Getting a leg up over the coding barrier: pre-start programming bootcamps for Stage 2 students’

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General and Computer Science context
Bootcamps
An OU bootcamp
Quantitative analysis
Your experiences
The problem

“Sophomore” or second year slump

• Skills gap
• Study time gap
• Serious programming
The CS problem

Some UK HEA facts and figures:
A sector-wide continuation rate of 91% in CS is one of the lowest;
At 60%, CS is at the bottom end of the table for percentage of students achieving a first or upper second;
A higher percentage of men (7%) than women (5%) withdrew without their award across the sector;
Men make up 43% of the student body as a whole but over 80% of CS students.
Bootcamp or Bridging programmes

Concurrent modules during first year
‘Just in time’ before second year
Recap activities
Bootcamp candidates

Deciding who would benefit most

• Using pre-HE entry data
• Using HE Year 1 data
• Non-selective offering
The OU computer science context

Computing & IT qualifications

• All pathways include programming
• Common Stage 1 curriculum

Rate and content of study

• Variable
• Joint honours

Why a bootcamp?
OU Programming bootcamp

When?
• September

What?
• Online - VLE
• Week-long
• Tutor supported
• Quizzes
Student feedback

‘I have only a little programming experience so I found the booster to be both a refresher and a foundation for further study.’

‘I'm glad I chose to participate actively in forum discussions as it allowed me to gain valuable feedback about my programming techniques.’

‘After a few months off for the Summer break, I found this bootcamp to be very handy to get back into the groove of things and I believe I am now ready to begin my year 2 modules.'
Does performance at Stage 1 make a difference to bootcamp registration by whole cohort?

Stage 1 Bootcamp registration for whole Stage 2 Cohort (15J) showing relative % in each band

- % of Students (No)
- % of Students (Yes)
- Total No Students
Did Boot camp help?

Stage 2 performance compared with Stage 1 bootcamp completed

Average % Scored

Stage 2 Score %

0-9 10-19 20-29 30-39 40-49 50-59 60-69 70-79 80-89 90-100

No Students

Stage 1 average  Bootcamp Score (%)  No. Students

The Open University
Did Boot camp help?

Performace at Stage 2

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<thead>
<tr>
<th>Stage 2 Score</th>
<th>No Students</th>
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<td>0-9</td>
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- No Bootcamp
- Bootcamp
- No show
Discussion

Do you offer a bootcamp or similar activity to students? When does it take place? What are the student selection criteria? Is it successful?
References


