

# Monitoring Students' Engagement with Mathematics at Third Level

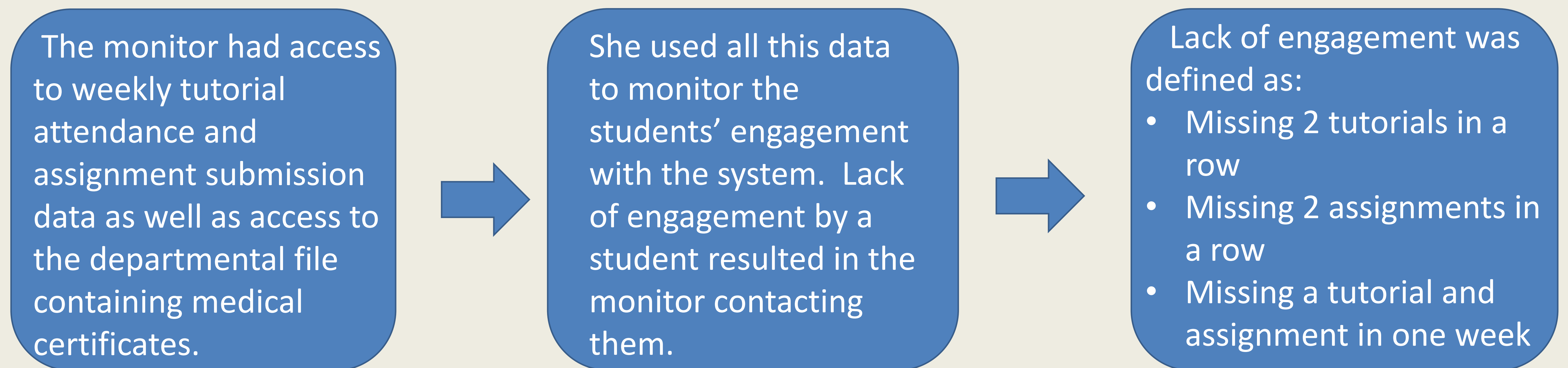
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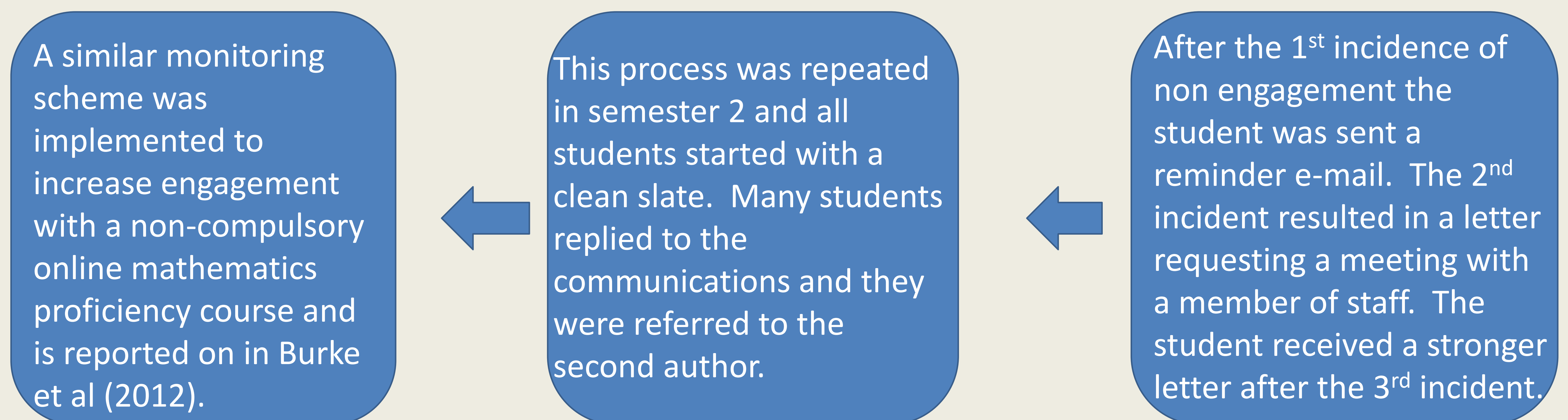


## Abstract

We present an overview of a monitoring scheme which was set up in the 2010-11 academic year by the Department of Mathematics and Statistics at the National University of Ireland Maynooth to increase students' levels of engagement. We monitored first year students' submission of assignments, their attendance at tutorials and their engagement with an online mathematics proficiency course. Students who failed to engage appropriately were contacted by the department. The contact was initially by email, but then progressed to a meeting with a member of staff, and onto a letter from the head of department for students who continued with their pattern of non-engagement. We will describe how the monitoring project operated and present evidence that it has significantly increased levels of engagement.



## Method



## Results

We considered the impact of the monitoring scheme on attendance levels and submission rates by comparing the behavior of students in the year 2010/11 (when the scheme was in operation) to their counterparts in 2009/10 (when there was no effort to contact students who were not engaging).

Highest type of correspondence warranted

Year	2009/10	2010/11
<b>No Contact</b>	291 (51.2%)	332 (61.1%)
<b>E-mail</b>	109 (19.2%)	121 (22.3%)
<b>Letter 1</b>	47 (8.3%)	40 (7.4%)
<b>Letter 2</b>	121 (21.3%)	50 (9.2%)
<b>Total</b>	568	543

When we compared attendance and submission rates for the years 2009/10 and 2010/11 we found that there is a significant difference between the mean number of assignments submitted in Semester 1 (t-test,  $p=0.007$ ), and in the number of tutorials attended (t-test,  $p=0.002$ ). In both cases, the mean is significantly higher for the 2010/11 group.