Chapter 1

INTRODUCTION TO THE STUDY

For several decades the world of business and industry has been bombarded by the forces of rapid change--in technology, in job requirements, and in worker responsibility and accountability (McElroy & Thomas, 1981). Concomitant demands for addressing such changes have escalated in intensity during the most recent decade, spurring urgent calls to modernize the U.S. manufacturing base. Consequently, leaders in the key arenas of manufacturing, economic development, and higher education have coalesced to confront the phenomenon of rapid change and to examine its global genesis and impact. The result is a carefully researched and thoughtfully forged consensus among such leaders that the ability of U.S. firms to compete in the global marketplace depends, in large measure, on two factors: (a) the use of computer-based technologies, and (b) the adoption of management practices and principles that emphasize continuous improvement (Jost, 1992; Rodriguez, 1991; Smith, 1990). Moreover, failure to adopt such technologies and practices will eventually lead to industrial obsolescence, loss of market share, and severe cutbacks in production and employment.

Considering this workforce dilemma, what is the role of post-secondary education in resolving it? Nationally, that role centers primarily around post-secondary education professionals working with policy makers and industry leaders to craft curricula and other on-going life-long learning strategies that successfully equip the future workforce to cope with new

technologies and management practices. Accordingly, the role demands that higher education faculty members pay more attention to the changing technologies and practices buffeting industries and to respond by continually updating their curricula materials with current management innovations and technological breakthroughs. At the state level, an even more critical role for community colleges in workforce preparation is emerging. In 1993, a Virginia Community College System (VCCS) task force noted the following:

> The rapidity with which new information is currently formed and transmitted makes it essential for educational institutions to be places where learning is a continual, ongoing process, not only for students in the classroom, but for every person whose charge is to either directly or indirectly provide those students with an education. Faculty, for example, must possess current information in their disciplines in order to provide students with an up-to-date, quality education (VCCS Professional Development Task Force, 1993, p.9).

Clearly, employers are increasingly searching for workers who possess the latest technical skills. Given the rapidly advancing technologies that characterize today's environment, the continual enhancement of community college educators' skills and knowledge in these technologies is essential for the development of curricula that will meet the changing needs of business and industry.

Moreover, in the nation generally and in the Commonwealth of Virginia, specifically, the community college's philosophical grounding and geographical accessibility make it the most

logical deliverer of the technical skills demanded and urgently needed by employers. The Virginia Community College System's mission is to assure that all individuals in the diverse regions of the Commonwealth of Virginia are afforded an on-going opportunity to develop and extend their skills and knowledge through quality programs and services that are financially affordable and geographically accessible. Along with providing affordable and accessible education, another part of the mission of the VCCS is providing quality instruction to individuals. The enormity of such a mission makes it essential that the VCCS employ highly qualified, highly motivated faculty. In addition the System must maintain and nurture a corps of professionals who keep themselves informed about new developments in their various fields, who utilize that information to improve their professional performance, and who continue to function as active, vital supporters of the System's ongoing commitment to quality education (VCCS Professional Development Task Force, 1993). It is equally important to keep faculty excited about their disciplines, knowledgeable of recent developments in related fields, and eager to avail themselves of new teaching techniques and delivery systems (VCCS Professional Development Task Force, 1993).

Only by keeping current with technology can faculty members craft curricula that prepare students for the workplace--globally as well as locally. The challenge confronting the community college system in Virginia is not easy. Consider a southwestern Virginia case in point. In a 1992 study of southwestern Virginia's industry and service providers conducted by Mt. Auburn Associates & Gene, Inc., researchers interviewed and surveyed 660 area manufacturing firms that

employed 52,012 individuals. Two important findings unfolded as a result. First, the researchers noted that "while community colleges have much of the basic machinery and training relevant to meet the needs of local industries, there is a marked deficiency in training and support for advanced technologies" (Mt. Auburn Associates & Gene, Inc., 1992, p.1); second, and equally salient, the authors of the final report observed that "the current technologies and training resources need to be substantially enhanced in order to provide the type and extent of services needed by the region's manufacturers" (Mt. Auburn Associates and Gene, Inc., 1992, p.1). The recommendation that followed was to establish an advanced manufacturing center in southwest Virginia to address the needs of the region--an expensive but critical undertaking.

