TEACHING MANAGERIAL ACCOUNTING: A DISCUSSION ON PEDAGOGY

Myint Thein*

Abstract

This paper discusses about the toughness of managerial accounting to university students explaining the causes and suggesting ways to alleviate the difficulties faced by students. The main focus of this paper is pedagogy on the part of faculty with the purpose of improving it by stimulating students' interest and their eventual participation in the class. In this context, the use and limitations of computer-assisted system in class rooms is also evaluated in contrast to traditional chalk and talk method of teaching. It also looks at the problem faced by managerial accounting students at English-media instruction institutions in EFL countries like Thailand. Finally, a number of recommendations to improve teaching of managerial accounting on the part of pedagogy are presented by the writer.

INTRODUCTION

Managerial Accounting is often regarded as one of the tough subjects for students in universities, especially in undergraduate level. The teaching/learning process of this subject demands high attention on the part of faculty (instructors/lecturers/teachers) and hard work on the part of students every semester. The reason for its toughness may be due to high standard of examination and student evaluation process; but there are many other explanations that lead to this situation. Sometimes, curriculum is too tight to learn ina semester or term, students are often unprepared and unfamiliar with the practical field of study, pedagogy may be non-motivating and nonstimulating, and there may be cases of incompetence on the part of faculty. The purpose

^{*}Asst. Prof. Dr. Myint Thein holds a Ph.D. in Public Administration from the National Institute of Development Administration (NIDA). He has been teaching accounting subjects in ABAC School of Management as well as in the Graduate School of Business, Assumption University since 1989. He is also a Fellow of The Chartered Institute of Management Accountants, U.K.

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of this paper is to discuss these weaknesses and present some ways to alleviate them, even if these weaknesses could not be eliminated. However, the scope of this paper will not cover curriculum part that is too complicated and too wide to discuss in one paper. Instead, the discussion will focus on pedagogy part and related matters.

Requirement of background knowledge

Many students of managerial accounting faced difficulties in learning managerial accounting partly due to the lack of and/or forgetfulness of required background knowledge of financial accounting and cost accounting. In instance, a student could not understand master budget if s/he does not know or remember full accounting cycle from original business transactions to preparation of balance sheet and statement of cash flows. Budgeted income statement and cash budget are, in one way, tests for students' understanding of cash basis and accrual basis.

In another case, a student could not understand fixed overhead over-applied and under-applied in cost variances without the knowledge of overhead allocation from basis cost accounting course. More over, the students do not comprehend the disturbance of allocated fixed expenses in decision making simply because they have not learned about allocation of overhead costs. Most of the students take managerial accounting before cost accounting courses probably due to curriculum structure. Historically speaking, management accounting developed from cost accounting only in the late 1940s which was the start of management accounting in business school curricula to the present day (Boer, Germain B., 2000). Many managerial accounting textbooks from the United States include cost accounting topics in earlier chapters, but in majority of curricula they are skipped in favor of main topics of managerial

accounting due to the limitation of teaching hours in a semester. In contrast, British text books treat management accounting as an extension of cost accounting, or as an advanced stage of cost accounting. If management accounting were to be taught seriously or at an advances level like professional examination, a student would be required to finish cost accounting first.

Even if the students have learned financial accounting and some basic cost accounting, the problem is that the students forget them at the time they take managerial accounting course that follows immediately in the following semester. In introduction of managerial accounting on the first session to the new students, the writer used to ask them if they know the meaning of GAAP. In most cases, there were no answers from the students except in rare cases the answer came out after some minutes' waiting and repeated persuasion for the answer. This happened not because of shyness but because of forgetfulness or loss of memory retention. According to Adams at el (1999), introductory accounting instructors often receive complaints from finance and accounting instructors about students' loss of memory retention of what they learned from introductory level. They anticipate that students will better learn and retain information better if it is presented in decision contexts. However, in basic accounting courses, students learn to do routine bookkeeping jobs including preparation of financial statements. To retain information partly depends on improved pedagogy also. The writer also heard from his colleagues teaching managerial accounting complaining about those instructors who taught basic accounting for not teaching the students well. It depends partly on the interest taken or not taken by students especially when they are not fully committed prior to choosing major subject. In fact, solution to teaching/learning problem of accounting is too wide that it goes beyond university campus, and that it is beyond the scope of this paper which focuses on managerial accounting alone.

