

Attendance Monitoring – Supporting Students Effectively

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Background

- Why bother?
- ‘Anecdotal’ evidence of class attendance dropping
- ‘Some’ data linking poor attenders with poor outcomes
- Increasing numbers of students need part-time work
- A lack of understanding of the reasons for non-attendance
- How can we help?

Literature

- Non-attendance is a widespread problem in Higher Education (Newman-Ford, Fitzgibbon, Lloyd, and Thomas, 2008)

Sessions Missed	Chance of module failure	Chance of 2i or 1st class mark
10% or less	25%	25%
20% or less	33.3%	20%
30% or less	33.3%	14.3%

(from Colby, 2004)

Literature

- Attendance impacts performance (Durden & Ellis, 1995) in a non-linear fashion (4+ missed sessions)
- Students are becoming more heterogeneous (e.g., widening access, social inclusion)
- Cooper, Taylor, Smith and Catchpole (2002) revealed institutional differences in part-time jobs (79% in GC vs. 52% in UoG)
- Non-attendance linked to low motivation (Longhurst, 1999) and disengagement

Literature

- Solutions have been developed, e.g., 'lecture-capture', but the literature is currently mixed regarding benefits (e.g., Vardi, 2012 (reduced attendance) vs. McGowan & Hanna, 2015; no difference, supported study)
- Attendance monitoring is becoming more common, can provide good data, but may be destructive to development of professional behaviours (e.g., in Healthcare, Lipscomb & Snelling, 2010)

Objectives

- Develop an attendance monitoring system
- Test it
- Use the data to support our students' experience and outcomes

Method - Participants

- 301 Psychology students (76.1% identify as female)
 - Year 1 (n = 56)
 - Year 2 (n = 87)
 - Year 3 (n = 80)
 - Year 4 (n = 71)

Method - Equipment

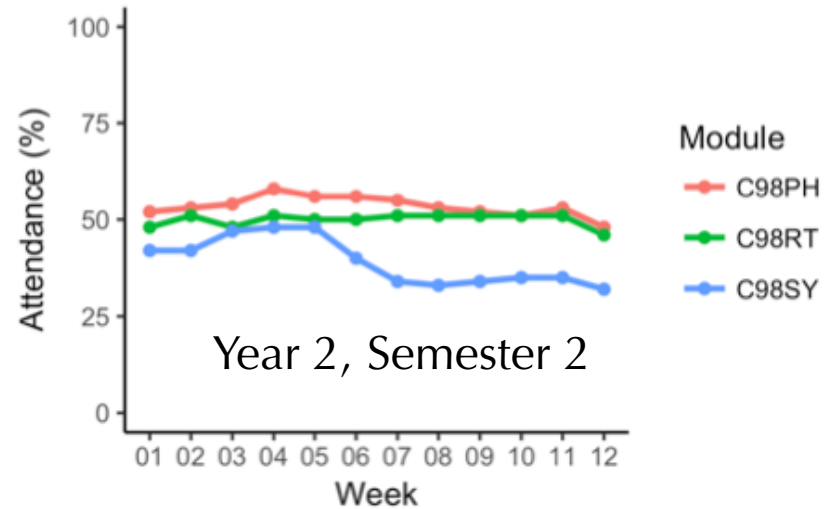
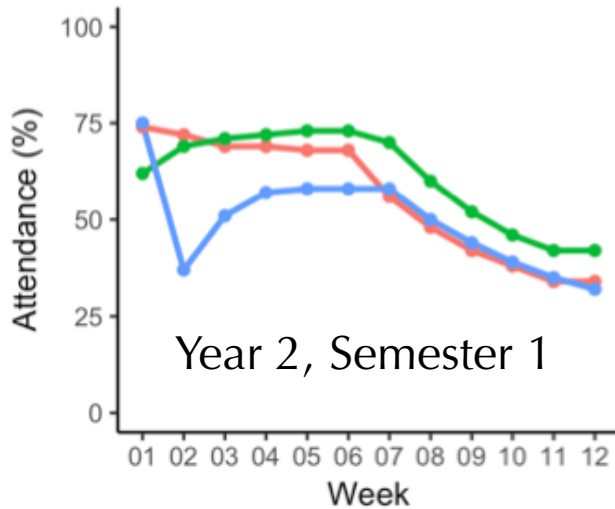
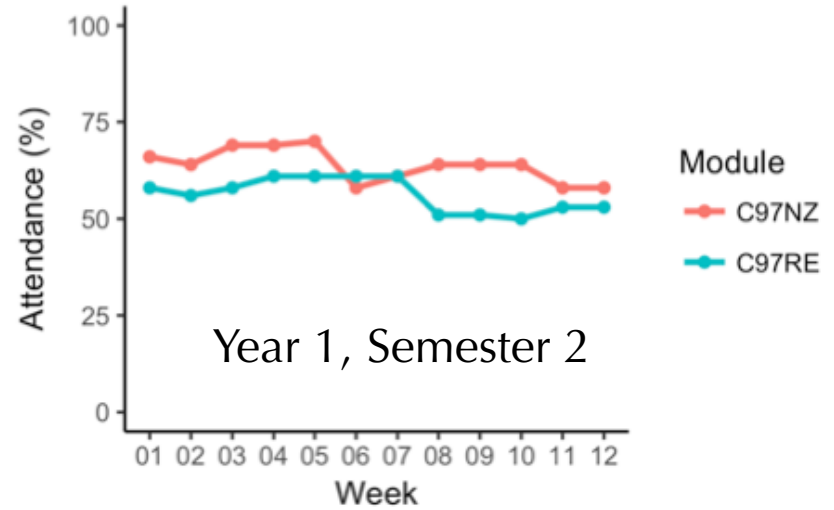
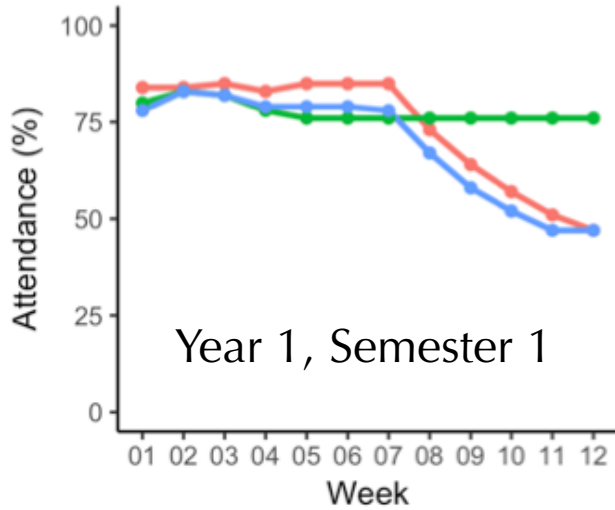
- Institutional ID cards (with barcodes)
- Barcode scanner
- A collection of Python scripts
- Institutional data systems



