Abstract

In 1998, the University of Hong Kong was the first tertiary institution in Asia to implement a campus-wide notebook computer programme, where each incoming student is enabled to own a personal notebook computer. At the beginning of each year, incoming students are surveyed to collect baseline data about their self-reported computer skills and their attitudes about computer use in education. In mid-May 2001, at the end of their undergraduate education, the 1998 cohort was surveyed again to gauge the changes, if any, in the skills and attitudes of the students after three years of study at the university and to collect the opinions of the students for future directives concerning IT in education at the University. Generally, students who participated in the notebook programme were satisfied and found the ThinkPads to be useful in their coursework and studies, using them for about 14 hours a week for school work.

1: Introduction

The new undergraduate students of the academic year 1998-1999 were the first cohort of freshmen offered the opportunity to participate in the HKU/IBM Notebook Computer Programme. About 86% of these students chose to participate and purchased an IBM ThinkPad computer bundled with pre-loaded software, a modem, and a 10/100 EtherJet CardBus Adapter and Cable.

As part of the programme, the IT & T Group within the CAUT conducted a census/non-sample survey on all of these students (N=2,835) in mid-August 1998, to collect baseline information of their self-reported computer skills and their attitudes about computer use in education, before the students started receiving IT instruction or had any experiences with IT at the university. At the end of the 2000-2001 academic year, in mid-May 2001, a new survey was taken of these now-third-year students (N=2,789).

2: Objectives

The objectives of the new survey were to gauge the changes, if any, in the self-reported IT skills of the students and their attitudes about computer use in education after three years of study at the university, assess the performance of the HKU network both on and off campus by the ACEnet and HKU-PPP dial-up connection respectively, and collect the opinions of the students for future directives concerning IT in education at the University. This survey also aimed to evaluate student usage of the ThinkPad computers purchased through the programme, and their level of satisfaction with this programme and other supporting services. In this short summary, we focus on all respondents’ answers to questions about the future of the notebook computer programme and participants responses to questions about the programme.

3: Questions Asked of All Students

When asked, “In your opinion, which of the following should the University do in the future? (Choose all that apply)”, the majority of students felt that the University should expand the programme to include more vendors to provide a wider choice of smaller and lighter notebook models, improve dial-up access, make arrangements for broadband access for students with a commercial ISP, include a wireless network access card in the notebook bundle, and improve technical support services. Only 31.7% felt the voluntary programme should be mandatory, and only 1.9% felt it should be discontinued.
3: Questions Asked Only of Notebook Programme Participants

When asked, “Overall, how satisfied were you with the HKU/IBM Notebook Computer Programme,” 4% replied “very satisfied,” 40% replied “satisfied,” and 43% replied “average.” Only 11% indicated dissatisfaction with the programme, less than 1% were “undecided”, and 2% replied, “no comment”. How useful did students perceive the notebook computers were to their studies at the University? By ticking a number on a Likert-like scale ranging from 1 (“not useful at all”) to 5 (“very useful”) participants were asked to respond to the question, “How useful was your ThinkPad computer in your course work and studies at HKU?” The mean of the responses was 3.4, while the mode was 4.

One of the perennial debates associated with the notebook programme has been whether students would prefer desktop computers. When survey participants were asked, “Looking back over your three years at the University, would you have preferred to own a notebook or a desktop computer for use in your studies, if you had only one choice?” they indicated a preference for notebook computers by a majority (68%). Only 26% indicated they would prefer a desktop while 6% were undecided.

Another concern of the programme organizers was that students might buy notebook computers only to sell them to relatives, friends, or other interested parties. As the University subsidized the purchases, this would be unacceptable. In the survey, students were asked to report the “current status” of their computers. After three years, 92% reported still having their original ThinkPads, while 4% said they had exchanged it for a desktop computer and nearly 3% indicated they had exchanged it for a notebook computer of another brand. Slightly more than 1% said they no longer owned a computer of any kind. In addition, on average students reported using the ThinkPads for school-related work 14 hours per week during the 2000-2001 school year.

One of the reasons why the University implemented a notebook computer programme was the belief that personal ownership of a computer would help students become more skillful in their use, and know more about them. When asked whether owning a ThinkPad helped them learn more about computers, fully 71% replied that it had. Only 21% disagreed while 7% were undecided.

Although students seldom brought their notebook computers to campus (only slightly more than 10% indicated that they brought them a few times a month or more), 21% indicated that the need to bring them to campus had increased over the past three years. As has been found in other IT&T Group surveys, the main reason given for not bringing their computers to campus was size and weight, with 75% of students indicating that these factors limited the frequency “a great deal.” In addition, students chose “battery life” (41%), and “secured student storage/locker on campus” (35%) as the next two most important reasons they did not regularly bring their ThinkPads to campus. Thirteen respondents chose “other” as the factor which limited the frequency “a great deal”, among which six indicated the availability of computers in the computer laboratory on campus as a common factor inhibiting them from bringing the notebook computers to campus.

4: Conclusions

After three years, the majority of students would recommend that the notebook computer programme include a wider choice of smaller and lighter notebook models with wireless capabilities offered from a variety of vendors. In addition, the majority of students would recommend that technical support services and dial-up access be improved, and that the University make special arrangements with commercial Internet Service Providers (ISPs) to provide students with broadband access from home. Generally, students who participated in the notebook programme were satisfied with it. They found the ThinkPads to be useful in their coursework and studies, preferred owning a notebook computer over a desktop, still had their original computers, and were using them for about 14 hours a week for school related work. Students also believed that personal ownership of a notebook computer has helped them learn more about computers. And finally, contrary to expectations, students were not bringing their computers to campus for a variety of reasons, the most important being the size and weight of the computer.