

## **What Accountancy Skills Are Acquired at College?**

**Dr. Mohammed Naim Chaker**

Associate Professor

Economics and Finance Department

College of Business Administration

Ajman University of Science & Technology

P.O. Box 346, Ajman

UAE

**Dr. Tengku Akbar Tengku Abdullah**

### **Abstract**

*There are many studies questioning the effectiveness of accounting education at colleges that prepares the students for professional accountancy work. The aim of this paper is to assess the accountancy skills of KIMEP accounting graduates acquired during their study at the college. The research method used in this study is based on a perception survey. As this research seeks to explore the perception of the respondents on accountancy skills, descriptive statistics are used. The findings of the study are discussed under three categories namely technical and functional skills, interpersonal and communication skills, and organisational and business management skills. This study found that KIMEP accounting graduates were equipped with professional ethics (organisational and business management skills), interpersonal and communication skills, auditing skills and information development and distribution skills (technical and functional skills). However, there are certain skills needed to be enhanced.*

**Keywords:** Accounting education; Accountancy skills; Technical and functional skills; Interpersonal and communication skills; Organisational and business management skills

### **1. Introduction**

Accounting educators around the world from developed countries to developing countries are pressured by the industries and the professions to generate graduates with accountancy skills that cater for their changing needs. There are many studies that question the effectiveness of accounting education (e.g. Bedford, Committee, 1986; Siegel & Sorenson, 1994; Albrecht & Sack, 2000; Mara Ridhuan, et al 2007; Bui & Porter 2010). The purpose of the paper is to assess the accountancy skills of Kazakhstan Institute of Management Economics and Strategic Research (KIMEP)'s graduates acquired while studying at the college. The study investigates using a survey method on technical and functional skills, interpersonal and communication skills, and organisational and business management skills. The paper is structured as follows. First, it discusses the literature on accounting education. The accounting skills that accounting graduates need which are knowledge, professional values, ethics and attitudes to perform accounting and other tasks are discussed next. Third, the KIMEP BSc in Business Administration and Accounting program is briefly explained. Fourth, the research method used in this study is briefly discussed. Fifth, it discusses on the findings of the study, and a conclusion completes this paper.

### **2. Literature review**

The debate in accounting education arises due to a concern that accounting educators are unable to provide accounting graduates with relevant skills that are required at workplace (see for example ICAEW, 1996; Albrecht & Sack, 2000; Montano et al., 2001; Lin et al., 2005; de Lange et al., 2006; Clovey & Olajide, 2008). The Bedford Committee (1986) commented that university accounting programs had ignored the changes taking place in the business environment. The Bedford Committee was in the opinion that the training of accountants failed to meet the demands of the marketplace. The Bedford Committee recommended that the accounting curriculum should also include the non-technical accounting skills in addition to the technical accounting skills. Arthur Andersen & Co. et al. (1989) continued the work of the Bedford Committee (1986) but they focussed on the scope, content and teaching of accounting. Their study was on the skills required by accountants in public practice. Arthur Andersen & Co. et al. (1989) identified skills in communication, interpersonal and intellectual, and knowledge in accounting, auditing, business and organisational were required by public accountants.

In order to accelerate the accounting education reform, the American Accounting Association (AAA, 1986) formed the Accounting Education Change Commission (AECC) in 1989. The AECC published two studies by Francis et al. (1995) and AAA – AECC (1996). In 1994, the Institute of Management Accountants (IMA) and Financial Executives Institute (FEI) commissioned a study which was conducted by Gary Siegel Organisation. The study was on the perceptions of American employers on the educational needs of entry-level management accountants. The American employers perceived that universities were not preparing students adequately for entry-level accounting work (Siegel & Sorenson, 1994). Siegel & Sorenson (1999) listed communication, accounting, interpersonal skills, business analysis, and business operation knowledge as the most desirable skills for entry-level accountants. In the UK, Chartered Institute of Management Accountants found that non-technical accounting skills were of higher priority in a membership and employer survey (CIMA, 1998). Montano et al. (2001) found that oral and written communication skills, pressure management skills, and the ability to integrate in work teams were the most valued skills and attributes in a survey of CIMA employers in the UK.

