TAX RETURN PREPARATION PROBLEMS IN ACCOUNTING CLASSES: AN INNOVATIVE APPROACH TO GENERATING MULTIPLE PROBLEMS AND SOLUTIONS

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ABSTRACT

Accounting instructors often assign tax-return preparation problems to teach students how to apply tax concepts in "real world" settings. The AICPA Model Tax Curriculum Task Force also recognized the importance of tax return preparation skills by including it as an objective of its six semester hour Model Tax Curriculum (AICPA 1998). Widespread inclusion of tax form problems in textbooks and/or supplemental material corroborates their popularity as an instructional tool. However, use of these tax return problems is not free from problems. The paper discusses these problems faced by instructors who teach undergraduate tax courses and proposes and demonstrates software specially written for this purpose to take care of the shortcomings.

INTRODUCTION

Tax instructors often assign tax return preparation problems to teach students how to apply tax concepts in a "real world" setting. A review of current undergraduate taxation textbooks (e.g., Hoffman et al. 1998; Pope et al. 1998; Willis and Davis, 1998) indicates that the inclusion of tax form problems in textbooks and/or supplemental material (e.g., Frankel 1996) is widespread and attests to their popularity as an instructional tool. In addition, upon recommendation of the Accounting Education Change Commission, the Model Tax Curriculum Task Force of the AICPA recently identified knowledge skills needed by public, private and governmental employers of accounting graduates and developed course syllabi based upon those identified needs. Their objectives included enabling students to prepare tax returns using software.

The use of tax return problems to simulate a "real world" setting suffers from some limitations. First, most textbook problems are narrative, with the required information presented to the student in the order it is needed to complete the assignment. That is, the problems are structured problems. Students are not required to sort through taxpayer records to determine what is relevant to the preparation of a tax return. Nor do they become familiar with the forms on which items of income, deduction and withholding are reported.

Another problem is that there may be a mismatch between the content and complexity of textbook problems and the knowledge of students based on content of the course. Textbooks

provide either end-of-chapter tax return problems or comprehensive tax return problems in an appendix. These problems may encompass material that the instructor has chosen to omit from the course or, conversely, may not encompass material from an earlier chapter that the instructor would like to have in the problem.

Finally, there may be a lack of instructional control due to student collusion or the generation of a "correct" solution. These problems exist because instructors often assign the same problem to all students. Students may work together despite the admonitions and efforts of the instructor. This problem is exacerbated by the availability of tax preparation software at relatively low prices. The danger to the students who collude or successfully acquire a solution is, of course, that they fail to profit fully from the exercise.

We attempted to address these potential problems by designing a tax "generator/solver" using integrated spreadsheet, word processing and database-management applications. The generator/solver uses a random number generator to design a tailor-made tax return problem depending on the instructor's needs. The first phase, which has been completed, entailed writing a Visual Basic 4.0 program to provide the Single Document Interface (SDI) needed for the application (see Appendix A). The interface establishes link to an MS-Excel spreadsheet and provides the capability of printing the spreadsheet. Two different modules written in VB 4.0 are attached to the partly pre-formatted 1040 look-alike. Module 1 (Appendix B) enforces the constraints or parameters set by the instructor. Module 2 (Appendix C) provides the "auto-execute at load" feature. At the present time, the instructor is able to set upper and lower bounds on certain items (e.g., Wages, tips, etc., in line 7 greater than $20,000 and less than $100,000), run the application, and generate solutions for several projects.
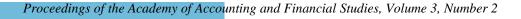
The second phase of the development process will link the present interface to an MS-Word application to create the W2s, the 1099s, and other supplementary material. Finally, we propose to link the application to an MS-Access database, which will contain the various tax-tables.

Thus when complete, an instructor would be able to specify all the constraints and generate W2's, 1099's and other supplementary material, and a completed 1040 according to the specifications of the instructor.
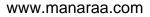
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