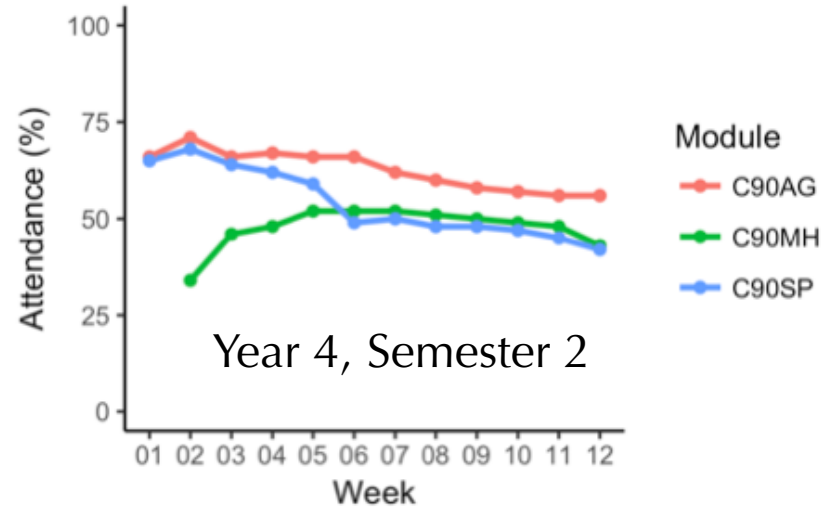
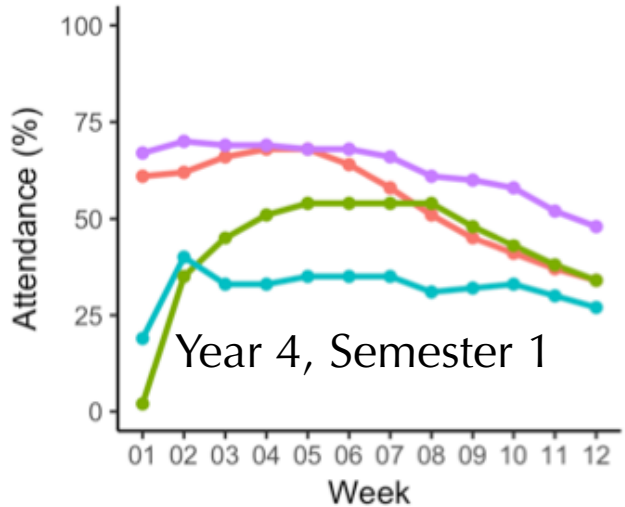
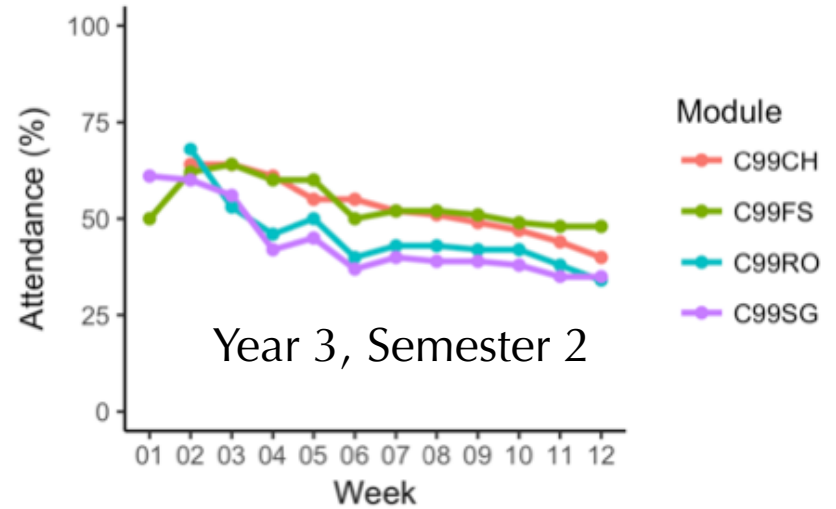
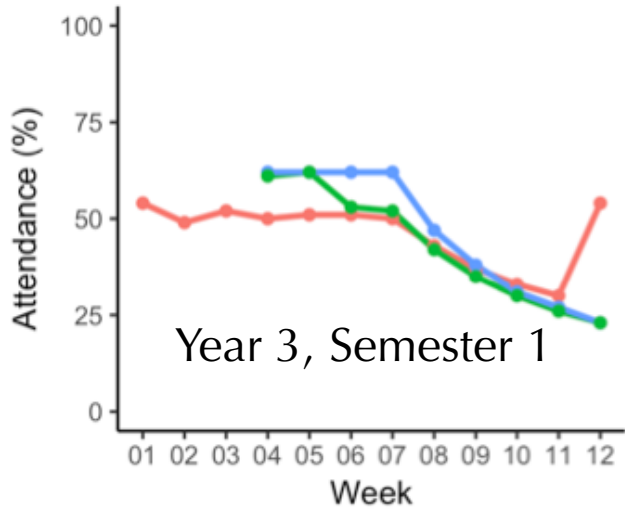
Method - Procedure

