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UTILIZATION OF COMPUTERIZED TAX RESEARCH SERVICES IN THE TAX RESEARCH CURRICULUM

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ABSTRACT

in general the use of microcomputers, electronic spreadsheet, tax preparation and tax planning software programs are becoming an integral tool in public accounting and industry. For the tax practitioner, skill utilization of a tax database for computer assisted tax research is essential

This paper provides an overview of computerized tax research systems and furnishes information which will be helpful in incorporating computerized tax research into the curriculum of a tax research course. General information on computerized tax research systems, procedures and resources available to instructors are discussed.

INTRODUCTION

A course in tax research is offered at most institutions which offer a graduate degree in taxation [1]. Typically, the course is required early in the graduate tax curriculum. A primary objective of the tax research course is to provide students with knowledge about how to access and evaluate the tax authority which must be utilized for the resolution of tax issues. With the tools developed in the tax research course the students can do successful research in the various specialized areas of taxation,

The task of performing competent tax research would be challenging even in a static environment. However, the federal income tax laws are by no means static. The 1986 Tax Reform Act was the most significant change in 50 years but by no means the only change. In fact it was the sixth major tax bill since 1976. Fortunately tools are available to the tax researcher which are of great assistance in sorting through the quagmire of tax information. One of the tools available to the tax researcher is the computerized tax service. A recent survey indicates that the use of computer assisted tax research by Big Eight CPA firms are growing rapidly [8]. Other studies also indicated increasing utilization of computers by business firms [5].

In general the use of micro computers, electronic spreadsheet, tax preparation and tax planning software programs are becoming an integral in public accounting and industry.

For the tax practitioner, skill in utilization in a tax database for computer assisted tax research is essential. Yet a 1985 survey revealed that less than 10 percent of the responding institutions were utilizing a tax database [2].

There is an urgent need to integrate computers into accounting programs. AACSB accreditation standards require "A basic understanding of the concepts and applications of accounting, of quantitative methods and management information systems including computer application". For accreditation of accounting programs, accounting departments are required to provide information on computer application in accounting course work, beyond

those courses included in the business common body of knowledge (e.g. Computer Information Systems) [1]. Additionally, members of the accounting profession have expressed the opinion that accounting programs have a responsibility to provide computer literacy. "Accounting curriculums should reflect the premise that the accounting function will increasingly be based upon computerized information systems." [4]

Integration of computerized tax research into the graduate tax course work can provide students with hands-on computer experience in solving tax problems. Research cases can be either hypothetical or drawn from real world experiences. This will further enhance the link between experiential learning in the classroom and practical application in the work place. The knowledge gained and procedures utilized in performing computerized tax research can be directly transferred to practice.

The purpose of this paper is to provide an overview of computerized tax research systems and to furnish information which will be helpful in incorporating computerized tax research into the curriculum of a tax research course. General information on computerized tax research systems, procedures and resources available to instructors will be discussed.

BACKGROUND

The ability to conduct meaningful, effective tax research is the cornerstone on which a sound graduate tax education is built. The authority which a tax researcher must consult to answer complex tax law questions can be overwhelming. Computerized Tax Research Services (CTRS) have several features which greatly enhance the speed and efficiency of the tax researcher. The seemingly limitless storage capacity of the computer provides the opportunity for the most comprehensive set of research materials conceivable. The expense and space considerations which may restrict a library from providing extensive tax research material are not as significant of a factor when a computerized data base is utilized. With a CTRS, a screen, keyboard and printer allows almost instantaneous transmittal of any tax authority material to remote terminals. In addition to the speed with which material can be gathered, CTRS also allows the individual tax researcher to tailor queries based on key words selected by the researcher, that is the researcher creates the indices and is not limited by the topical index or citation of a manual tax service.

