



遙距及成人  
教育研究中心  
Centre for  
Research in  
Distance & Adult  
Learning

## **Student attrition at OUHK: A preliminary investigation**

As per Senate decision on the Academic Standards Report submitted to it at the 14<sup>th</sup> meeting held on Friday 13 August 1999. See section 36.3.2 of Senate minutes S/14/M

## Summary

- Student dropout from courses, otherwise known as student attrition, is of two major types. The first type consists of students who dropout during the semester, without completing or passing some or all of their assignments. The second group, which is of current concern at the Open University of Hong Kong (OUHK) and the focus of this investigation, consists of students who successfully complete the assignment components of the course, but do not attend the examinations.
- Based on a recent Academic Standards Report submitted to the OUHK Senate in August 1999, CRIDAL was requested to conduct a preliminary investigation as a possible start to unravelling the issue and finding possible answers to the dilemma.
- A review of the pertinent literature revealed that several factors including social and personal adjustment, academic adjustment, examination anxiety, and distance learning related variables might be responsible for student attrition especially in open and distance learning (ODL.).
- A preliminary analysis of examination non-attendance data at the OUHK from February 1990 to February 1999 revealed the following:
  - The university-wide average rate of examination non-attendance was about 30 per cent and ranged from a high of 44% to a low of 22%.
  - The Schools of Business and Administration and Arts and Social Sciences recorded non-attendance rate of above the university average for foundation courses, Education and Languages has non-attendance figures below the overall average for the middle/higher level courses. The School of Science and Technology and CCCE have above average examination non-attendance rates for pre-foundation and foundation courses.
  - In the middle/higher level courses, Science and Technology recorded the highest non-attendance rate for all the periods examined except the 1993 and 1994 examinations.
  - Business and Administration has had a consistently lower-than-average non-attendance rate. Similarly for Education and Languages although a sudden increase was noticed in February 1998.
  - There is a need to conduct in depth studies into examination non-attendance rates at the University focusing on factors which have contributed to:
    - higher-than-average non-attendance figures in the pre-foundation and foundation courses,
    - below-average non-attendance figures in some courses notably the middle level/higher courses in Education and Languages and postgraduate course in Education and Languages and Business and Administration, and
    - the noticeable increase in non-attendance rates in Science and technology courses.
- While the results of the investigation will further demonstrate OUHK's pursuit of quality and adherence to standards in its course delivery, it is hoped that the study will also provide some data to illuminate the problem of examination non-attendance which has been least studied in open and distance learning.
- Provided CRIDAL receives all the data being requested from ITU in due course, the comprehensive investigation planned should be completed and report submitted to Senate by June 2000 at the latest.

## **Introduction**

Student attrition, a critical factor linked to the success of University courses especially in open and distance learning (ODL) has been under investigation for many decades. Two types of attrition are common: those who drop out during the semester without completing or passing some or all of their assignments, and those who successfully complete the assignment components of the course, but do not attend the examinations. Out of the two, the issue of examination-non attendance has been least investigated. Lately, the Open University of Hong Kong (OUHK) is directing attention to this latter species of student attrition as contained in a recent Academic Standards Report submitted to its Senate in 1999.

From a pragmatic point of view, student retention is seen as a mark of a quality institution and, increasingly in these times of budget cutbacks, funding and headcounts are closely linked (White and Mosely, 1995). While there are some factors influencing attrition that are beyond the control of universities, such as race, age, gender and socioeconomic status (Cooke, Sims and Peyrefitt, 1995), there are many ways in which universities may be able to do more to prevent it if sufficient information is available to understand more about it (Rickinson and Rutherford, 1996). If data are available to predict which students are at risk of dropping out, then counselling staff and academics will be able to focus attention on addressing potential problems before they occur (Cooke et al., 1995).

There has been a lot of research undertaken to investigate factors affecting attrition rates of undergraduate students, but comparatively little concerned with adult students. Further research with the latter group is important, since they differ from the former according to age, career stage, personal life circumstances, reasons for pursuing education, and finances (Cooke et al., 1995).

The situation of student attrition at the Open University of Hong Kong (OUHK) is as serious as that documented in both conventional face-to-face and distance education institutions overseas. A study by Fan and Chan (1997) revealed that for most of the OUHK entry (foundation) courses, the rate of non-attendance at examinations was more than 35%. Furthermore, Fan's and Chan's analysis revealed that 70% of the dropouts occurred in the first half of the semester. Clearly, then, it is important for the OUHK to conduct a larger-scale investigation to attempt to uncover some of the preventable reasons for dropping out.

