

Nobi Group Case Study

HIGHER EDUCATION | Improving Academic Performance

CASE #1

By The Numbers:

19

INTERVENTIONS
TESTED

524,288

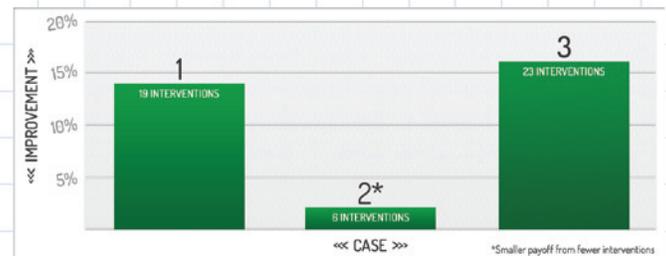
COMBINATIONS

14%-ile

IMPROVEMENT

Nobi pioneered improvement of mathematics education in 2012, helping to achieve a 10.3%-ile shift in nation-wide comparisons. This initial work paved the way for new applications at the university level, with three separate projects aimed at increasing student performance. Each statistical design took a single semester, with class sizes varying from about 30 to over 150.

Findings across the three universities included: new tutorial formats, reworking assignments to provide stronger foundation of knowledge for remaining studies, study management tools, extra lectures, faculty changes and informal tutorials, with additional pairs of tactics found synergistic.



Expert ranking of these findings pre-study averaged about 7, from an average of 16

interventions tested. One of the strongest changes had been ranked almost bottom. So, conventional wisdom ranked the proven helpful findings about a third of the way down the list. The same experts came up with all the winners – but they were impossible to rank. Had experience been used to decide which few to implement, the most innovative solution would have missed.

CASE #2

By The Numbers:

6

INTERVENTIONS
TESTED

512

COMBINATIONS

2%-ile

IMPROVEMENT

An interesting conclusion was discovered. Telling students to attend a specific helpful seminar hurt attendance. Letting the word spread informally was more effective. That then became the standard. No surprise, when one considers how people really “tick”.

A vital reason for Nobi’s standard laissez-faire approach, but with clear and deliberate intent rather than any sense of lackadaisical management-- was that human subject testing has to recognize voluntarism in its subjects. Students have to be free to take an intervention or leave it. Of course, one could not design the study by asking for volunteers. This would bias the sample and therefore the “findings”.

CASE #3

By The Numbers:

23

INTERVENTIONS
TESTED

8,388,608

COMBINATIONS

16%-ile

IMPROVEMENT

Nobi’s techniques allow for real-world studies, which upon implementation, achieve the study’s predicted improvement. So the study was perfectly managed by allowing participants to act as they would naturally. The study design captures that dynamic, using sophisticated statistical design and recognizes the unique nature of human subject testing.

There was early concern over whether the studies were playing roulette with students. In fact the studies stopped any accidental and well-intentioned roulette. All tactics tested were similar to those tried every year. Further, as noted earlier, this form of study design usually brings improvement during its course. It was easy to show that all students had been advantaged in this way. Then, when implementing with the next year’s students, all those students were more fully advantaged.