A CPA Australia survey on CFOs in 2000 found that communication, general management, people management and knowledge management were the most valued skills by the CFOs (Nash, 2000). Rahman et al. (2007) studied on competencies required at the workplace and its emphasis at university. In this study, using Deppe et al. (1991)'s competency skills profile, the respondents were asked on communication skills, decision-making skills, leadership development, continuous improvement skills, professionalism, information development and distribution skills, management accounting and financial accounting and their applications, auditing, and taxation. They found that there were large gaps between its importance at workplace and its emphasis at the university. Bui & Porter (2010) examined on the competency gap between the employers' expectation and the competency skills that the accounting graduates had. Bui & Porter (2010) found that the accounting graduates were lacking in writing skills, in applying knowledge to practical situations, and in understanding the requirements of working as a member of a team in the accounting profession.

### ***3. Skills requirements for accountants***

Skills are capabilities which include knowledge, professional values, ethics and attitudes to perform accounting and other tasks required from accountants. These skills are acquired from the total effect of the accounting program, specific courses, practical experience and continuing professional education. IAESB (2010) listed skills required by professional accountants under five groupings, namely i) intellectual skills, ii) technical and functional skills, iii) personal skills, iv) interpersonal and communication skills, and v) organisational and business management skills. The Higher Education Academy (1998) defined intellectual skills as the ability to analyse, think critically, evaluate and synthesise information. Accountants need intellectual skills to make decisions, exercise good judgments and solve problems. These skills are derived from a combination of knowledge.

Technical and functional skills are skills specific to accountancy as well as general skills. These skills include skills in numeracy, decision and risk analysis, measurement, reporting and knowledge in legislation and regulatory requirements. Personal skills are skills relate to ability, attitude, capability that an individual accountant has. These skills can be developed to improve personality and individual learning. Interpersonal skills are skills that enable an accountant to work with others for the benefit of the organisation. With these skills, an accountant can influence, motivate, resolve conflict and delegate tasks to his/her team members to achieve the goals of the organisation. In order to achieve that, the accountant must have good communication skills. Communication skills are skills that enable an accountant to convey, discuss, listen and defend his/her view, orally and in writing and in either formal or informal settings. Organisational and business management skills are important in managing a business organisation in which an accountant is a key member of the management team. It is important for the accountant to understand all aspects of organisation including its behaviour. The organisational and business management skills include long-term planning, project management, management of people and resources, decision making, leadership and professional judgement.

### ***4. KIMEP B.Sc. in Business Administration and Accounting program***

Kazakhstan Institute of Management Economics and Strategic Research (KIMEP) located in Almaty, Kazakhstan is an educational institution based on North American and European academic institutions. Its main objective is to train the people of Kazakhstan in leadership in business and government. KIMEP introduced Masters of Business Administration (MBA) and Master of Arts (MA) in Economics in August 1992 and Bachelor programmes in the 1999 – 2000 academic year.

KIMEP BSc in Business Administration and Accounting program which is a 129 credit program offers majors and minors in accounting, finance, management, marketing, information systems and operation management. The accounting part includes all aspects of financial and managerial accounting, auditing, taxation and business law. Students who major in accounting are required to take Intermediate Financial Accounting I, Intermediate Financial Accounting II, Management Accounting II, Principle of Taxation and Auditing and are also required to take one elective course from a list of accounting courses.

### 5. Research methodology

The research method used was based on a perception survey of KIMEP's accounting graduates. The contact mailing list of the survey population was extracted from KIMEP alumni's office database. There were 355 B.Sc. in Business Administration and Accounting graduates. As some of the graduates did not update their latest addresses and telephone numbers, only 200 graduates could be contacted. Sixty respondents (30%) duly completed the questionnaires. An additional of 24 completed questionnaires was obtained after requesting a help from the big four audit firms in Almaty. A total of 7 questionnaires were not usable. The number of usable responses was 77 giving a response rate of about 38%. The skill profile used in the survey was developed by Deppe et al. (1991) and Palmer et al. (2004). To determine the internal consistency, data reliability test was conducted on all the variables. The test result except for the professionalism variables exceeded 0.70, and they were reliable (Nunnally, 1978).

