

# *Perceptions of First-Line Managers in the Manufacturing Sector on Tertiary Accounting Education: A Hong Kong Study*

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*The curricula in tertiary education have become more and more "market-driven" because they are strongly influenced by rigid professional accounting examination syllabuses. This paper explores how accounting education may be improved and re-oriented to effectively train quality professionals to meet the new requirements and challenges of the twenty-first century. A survey of first-line managers in the manufacturing sector was conducted to obtain their perceptions on the general deficiencies and qualifications of accounting graduates. The findings give educators a useful guide as to how future accounting curricula and teaching methods should be planned and modified in order to prepare graduates to cope successfully with a fast-changing business environment.*

## **Introduction**

Accountants in the old days were perceived to be number crunching creatures. As regulatory requirements were stepped up, the accountants' output became more valuable. At the same time, business competition forced businesspersons to look to their accountants for accurate, timely, and relevant information for decision making. It is obvious that the role of accountants is evolving in response to dynamic business environment.

An opinion survey was carried out and reported in this article. This survey was an extended study of the research conducted by Ng in 1993. That study (Ng, 1993) along with the studies by Ng and Ho (1992, 1993)

sought to gather the opinions of practitioners in Certified Public Accountants (CPA) firms and accounting executives of commercial/industrial firms regarding technical knowledge, proficiency, and work performance of the fresh graduates they recruited. By contrast, this study presents the opinions of first-line managers in the manufacturing sector.

## **Background of the Survey**

The justifiable reasons for selecting listed manufacturing companies as targeted populations are:

1. After the financial crisis in 1997, the government policies have modified to an all-rounded economic development, for example, high technology industry, infrastructure development, and export. The government realized that the Hong Kong economy should not rely on the financial services only. As a result, the manufacturing industry has re-gained its important status;
2. The manufacturing industry has played an important role in the economic development of Hong Kong. Before the 1980s, the manufacturing industry was the backbone of Hong Kong's economy. Although Hong Kong has gradually shifted to service-oriented industry since 1980s, the manufacturing industry remains a significant component of the economy to this date;
3. As at 31 December 1997, listed manufacturing companies accounted for nearly one-third of the total listed companies (602) in Hong Kong.<sup>1</sup>
4. Further, the manufacturing industry provides lots of employment opportunities to the new accounting graduates. According to 1997 membership statistics of Hong Kong Society of Accountants, the commercial and manufacturing sectors employed nearly half of the membership.<sup>2</sup>

## **Previous Study and Development**

In recent decades, academics and the public have increasingly expressed concern about the relevance of the existing accounting curricula to the business world. Practitioners and academics have criticized accounting education as being too narrow and technical to properly prepare entrants for the rapidly changing and expanding accounting profession. In the

United States, a number of studies including those by Roy and MacNeill (1966) and the Beamer Committee (AICPA, 1969) have identified the deficiencies and insufficiencies of accounting education. In 1979, Hadley and Balke measured the level of exposure (knowledge and experiences) to selected topics which accounting practitioners believed to be desirable for accounting graduates to possess before they entered the profession. They found that there was a significant divergence between what was taught and what practitioners thought should be taught. Similar results were found later in the United Kingdom by Lyall (1985) who examined the perceptions of both industrial and professional accounting practitioners to the desirable level of exposure which accounting undergraduates should have.

In a special report entitled "Future Accounting Education: Preparing for the Expanding Profession," the American Accounting Association (AAA) Committee explained that a broader education was the only effective way to produce all-rounded professional accountants with the ability to face the challenges awaiting them. In response to these calls for greater breadth in accounting education, in 1988 the members of the American Institute of Certified Public Accountants (AICPA) by an overwhelming majority agreed that candidates wishing to join the AICPA after the year 2000 would be required to have 150 semester hours of college-level education. This new requirement is 30 hours more than the current 120 hours. The Committee has also agreed that the additional 30 semester hours should not be devoted to more technical accounting courses (Collins, 1989). In 1989, the Accounting Education Change Commission (AECC) was formed. In Position Statement No.1 issued in September 1990, the AECC unequivocally stated that the accounting program was intended to prepare students to *become* professional accountants, not to *be* professional accountants.

