

Volume 1 No. 1 / 2003

National Accounting Research Journal



FACULTY OF
ACCOUNTANCY
UNIVERSITI TEKNOLOGI MARA

Hadiah

UiTM
(PERAKAUNAN)

ISSN 1675-753X

Contents

Preface by

DATO' SERI PROF. DR. IBRAHIM ABU SHAH i
Vice Chancellor
Universiti Teknologi MARA

PROF. DR. IBRAHIM KAMAL ABDUL RAHMAN ii
Dean
Faculty Of Accountancy
Universiti Teknologi MARA

UiTM AT A GLANCE iii

**The Applications Of Management Accounting Techniques
In Malaysian Companies: An Industrial Survey** 1
Ibrahim Kamal Abd Rahman, Normah Omar, Zubaidah Zainal Abidin

**Competition Policy Issue In Drug Companies: A Management
Accountant's View** 13
Tengku Akbar Tengku Abdullah

**Assessing Business Zakat At Pusat Zakat Selangor: Between
Theory And Practice** 33
Rashidah Abdul Rahman, Rohila Awang

**Quality Monitoring Of The Accounting Profession: Are We
Ready For Peer Review?** 49
Normah Omar, Mohd Johari Alwi, Zaini Ahmad

**Perceptions Of Public University Accounting Graduates On
Skills Necessary For Workplace** 67
Mustafa Mohd Hanefah, Samihah Hj. Ismail

**An Empirical Study On Computer Literacy Among Bachelor
Of Accountancy Graduating Students In Malaysian Public
Higher Institutions** 81
Siti Noor Hayati, Mohamed Zawawi, Rashidah Abdul Rahman

Ethics And The Accounting Profession In Malaysia
Muhammad Adam Bakar, Maisarah Mohamed Saat, Ainun Hj. Abdul Majid

Mustafa Mohd Hanefah
Samihah Hj. Ismail
School of Accountancy
Universiti Utara Malaysia

Abstract

Many researchers have debated the relevance of accounting curriculum to the employers in the U S and other developed countries. Accounting graduates are said to lack various skills that are important in today's job market. Among them are technological skills, oral and communication skills, and professional skills. This phenomenon is not only common in developed countries, but also in the developing countries like Malaysia. In Malaysia, graduates from local universities and colleges are facing unemployment due to the lack of such skills. Although the Malaysian economy is performing better than other countries in this region, yet the unemployment rate among graduates is still high.

The main objective of this research is to study the perceptions of the Malaysian graduates toward professional and technological skills that are vital for accounting graduates. The results indicate that a majority of the respondents strongly perceived that accounting curriculum should give high priority to certain professional and technological skills. This include English language, analytical/critical thinking, business decision modelling, interpersonal, negotiation, teamwork, oral and written communication, and risk analysis.

Professional skills that were perceived to be important by the respondents include accounting software, communication software, database software, electronic commerce, file and directory management, information systems planning and auditing, presentation software, spreadsheet, technology security and control, windows, word processing software, and worldwide web tools. Based on the findings, implications for accounting education are also discussed.

1.0 Introduction

The accounting educational processes in academia and in the accounting profession have become increasingly more complex due to the continually changing business environment. Due to the rapid change in the business world, the accounting profession is forced to keep pace with the changes in order to provide relevant professional accounting services to its clients. Accountants are required to possess knowledge and skills to meet the dynamic changes in the corporate world. This is simply because the business environment in the new millennium can be characterised as keenly competitive, global, technology-intense and dynamic. But most prospective accountants are trained in colleges and universities. Thus, the relevant question is whether the current accounting curriculum is able to produce graduates with the necessary skills and knowledge to meet the new challenges?

In the U.S., the American Accounting Association (AAA), a professional organization for accounting educators, appointed a commission in 1984 to study the relevance of accounting curriculum to the accounting profession. The Bedford Committee released its report in 1986. The report concluded that university accounting programs have failed to recognize the extensive changes taking place in technology, in societal values, and in social, government, and business institutions.

