“Why Can’t I Learn Programming?”

The Learning and Teaching Environment of Programming

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Pedagogical Background

Bloom’s taxonomy
Curriculum designs
Classroom practice

Learning Pyramid
Teaching methods
Learning Activity Unit
a Quick Analysis Tool

Initial learning

- Active
- Moderated
- Passive
Learning Activity Unit
a Quick Analysis Tool

1. Initial learning
2. Trying
3. Experimenting
4. Pause
5. Using

Active Moderated Passive

Repeating
Modifying
Creating
Learning Activity Unit
a Quick Analysis Tool

1. Init AMP
2. Try
3. Exp
4. Pause
5. Use

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Learning Activity Unit
a Quick Analysis Tool

1. Init AMP
2. Try
3. Exp
4. Pause
5. Use

Home Work
Portion of Informatics in the Curriculum

- Literature
- Languages
- Maths
- Society
- Nature
- Geography
- Arts
- Informatics
- Life Skills
- PE

Legend:
- NC2007 min
- NC2012 min
- Syllabus 2012
- NC2007 max
- NC2012 max
Learning in School

• National Curriculum
• Frame Syllabus

1. Init AMP
2. Try
3. Exp
4. Pause
5. Use

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1. Init AMP
2. Try
3. Exp
4. 

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Code Week...
(15.10-23.10)

- Scratch activity (example)
  - 2014
  - 2015
  - 2016

- Efficiency
  - Very interesting
  - Interesting
  - Boring

Company’s teaching action
Hour of Code
Coding Girls
The Base of Programming

Prerequisites

Abstraction  English  Algorithmic thinking  Typing  Logic decision

Personal Level of Knowledge and Skills
Teaching programming

• Long term
• Customization
  – Custom methods
  – Custom learning paths
• Improve thinking process, creativity