THE CURRICULUM DESIGN IN UNIVERSITIES FROM THE PERSPECTIVE OF PROVIDERS IN ACCOUNTING EDUCATION

KAI-WEN CHENG
National Kaohsiung Hospitality College

Under the influence of globalization and the ongoing expansion of technology, many scholars believe that there is an obvious discrepancy of expectation between the providers of accounting education (i.e. teachers and students) and the demanders of that education (i.e. accounting firms and business enterprises) (Albrecht &Sack, 2000; Li,1999; Ma, 1996; Tu,1989; Cheng, 2002; Cheng, 2005). This research presented questionnaires to the providers of accounting education, to explore the future directions of "curricula design" in accounting education at the university level to acquire suggestions on how to decrease the expectation gap between business and the academic practitioners in this field. The research results show that there are five directions that universities can take as follows to upgrade accounting education:

1. Basic accounting, intermediate accounting, advanced accounting, cost accounting, management accounting, and auditing should be integrated.

2. Some courses, like business english, english conversation, communication skills and abilities, e-commerce, strategic cost management, and enterprise resource planning, should be supplemented.

3. Students should be divided into employment and advanced study groups according to their interests.

4. Case study approach should be more emphasized and promoted in universities.

5. A more flexible school-year system should be proposed.

Introduction

In 1966, the American Accounting Association (AAA) defined accounting as an information system that identifies, records, and communicates the economic events of an organization to interested users. In brief, the key function of accounting is to provide many "information services" in this information age, not such one. Therefore, "accounting" is not merely the language of enterprise but also "the informer of the supervisors". It plays significant and diverse roles in business and indeed greatly affects the economic development of a nation. The pivot for promoting the function of accounting in business is to upgrade the quality of accounting education in universities.

Under the influence of globalization and the ongoing expansion of technology,

many scholars believe that there is an obvious discrepancy of expectation between the providers of accounting education (i.e. teachers and students) and the demanders of that education (i.e. employers of accounting firms and business enterprises) (Albrecht &Sack, 2000; Li,1999; Ma, 1996; Tu,1989; Cheng, 2002; Cheng; 2005). According to Albrecht & Sack (2000), there are many problems in current accounting education, and a major problem lies in the content and design of the curricula. They indicated that it is not sufficient to change the curricula simply by adding more homework or several "new" courses. To the contrary, the curricula requires a drastic reform. While the traditional curricula still need to focus on fostering a good accountant, the practical business world has made it clear that what they need is a good business person. Further, compared to the educational circle, the courses the business circle should emphasize more are: Financial knowledge, commercial law, tax knowledge, mathematics and statistics, teamwork ability, business ethics, and business expansion ability (Ma, Ma, & Ko, 1999).

In 1990 and 1992, the Accounting Education Change Commission (AECC) published two position statements that defined the objectives of education for accountants and dealt with the first course in accounting. Position Statement Number One asserted that a primary objective of accounting education should be to provide "a basis on which life-long learning can be built" (AECC 1990, 1). Position Statement Number Two dealt with the first course in accounting and reemphasized the importance of teaching students to learn on their own. This statement stated that students completing the first course should "possess enhanced analytical skills and the ability to confront unstructured problems" (AECC 1992, 3). In this context, shortening the discrepancy of expectations between business circles and the academic area, "curricula design" seemed to be the most feasible method. Hence, the research for this paper was in the hope of offering workable suggestions to shorten the gap in expectations between the business community and academia.

Research Question Development

Courses Integration

According to Li(1999), the six core accounting courses: Basic accounting, intermediate accounting, advanced accounting, cost accounting, management accounting, and auditing should be integrated for learning to be effective. But this research didn't point out in what way they should be integrated. This leads to the following question :

Q1: Should basic accounting, intermediate accounting, advanced accounting, cost accounting, management accounting, and auditing be integrated courses? In what way should they be integrated?

Courses Supplemented or Deleted

A number of studies stated that compared to the educational circle, the courses the business circle should emphasize more are: Information system, business strategy, commercial law, international commerce, e-commerce, business ethics, and research methods in accounting (Richard, 1993; Williams, 1993; Albrecht & Sack, 2000).

This leads to the following question :

Q2: What accounting courses should be supplemented? What courses should be deleted?

Employment and Advanced Study Groupings

Cheng (2002) stated that if students could be divided into employment and advanced study groupings. Schools can plan proper accounting curricula for their choice. This leads to the following question :

Q3: Should students be divided into employment and advanced study groupings?