The study also identified several skills and knowledge competencies that should be taught in accounting programs. A traditional lecture-based classroom where only content was conveyed was criticized. Among the recommendations, the report stated that accounting should be viewed as a broad economic information development and distribution process as opposed to a narrow perspective. In 1989, the Accounting Education Change Commission (AECC) was established to study and implement the necessary changes in the accounting education. Even this commission's study found that accounting education was not keeping pace with the changes in the profession.

Many related studies were carried out following the findings of the Bedford's Committee and the AECC's study. This include the Big Eight White Paper, 1989 entitled 'Perspectives on Education: Capabilities for Success in the Accounting Profession'; the Institute of Management Accountants study in 1994, and the American Institute of Certified Public Accountants' (AICPA) 'Vision Project in 1988'. The White Paper, dubbed the Perspectives, called for a thorough curricular change and a dynamic partnership between practitioners and academia to address the educational needs of the profession. The perspectives also stated that emphasis should be placed not only on the presentation of relevant material, but also on the compounding of learning by appropriate combination across course and departmental lines.

The Vision Project 1998, on the other hand, identified several core competencies important for the accounting profession. They include human skills, knowledge, and technology that provide value and results to the users. According to a recent survey by the Malaysian Employers Federation (MEF), the national tertiary education system has several flaws that prevent local graduates from getting jobs that match their qualifications. Graduates lacked attributes necessary to land the right jobs. The attributes include communication skills, ability to converse in English, creative thinking and the ability to carry themselves socially (The Star, August 5, 2002). Studies concerning skills and competencies among new accounting graduates in the developed countries and various others motivated the researchers to carry out this research.

2.0 Review of Literature

Many researchers have carried out studies on this subject. Porter and McKibbin (1988) found that most accounting programs follow a pedagogical model developed decades ago whereby students are taught business concepts through functional areas such as accounting, management, marketing, finance, etc. These students are therefore being inadequately prepared for a cross-functional world. Patten and Williams (1990) contended that accounting graduates, while prepared technically, were not equipped to meet the challenges of the accounting profession. They suggest that accounting education must be based on a strong interdisciplinary foundation.

Reckers (1996) supported this idea. According to him, prospective accountants were required to possess more diverse (interdisciplinary) skills and a broader management perspective as a result of an increase in the demands for new accounting services. Elliot (1991), on the other hand, argued that the purpose of higher education was to produce knowledge workers. Accounting teachers must, therefore, teach students how to learn rather than what to learn. Accounting educators must consider the changing business environment. This has been studied by many academics.

Deppe et al. (1991) reported that accounting students do not possess the most important competencies necessary for the working environment because these were not taught in colleges. Reckers (1996) presented strong arguments for accounting educators to consider the basic factors affecting accounting programs in today's market; namely customers (who our customers are and what they want) and educators (what are the most effective pedagogical methods and approaches).

Daggett and Liu (1997) surveyed 92 employers of new college graduates about their work force readiness. The findings indicated that technical graduates, including accounting graduates, were least prepared in writing, presenting, and interactive skills, but best prepared in the competencies of entering, manipulating and retrieving

data as well as data analysis and synthesis. Inman et al. (1989) reported that accounting education has a narrow focus that may not permit the development of skills and abilities needed in the accounting profession.

Kryder (1997) identified five core skills vital for accounting and business graduates. They included written business communication, oral business communication, team orientation, computer competency, and multicultural communication. Messmer (1997) also stressed the importance of communication skills, teamwork, and interpersonal skills. Thornburg (1997) suggested a similar set of skills for success: written communication, oral communication, computer knowledge, human relations, problem solving, leadership and delegation.

Albrecht and Sack (2000) undertook a study on this subject sponsored by the American Accounting Association (AAA), the American Institute of Certified Public Accountants (AICPA), the Institute of Management Accountants (IMA), and the Big 5 CPA firms. They suggested that three major changes in the business environment (technology, globalisation, and investor concentration) necessitated a more broadly educated accounting student. They argued that current accounting curricula do not expose students to a broad business education nor do they teach global perspectives and suggested that accounting education should be integrated and students should only be taught relevant things.