Earlier research has indicated that student attrition is a multidimensional phenomenon that includes demographic variables, educational background, employment characteristics, financial status, marital and family status (Bhatnagar, 1975). Amongst these, there are several potentially preventable reasons for university students dropping out, with these falling mostly into the two categories of academic adjustment or social and personal adjustment. There has been a preponderance of evidence to suggest that the majority of reasons fall into the latter category.

## **Social and Personal Adjustment**

One of the major reasons identified for adult students to drop out of their courses has been conflict between their studies and other commitments in their working or family lives (Louttit, 1968; Cullen, 1994), and students at the OUHK have been no exception to this (Fan and Chan, 1997). This has particularly been a problem if the students have experienced any change in any personal or work-related circumstances after commencing their courses (Smith, 1987).

Another potential problem that can cause students to give up can occur if they are overwhelmed by feelings of inadequacy and distress when they are faced with the new demands of their studies (Rickinson and Rutherford, 1996). Once they lose confidence in their abilities, it becomes easy for them to give up (Cullen, 1994).

Financial problems also play a major part in contributing to student dropouts (Cullen, 1994; Young, 1994; Fan and Chan, 1997). From another point of view, Cooke et al. suggested that students with internal locus of control, that is those who attribute their success or failure to internal factors such as effort, are more likely to feel able to influence circumstances and persevere than those who attribute their successes and failures to external factors beyond their control.

Only two studies reported gender differences in ability to persevere in the face of personal problems, and these were contradictory. While Fan and Chan (1997) found a slight tendency for females to be more persevering, Cullen (1994) reported that women were more likely to be affected by these outside pressures.

A less commonly documented issue, but nevertheless one that may very well be relevant to student attrition is that some students have been found to drop out simply because they have accomplished their own educational goals from the course, have attained whatever they set themselves to attain, and have no need to continue (Louttit, 1969; Cox, 1984).

## **Academic Adjustment**

There are two main ways in which academic adjustment has been found to influence students dropping out. One is course difficulty and the other is inappropriateness of the course to the students' needs or interests. For example, Chyung, Winiacki and Fenner (1998) found that adult distance learners who dropped out often did so because they were dissatisfied with the course content or learning environment, or there was a discrepancy between their professional/personal interests and the course structure. Fan and Chan (1997) found that the course being too difficult was a significant reason for dropping out. Fan and Chan also found education background to be a contributing factor, particularly if the students had insufficient background content knowledge for the course they were studying.

Willingness to seek help for personal or academic problems may also be a factor that distinguishes between the students who drop out and those who persevere. Fan and Chan (1997) found a positive link between attendance at face-to-face sessions and perseverance, while Rickinson and Rutherford (1996) found that, amongst those who eventually dropped out, while a high percentage sought help from their personal tutors, a low percentage sought assistance from student support or counselling services.

### **Examination Anxiety**

Most of the research described above has been concerned with those students who have dropped out at any time during their courses, and in fact Fan and Chan found that around 70% of those who dropped out did so at around the time of submission of the first assignment. However, there is another special case of student about whom comparatively little research has been documented. These are the students who complete and pass all of their coursework assignments, but do not show up for the examination. While there is no evidence yet about whether this happens due to examination anxiety, there is certainly sufficient evidence about the adverse effects of examination anxiety to warrant further investigation of this phenomenon. Not only has examination anxiety been shown to disrupt performance (Onwuegbuzie and Seaman, 1995; Cantazaro, 1996), it can also lead to pessimistic behaviour before the examination. For example, Martin (1997) found that people's general anxiety, as well as examination anxiety, increased significantly when they were close to an examination, whilst Dewberry and Richardson (1990) found that people's general optimism was reduced if they were experiencing pre-examination anxiety. Cantazaro (1996) suggested that this can be compounded if, for some reason such as previous unsuccessful experiences, the student anticipates failure, as this has been shown to increase anxiety. Based on these research findings, it may be reasonable to conjecture that students who may be able to cope with difficulties associated with their studies during the semester when there is comparatively little pressure, fall apart and are unable to cope when they have the added anxiety of the approaching examination. This certainly requires further investigation in the OUHK context.

There is clearly sufficient evidence to indicate that at least some of the factors influencing student attrition are within the power of universities to change. Given the importance of student retention for economic and social reasons, it is important to gain insights about the nature of these factors to enable preventative initiatives to be instigated. At OUHK a useful contribution has been made by the work of Fan and Chan (1997), with two mathematics foundation courses. However, more research is necessary to determine whether their findings, and those of overseas research, are generalisable to other subject areas and other levels of courses.

There are two groups of students to be considered:

- a) those who dropout during the semester, without completing or passing some or all of their assignments, and
- b) those who successfully complete the assignment components of the course, but do not attend the examinations.