Case Study Approach

The use of case studies,made popular by the Harvard Business School curriculum and the establishment of Harvard Business School Publishing(HBSP), has long been a component of the business curriculum. Case study approach documents actual business situations in detail and provides teaching notes for use with each case. Case studies readily illustrate particular business concepts of interest, and faculty members also find case studies to be the most effective taching method for cultivating thinking skills and analisis skills(Lavitt, 1992; McEwen,1994; Pithers & Soden,2000; Ma, 1996; Fan,2000). This leads to the following question :

Q4: Is case study appraoch necessary?

Prerequisite Credits Problem

A number of studies pointed out the numbers of prerequisite credits for an accountin degree are too strict and the four-year school system and 150 credits can be made more flexible(Tu, 1989; Albrecht & Sack,2000). This leads to the following question :

Q5: Should the numbers of prerequisite credits for an accountin degree be reduced? Can the four-year school system be made more flexible?

So far, many scholars have pointed out the causes that result in the discrepancy of expectation between the providers and the demanders of accounting education. They mainly agree that there is something wrong with the curriculum planning and have continuously offered their suggestions (Richard, 1993; Williams, 1993; Albrecht & Sack, 2000; Li, 1999; Tu, 1989; Cheng, 2002; Lavitt, 1992; McEwen,1994; Pithers & Soden,2000; Ma, 1996; Fan,2000). I compiled the suggestions and proposed related questions for this research.

Methodology

The Design of the Questionnaire

Questionnaire survey was used in this study. The questionnaire was designed to have two parts: The first part dealt with relevant personal information; the second part covered the related questions on "accounting curriculum design". The design of the questionnaire adopted the Likert-type 5-point, strongly agree- strongly disagree test. A panel of specialists that included three scholars in the related field in Taiwan reviewed and revised the questionnaire content in order to establish the content validity of the questionnaire. A reliability coefficient of 0.78 using the Cronbach's α was reported.

Participants

There were two types of participants for the questionnaire. The first were seniors in the accounting departments at Taiwan University, Chengchi University, Taipei University, Soochow University and Cheng Kung University. The second were graduates of the accounting departments at the same five universities. They were alumni who had been engaged in the accounting field for two or three years. The reasons for choosing these five universities were:

1. All the accounting departments of these five universities have a long history and educate on a large scale; hence, they have a sufficient foundation to represent the accounting departments of national and private universities in Taiwan overall.
2. These five representative schools were chosen to effectively control the rate of response, lest it be too low to reliability.
3. The accounting departments of these five universities, hold the top five priorities in the mind of high school graduates, so both the level and learning attitude of the students is excellent. Therefore, it could be excluding the factor that students might choose accounting as a major simply because of test scores.

Additionally, this study chose seniors as participants because this group have taken the majority of courses in accounting and now supposedly "own" a clear notion of "accounting curriculum design". Additionally, it was not easy to retrieve questionnaires from graduates who have been engaged in the field for long periods of time, as they may have changed their residence or telephone number from their school contact. As a result, this paper focused on more recent graduates with two or three years of working experience in accounting.

Research Tools

After the questionnaires were retrieved, this study adopted statistical package software from the SPSS 10.0 edition as the tool for analyzing the data, in expectation of minimizing the possibility of errors. Descriptive statistical analysis and t-test were used in this study. The significant level of every statistical test was set at α=0.05.

Data Analysis and Results

Questionnaire Distribution and Return

The questionnaires for this research were divided into Questionnaire A and Questionnaire B. Questionnaire-A participants were seniors in accounting departments from Taiwan University, Chengchi University, Taipei University, Cheng Kung University and Soochow University. The study distributed 60 copies to each school, so the total copies distributed were 300. Questionnaire-B participants were graduates from the accounting departments of the above-mentioned universities, and all of these participants have worked in the field for two or three years. To facilitate the sampling and retrieval of the questionnaires, 253 copies of the questionnaires were distributed based on the lists of alumni provided by the schools, with the help of teachers. Since the analysis of the research relied on respondent

Table 1: Questionnaire Distribution and Return (1)

Objects of distribution	*Number of distributed questionnaires*	*Valid returned questionnaires*	
		copies	*Percentage(%)*
Taiwan University	*60*	*58*	*96.67*
Chengchi University	*60*	*56*	*93.33*
Taipei University	*60*	*54*	*90.00*
Cheng Kung University	*60*	*37*	*61.67*
Soochow University	*60*	*42*	*70.00*
People in the related field	*253*	*76*	*30.04*

multiple choices, blank questionnaires or questionnaires that were returned with unvarying choices were regarded as invalid. The results from the returned questionnaires are listed in Table 1.