Many researchers have studied graduates' perceptions toward curriculum and the importance of skills. These studies concluded that graduates who are one of the most important stakeholders in the accounting programs should provide feedback to their universities on the relevance of the accounting program. Gabbin (2002) suggest that alumni CPAs and accounting educators should have a close relationship. This is important because:

- Accounting practitioners know better than anyone else what the profession has to offer top students.
- Accounting practitioners are in the best position to provide expert insight about the changing nature of the profession and employer needs.

Gabbin further suggested that accounting educators should get regular and systematic feedback from the alumni about the changing business environment and their assessment of an accounting program's strengths and weaknesses. This feedback can help program improvement. Smith and Demichiell (1996) emphasized the importance of surveys of stakeholders in designing new curriculum.

The AAA assessment task force documented the importance of employer/alumni feedback on the curriculum in 1999. The findings revealed that 10 out of the 13 programs surveyed acknowledged the importance of alumni or employer feedback in developing curriculum changes and assessing the success of innovations.

Of the 13 programs, eight used input from both employers and alumni to support curriculum changes. This strongly supports the notion that before any changes are made to the existing curriculum, feedback from the employers and the alumni is important. Feedback from these two groups will also assist in improving the quality of the programs.

The purpose of this research is to study the perceptions of the accounting graduates regarding the skills that are necessary for accountants in their work place. The findings of this study will be useful in the design of a new curriculum by colleges and universities in Malaysia.

3.0 Research Method

A survey questionnaire was used in this study. The questionnaire was based on that used in a previous study (Albrecht and Sack, 2000). Using this as a pilot study, a more comprehensive questionnaire was constructed. Areas addressed by the instrument included demographic information such as respondent's age and gender, years since graduation and organizational information such as industry, and position held by the respondent.

Respondents were asked to evaluate the relative importance of the subjects offered in a curriculum and professional skills that are required by the accounting profession. A five point Likert scale was used to measure the importance of professional and technological skills. One indicated no priority (not important), two, low priority, three, middle priority, four, high priority, and five, top priority. The internal consistency for all the sections was assessed with Cronbach's alpha (Cronbach 1951). The coefficient for professional skills was 0.96, and technological skills, 0.91, indicating high reliability.

Questionnaires were mailed to the respondents based on the addresses provided by the respective institutions, with a postage-paid reply envelope. The cover letter assured respondents that no individual or individual organization would be identified in the description of the study and its results.

4.0 Results and Discussions

Of the 2,274 questionnaires mailed, 381 were returned, but only 374 were used in the analysis giving a return rate of 16.5 percent. Seven were unusable. The respondents were selected randomly from a list of 11,205 graduates provided by the colleges and universities. The database used consisted of graduates who graduated in 1995 - 2000. The low response rate could be due to many reasons, and a number of efforts were undertaken to overcome the problem. Letters of reminders were sent to the respondents, yet not many responded. Family members of the respondents were also contacted to help send the questionnaire to the

respective respondent, but again not many returned the questionnaires. This could be because addresses provided by the institutions were not up to date, and also due to other commitments, the respondents were not keen to participate in this study. Characteristics of the respondents appear in Table 1.

The demographic results indicated that the majority of the respondents were female (63.8 percent), below thirty years of age (83.6 percent), and obtained accounting degree from a local public university (97.8 percent). Only 2.2 percent of the respondents were from the private institutions. The respondents were divided into two groups. A total of 185 respondents held positions as accountants in corporations, Big 5 and non-Big 5 accounting firms. For data analysis, this group was categorized as 'Accounting'. Another 189 of the respondents do not hold position as accountants, but work in government departments, schools and colleges, or manage their own businesses as officers, teachers and entrepreneurs respectively. This second group was classified as 'Non-accounting'.