## Research Questions

For both groups (a) and (b) listed above:

1. Has there been any change in attrition rate or patterns of attrition over the past 10 years?
2. What non-controllable factors (e.g. demographic variables, educational background, employment characteristics, financial status, marital and family status, age, gender) are predictors of student attrition?
3. What controllable factors are predictors of student attrition: conflict between studies and work commitments or family commitments; negative emotions associated with studying, locus of control, initial reason for choice of course, level of competence/prior academic experience, management of course demands/workload, perceived need for academic support, sufficiency of background content knowledge for course, appropriateness of course, willingness to seek help for personal or academic problems?
4. Is there any interaction between the above factors and the time of the semester at which the student drops out?

For students in group (b) described above:

5. What is the relationship between examination anxiety, general anxiety, and non-attendance at examinations?

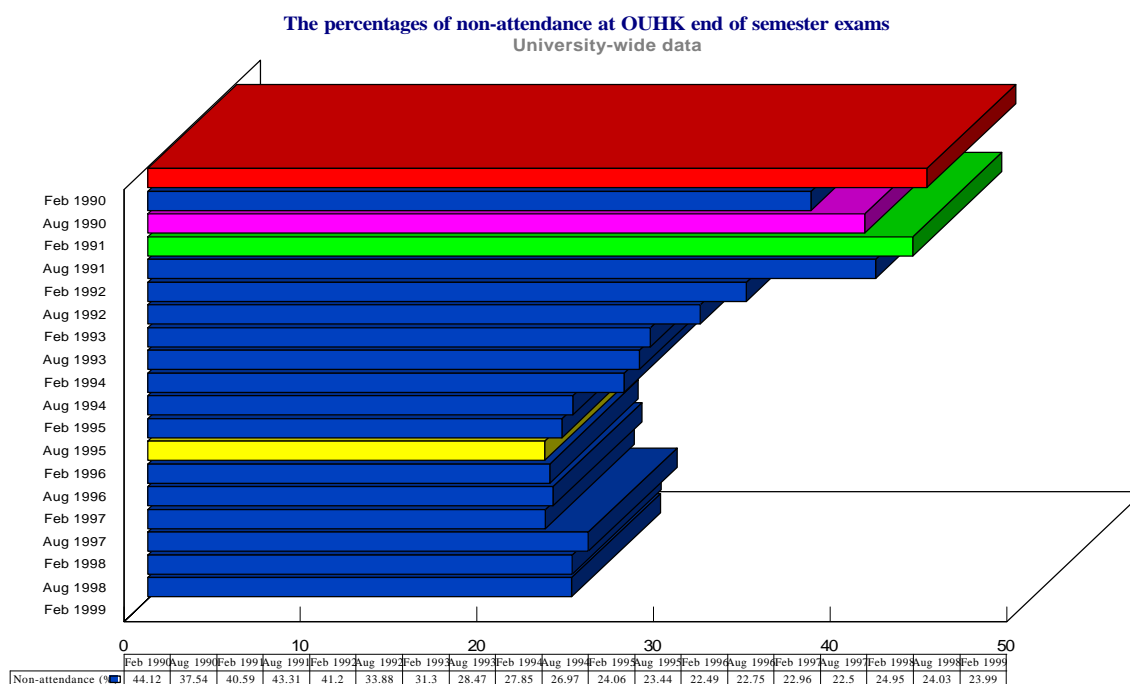
## Procedures

- |          |                         |   |
|----------|-------------------------|---|
| Phase 1: | Sept-Oct 1999           | Analysis of examination non-attendance data from Feb. 1990 to Feb.1999 examination periods, with respect to Research Question 1   |
| Phase 2: | Oct.-Nov.1999           | Analysis of data provided by Registry: examination non-attendance by completion/non-completion of coursework requirements, with respect to Research Questions 1 and 2   |
| Phase 3: | Nov.-Dec. 1999          | Design, validation and pilot testing of questionnaire and interview schedules to investigate Research Questions 3-5<br>(Some items will be adapted from Rickinson and Rutherford, 1996)                           |
| Phase 4  | Dec.1999-<br>March 2000 | Telephone questionnaire interviews to xx students each in group (a), group (b) and a control group of persisters<br>Focus group follow up interviews for further in-depth investigation of Research Questions 3-5 |
| Phase 5  | April –June 2000        | Data gathering and collation, analysis, report writing and submission of report   |

## Preliminary analyses of patterns in examination non-attendance

In order to identify patterns that might lead to further research questions, student records were considered for all courses examined between February 1990 and February 1999. These data focused specifically on non-attendance at examinations by students who had successfully completed the assignment components of their courses.

From Figure 1 it can be seen that there has been a steady decline in non-attendance at examinations, ranging from a high of 44% to a low of 22%, although there was a sudden increase in February 1998 followed by only a slight decrease in August 1998 and February 1999.