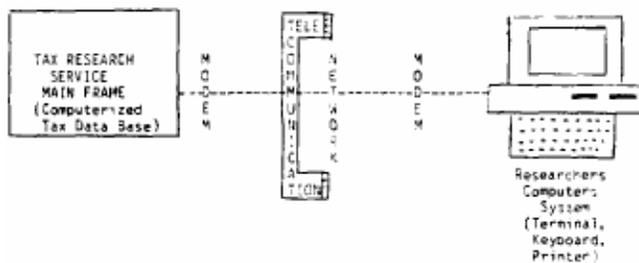
There are three computerized tax research services. LEXIS, a product of Mead Data Central, PHINet, a product of Prentice Hall and WESTLAW, a product of West Publishing Company. LEXIS is the dominant service among CPA Firms, although the PHINet market is growing [8]. The three services differ to some extent in terms of their data bases, format and the mechanics of conducting a data base search. All

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three services provide most all the primary 18% authorities; Internal Revenue Code, Legislative Histories, Regulations, Revenue Rulings and Judicial decisions. LEXIS and WESTLAW also contain many non-tax legal libraries while PHINet includes the full Prentice-Hall Federal Tax Service. All three services function in similar manner and produce essentially the same results.

The tax data bases the CTRS can be accessed via microcomputers for special-use terminals. Once online the data base information can be retrieved in a number of ways. Access to tax authority and related information is most commonly achieved through a keyword or key phrase approach. Other options are available such as citation of a particular code section, court case or other authority. Regardless of the search command approach utilized once the query is transmitted it will be processed, with the appropriate libraries searched for the requested information. Documents satisfying the search request are transmitted to the researcher for display on the terminal. The researcher can review and evaluate the information selecting documents to be printed or retained for future reference.

The diagram below illustrates a typical Computerized Tax Research System:



It is through this communication system that the researcher can access the tax database and that the CTRS can disseminate information.

CLASSROOM APPLICATION OF CTRS

Incorporation of a CTRS into the curriculum of a graduate tax research course can be structured in various ways. Tax practitioners typically avail themselves of CTRS as a supplement in traditional research methods [8]. Following the practitioner approach allows the instructor to utilize research cases already proven to achieve desired objectives. Previously created case designed to lead students to explore some specific tax authority relevant to their tax studies can be utilized in the completion of a computerized tax research project.

Regardless of how use of CTRS is structured into a tax research course or which of the three computer services is utilized, supplemental materials exist which will facilitate integration of CTRS into the curriculum. Under a grant from the National Center for Automated Information Retrieval, Professor Kevin Murphy of Oklahoma State University has developed a series of tax research training materials which

supplements the LEXIS CTRS. The materials consist of both manual and computer assisted research exercises. An instructor's guide, intended to assist both the instructor and student learning in utilization of PHINet for computer assisted tax research, is available to those selecting that service. The guide includes example research exercises. The tax research text published by West Publishing Company offers a comprehensive illustration of how to conduct tax research utilizing the WESTLAW computerized tax service [9]. The text also offers in-depth discussion of the other services.

Procedural Information

The basic search strategy utilized in the implementation of computerized tax research is quite similar for all three CTRS (LEXIS, PHINet and WESTLAW). The fact situation presented to the students can be hypothetical or based on real experiences. As with the manual approach to tax research, the researcher must identify the issue(s) or question(s) to be investigated. Next the files to be searched must be selected from the library menu if files. The appendix provides a partial listing of the files contained in the PHINet Research data base with a brief description of each file. The researcher should attempt to select the narrowest file possible which is likely to contain the desired tax authority. To access the pertinent tax authority from the selected file the researcher should generate a list of key words. Select words that are most likely to appear in the documents being searched. The words selected should be significant terms which capture the essence of the issue being investigated. The narrower the term used, the more direct and restricted the search will be. Key words or phrases can be structured in a number of ways. Use of search statements (connectors) can link key words and add flexibility to the search. This skill will become refined through experience. The researcher should perform the tasks of selecting the appropriate file, keywords and connectors before being on-line with the CTRS. When the researcher is fully prepared, the CTRS should be accessed and the desired search requested. When the documents have been retrieved by the CTRS they can be listed, displayed, printed.