If categorizing the samples into undergraduates and those in the related field, the results presented as in Table 2.

Future Directions of Curricula Design

The results for the questionnaire survey were analyzed as follows:

Courses Integration

1. Whether the courses lack integration

It is indicated that 92.6% of the participants agreed that the courses lack integration. This result was consistent with the opinion of Li (1999).

2. The way to gain integration

Based on the survey, "providing more integrated courses for seniors" and "asking people from the business circle to lecture" were regarded as the best way for such coordination, reaching a total mean of 4.142 and 4.115 respectively.

Courses Supplemented or Deleted

1. The courses that should be supplemented

Based on the results, the top six standings for the courses to be supplemented were: Business English, English conversation, communication skills and abilities, e-commerce, strategic cost management, and enterprise resource planning. This result was generally consistent with the opinions of earlier research (Ma, Ma, &

Table 2: Questionnaire Distribution and Return (2)

Objects of distribution	**Number of distributed questionnaires**	**Valid returned questionnaires**	
		copies	**Percentage (%)**
Group 1: Undergraduates	300	247	82.33
Group 2: Graduates	253	76	30.04
Total	553	323	58.41

Table 3:Statistics for Opinions on Grouping

Item	Number of people		Percentage (%)		Mean			p-value
	Group 1	Group 2	Group 1	Group 2	Group 1	Group 2	Total	
Total	247	76	100	100	3.429	3.368	3.415	0.726
Strongly agree	57	21	23.1	27.6				
Agree	83	18	33.6	23.7				
Neutral	44	16	17.8	21.1				
Disagree	35	10	14.2	13.2				
Strongly disagree	28	11	11.3	14.5				

Ko, 1999; Richard, 1993; Williams, 1993; Albrecht & Sack, 2000).

2. The courses that should be deleted

According to the results, the top five standings for the courses to be deleted were public finance, microeconomics, macroeconomics, international trade and foreign exchange, as well as data processing. However, more than half of the participants left this item blank. The reasons that could be deduced from such a response is these participants either chose not to answer the quesetion or did not think any courses should be deleted.

Employment and Advanced Study Groupings

Most participants thought that they should be grouped. A possible explanation for such a result is that participants would like to make preparations for their career choice ahead of time, whether they desired to join the work force or pursue advanced study after graduationg from university. This result was in accordance with the view of Cheng (2002). For further details, see Table 3.

Case Study Approach

1. Whether case study approach in the accounting curriculum is necessary

The result indicated that most of the participants agreed that case study

Table 4: Statistics for Opinions on Case Study Approach

Item	Number of people		Percentage (%)		Mean			p-value
	Group 1	Group 2	Group 1	Group 2	Group 1	Group 2	Total	
Total	247	76	100	100	4.020	4.079	4.034	0.591
Strongly agree	75	24	30.4	31.6				
Agree	114	37	46.2	48.7				
Neutral	48	13	19.4	17.1				
Disagree	8	1	3.2	1.3				
Strongly disagree	2	1	0.8	1.3				

approach is indeed necessary. This result was generally consistent with the opinion of earlier research(Lavitt, 1992; McEwen,1994; Pithers & Soden,2000; Ma, 1996; Fan,2000). For further details, see Table 4.

2. Time for implementation

The results showed that 77.2% of the participants believed that juniors and seniors can better adjust to case teaching. As basic financial accounting courses are generally taught during the first two years of college, the participants indicated that the appropriate time for implementing case study curricula should be after students have completed these basic courses.