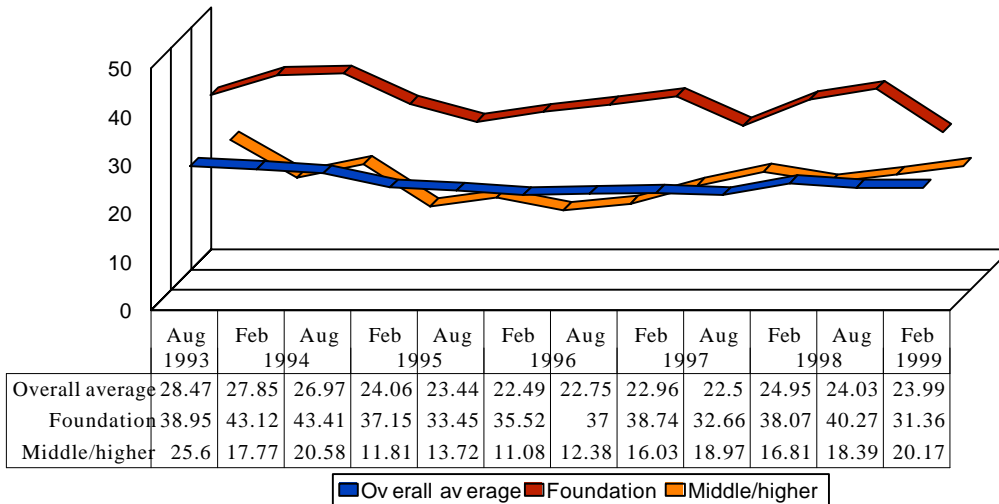


**Figure 1: Overall examination non-attendance rates by examination period**

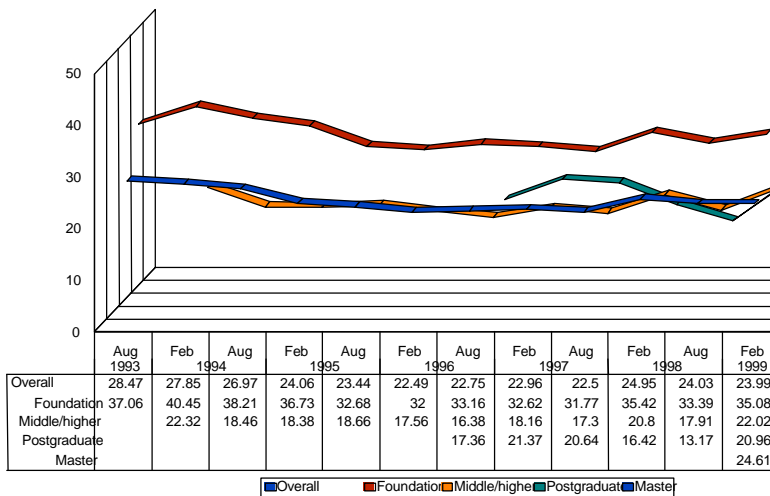
When these figures are broken down by School (Figure 2), it can be seen that most schools follow patterns to the overall picture, with a decrease in rates in February/August 1998 followed by a small increase and then another slight decrease. The clear exception to this pattern is Science and Technology, where there has been a steady increase in the non-attendance rates of the foundation level courses and little change in the middle/higher courses. In all Schools but one, the highest non-attendance rate has been in the lowest level course, that is pre-foundation courses in CCCE and foundation courses in the other Schools. The exception to this pattern is Education and Languages, where the new postgraduate area had the highest, with a sharp increase followed by a sharp decrease. In Science and Technology the non-attendance rates for both foundation and non-foundation courses is above the overall average, as is the case for pre-foundation and foundation courses in CCCE. In Arts and Social Sciences and Business and Administration, the rates for foundation courses are above the overall average with the middle/higher levels being

close to the average. In Education and Languages the non-attendance figures for the middle/higher level courses is below the overall average.

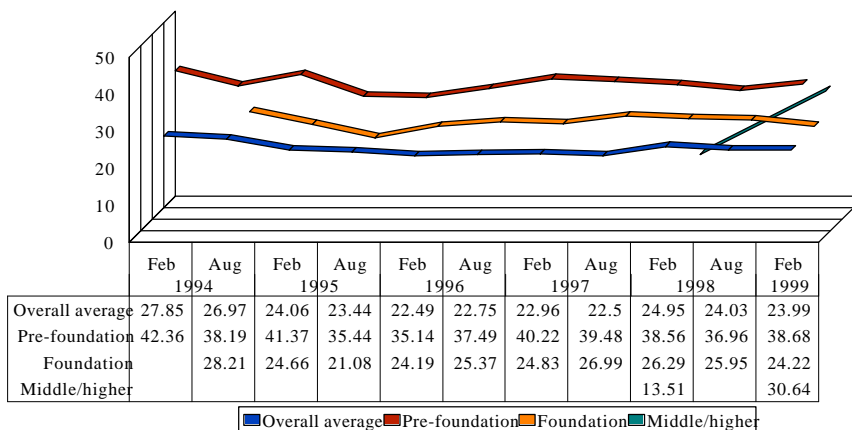
**The percentages of non-attendance at exams by the different levels of courses at the School of Arts and Social Sciences**