Table 1: Demography

Gender			
		Frequency	Percent
Valid	Male	129	36.2
	Female	227	63.8
Total		356	100.0
Age			
		Frequency	Percent
Valid	<30	312	83.6
	30-40	54	14.5
	41-50	7	1.9
Total		373	100.0
1st degree obtained			
		Frequency	Percent
Valid	Public	364	97.8
	Private	8	2.2
Total		372	100.0
Annual salary			
		Frequency	Percent
Valid	<20k	145	42.3
	20k-40k	155	45.2
	40,001-60k	27	7.9
	60,001-801k	12	3.5
	80,001-100k	1	0.3
	>100k	3	0.8
Total		343	100.0

		Position	
		Frequency	Percent
Valid	Accounting position in corporations	114	30.5
	Big 5	13	3.5
	Non big 5	58	15.5
	Sub-total	185	49.5
	Governmental position	85	22.7
	Educational fields	22	5.9
	Non-accounting position in corporations	82	18.9
	Sub-total	21.9	50.5
Total		374	100.0

We compared the perceptions of the various occupational groups and a two tailed Mann-Whitney *U* test was used to compare differences related to individual statements. The respondents were categorized into various occupational groups such as working in corporations/industry, Big 5 accounting firms, non-Big 5 firms, government, education, or other non-accounting positions. The mean responses, within-group ranks, and *p* values for the Mann-Whitney test statistic for the attributes are provided in Tables 2, 3, 4 and 5.

4.1 Professional Skills

Most of the literature surveyed argued that accounting graduates today lack professional skills. Besides oral and written communication skills, other skills that should be possessed by graduates include analytical/critical thinking, negotiation, interpersonal, teamwork, risk analysis and others. On a scale of 1 to 5, where 1 is no priority and 5 is top priority, respondents were asked to prioritise the skills that should be possessed by new accounting graduates.

According to both groups of respondents, the most important attributes to be possessed by newly hired accounting graduates are (in order of importance) English language, oral communication, teamwork, professional interaction, written communication, decision making, computing technology and analytical/critical thinking.

The results (Table 2) indicate statistical differences between the two groups for oral communication ($p < .05$) and computing technology ($p < .10$) only. It is no surprise that skills such as written and oral communications, professional interaction, and computing technology are perceived to be very important by the respondents. In performing their work, beside technical skills that are vital to the profession, accountants are required to communicate and negotiate with their clients, government departments and others. Accountants are required to prepare reports that are objective, concise, and clear. In order to communicate the right information to the users of the reports, professionals not only should be able to communicate effectively but also able to use different technologies and media.

Teamwork is also considered to be very important by the respondents. Accountants and auditors are expected to work in groups to accomplish their tasks. As such, teamwork is very important in order to get jobs done on time. Otherwise, accounting and auditing work will face problems leading to delays in preparing their reports. Meeting deadlines is a norm for accountants, and teamwork helps them to complete their tasks as scheduled.

It is interesting to note that those attributes believed to be less important included customer/client orientation, entrepreneurship, resource management, research methods and foreign language (excluding English).

Table 2
Professional Skills by Position (n=374)

	Accounting		Non-accounting		p*
	Mean	Rank	Mean	Rank	
a. Analytical/Critical thinking	3.89	(7)+	3.94	8	.700
b. Business Decision Modelling	3.62	14	3.55	14	.304
c. Computing Technology	3.89	(7)+	4.03	7	.076 ^b
d. Customer/Client Orientation	3.49	15	3.41	16	.319
e. Decision-making	4.08	6	4.15	6	.572
f. Entrepreneurship	3.46	16	3.53	15	.478
g. English Language	4.54	1	4.45	1	.174
h. Foreign Language (excluding English)	2.90	19	2.94	19	.681
i. Interpersonal	3.74	12	3.76	12	.969
j. Negotiation	3.64	13	3.66	13	.923
k. Oral Communication	4.36	2	4.23	2	.021 ^a
l. Professional Interaction	4.27	4	4.19	4	.106
m. Project-Management	3.76	10	3.77	11	.924
n. Research Methods	3.22	18	3.25	18	.970
o. Resource-Management	3.26	17	3.26	17	.997
p. Risk Analysis	3.75	11	3.87	10	.271
q. Strategic Management	3.78	9	3.92	9	.156
r. Teamwork	4.35	3	4.22	3	.782
s. Written Communication	4.14	5	4.18	5	.893

^a and ^b indicate that differences are significant at 5% and 10% levels respectively

* Represents results of a two-tailed Mann-Whitney test. H0: the accounting and non-accounting group have identical population distributions. H1: the two groups do not have identical population distributions.