Prerequisite Credits Problem

According to the results, most participants believed that the numbers of prerequisite credits are too strict. For further details, see Table 5. Several reasons accounted for this result. First, the required number of credits for graduation and prerequisite credits was too high. Secondly, numerous limits for taking courses in basic accounting, intermediate accounting, and advanced accounting now exist. In addition, most participants stated that "making the system of prerequisite credits more flexible" would allow them to develop their specialty further. Moreover, the results showed a preference among participants for a more flexible four-year school sys-

Table 5: Statistics on Opinions on Prerequisite Credits

Item	Number of people		Percentage (%)		Mean			p-value
	Group 1	Group 2	Group 1	Group 2	Group 1	Group 2	Total	
Total	247	76	100	100	3.437	3.395	3.427	0.790
Strongly agree	59	21	23.9	27.6				
Agree	59	13	23.9	17.1				
Neutral	77	23	31.2	30.3				
Disagree	35	13	14.2	17.1				
Strongly disagree	17	6	6.9	7.9				

Table 6: Statistics on the Opinions Regarding the Four-YearSchool System

Item	Number of people		Percentage (%)		Mean			p-value
	Group 1	Group 2	Group 1	Group 2	Group 1	Group 2	Total	
Total	247	76	100	100	4.085	4.276	4.130	0.108
Strongly agree	96	31	38.9	40.8				
Agree	97	37	39.3	48.7				
Neutral	39	6	15.8	7.9				
Disagree	9	2	3.6	2.6				
Strongly disagree	6	0	2.4	0.				

tem. Further details are listed in Table 6. This result probably related to the fact that each student differs in abilities, ideas, and even what they learn in universities. A more flexible school-year system can allow students to decide how soon they want to graduate based on individual ability and specialty or career focusa. The most important of all, students can take the courses they are interested in to facilitate their career planning. These results were in accordance with the view of Tu (1989) and Albrecht & Sack (2000).

Research Conclusion and Discussion

Based on the results of the data analysis, there are seven lesseons appearing from this study. They are as follows:

1. Six courses, basic accounting, intermediate accounting, advanced accounting, cost accounting, management accounting, and auditing, do lack integration. This result was consistent with the opinion of Li (1999). In addition, this present study shows the most favored methods for integration are "providing more integrated courses for seniors" and "asking people from the business circle to lecture.". The former method provides panoramic understanding while the latter makes students more aware of the problems they may encounter in business and lets them apply theory to practical affairs.

2. Courses that should be supplemented can be categorized into four types: Language skills (business english and english conversation); communication skills and abilities; managing skills (strategic cost management, information management, enterprise resource planning, financial information system, and business software application); as well as knowledge of law (tax law). The results pointed out both the trend of internationalization and computerization of enterprises and the fact that the tax system is becoming more and more complicated. This result was also consistent with the opinion of earlier research (Ma, Ma, & Ko, 1999; Richard, 1993; Williams, 1993; Albrecht & Sack, 2000).

3. Courses that should be deleted are: Public finance, microeconomics, macroeconomics, international trade and foreign exchange, and data processing. It can be inferred from this result that the courses of public finance and economics focus on theory and thus are not very useful in practical business dealings. As for the course in data processing, the inference is that as students today are generally already equipped with the fundamental skills of word processing, they do not obtain what they really want from this course. Consequently, they think the course should be deleted.

4. The participants think that students should be divided into employment and advanced study, so they may make proper preparations for their career choice ahead of time. This result was in accordance with the view of Cheng (2002).

5. The participants regard case study

approach to be essential. This result was generally consistent with the opinion of earlier research(Lavitt, 1992; McEwen,1994; Pithers & Soden, 2000; Ma, 1996; Fan, 2000). Moreover, this present study concludes that most participants think that juniors and seniors can better adjust to case teaching. As basic financial courses are generally taught during the first two years of college, they regard the appropriate time for implementing case teachingto be the last two years of study when they have completed these basic courses.

6. The participants consider the prerequisite credits system in accounting departments to be too strict and believe a little more flexibility should be added to the four-year school system. That flexibiltiy will allow students to decide how soon they want to graduate based on the individual ability and ideas. In addition, students can take more courses they are interested in and thus facilitate their career planning. The survey result is consistent with the views of earlier research (Tu,1989; Albrecht & Sack, 2000).

It has been undergone many changes over the years since "accounting" this term started. Today, under the influence of globalization and the expansion of technology, many scholars think that there is an obvious discrepancy of expectations between the providers of accounting education (i.e. teachers and students) and the demanders of accounting (i.e. employers of accounting firms and enterprises). Although more and more research has investigated this discrepancy of expectation, there is no consensus regarding what kind of curriculum planning is the best. In this continuously innovative century, school education will play a much more important role than ever before (Lai & Lin, 2004). To survive in the current fast-changing business environment, each school must cultivate well-prepared students who can meet the requirements of intensive global competition. Therefore, curriculum planning has to become an indispensable and important issue for school administrators to note. The findings of this study suggest some clear and practical directions that can to be incorporated into current curricula planning for university accounting education.

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