Another reason for low memory retention on the part of students is the lack of practical field experience. In spite of the growth of service sector especially in advanced nations, up to now studying of manufacturing costs from different approaches is the backbone of managerial accounting. In this context, students should physically have the experience of factory operations at least as a token. When explaining about manufacturing overhead expenses, the writer explained the definitions of indirect materials and indirect labor, and gave examples before asking them to contribute more examples. It was hard to get their contribution, and even when they contributed the answers were often wrong. It was not their weakness because they simply did not have field experience. Thus it would be advisable to take students a couple of trips to different types of industry, and let them see how production is done with their own eyes as a saying suggests "Seeing is believing". Only when they have some knowledge of a shop floor they could not only understand properly the terms that they learn but also will not forget easily. Maher (2000) mentions that more and more educators include field trips and field studies in their management accounting classes thereby increasing students' understanding of real-world problems.

One weakness on the part of students is that many of them are reluctant to bring textbook to the class. When an instructor explains a solution to a problem in textbook, those who do not have textbook could not understand naturally. It is doubtful if they really study the textbook. This kind of weakness can be found in the students who take any accounting subject. For them, the main purpose of taking accounting is based on their misunderstanding that if they take accounting the only thing they need to do is to compute, not to read or write. Accounting, especially managerial accounting, is based on concepts, principles and criteria. Thus, it is definitely important for the students of managerial accounting to read textbook in order to understand concepts. Even understanding of concept is not enough; they need to solve problems by themselves so as to clarify their concepts in application. To urge them to read and practice, the basic necessity is to make them interested in the subject. Hence, it becomes a part of the managerial accounting pedagogy to make the subject interesting to students.

Making the subject interesting

There are many ways to arouse the students' interest in the subject such as by poking jokes from time to time and making them participate in teaching/learning process. Telling jokes makes them learn comfortably but too much of it could jeopardize their learning spirit. More over, it takes time away from real learning in a tight schedule. On the other side, every teacher could not have good humor by their nature. Participation of students in teaching/learning process is so useful that it will be discussed separately in a following section. Here, the writer likes to suggest giving examples that are close to their life and understanding.

When explaining about sunk cost, giving example of the Titanic makes the students easily understand. They will feel serious if they are told that their tuition fees for a semester are a committed cost after withdrawal period. At the beginning, students could not comprehend the meaning of opportunity costs especially if they have not studied economics. As the definition of opportunity cost is potential benefits foregone for choosing one alternative over another, they could understand when they know that the loss of sleep by coming to an early class is a kind of opportunity cost. They were given to realize that there are tradeoffs in life when a decision is taken; for example, their cost of learning in university consists of the loss of income they could get by working instead of entering university on fulltime basis.

In teaching budgeting, the writer used to ask the students to compute the production units required out of sales forecast, estimated beginning inventory and desired ending inventory, before showing a typical format. Only a couple of students could give correct answer because they rarely used analytical thinking. Then, the writer asked similar questions to compute pocket money for a month they should ask from their mother by telling the money in their hands at the beginning of the month, the money they want to keep at the end of the month, and the money they need to spend during the month. At that time, the correct answer came out easily from them. If such an analytical thinking is not enforced on them, they would not understand but memorize the format. Of course, such a way of teaching takes time. Life lessons can be adapted in managerial accounting and vice versa.

Another interesting approach used in budgeting as well as standard costing is a process of setting plans/standards, measuring actual performance, comparing and finding differences between actual and budgets/ standards, investigating their causes, and follow up action. The writer used to tell the students to take this approach as their philosophy for life improvement. Everybody at any stage of life should have a plan that needs to be implemented. At each interval of time they need to review their achievement against their plan and evaluate their performance. The causes for shortfall of achievement should be taken as lessons for self improvement. Thus giving real life examples increases the students' interest in managerial accounting, but motivating them to participate in teaching/learning process is more effective in their learning.

Motivating students' participation

Students' participation, voluntarily or nonvoluntarily, definitely enhances the interest of the students in any subject. To motivate their participation, students are invited to come out and write solution or part of it on the board; but it is only one of the means of motivation. There are a number of ways an instructor can use depending on students' interest, discipline, intellectual level and communication skill.