## 6. Results

### 6.1. Biography

Table 1 shows the age distribution of accounting graduate respondents based on their gender. There were 55 female respondents (71%) and 22 male respondents (29%). About 68% of the 76 respondents were 23 years old and below, and most of them were female. Similarly, about 79% of the respondents above 23 years old were female.

**Table 1 Age of respondents according to gender**

Gender	Age (years)		Total
	20 – 23	24 - 27	
Male	16	5	21*
Female	36	19	55
Total	52	24	76

\* One male respondent did not state his age.

Table 2 shows the respondents' academic performance. Generally, the respondents performed well academically. Only 7 % managed to obtain GPA 2.00 – 2.99. About 54% obtained GPA 3.00 - 3.99 and 39% did very well (GPA 4.00 – 4.35).

**Table 2 Respondents' academic performance**

GPA	Total
2.00 – 2.99	5
3.00 – 3.99	37
4.00 – 4.35	27
Total	69*

\*8 respondents did not state their GPA.

Table 3 shows distribution of the respondents' field of employments. About 58% of the respondents worked in accountancy firms; 91% of them worked in the international accountancy firms. The others sector attracted about 23% of the respondents' employment. The remaining respondents worked in the manufacturing, service, and oil and gas industries.

**Table 3 Respondents' employment field and firm's national origin**

Employment field	National origin of firm			Total
	Domestic	International	Both	
Accountancy firm	1	41	3	45
Manufacturing industry	1	1	0	2
Service industry	0	7	0	7
Oil and gas industry	1	1	3	5
Others	2	14	2	18
Total	5	64	8	77

Table 4 shows the respondents' year of graduation and number of years the respondents were in their latest positions. About 79% of the respondents graduated in the years 2006 to 2008, and 72% had only between one to twelve months' experience in their latest positions. In contrast, only 10% of the respondents had twenty-five to thirty-six months' experience in their latest positions.

**Table 4 Respondents' year of graduation and number of years in latest position**

Year graduate	1-12 months	13-24 months	25-36 months	Total
2003	1	2	2	5
2004	4	3	0	7
2005	1	2	0	3
2006	8	2	2	12
2007	17	3	2	22
2008	21	1	1	23
Total	52	13	7	72*

\*5 respondents did not state either their graduation year or years in latest position.

## 6.2. Profile of skills acquired by KIMEP accounting graduates

As this study is to assess the accountancy skills acquired by the graduates while at the college, most of the respondents chosen were those "... who had graduated during the past 5 years in order to ensure that their working experience would be limited and their educational experience would still somewhat fresh on their minds" (Deppe et al.; 1991, p. 279). Table 5 shows the perceptions of KIMEP accounting graduates on the skills that were acquired while studying at the College. Respondents were asked to indicate their level of agreement with each statement using the seven points of Likert Scale (1 = strongly disagree, 7 = strongly agree). The skills profile is divided into three groups namely, technical and functional skills, interpersonal and communication skills, and organisational and business management skills.

Under the technical and functional skills group, there are 5 skills sub-groups namely, financial accounting skills, management accounting skills, auditing skills, taxation skills, and information development and distribution skills. For the organisational and business management skills group, there are 3 skills sub-groups which are knowledge of business environment, professional ethics and leadership development. For the financial accounting skills, respondents were asked on their perceptions on 5 statements as shown in Table 5. The mean for each statement is comparatively high, as the lowest is 5.58. However, the standard deviation for each statement is also high, as the lowest is 1.11. This implies that there is relatively higher degree of varied opinions. The respondents knew "how to prepare financial statements" (mean = 6.00; standard deviation = 1.12) and analysing financial statements (mean = 5.95; standard deviation = 1.11). However, the respondents were comparatively not strong in the preparation of group accounts (mean = 5.58; standard deviation = 1.33), and in applying relevant financial reporting standards including the international financial reporting standards (mean = 5.58; standard deviation = 1.46).