Although the Mt. Auburn Associates & Gene Inc. (1992) findings typify a widespread and clearly demonstrated need for technological improvement, time and budget constraints all too often have impeded the community colleges' respective abilities to react promptly and judiciously to similar valuable findings and recommendations. Albeit southwestern Virginia subsequently succeeded in establishing its manufacturing center, many community colleges have been unable to keep their faculty members optimally abreast of technological advances. Reduced budgets have tended to diminish the quantity and the quality of the professional development experiences so vital in meeting the community college mission (VCCS Professional Development Task Force, 1993). One result of inadequate technical and professional upgrade experiences may be the feeling of "fatigue--of burnout--that is present on far too many campuses" (Committee on the future of the Virginia Community College System, 1988, p.35). Moreover, even though

community college faculty have engaged in many faculty development activities for years, their perceptions vary regarding the relevance and effectiveness of those activities in which they have participated. The differing perceptions may have issued, in part, from the fact that "Community college faculty members typically teach five or more classes each semester" (p. 35). Differing perceptions may also be related to the influences of particular variables including gender, age, longevity, position, and type of courses taught, on professional development activity. Of these five variables, a significant finding by the VCCS professional development task force (1993) showed that women were significantly more involved in group-oriented activities--such as conference and workshop participation and course work--than men.

"Faculty members, especially those in rapidly developing technical programs, have difficulty keeping abreast of their fields" (Committee on the future of the Virginia Community College System, 1988, p.35). This report added exculpatorily that "faculty are committed to their tasks and generously give of their time to students outside the classroom" (Committee on the future of the Virginia Community College System, 1988, p.35). Subsequently, the professional development task force, in 1993, emphasized the importance of keeping faculty excited about their disciplines, knowledgeable of current developments in their fields, and aware of new teaching techniques and delivery systems (VCCS Professional Development Task Force, 1993).

Statement of the Problem

Despite voluminous published materials in the general domain of professional

development, the related literature pertaining to faculty development of community college instructors--especially in technology and other education-for-work curricula--has been less abundant. The 1993 task force, cited above, found that conference attendance, course revision, and conference planning were the top three faculty development activities in which all faculty participated. Activities with the least participation were book publication, internships/exchanges, and educational or sabbatical leave. This trend indicates that most new professional knowledge has been largely created, learned, and accrued through formal and informal discussions and accounts of personal experiences (VCCS Professional Development Task Force, 1993). Moreover, almost no published studies have surfaced that focus on occupational-technical faculty members in community colleges--specifically, on their perceptions of the role and impact of faculty development on student learning and on the personal benefit to each faculty member.

Although sundry faculty development activities have been catalogued and offered, a consensus has not emerged concerning (a) the appropriate nature and design of such activities, and (b) the extent to which different kinds of activities impact individual participants differently. Smith (1981) indicated that there was a need for more research to determine the perceptions of participants in staff development programs about the usefulness and benefits of various practices. This statement still holds true today, and especially applies to occupational-technical faculty, who must find the right faculty development activity that allows them to stay current with the latest technologies in industry. Hence, the main purpose of this study was to clarify the

issue, in part, by examining faculty perceptions of faculty development activities from a variety of vantage points. First, to what extent do faculty members believe they have personally benefitted from different faculty development activities? Second, to what extent do they believe their participation in the activities benefitted their students?