### Survey in Hong Kong

Accounting education in Hong Kong used to follow the traditional path introduced from the United Kingdom that adhered closely to professional examination syllabuses with emphasis placed on the application of technical accounting principles. However, the recent trend seems to be in favor of a broader general education with a greater emphasis on concepts and principles. This was established by several studies of accounting education in Hong Kong. Tong's (1990) study did this by presenting an evaluation of accounting education in Hong Kong by two groups of accountants: those in the commercial/industrial firms and those in the CPA firms. Another study

by Gul, Chan, & Tong (1991) on Hong Kong accounting practitioners' perceptions of academics and content levels of the undergraduate curricula elaborated and extended Tong's (1990) study. One of its objectives was to evaluate the opinions of practitioners regarding accounting education. The results indicated that although there was a fairly high degree of agreement, there were some divergences in the topics expected by practitioners and what was actually taught in the educational institutions. The results of surveys by Ng (1993) and Ng & Ho (1992, 1993) showed that the majority of accounting executives and practitioners agreed that existing curricula which adhere closely to professional examination syllabuses should be revised.

In 1994, the Hong Kong Vocational Training Council conducted an accountancy manpower biannual survey. The results from the survey to some extent echoed the results of Ng (1993) and Ng & Ho (1992, 1993). Employers in CPA firms identified "written communication skills in English" and "ability to think analytically and work independently" to be areas which educators needed to devote the greatest efforts.

### **Research Methodology**

Since first-line managers are those who supervise and monitor their staff closely and directly, they are supposed to have first-hand knowledge on the performance of their subordinates. This places them in a legitimate position to give a fair evaluation of the proficiency and competence of the fresh graduates who join them. Questionnaires were sent to first-line managers of 160 listed manufacturing companies which were randomly selected from Hong Kong listed manufacturing companies. The selected companies represented around 25% of the companies listed on the Hong Kong Stock Exchange as at 31 December, 1997.

In the questionnaires, the subjects were first asked to evaluate the general working performance and technical knowledge of fresh accounting graduates recruited during the preceding three years. The managers, as employers, were then asked whether certain subjects of the current accounting curricula should be emphasized to match the practical business and professional skills required in view of the volatile and rapidly changing business environment in Hong Kong.

### **Result Findings and Analysis**

A total of 49 responses were received, representing a response rate of 30.6%.

Table 1 summarizes the company size (in terms of number of employees) of the 49 respondents. The numbers of accounting employees employed in the company of the respondents are shown in Table 2. Table 3 shows the number of accounting staff with accounting degrees in the company of the respondents.

The first-line managers were asked to rank the working performance and technical knowledge of the accounting graduates recruited in preceding three years in terms of “Strong,” “Adequate,” and “Weak.”

As evident from Table 4, most respondents ranked the graduates “Strong” in the following areas:

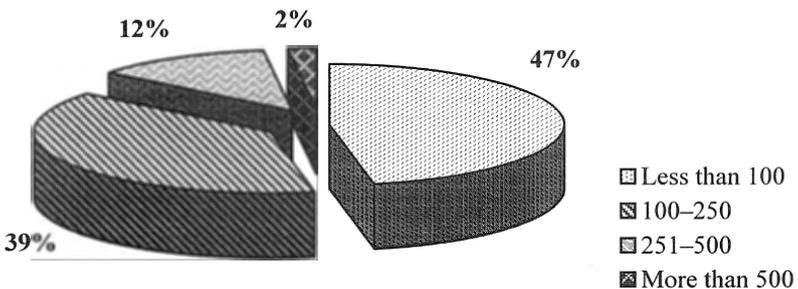
1. Financial accounting (71%) and
2. Understand the objectives of the job assignment (52%)

On the other hand, graduates were found “Weak” in the following areas:

1. Analytical skills (27%)
2. Ability to handle complicated work (21%)
3. Working independently (15%)
4. Discharge duties (15%)

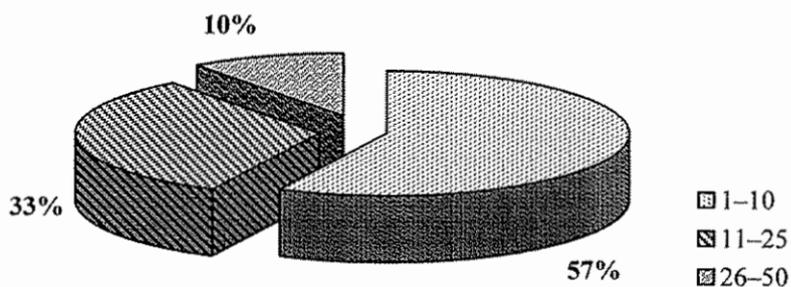
**Table 1. Company Size (in Terms of Number of Employees)**

No. of employees	No. of responses	% of total
Less than 100	23	47
100–250	19	39
250–500	6	12
More than 500	1	2
Total	49	100