The simplest form of inviting participation is by asking short and simple questions that majority of them can answer. This is useful when students seem to become weary of explanation of an instructor. Ideally, questions are asked to encourage shy students and/or non-native speakers in English-media institutions. However, those questions could also be directed to daydreaming, or side-talking or late-coming students. Sometimes, the instructor needs to repeat the question loud and clear while persuading students to answer. It is even necessary to assure them that there is no silly answer but only silly question in the class. Moreover, the students need to be encouraged not to be afraid of making mistakes while doing activities with their fellow students who rarely make mistakes. In fact, mistakes naturally can happen as they are just learning the topic for the first time. If a student gives an incorrect answer, it is important for an instructor to appreciate the participation, explain the correct answer clearly and never to blame the student. It may be interesting if the instructor invites other students who have different answers or opinions, and finally let the whole class judge. Moreover, challenging questions and commenting their answers would be interactive and provoking to students especially bright and/or eloquent ones. That way can provide feedback and alertness on the part of students. Now, it is generally accepted that teaching-learning is a two-way process.

In introducing budgeting topic, the writer used to draw an organization chart of a manufacturing organization, and started with a question, "Which department should start a budget?" At the beginning, it may be puzzling for the students but after a couple of minutes different answers came up such as "finance and accounting department", "production department", "human resource department", and "marketing department". To increase more students' involvement, their answers were followed by another question asking who would support which answer. It made the other students think, and the result of thinking is learning. For the next step, the question would be about different targets between marketing department and production department, how to resolve them if the students were respective managers. The purpose was to set them enter in the role of managers and force them to think what they will decide if they were in managers' place. In this context, White (1998) suggests asking the students to play specific roles in class when evaluating more technical and complex cases. As an example, he suggests one student to play the role of the corporate controller, while another to play the divisional manager, and let them engage in a budget negotiation.

Such questions and role playing may take about one period of one and half hours, but would arouse the students' interest with the practical budgeting process. The students need to understand that filling up the forms are technical and routine in practice, but what is more important is communication and coordination in the budgeting process. The approach of questions and role playing is somewhat similar to case study but not as sophisticated and specific as a case study. The progress of a discussion and/or negotiation will lead to different directions such as outsourcing, acquiring new machines, or streamlining. The case will grow in the class depending on the participation of students.

One way of getting full participation of all students in a class is giving assignment to be done during a session. There are two approaches for supervising their work- one by the instructor in the teaching hour and another by tutor/s in a smaller class. The first approach generates an opportunity for the instructors to be closer to students and to receive direct feedback of students' understanding. The instructor can go round, encouraging students, answering their questions and seeing progress at the same time checking the lazy ones. Special attention needs to be given to those lazy students who used to pretend as if they were working and those who were just waiting. They are given to understand that managerial accounting is not a mere knowledge accumulating subject, but a practical subject that must be practiced. They cannot learn this subject just by listening and seeing, but by doing by themselves. They are often reminded that they can learn this subject only by doing because when they do they need to think, and when they think they learn. Besides, their performance of the assignment in the class should be recorded as class participation or given special assignment points. This approach can lead an instructor to improve the learning process of his/her students as well as one's own performance.

The second approach of giving assignments is by dividing a class in to two or three sections to be supervised by tutors individually. Generally, students are more friendly and comfortable with tutors than instructors because of age (sometimes, generation) difference with the latter. Student/tutor ratio is usually higher than student/instructor ratio resulting in individual and close supervision. However, it requires thorough instruction by instructors to tutors and a complete feedback by tutors to instructors. In another way, it is an application of specialization principle whereby instructors will concentrate on teaching and tutors will supervise the students. During a tutorial session, students can ask as many questions as they can personally without embarrassing other students. In spite of its merits, tutorial system will consume financial resources of an institution. To ease such a financial burden, an alternative is to give homework, receive back during class hour or at instructor's office, and check them during office hours of the instructor. This method will exert effort of students as well as that of instructor.

As for team presentation approach, the writer has an opinion that it is not yet appropriate for undergraduate managerial accounting students because most of the textbook problems can be solved by individual students. If presentation approach is used it would take a large span of students' time as well as that of the instructor's. Moreover, presentation cannot cover every topic in the curriculum. Due to its time consuming nature, presentation is appropriate for the subjects that require choice of topic, case or company, and different approaches to each problem. It can preferably be used in professional classes or graduate classes where cases are used as study material.