+ Indicate same ranking for two attributes.

A further analysis by gender also indicated a high ranking for the following professional skills by the male respondents. English language, oral communication, written communication, professional interaction, teamwork, decision-making, and analytical/critical thinking were perceived to be important in the work place.

A similar ranking were given by the female respondents. Interestingly both groups agreed that greater emphasis should be given to English language, oral and written communication, and professional interaction. The two groups also differed in their perception of the relative importance of four attributes; namely (in no particular order), analytical/critical thinking, negotiation, risk analysis and written communication. The results were significant at 0.05 level.

Table 3
Professional Skills by Gender

	Male		Female		p*
	Mean	Rank	Mean	Rank	
a. Analytical/Critical thinking	4.08	7	3.85	9	.015 ^a
b. Business Decision Modelling	3.67	14	3.57	13	.248
c. Computing Technology	4.01	8	3.93	7	.408
d. Customer/Client Orientation	3.48	16	3.41	16	.556
e. Decision-making	4.18	5+	4.06	6	.161
f. Entrepreneurship	3.59	15	3.43	15	.155
g. English Language	4.48	1	4.51	1	.558
h. Foreign Language (excluding English)	2.92	19	2.89	19	.631
i. Interpersonal	3.84	11	3.69	11+	.127
j. Negotiation	3.78	13	3.54	14	.027 ^b
k. Oral Communication	4.35	2	4.25	3	.429
l. Professional Interaction	4.28	4	4.17	4	.428
m. Project-Management	3.82	12	3.76	10	.411
n. Research Methods	3.31	18	3.22	18	.248
o. Resource-Management	3.32	17	3.24	17	.488
p. Risk Analysis	4.00	9	3.69	11+	.002 ^a
q. Strategic Management	3.85	10	3.86	8	.984
r. Teamwork	4.18	5+	4.34	2	.796
s. Written Communication	4.29	3	4.07	5	.032 ^a

^a and ^b indicate that differences are significant at 5 % and 10% levels respectively

* Represents results of a two-tailed Mann-Whitney test. H₀: the male and female group have identical population distributions. H₁: the two groups do not have identical population distributions.

+ Indicate same ranking for two attributes.

4.2 Technological skills

The respondents strongly perceived that accounting graduates should possess technological skills. As a result of the impact of technology on accountants, it is not surprising that the following technological skills are perceived to be critical for accountants. Among them are accounting software, communication software, database software, electronic commerce, file and directory management, information systems planning and auditing, presentation software, spreadsheet, technology security and control, windows, word processing software, and worldwide web tools.

However, certain technological skills were perceived to be not important. They are computer hardware and operations, graphics software, HTML programming, and programming languages. This could be because, accountants are not required to do programming but they need to fully understand the new technologies so as to accomplish their tasks effectively. The two groups also differed in their perception of the relative importance of eight attributes; namely (in no particular order), computer hardware, other operating systems, and word processing hardware. The results were significant at 0.05 level.

The other five attributes were significant at 0.1 level. They are computer operations management, graphics software, information systems planning and auditing, technology management and budgeting, and worldwide web searching.

Table 4
Technological Skills by Position (n=374)

	Accounting		Non-accounting		p*
	Mean	Rank	Mean	Rank	
a. Accounting Software (e.g. UBS)	2.54	5	2.54	3+	.328
b. Communication Software (e.g. email)	2.37	7	2.40	9	.693
c. Computer Hardware	1.83	20	1.90	20	.050 ^a
d. Computer Operations Management	2.03	17	2.12	16	.069 ^b
e. Database Software (e.g. Access)	2.26	10	2.38	10	.736
f. Electronic Commerce	2.22	11+	2.33	11	.211
g. File & Directory Management	2.22	11+	2.22	14	.797
h. Graphics Software (e.g. Adobe)	1.65	23	1.68	23	.098 ^b
i. HTML Programming	1.66	22	1.77	21	.120
j. Intra / Extranets	1.88	18	2.05	18	.616
k. Information Systems Planning & Auditing	2.64	3	2.74	1	.083 ^b
l. Other Operating Systems	2.13	15	2.11	17	.000 ^a
m. Presentation Software (e.g. Power Point)	2.37	7	2.54	3+	.224
n. Programming Languages	1.69	21	1.72	22	.185
o. Project Management	2.18	13+	2.25	13	.82
p. Spreadsheet Software (e.g. Excel)	2.77	1	2.71	2	.767
q. Systems Analysis	2.11	16	2.21	15	.638
r. Technology Security & Controls	2.18	13+	2.29	12	.712
s. Technology Terminology	1.87	19	1.97	19	.651
t. Technology Management & Budgeting	2.40	6	2.43	7	.097 ^b
u. Windows	2.62	4	2.47	6	.102
v. Word Processing Software (e.g. Word)	2.66	2	2.53	5	.039 ^a
w. World-Wide Web Searching	2.31	9	2.41	8	.089 ^b