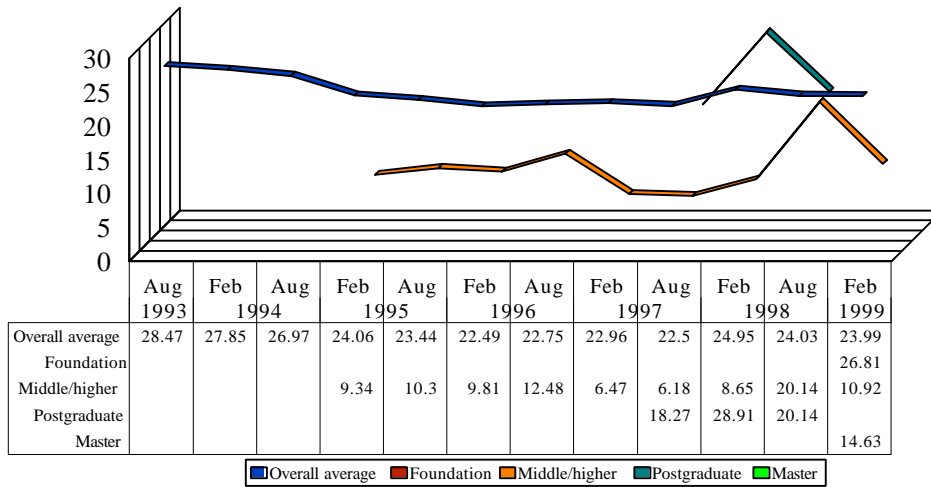
**The percentages of non-attendance at exams by the different levels of courses at the School of Business and Administration**



**The percentages of non-attendance at exams by the different levels of courses at the Centre for Continuing & Community Edu**



The percentages of non-attendance at exams by the different levels of courses at the School of Education & Languages



The Percentages of non-attendance rate of exams by the different levels of courses at the School of Science & Tec  
Different level courses

