

# 1 The Challenge of Teaching Information Technology in Public Administration Graduate Programs

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*This chapter first points out the need for a reader on information technology by reviewing the importance given computing education by M.P.A. programs and practitioners. Next, the chapter surveys current textbooks' and general public administration journals' treatment of the topic since 1985. Three highly respected public administration journals and six textbooks are reviewed. The journals are found to barely treat the topic of computing, whether as a main focus or as merely a mention in articles. The textbooks also barely mention computing. In addition, there was no consistent rubric or chapter topic under which computing is discussed. The need for a reader on information technology and computer applications in public administration is apparent. The chapter then turns to the consideration of what hands-on-skills in computer applications should be a mark of a graduate degree in public administration. It is suggested that there are six generic skills with a seventh one on the horizon. Finally, the chapter concludes by briefly discussing a range of issues that public administrators should be conversant with if they are to successfully utilize computer applications in the delivery of public sector services.*

## Introduction

In 1985, a special computing education committee recommended to the National Association of Schools of Public Affairs and Administration (NASPAA) that a sixth skill, comput-

ing, be added to the original five skills that must be taught in a MPA Program. This recommendation applied to the accreditation of schools starting in 1988. Now more than ten years have passed since the original recommendation. It seems an appropriate time to evaluate the progress that has been made and to reconsider what should be taught.

## **Computing Education in MPA Programs**

There have been two published studies that surveyed MPA programs and assessed the level of computing education. Cleary (1990) mailed out questionnaires to 215 public affairs/public administration masters programs affiliated with the National Association of Schools of Public Affairs and Administration in 1989. Of the 80% returned, about one out of four reported that they had a course dealing with information systems/computer skills. The respondents were quick to note that the information systems/computer skills area needed more attention in the future. Yet, 1989 was a long time ago, especially when it comes to the massive changes in the computer field.

Brudney, Hy, and Waugh (1993) did a little more recent survey of MPA programs. Close to 90% of the programs said they use computers in their instruction. Over half of the institutions offer a course in computers, yet only 30% had made computing a requirement. The study also suggested that computing skills need to be taught beyond the typically taught statistical applications.

Without another survey of programs, one can only surmise, pretty safely, that computer use in MPA courses has greatly expanded. But what skills and management issues should be taught?

## **What PA Practitioners Advise in Computing Education**

Four studies surveyed public managers. Lan and Cayer (1994) surveyed administrators in one state. The recommendations were that MPA programs need course work in computer literacy, specifically knowledge of applications and hands-on-skills. The respondents said they use information technology (unfortunately this includes phone and fax) on an average of 56% of their day. The respondents also said that they were involved with the management of the information system, so management issues as well as computer skills are important for PA students.

Crewson and Fisher (1997) surveyed 371 city administrators in the US. In terms of importance for public administrators in the future, 37% of the sample rated computer skills as most important with 57% giving such skills moderate importance. Similar ratings were given by the sample to knowing about computers.

An earlier study (Poister and Streib, 1989) of 451 municipal managers indicates the extensive diffusion of management information systems in the 1980s. Other indications of computer use can be obliquely inferred from usage of such management tools as revenue forecasting and performance monitoring.

A 1988 study of 46 technologically advanced cities was intended to predict the

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