In fact, a selected number of Western universities had experimented with case materials in accounting, but when looking at their cases it was found that students needed a wide spectrum of knowledge of business including operation management. As a sophomore student usually has not yet accumulated knowledge sufficient enough to be able to comprehend a case it may take more time for them to try to understand it. However, according to White (1998) students who studied cases in teams felt that their time in the classroom was well spent, that they have learned much from cases, and that the course had increased their level of interest. Nevertheless, the writer is of opinion that the approach of team work with cases should be

considered in the light of time available, students' intelligent level and the course level.

Another variation of team work with cases is an experimentation of serial-case pedagogy in the introductory managerial accounting course by the California State University in the early 1990s (Adams et al, 1999). A serial case by the name of California Car Company (CCC) was created to introduce a user, decision-making approach into a second semester course that emphasized managerial accounting. The serial-case includes a sequence of decisions related to CCC over an academic term. The students were given initial decision problems to solve before they were again given more complicated decision problems introducing concepts such as Just-In-Time (JIT), Activity Based Costing (ABC) and Total Quality Management (TQM). It was found that a serial-case can be a powerful pedagogical tool in dealing with business-decision problems and related accounting information. To the writer a user oriented approach is suitable especially for aspiring future managers, but it may be too advanced for students who have just learned introductory accounting courses and those who have not yet chosen their major for study. After a decade of its experiment, managerial accounting text books have not changed to this direction reflecting its place in accounting pedagogy.

Lancaster and Strand (2001) had experimented a Team-Learning Model (TLM) in managerial accounting class as part of Cooperative Learning. Cooperative learning necessitates each student's attitude to be positively independent with others in a team, yet there must be individual responsibility. There must be team interaction and students are required to learn social and small group skills. Team-learning model (TLM) requires students to be actively involved in learning process. The results of their experiment and follow-up research suggest that TLM in accounting course encourages students to be more actively involved. However, academic performance and perceptions were not different for managerial accounting students engaged in TLM than those students who took in a more traditional way.

The use of (computer-assisted) multi-media in teaching managerial accounting

The use of multi-media technology with CDROM of publishers helps instructors a lot. It is eye-pleasing for the students with colors, pictures and clear writing of words in contrast to board (black, white or green) writing by instructors. Using a computer-assisted system, an innovative instructor can prepare a power point presentation. As the students need not wait for the instructor to write on the board, it saves a lot of time for both students and the instructor. However, if an instructor relies too much on technology, it could tame the interactive teaching-learning dynamics in the class. The readiness of electronic teaching materials could unintentionally bring laziness on the part of some instructors to prepare lessons. At least, it could reduce initiative and flexibility of an instructor that could be based on reaction of the students for any question or discussion. Worse, even an unqualified instructor could bring CD/ diskette in to the class room.

In most cases, solution to management accounting problems develops step by step. If a solution is put on a screen, students may have no idea about these steps even though instructor explains by pointer or finger. When a solution is illustrated by chalk and talk, an instructor may pause to check their understanding and explain each step intermittently asking questions. It is also possible that questions and discussions will arise by enthusiastic and intelligent students at each step of solution. The old method of chalk and talk is not entirely out of date but it has its merit of motivating by arousing interest on the part of students. However, the obvious disadvantage of this method is that it is time consuming and hazardous of chalk dust to instructors and students in the front. The problem of chalk dust could be largely protected by use of dustless chalk or eliminated by using white board and marker. Another variant of chalk and talk is writing on the transparency sheet on the projector while explaining to students.

Chalk and talk method can give the students more opportunity to participate in the process of solving problems if the instructor can afford more time. At each stage of solution, an instructor can invite volunteers to come out and write on the board each step or part of solution one at a time. If the instructor records their participation, the students become even more active.

There are a number of studies that support multi-media or computer-assisted teaching over traditional teaching (Jensen and Sandlin 1992, Alavi 1994, etc). A more recent experiment conducted by Beets and Lobingler (2001) concludes that students in their project performed no differently on examinations and daily quizzes among different pedagogical approaches of chalkboard and computerprojected software. One third of the students who preferred discussion using a chalkboard had higher examination grades when a chalkboard was used. Their final conclusion is that there were differences in preference over different pedagogical approaches among students, and that students performed well with the pedagogical approach of their preference.

Relating to this issue, Doost (1999) is more candid and forceful in expressing his views. After using power-point in his classes he found out that it even slowed down from interaction and learning. Hence he suggested that human touch and face-to-face interaction with a group of students were essential in the learning process.