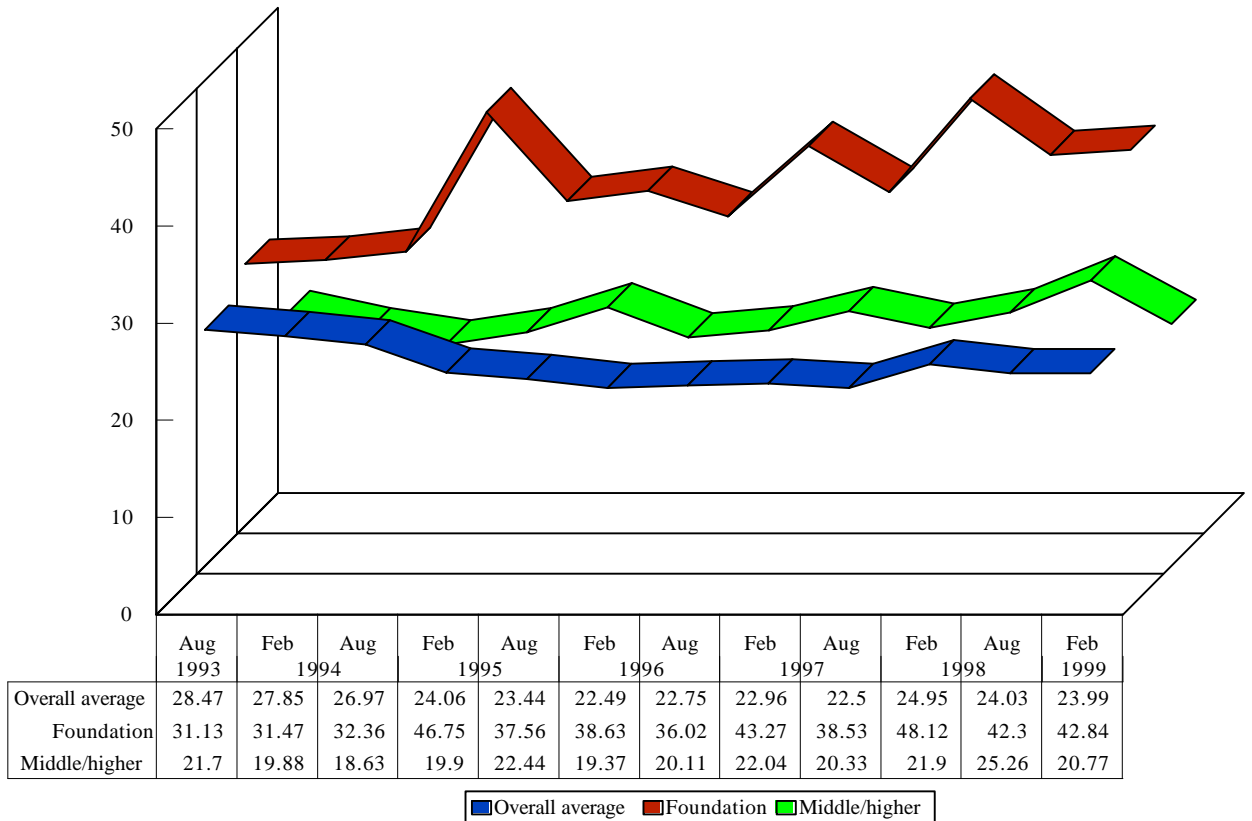
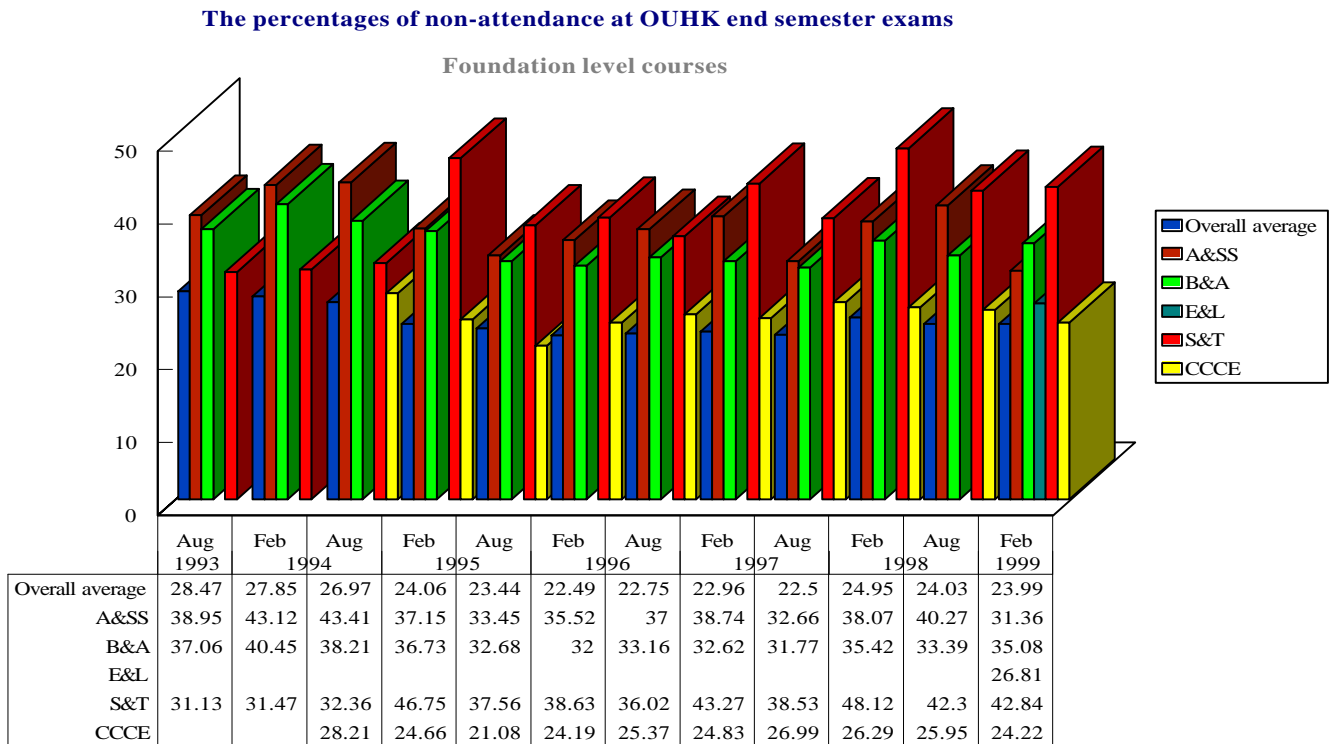


Figure 2: Comparison to overall average, by Schools

Looking further at course levels, it can be seen that at the foundation level (Figure 3) Science and Technology has had the highest non-attendance rates from February 1995 onwards with the exception of August 1996, when it was slightly lower than Arts and Social Sciences. Business and Administration and Arts and Social Sciences had amongst the highest rates in the earlier presentations but declined until a slight increase occurred in February 1998. CCCE has been consistently the lowest.