The responses for the management accounting, auditing, and taxation skills were also highly varied, as illustrated by their high standard deviations. For the management accounting skills, the respondents were asked on 6 statements. For all the statements, the mean of each statement is 5.78 or less with standard deviation of between 1.05 and 1.21. Generally, this indicates that the graduates were comparatively not strong in the area of management accounting. This is not surprising as the majority of the respondents worked in accountancy firms where most of the work was of auditing in nature. For the auditing skills, the respondents were asked on 2 statements. The respondents were able to do fundamental auditing work (mean = 6.18; standard deviation = 1.07). However, they were comparatively less able to apply auditing standards to their work (mean = 5.90; standard deviation = 1.46). This finding is quite surprising as the majority of the respondents worked in reputable international accountancy firms.

For the taxation skills, the respondents were asked on 2 statements. Overall, their perceived taxation skills were lower than their management accounting skills. The respondents perceived that they were poor on the taxation skills as the mean score is as low as 5.23 and the standard deviation as high as 1.46. Moving to the information and distribution skills, the respondents were asked on 3 statements. The responses to the statements were consistent as the standard deviation for each statement was relatively low. The respondents were in the opinion that they understood the role of information technology in solving business and accounting problems as illustrated by the mean score of 6.23 with standard deviation of 0.72.

They were also able to apply the principle of internal control to their work. However, they were comparatively less certain on system development life cycle to plan, design, implement and evaluating an information system. Interpersonal and communication skills are the most valued skills by any organisations. For interpersonal and communication skills, the respondents were asked on 6 statements. The mean score of all statement items are above 6.14 and the standard deviations of less than 1.00. This implies that the responses were consistent. The respondents were very confident on these interpersonal and communication skills. There are 3 types of skills listed under the organisational and business management skills namely, knowledge of business management, professional ethics, and leadership development. Generally, the respondents answered positively on those skills. However, on the knowledge of financial markets and funding institutions (mean = 5.36; standard deviation = 1.08) and the laws relating to the business and business operation (mean = 5.39; standard deviation = 1.02), the respondents were comparatively not very positive on the skills that they acquired at the College.

**Table 5 Descriptive statistics of skills profile acquired by KIMEP accounting graduates**

Skills	Mean	Standard deviation
<b>Technical and functional skills</b>		
Financial accounting skills		
I know how to prepare financial statements	6.00	1.12
I know how to prepare consolidated accounts	5.58	1.33
I am able to analyse financial statements	5.95	1.11
I am able to apply relevant financial reporting standards to prepare financial statements	5.73	1.38
I am able to apply international financial reporting standards in preparing financial statements	5.58	1.46
Management accounting skills		
I have knowledge of costing in order to determine, analyse and control costs	5.49	1.14
I know how to prepare a budget	5.42	1.21
I know how to appraise an investment	5.14	1.17
I know the fundamentals of management accounting (planning, control, decision-making, etc.)	5.78	1.05
I can use live data to evaluate risks to solve problems	5.31	1.20
I am able to exercise judgment to solve real-world problems	5.55	1.05
Auditing skills		
I understand the fundamentals of auditing	6.18	1.07
I am able to apply auditing standards in my work	5.90	1.46
Taxation skills		
I understand the fundamentals of taxation	5.53	1.27
I am able to apply relevant tax legislation in my work	5.23	1.46
Information development and distribution skills		
I understand the role of information technology in solving business and accounting problems	6.23	0.72
I understand the system development life cycle to plan, design, implement and evaluate an information system	5.69	0.89
I am able to apply the principle of internal control to my work	5.06	0.91
<b>Interpersonal and communication skills</b>		
I am able to present views in writing in English	6.25	0.83
I am able to present views in writing in Russian	6.31	0.96
I am able to make oral presentation in English	6.35	0.72
I am able to make oral presentation in Russian	6.36	0.89
I am able to listen effectively	6.30	0.90
I understand interpersonal and group dynamics	6.14	0.70
<b>Organisational and business management skills</b>		
Knowledge of business environment		
I understand the economic, social and cultural forces in the world	5.86	0.85
I know how typical business organisations work and are managed	5.95	0.86
I possess knowledge of financial markets and funding institutions	5.36	1.08
I understand relevant laws relating to the business and the operation of businesses	5.39	1.02
Professional ethics		
I understand the code of professional ethics	6.30	0.71
I can apply the code of ethics in my work	6.34	0.72
Leadership development		
I can work effectively with diverse groups of people	6.04	0.95
I can organize and delegate tasks	6.09	0.89
I am able to motivate other people	5.95	0.83
I can resolve conflict	5.84	0.88
I understand methods of managing changes within organization	5.70	0.92