However, one area where multi-media is useful and effective is teaching master budget. Students

are assigned to prepare their budget solution in a spread sheet where cells are linked from one to next through formula bar. During preparation, important variables like percentage of cash and credit sales, collection percentages of credit sales in following periods, standard material usage per unit of output, standard labor hour per unit of output, and interest rate etc need to be put in separate cells. The purpose is to make them understand the linking among various budgets and find out possible effects by changing one or more of these variables. A spin-off of this approach is that students can do project analysis when they move up to project management and financial evaluation. This kind of approach is more suitable for graduate students with their independent study. However, at the beginning of budgeting lesson, the instructor should explain step by step preferably with chalkboard both in undergraduate courses and graduate courses.

Teaching managerial accounting in English to non-native speakers

As an instructor of managerial accounting for over two decades both in Thailand and Myanmar (Burma), the writer has come across many students facing difficulties in learning managerial accounting in English. This kind of problem may not be pervasive in other non-native Englishspeaking countries like Hong Kong, Singapore, India and Sri Lanka, yet the students may not be equally comfortable as native speaking students learning from native speaking instructors. In this context, the learning environment in language aspect could be divided into five groups as follow:

a. Native English-speaker teaching native English-speaking students in their own language.

b. Native English-speaker teaching nonnative English speaking students.

c. Non-native English speaker teaching native English-speaking students in English.

d. Non-native English-speaker teaching their own native students in English.

e. Non-native English speaker teaching other ethnic non-native students in English.

Groups (a) and (b) could be commonly seen in native English speaking countries like U.S.A., U.K., Canada, Australia and New Zealand. In terms of language, group (a) does not have special problem but group (b) students would have problems if they were not born and educated in native English speaking countries. Even though the problem is not severe in English-language affluent countries like Hong Kong and Singapore (groups b and c), they still could have some problems in adjusting to hear native English assents to their native ears. In group (c), non-native English speaker may not be comfortable whereas native Englishspeaking students can tolerate and adjust their hearing of non-native accents. However, if a non-native teacher comes from a country, where people speak English with a marked accent, English-speaking students may be hard to adjust at the beginning. In group (d), language-weak students may have difficulty in understanding even when they listen to the speaker of their own ethnicity. Among those groups, group (e) has accent problem both for the speaker and the students. It needs the effort of both sides, especially instructors to be able to speak slowly, clearly and correctly whereas students should be attentive with full concentration. After all. language is a matter of assimilation through time and effort.

The last group encounters the most difficulty in learning managerial accounting in English. An instructor needs to be careful to speak slowly, loud and clear, at the beginning, and should check if the students can understand him. If an instructor uses rare or new terms, s/he should write them on the board or say again. As the majority of the students in this group are also slow in reading comprehension, an instructor should insist them on practising reading with concentration so that they can understand the problem because it will help students in solving problems. In fact, practice is the key to learning accounting.

RECOMMENDATIONS

The writer would like to give the following recommendations to make teaching of managerial accounting more effective in class rooms.

a. Students should have background knowledge about financial accounting and cost accounting sufficient enough to understand managerial accounting lessons.

b.The teacher should insist that the students should bring textbook so that they can look at the illustration of instructor and also do class assignments. They should also be advised to read textbook in their own time.

c. There should be time available for questions and answers during a lecture class. Moreover, students should be asked to come out to the board one by one and write the answers step by step. In case innovative students come out, the instructor should acknowledge his/her independent thinking and analyze his/her answer to the class. It would be effective if the instructor ask them to do individual assignment in the class, and go round monitoring. If it is not convenient due to tight schedule, tutorial sessions should be opened and undertaken by tutors.

d. As managerial accounting is a problem solving subject, students should be encouraged to use their common sense and intelligence to solve in different approaches or formats.

e. The use of multi-media equipment is attractive and effective to some extent but it should not jeopardize the initiative of both instructor and students as well as face to face interactive teaching/learning process. f. Students should be taken to industrial establishments and service enterprises to be familiar with practical working life. On the other hand, senior management accountants should be invited as guest lecturers to enhance practical knowledge on the part of students.

g. In institutions using English as medium of instruction in non-native countries, special attention should be given to comprehension by both instructors and students.

h. Finally, instructors should be qualified, competent and caring to students.

This paper focuses only on the pedagogy part of teaching managerial accounting, leaving curriculum part and detail discussion on qualification of instructors that may deserve separate and special treatment in future.

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