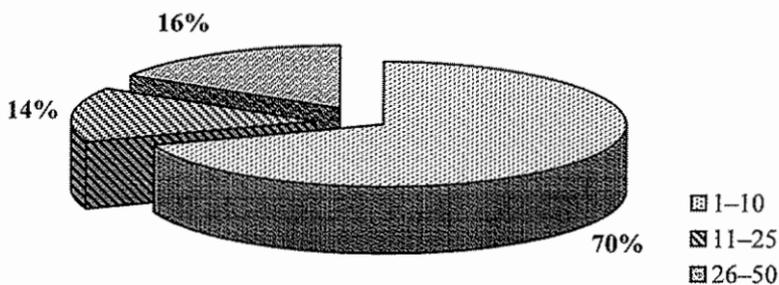


**Table 2. Number of Accounting Employees**

No. of accounting employees	No. of responses	% of total
1-10	28	57
11-25	16	33
26-50	5	10
Total	49	100

**Table 3. Number of Accounting Staff with Accounting Degrees**

No. of accounting staff with accounting degrees	No. of responses	% of total
1-10	34	70
11-25	7	14
26-50	8	16
Total	49	100



**Table 4. Proficiency in Knowledge and Performance Evaluation by First-Line Managers**

	Strong (%)	Adequate (%)	Weak (%)	Mean	Rank
<b>Accounting and related knowledge</b>					
Knowledge of Auditing — particularly Internal Audit/Control	51	34	15	3.72	8
Knowledge of Business and Company Law	47	43	10	3.74	7
Knowledge of Business Finance	49	46	5	3.88	6
Knowledge of Information Systems	53	41	6	3.94	5
Knowledge of Hong Kong Taxation	56	37	7	3.98	4
Knowledge of Mathematics	39	51	10	3.58	10
Knowledge of Economics	50	34	16	3.68	9
Knowledge of Managerial/Cost Accounting	59	36	5	4.08	2
Knowledge of Financial Accounting	71	29	0	4.42	1
<b>Capabilities on the job</b>					
Analytical skills	15	58	27	2.76	19
Ability to handle complicated work	10	69	21	2.78	18
Working independently	7	78	15	2.84	17
Discharge duties	22	63	15	3.14	16
Complete assignment on schedule	20	74	6	3.28	15
Acquiring new skills	25	68	7	3.36	13
Applying knowledge and skills to jobs	27	67	6	3.42	11
Understanding the objectives of job assignments	52	46	2	4.00	3
<b>Interpersonal skills</b>					
Communicate effectively	24	67	9	3.30	14
Getting along with people	24	71	5	3.38	12

Mean — Weighted Average (where Strong = 5, Adequate = 3, Weak = 1).

The ranking is rated according to the level of employee proficiency and performance perceived by employers with "1" indicating the highest proficiency.

To provide a clear picture of the survey results, the weighted average mean value of the first-line managers' evaluation of each item was calculated. In the weighting system, the lowest mean value of "1" indicates that the first-line managers found the graduates weak in that area while the highest mean value of "5" indicates that the subjects rated the graduates strong in that area.

The calculated mean values of the nineteen items of the questionnaires were ranked from the highest to the lowest values, i.e. from "1" to "19." The "analytical skills" ranked last with the lowest mean value of 2.76, and the "ability to handle complicated work" ranked second last with a mean of 2.78. Nine out of the first ten items in this ranking fell to accounting and related knowledge. This implies that the respondents were generally of the

view that while the Hong Kong accounting graduates whom they employed were strong academically, they were weak in communication and critical thinking skills.

These findings are consistent with the findings of a survey of Australian graduates (Miller, 1984) and similar surveys of Hong Kong accounting graduates (Ng, 1993; Ng & Ho, 1992, 1993).

To summarize, the above results suggest that Hong Kong academics are successful in transmitting accounting and auditing technical knowledge to students through the current accounting curricular. Yet, the curricula they designed are deficient in equipping the students with the necessary business knowledge, analytical skills, and planning skills.

The first-line managers were also asked to provide information on changes that they would like to see in accounting education. Specifically they were asked to indicate whether they agreed or disagreed to increase the teaching emphasis on certain subjects. For the purpose of this survey, teaching emphasis was defined as the completeness, comprehensiveness, and the depth of the syllabus of a particular subject.

