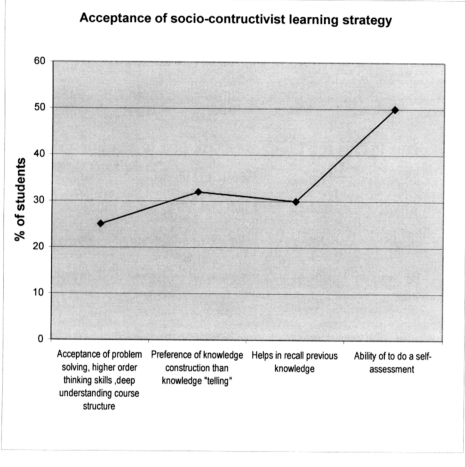
### 7.2.3 Comparison of Lesson Structure and Method of Delivery




**Graph 7.4 - Lesson Structure and the Method of delivery of Windows 2000 Professional compared to other educational systems**

Graph 7.4 shows the acceptance of lesson structure and method of delivery of all the educational systems tested. As we could see in the Graph 7.4, the lesson structure in Windows 2000 Professional is most accepted by the students **(80%)**, compared to other courseware. The method of delivery is regarded to be learner control than teacher-directed. This is because, in the Windows 2000 courseware, students are given the resources, examples, exercises and test, which is fully controlled by the students. **100%** of the students evaluated it said it is not rigid.

### 7.2.4 Comparison of Socio Constructivist Learning Strategy Results and Students' Test Results in Windows 2000 Professional




**Graph 7.5 - Acceptance of Socio-constructivist learning strategy of Windows 2000 Professional**

From Graph 7.5, we could conclude that more than average of the students evaluated this courseware do not accept the socio-constructivist course structure in Windows 2000 Professional. Only **34.25%** of the students evaluated the Windows 2000 courseware could accept the socio-constructivist view of learning. The other **75.75%** of the students seem to prefer the traditional way of learning where they are given the

knowledge rather than providing them with a way of attaining knowledge. They do not prefer to construct knowledge and solve problems.

This also could be seen in Table 6.2, where students' test results indicates just an average **(49.5%)** performance. This shows that students could not perform very well through the socio-constructivist way of learning.

### 7.2.5 Possibilities of why students could not accept socio-constructivism.

One of the possibilities is due to the fact that these students come from a background where they were thought according to the behaviorist way than the constructivist way (Chapter 4, section 2.5). Therefore they are not able to accept the new shift.

There might be other reasons the students could not accept this new shift. Since the evaluation was done in just 3 hours, and students were introduced with the socio-constructivist way of learning during that period. Therefore, the timeframe might be too short for them to adapt to the socio-constructivist way of learning.

Since the Windows 2000 Professional prototype was socially accepted (Graph 7.1 and Graph 7.2 ) and practically accepted ( Graph 7.3) by the students , therefore there should not be any problems with the system which affected the low acceptance of the learning strategy. However, the Windows 2000 prototype only accommodates some of the socio-constructivist characteristics, like problem solving, knowledge construction, previous knowledge construction and self-assessment. Therefore, it

might be insufficient to just accommodate these features. Other features like knowledge collaboration, exploration and apprenticeship learning might have to be added as well.

## 7.3 Conclusion

This research revolved around the development of educational system that is usable for tertiary level students in Selangor and Klang Valley. Studies on socio-constructivism and software heuristics have been used to design a set of questionnaire for evaluation of existing educational systems. The requirements gathered from the evaluation were used to design and develop a prototype in this research. From the analysis of the evaluation results of the prototype, we could conclude that the studies have proved to create a more accepted educational system. However, students must be exposed more to the constructivist way of learning for them to accept this new shift.

A future work can be done to accommodate all the socio-constructivist approaches in the Windows 2000 Professional prototype to check whether students respond better with the socio-constructivist way of learning.

In future, a study on educational systems on school level could also be done to see how well students at primary and secondary level adapt to the design of educational system.