Programming education for non-technical students using children’s media authoring environment

Toshiyuki Takeda
Kwansei Gakuin University, Japan
takeda@kwansei.ac.jp

Abstract: Since 2002 Kwansei Gakuin University, Japan has tried to use media authoring environment created for children (Squeak, Cricket LOGO and Scratch) for computer programming courses (formal / informal) for non-technical students. As “Fluency with Information Technology” (Snyder, 2003) says algorithm thinking and computer programming are essential to be fluent with IT. However, most students are not familiar with and sometimes dislike computer programming. Media authoring environments designed for children are suitable for our goal because students can make a script on graphical user interface (such as tile scripting) without typing and can make their own dynamic contents with multimedia (text, image, audio and video).

This presentation shows how we developed curriculums using media authoring environments and evaluation for environments including comparison with traditional (commercial) programming language environments.