

# Department of Computer Science, University of Otago

UNIVERSITY  
of  
OTAGO



*Te Whare Wānanga o Ōtāgo*

---

Technical Report OUCS-2018-02

## **Outcomes in introductory programming**

Author:

**Anthony Robins**

Department of Computer Science, University of Otago, New Zealand



---

Department of Computer Science,  
University of Otago, PO Box 56, Dunedin, Otago, New Zealand

<https://www.otago.ac.nz/computer-science/research/publications/reports/index.html>

**Please cite as:**

Robins A. V. (2018) Outcomes in introductory programming. Computer Science Technical Report, OUCS-2018-02, The University of Otago. <https://www.otago.ac.nz/computer-science/otago685184.pdf>

# Outcomes in introductory programming

Anthony V Robins  
anthony@cs.otago.ac.nz  
Computer Science, The University of Otago

## Introduction

Welcome reader. This technical report is best thought of as an appendix to my chapter on introductory programming (Robins, 2019) in *The Cambridge Handbook of Computing Education Research*. It is intended to evolve into further discussion of the issue of outcomes in introductory programming courses (and for novice programmers in general). I had hoped to have something of interest in here by the time the Handbook was published, but (as usual) "things" got in the way, and I haven't made any progress yet. However, I will be working on this document, so it is worth checking back later...

## Some example data

I'm interested in data that relates to outcomes in introductory programming courses. One interesting looking data set is from the American "Advanced Placement" exams: [https://en.wikipedia.org/wiki/AP\\_Computer\\_Science\\_A](https://en.wikipedia.org/wiki/AP_Computer_Science_A)

There are many caveats about how to interpret this data (I will add notes from an interesting discussion with the Mark Guzdial and Brian Dorn), but it may be interesting to compare AP results for programming to those for other topics.

Comments and suggests welcome to the email address above.

To be continued!

## Version history

- 0.0 (7 May, 2018): First placeholder notes.
- 0.1 (22 Feb, 2019): Revised placeholder notes.

## References

Robins A. V. (2019) Novice programmers and introductory programming. In S. A. Fincher & A. V. Robins (Eds), *The Cambridge Handbook of Computing Education Research* (pp. 327 - 376). Cambridge, UK: Cambridge University Press.