Based on the magnitude of all mean responses, the accountancy skills are ranked as shown in Table 6. The respondents rated themselves to be very good in professional ethics, interpersonal and communication skills, financial accounting skills, and in information development and distribution skills. The mean scores for those skills are between 6.00 and 6.32. The respondents perceived that they were comparatively poor in the areas of knowledge of business environment, management accounting skills, and taxation skills.

**Table 6 Skills profile and their ranking**

Skills	Mean	Rank
<b>Technical and functional skills</b>		
Financial accounting skills	5.77	6
Management accounting skills	5.45	8
Auditing skills	6.04	3
Taxation skills	5.38	9
Information development and distribution skills	6.00	4
<b>Interpersonal and communication skills</b>		
<b>Organisational and business management skills</b>		
Knowledge of business environment	5.64	7
Professional ethics	6.32	1
Leadership development	5.93	5

## 7. Conclusion

The research findings of this study indicate that KIMEP accounting graduates perceived that they were good in professional ethics, interpersonal and communication skills, auditing skills and information development and distribution skills in that order of their ranking. The recent scandals involving accountancy firms have increased the commitment of the accounting profession to ethical values that have been reflected in the hiring policy of the leading accountancy firms (Ahadiat & Mackie, 1993), and the calls for greater emphasis in the accounting curriculum (Loeb, 1994). This has been illustrated in the findings of the study that the accounting graduates understood the code of professional ethics and they knew how to apply them in their work. In a study by Kerr & Smith (1995), students perceived that a lack of ethics in the accounting profession can be devastating to the industry.

Communication skills in writing, such as preparing working documents and in oral communication such as active listening and active participation in meetings, one-to-one communication are important for accounting graduates entering the profession (Morgan, 1997; Smith, 2005). As most of the accounting graduates were working for the big four accountancy firms, this research finding is consistent with the requirements set by the big four accountancy firms in New Zealand, as they highly valued accounting graduates with analytical, critical and thinking skills, and oral presentation and writing skills (see Bui & Porter, 2010). Similarly, communication and interpersonal skills are important to accomplish internal audit tasks for internal auditors (Smith, 2005). However, it is quite surprising that the research finding on communication skills is not consistent with the findings based on the literature (for example Morgan, 1997; Mara et al., 2007).

For accounting graduates to accomplish their work, they should possess the technical and functional skills in addition to the communication skills. The skills required depend on where the accounting graduates work. For example, Awayiga et al. (2010) found that Ghana accounting graduates rated cost and financial accounting skills higher than taxation and auditing skills in that order, as most of the graduates were not employed in accountancy firms. The result of this survey shows that KIMEP accounting graduates rated auditing skills higher than other technical and functional skills, as the majority of them worked in accountancy firms in contrast to Carr et al. (2006)'s findings that auditing was perceived as not an important subject.

In contrast, Lin et al. (2005) revealed that the traditional accounting courses namely financial accounting, finance, management accounting and taxation were perceived to be important technical and functional knowledge skills for students in China. The reason was the accounting education in China was still based on knowledge training rather than on skills components such as the skills in analytical/critical thinking, decision making, and communication. Lin et al. (2005)'s study was based on the perceptions of accounting students, faculties and practitioners in China. This study also highlighted that skills in financial accounting, management accounting and taxation were comparatively weaker than other skills acquired by the accounting graduates while at the college though Carr et al. (2006) reported that respondents working in the accountancy firms perceived that financial accounting, taxation and management accounting were important.

The study is limited to students responses only and does not cover the feedback of employers. The findings of this study are beneficial to KIMEP accounting educators to assess the content and delivery means of subjects particularly in financial accounting, management accounting and taxation where the respondents' opinions were highly varied.

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