Research Questions Evolve From Purpose of the Study

The VCCS mission statement insures that all practitioners have an opportunity to develop and extend their skills and knowledge--whether or not they avail themselves of such offerings. The challenge for the VCCS is to create an environment which optimally cultivates and nurtures the acquisition of important new knowledge, skills, and understandings attendant with the fast changing global economy and high tech workplace demands. Therefore, this study was designed to (a) build upon the limited empirical base currently established relative to professional development opportunities available to Virginia community colleges' respective occupational-technical faculty members, and (b) ascertain the extent to which the participants in those professional development activities believed such experiences were beneficial to themselves and to their students. To fulfill this dual purpose, the investigator used both quantitative (census survey) and qualitative methods (semi-structured telephone interview) to gather information and analyze findings related to five research questions:

1. What faculty development activities did full-time occupational-technical faculty members in community colleges participate in during the previous three years?
2. To what extent did the faculty members derive personal benefit from the activities

identified in question #1?

3. To what extent did the participating faculty members believe their participation in the activities has benefited their students?

4. How did faculty perceptions vary by age, gender, and teaching experience in terms of the extent to which they had personally benefited from participation in professional development activities?

5. How did faculty perceptions vary by age, gender, and teaching experience in terms of assessing the corollary benefits their students had derived from the faculty members' respective professional development participation?

Delimitations

The study deals only with the perceptions of full-time, occupational-technical (Business Technology, and Engineering and Industrial Technology) community college faculty in the Commonwealth of Virginia. These fields were selected because they are the two occupational-technical fields that are greatly affected by technology.

Definition of Terms

For the purpose of this study, the following definitions will be used:

1. *Community college*: A two-year, publicly supported, post-secondary institution of higher education.

2. *Faculty development*: The broad range of programs and activities used by institutions to assist or renew faculty in their various roles. Faculty development in this study refers to any

kind of professional, instructional, organizational, and personal development.

3. *Full-time faculty*: Persons who have been appointed full-time appointments at a community college.

4. *Professional development*: As stated by the VCCS Professional Development Task Force (1993), "professional development" refers to a single aspect of faculty development, specifically, the part which has to do with increasing or improving professional knowledge and skills.

5. *Staff development*: In this study, the phrase will be used synonymously with faculty development. Some researchers use the term to include faculty and all other staff.

Significance of the Study

The findings from this study will assist institutions as they attempt to design and craft faculty development experiences with optimal value for extending and developing the skills and knowledge of occupational-technical community college faculty members in Virginia. For example, understanding the perceptions of occupational-technical faculty regarding the personal benefits and student benefits of faculty development activities will enable planners and program designers to tailor--or redirect or create anew--numerous current and future development experiences and programs to better address the participants' needs. Moreover, the design of activities can then be sufficiently flexible and modifiable to better meet the demands of the just-in-time, high-tech oriented businesses and industries. Such on-going, carefully designed offerings will enable faculty members to remain effective instructors and productive professional staff

members indefinitely. Thus the study has facilitated the achievement of one VCCS goal--to offer practitioners an array of activities designed to continually enhance and hone their technical and instructional skills. In addition to benefiting the faculty members directly, participation in such carefully designed activities will indirectly transfer benefits to their students, as faculty members harness new technologies and adopt differents methods of instruction into the classroom.

Chapter Summary

This chapter began by outlining the historical context that frames today's education-for-work challenges--especially the challenges that center around professional development in the arena of occupational-technical faculty at community colleges. Such faculty currently confront dual, intense demands of navigating heavy teaching loads while simultaneously mastering the fast-changing technology so indispensable to modern business and industry. Although numerous faculty development activities have been designed and offered for the purpose of assisting the faculty in discharging their dual demands responsibly, few assessments of the benefits of those activities have been undertaken. The remaining chapters of this study delineate more carefully (a) the current status of the research concerning professional development for occupational-technical faculty in higher education; (b) the methodology used in answering the five research questions in the arena of occupational-technical faculty development; and (c) how the findings from this study can enable policy makers and leaders in education to reinvigorate and refine faculty development activities for maximum personal benefit to the faculty members and, more

importantly, to the students they are charged with amply equipping for the challenges of the 21st century workplace.