* and ^b indicate that differences are significant at 5 % and 10% levels respectively.

* Represents the results of a two-tailed Mann-Whitney test. H0: the accounting and non-accounting group have identical population distributions. H1: the two groups do not have identical population distributions.

+ Indicate same ranking for two attributes.

Further analysis according to gender indicates that both groups perceive alike the importance of technological skills that should be possessed by the new graduates. Among them are accounting software, communication software, database software, electronic commerce, file and directory management, information systems planning and auditing, presentation software, spreadsheet, technology security and control, windows, word processing software, and worldwide web tools.

Technological attributes such as intra/extranets, technology terminology, other operating systems, computer hardware, HTML programming, and programming languages perceived to be less important by male and female respondents. These attributes are also perceived to be less important by all respondents, as shown in Table 4 above. It is best that these attributes are not included as part of the accounting curriculum. An accountants need not be an IT expert, but it is important to possess knowledge in this area.

Table 5
Technological Skills by Gender

	Male		Female		p^*
	Mean	Rank	Mean	Rank	
a. Accounting Software (e.g. UBS)	2.59	4	2.53	5	.874
b. Communication Software (e.g. email)	2.37	7	2.40	9	.631
c. Computer Hardware	1.80	20	1.93	19	.243
d. Computer Operations Management	2.02	16	2.13	17	.148
e. Database Software (e.g. Access)	2.34	9	2.31	10	.059 ^b
f. Electronic Commerce	2.33	10	2.26	11	.065 ^b
g. File & Directory Management	2.23	11	2.25	12	.893
h. Graphics Software (e.g. Adobe)	1.61	23	1.71	23	.752
i. HTML Programming	1.66	21	1.76	21	.071 ^b
j. Intra / Extranets	1.95	17	1.99	18	.005 ^a
k. Information Systems Planning & Auditing	2.64	2	2.72	2	.049 ^a
l. Other Operating Systems	1.91	19	2.23	13	.704
m. Presentation Software (e.g. Power Point)	2.43	6	2.49		.007 ^a
n. Programming Languages	1.65	22	1.75	22	.470
o. Project Management	2.23	11	2.22	15	.223
p. Spreadsheet Software (e.g. Excel)	2.74	1	2.75	1	.173
q. Systems Analysis	2.18	15	2.14	16	.145
r. Technology Security & Controls	2.22	13	2.23	13	.115
s. Technology Terminology	1.94	18	1.91	20	.128
t. Technology Management & Budgeting	2.36	8	2.47	7	.752
u. Windows	2.48	5	2.58	4	.013 ^a
v. Word Processing Software (e.g. Word)	2.51	3	2.65	3	.022 ^a
w. World-Wide Web Searching	2.30	8	2.42	8	.085 ^b

^a and ^b indicate that differences are significant at 5% and 10% levels respectively.

* Represents the results of a two-tailed Mann-Whitney test. H₀: the male and female group have identical population distributions. H₁: the two groups do not have identical population distributions.

+ Indicate same ranking for two attributes.

5.0 Summary, Recommendations and Conclusions

The results of this study support the findings of the previous research and expand our understanding of the Malaysian accounting graduates' perceptions of the skills that should be incorporated in the accounting curriculum. Specifically, this study provides evidence that alumni holding accounting and non-accounting positions perceive alike the importance of professional and technological skills that must be incorporated in the curriculum.