As Table 5 reveals, a majority of respondents agreed that changes should be made to improve or increase the content levels of courses on:

1. Business reporting writing (85%)
2. Business social environment (54%)
3. Problem solving skills (49%)
4. Knowledge of Business and Company Law (49%)
5. China Accounting and Taxation (47%) and
6. Communication skills (46%)

The above topics are basically those in which the first-line managers found current accounting graduates weak. In particular, the first-line managers shared the common view that students should be taught more on China Accounting and Taxation. This is predictable, apparent, and essential since the relationship between Hong Kong and China is becoming closer and closer after the change of sovereignty in July 1997. Only 22% of respondents felt that there should be an increased teaching emphasis on "auditing — particularly internal audit/control" and 71% of respondents were indifferent. These responses are consistent with only a few respondents (15%) rating the graduates' knowledge in this area as weak (see Table 4). The first-line managers also found related subjects useful since above 40% of respondents agreed to an increased emphasis on "Business and Company Law," "Information Technology," and "Business subjects."

**Table 5. First-Line Managers' Responses on Whether They Agree or Disagree With Placing More Teaching Emphasis on Certain Subjects in an Accounting Program**

	Agree (%)	Indifferent (%)	Disagree (%)	Mean	Rank
<b>Core subjects</b>					
Auditing — particularly internal audit/control	22	71	7	3.29	10
Financial Accounting	7	73	20	2.76	16
Managerial/Cost Accounting	10	71	19	2.80	15
Taxation	50	46	4	3.92	4
<b>Related subjects</b>					
China Accounting and Taxation	47	43	10	3.74	7
Business and Company Law	49	46	5	3.88	5
Business subjects (Production Management, Business Finance, etc.)	41	49	10	3.62	9
Information Technology	46	44	10	3.73	8
Mathematics	5	93	2	3.05	13
Economics	7	85	8	2.98	14
<b>Supporting subjects</b>					
Communication skills	46	49	5	3.83	6
Problem solving skills	49	49	2	3.93	3
Business report writing	85	15	0	4.71	1
Behavioral science	24	61	15	3.20	11
Business ethics	12	83	5	3.15	12
Business social environment	54	44	2	4.02	2

Mean — Weighted Average (where Agree = 5, Indifferent = 3, Disagree = 1).

The ranking is ranked from 1 to 16 with "1" indicating strongest agreement.

The weighted average mean values of employers' responses are given in the second last column of Table 5. In the weighting system, the lowest mean value of "1" indicates all respondents disagree on placing more teaching emphasis on a particular subject. The highest mean value of "5" shows that all respondents agreed to an increased teaching emphasis on that subject.

The calculated means values were also ranked from "1" to "16," with the highest mean value ranked as "1." "Business report writing" is ranked as "1" with the highest mean value of 4.71 and not a single respondent disagreed with increasing teaching emphasis on this subject. This implied that good business report writing skill is also a prerequisite of a competent staff. "Business social environment" was ranked as "2" with a mean value of 4.02. The ranking indicated that the first-line managers generally agreed there was a need to introduce a broader base of accounting education, to emphasize more on conceptual teaching and learning, and to break away

from rigid adherence to professional syllabuses. McDowell (1996) claimed that general education program tends not only to enhance students' intellectual development but also to provide them with introductory courses of various disciplines to aid in their career choices and mobility later on.

### **Limitation of the Survey**

The sample size of this survey was relatively small when compared with similar surveys carried out in some overseas countries. However, when comparing the sample size with the population size, the sample size represented 25% of the population. As long as the samples were well drawn (randomly selected), it should well represent the characteristics of the population.

Although the response rate was not very high at around 31%, it was considered quite satisfactory for this kind of opinion surveys particular in Hong Kong (probably due to cultural differences, the phenomenon is that response rates of opinion surveys in Hong Kong hardly rise over 50%).

### **Conclusion**

In evaluating the opinions of first-line managers in the manufacturing industry, it is found that improvements and/or additions to the existing accounting curricula are necessary. A more general and conceptual approach may be the direction for the changes.

The success of the career of accounting graduates depends very much on the quality of the training they receive from their accounting education. The result findings of this study may have useful implications for academics designing the accounting curricula and for students in their selection of optional subjects of study.

Accounting students should be trained in all-rounded disciplines in order to provide them with skills and technique to survive and compete in this dynamic and complex business world. In view of this, it would be better to incorporate the knowledge of information technology, e-commerce, etc. into the program. Programs offering double degree such as Business Management and Law may be considered.

As accounting graduates are subjected to increasing demands to provide a wide spectrum of services in the industries they work, accountants must be educated broadly and trained intensively. To achieve this objective, the existing accounting curricula should be properly designed

and modified to adjust to the changing needs of the dynamic business world.

## Notes

1. *Hong Kong Securities Journal*, Hong Kong Stock Exchange Commission, Hong Kong, January, 1998.
2. *Annual Report*, Hong Kong Society of Accountants, Hong Kong, January, 1997.

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