- Pilot with Year 1
- Student ID, Timetable, Class Registration defined
- Scanners passed around classes
- Weekly extraction of scanner data and processing
- Analysis by Module, and by Personal Tutor
- Automatic emails to students (>3 non-attendances), module leaders and personal tutors

Results



Results



Module Variability in Attendance

- Semester 1 mean attendance showed **two** significantly different (Chi-squared = 83.39, $df = 12$, $p < 0.0001$) groups
- Semester 2 mean attendance showed **three** significantly different (Chi-squared = 78.29, $df = 11$, $p < 0.0001$) groups

Student Feedback

Negatives

“The [staff member] forgot to record the data”

“I lost my ID card”

“I was in that class”

Positives

“Thank you for getting in touch, I’m sorry, I’ll do better”

“Yes, I have ongoing health issues”

“I know, I’ve re-arranged work to enable me to get to classes”

Discussion

- System provides far more consistent and accurate (within limits) data
- Reduced staff workload for ad-hoc recording
- Prompted an institutional review of practice
- Visa-dependent requirements are easily met
- Better engagement with 'at risk' students
- Alternative data collection methods? Gaming will occur
- Supportive not punitive 'ethos', although the potential exists

Conclusions

- System works well
- It is being considered for School adoption (other six departments)
- Better 'connection' and potential for 're-engagement' with students
- Next steps, relate attendance data to performance from the last session