

Teaching Tip

**CFC (Comment-First-Coding) – A Simple yet Effective
Method for Teaching Programming to Information
Systems Students**

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ABSTRACT

Programming courses have always been a difficult part of an Information Systems curriculum. While we do not train Information Systems students to be developers, understanding how to build a system always gives students an added perspective to improve their system design and analysis skills. This teaching tip presents CFC (Comment-First-Coding) – a method for assisting students with information systems design and development tasks where a significant portion of the goal is to actually build the system using a programming language and development environment. CFC uses a scaffolding strategy for building programs where the using the comment construct of the programming language. In CFC, the first step students perform is to describe the programming task via plain English (or any other natural language) inside comments. The CFC process strategically and incrementally builds on this method to gradually add functionality and complexity to the program, while allowing the student to compile and test every individual step. In multiple offerings of a sophomore level data structures course, this method has provided evidence of improved student performance.

Keywords: Programming, Application Development, Scaffolding, Coding, Assisted Program Design.