Typically, it is most efficient, and least costly, to have a list of "documents retrieved" printed. Using the list, the documents should be perused, noting the documents which merit additional review. If the documents are not available in the tax library, a print command should be submitted. Otherwise, an appropriate notation can be made on the printed list of documents. At this point, the remaining steps in the research process can be completed in the traditional manner. If additional issues arise, the researcher should re-access the CTRS and repeat the above scenario.

SUMMARY

Computerized tax research services are utilized in tax practice as one of the tools for conducting tax research. It provides efficiency and flexibility in accessing primary and secondary tax authority. Over time, tax practitioners will increasingly rely on CTRS as the primary resource for providing tax service to clients. Accordingly, the curriculum of

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graduate tax programs should be structured to adequately prepare students for careers as tax professionals. Additionally, the use of computerized tax packages enhances the students' learning process. Ninety-five percent of the students responding to a survey conducted at St Bonaventure University stated that use of tax computer exercises increased their ability to understand tax concepts and procedures [7].

There are difficulties to overcome in selection and implementation of a CTRS. A significant consideration is the cost of a CTRS. Resources are required for both hardware needs (PC, modem and printer) and the computer data base service. Presently the competition for the university market is quite strong between the three CTRS. Each offers significant educational discounts. The American Taxation Association Computer Usage Committee annually curriculum a survey of the cost components of each service [3].

If it is not possible to secure funding for a CTRS through institutional channels then consideration should be given to seeking outside funding. Certified Public Accounting firms traditionally have provided funds for development of such resources. The CPA firms are aware that if graduate tax programs are to provide students with state of the art background and training it is necessary to provide the opportunity for learning how to conduct computer assisted tax research.

- PB86 IRS Publications for use with 1986 returns,
 - 1984 1984 edition of Prentice Hall's Federal Taxes loose-leaf library
 - 1985 The 1985 edition Prentice Hall's Federal Taxes loose-leaf library,
 - 1986 1986 edition of Prentice Hall's Federal Taxes loose-leaf library,
 - SHEL A special file on tax shelters: includes relevant cases, rulings, and Chide sections, as well as news releases and injunctions of fraudulent, shelters (issued by the Department of Justice).
 - ASTG Prentice Hall's All States Tax Guide loose-leaf service
 - TXTR Prentice Hall's Pension and Profit Sharing loose-leaf service
 - TNTD Tax Notes Today (daily) – the current (today's edition.)
 - FNTH Tax Notes Today (history) -- a compilation of previous editions Tax Notes Today, dating back of May 3, 1986.
- PHINet's Research database files are updated every night to reflect the Latest tax developments.

APPENDIX

PHINET RESEARCH DATA BASE - MAIN MENU

- FED1 Prentice Hall's Federal Taxes loose-leaf library, Volumes 2-10 (current edition)
- FED2 The Federal Taxes Library with the index.
- INDX Index only for the Federal Taxes Library.
- CAS1 Federal tax cases
- CAS2 Federal tax cases as above, from 1924 through 1953.
- CASE All federal tax cases from 1924 to date.
- PLRS Private letter rulings (1977 to date); general counsel memoranda; technical advice memoranda; actions on decisions.
- RULE Cumulative (Current) Bulletin Material: revenue rulings and procedures; IRS news releases announcements and other materials contained in the bulletin.
- FULL A contribution, in one file, of CASE PLRS and RULE; takes no longer to search and is no more costly than any other file.
- TOTL The "global" search file, combining CASE PLRS, RULE, and FED1
- CITE The Prentice Hall Citator, which takes the history of cases and rulings
- TXRF A comprehensive file of current and historical material on tax reform, including the Tax Refund Act of 1986 and committee reports.
- IRML The Internal Revenue Manual.
- PBS4 IRS Publications for use with 1984 returns.
- PBS5 IRS Publications for use with 1985 returns.

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