**Figure 3: Foundation level courses by school**

In the middle/higher level courses (Figure 4), Science and Technology is again the School with the highest non-attendance rate for all except the earliest examination periods. Business and Administration has been the second-highest in the majority of presentations. An interesting pattern occurs with Arts and Social Sciences, where there was a notable decrease until August 1996 and then an increase. CCCE only has middle/higher level courses for two examination periods and the pattern has been inconsistent, going from the lowest rate in February 1998 to the highest in February 1999.

The percentages of non-attendance at OUHK end of semester exams

Middle/higher level courses

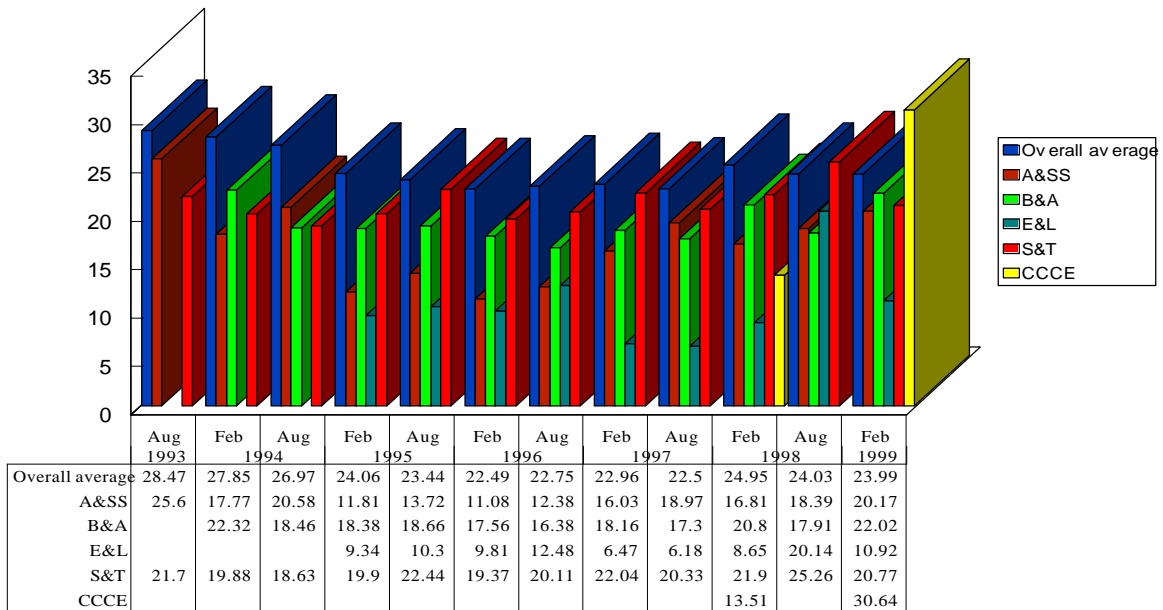


Figure 4: Middle/higher level courses by school

With postgraduate courses (Figure 5) Business and Administration has had a consistently lower-than-average non-attendance rate. This has also been the case for Education and Languages with two of the three presentations, the exception being a sudden increase in February 1998.