The results clearly indicate that areas such as oral and written communications, interpersonal skills, English language, negotiation skills, accounting software, communication software, database software, electronic commerce, file and directory management, information systems planning and auditing, presentation software, spreadsheet, technology security and control, windows, word processing software, and worldwide web tools should be incorporated as part of the accounting curriculum.

Among the technological attributes believed to be less important include intra/extranets, technology terminology, other operating systems, computer hardware, HTML programming, and programming languages. It is highly recommended that these attributes be left out in the curriculum.

To be more effective, universities and colleges should invite IT and accounting professionals to conduct special lectures to their students. The students will benefit most by listening and interacting with professionals from the industry. An internship program should also be incorporated as part of the accounting curriculum. The students should not only be sent to accounting firms but also to various industries to gain exposure. Furthermore, the internship should not only be confined to Malaysia but also to other countries in this region.

The focus of this study was on Malaysian accounting graduates. Future studies should also include the accounting faculty, prospective employers and the practitioners. A comparative analysis should be undertaken to find any differences in their perceptions. Similar studies should also be undertaken by accounting academics in other Asian countries.

References

- American Accounting Association (AAA), Committee on the Future Structure, Content, and Scope of Accounting Education (The Bedford Committee). (1986), "Future accounting education: Preparing for the expanding profession," *Issues in Accounting Education* (Spring): 168-195.
- Albrecht, W.S., and R. J. Sack. (2000), "Accounting Education: Charting the course through a perilous future." *Accounting Education Series*, Vol. 16. Sarasota, FL: American Accounting Association.
- Cronbach, L.J. (1951), "Coefficient alpha and the internal structure of tests," *Psychometrika* 16: 297-334.
- Daggett, P.D., and Liu, W.Y. (1997), "Prepared to perform? Employers rate work force readiness of new grads," *Journal of Career Planning and Employment*, LVII (2), 32-35, 52-56.
- Deppe, L. A., E. O. Sonderegger, J.D. Stice, D.C. Clark, G. F. Streuling. (1991), "Emerging competencies for the practice of accountancy," *Journal of Accounting Education* (Fall): 257-290.
- Elliott, R. K. (1991), "Accounting education and research at the crossroad," *Issues in Accounting Education* 6 (1): 1-8.
- Gabbin, A.L. (2002), "The Crisis in Accounting Education," *Journal of Accountancy* 193, (4): 81-86.
- Inman, B.C., A Wenzler, and P.D. Wickert. (1989), "Square pegs in round holes: Are accounting students well suited to today's accounting profession?" *Issues in Accounting Education* (Spring): 29-47.
- Kryder, L.A. (1997), "Communication skills: What you need to succeed." *New Accountant*, 12(4):12-13.
- Messmer, M. (1997), "Career strategies for accounting graduates," *Management Accounting*, August: 4-10.
- Patten, R.J., and D. Z. Williams (1990), "There's trouble-right here in our accounting programs: The challenge to accounting educators," *Issues in Accounting Education* (Fall): 175-179.
- Perspectives on Education: Capabilities for Success in the Accounting Profession (The White Paper), (1989), Arthur Andersen & Co., Arthur Young, Coopers and Lybrand, Deloitte Haskins & Sells, Ernst & Whinney, Peat Marwick Main & Co., Price Waterhouse, and Touche Ross. New York, NY.
- Porter, L. W., and L. E. McKibbin. (1988), *Management education and development: Drift or thrust into the 21st century?*, New York, NY: McGraw-Hill.
- Reckers, P. M. J. (1996), "Know thy customer," *Journal of Accounting Education* 14 (2): 179-185.
- Smith, S. J., and Demichiell, R. L. (1996), "Survey of stakeholders: A tool for assessing the importance of proposed curriculum changes," *Journal of Education for Business* 7: 325-328.
- Thornburg, L. (1997), "The new crop-recruiting today's graduates," *HR Magazine*, 42(5): 74-79.
- The Star. (2002), "Graduates lack attributes necessary to land the right jobs," August 5.