

Assessing Coding and CT

UON Computer Science 4 Schools

Introduction to Coding and Computational Thinking

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Presentation Contents

- Bebras
- Project Quantum
- Dr Scratch
- Debug Its
- Parsons' Problems

Bebras

- Challenge with Computational Thinking questions
- Run twice annually in Australia
- For Year 3 to Year 12
- [Bebras 365](#)
- Solution Guides

Project Quantum

- A large question bank
 - Not just Coding and Computational Thinking
 - general Digital Literacy as well
- Involves registering a Diagnostics Questions account
- Computing at School is one of the main contributors

Dr Scratch

- Online tool for automatic assessment of Scratch programs
- Analyses a Scratch program and gives mark out of 21
- Not ideal for measuring students' understanding
- Tool to support reflection and self-evaluation

Debug Its

- Created for the [Creative Computing Curriculum Guide](#)
- [Scratch programs](#) which have some problem
- Students try and find the cause of the problem and fix it ([debugging](#))
- There are Studios of [Debug It](#) problems from CC:
 - [Unit 2 \(Animations\)](#)
 - [Unit 3 \(Stories\)](#)

Parsons' Problems

- Mixed up snippets of Code
- Low cognitive load - don't have to recall syntax
- Students can focus on Computational Thinking
- Mostly used for Text languages
- Could be used for Blocks languages as well
 - Example in Scratch