The percentages of non-attendance at OUHK end of semester of exams

Postgraduate level courses

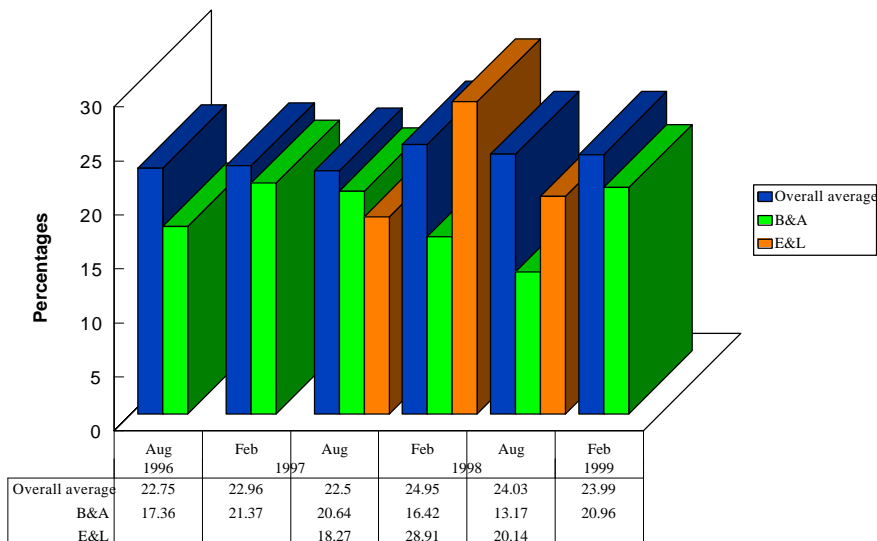
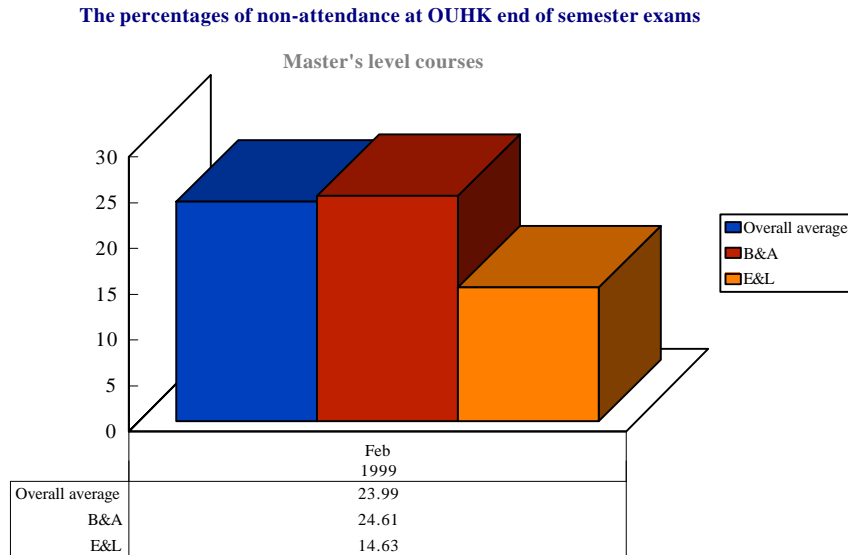


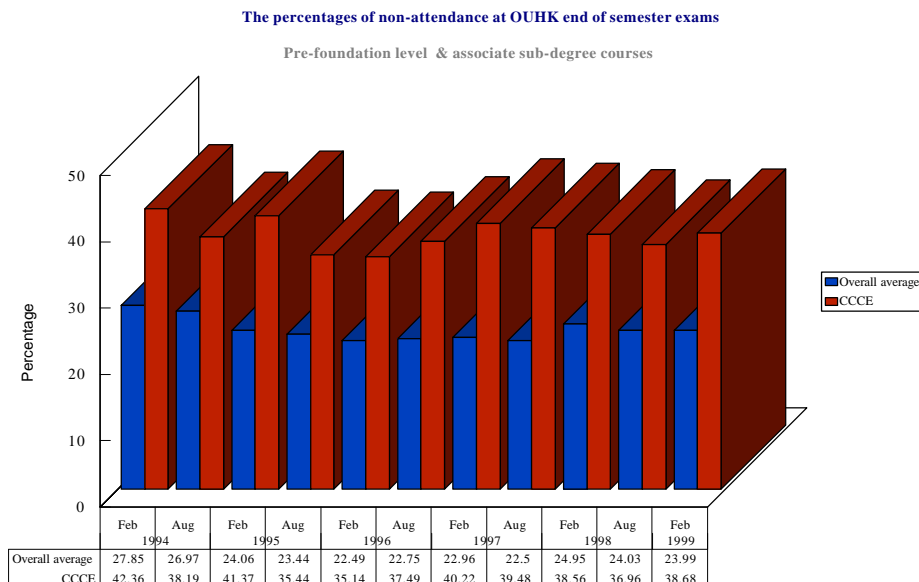
Figure 5: Postgraduate courses by school

At Masters level there is very little pattern to consider as these courses have only been examined once each (Figure 6). Business and Administration has a higher non-attendance rate than does Education and Languages.



**Figure 6: Masters degree courses by School**

There is only one Centre, CCCE, that offers pre-foundation-level and associate sub-degree courses. In all of the presentations at which these courses have been offered, the examination non-attendance rate has been higher than the overall average (Figure 7). There was a decrease in February/August 1996 followed by a slight increase.



**Figure 7: Pre-foundation and associate sub-degree courses**

### **Discussion, implications and questions for further investigation**

In addition to the research questions outlined above, some further questions have arisen from this initial analysis that require further investigation.

1. Why has there been an overall decrease in examination non-attendance rates? Is it because of any actions taken by OUHK, or is it due to changes in the nature of the students?
2. What factors contribute to the higher-than-average non-attendance figures in the pre-foundation and foundation courses?
3. What factors contribute to the below-average non-attendance rate of students in Education and Languages middle/higher courses or Business and Administration and Education and Languages postgraduate levels?
4. What factors have contributed to the increase in non-attendance in Science and Technology?

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