Self-Monitoring: An effectual classroom strategy

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ABSTRACT

This paper examines the effectiveness of self-monitoring (SMS) program in transforming students' misbehavior in classroom which if not overcome will eventually lead to sub-standard grade performance. The samples were the 36 students in Integrated Case Study (MAF680), a newly introduced code for Bachelor in Accountancy, who initially had shown some attitudinal and cognitive misbehavior in class. Following the seven (7) identified procedures, it was proven that SMS created huge positive variance not only in students' classroom behavioral abilities but also on the grade achievements where 83% of students obtained a grade point average (GPA) of 3.00 and above. Other benefits were observed such as making the students responsible by initiating control, checking, and applying prompt remedial measures with minimal effort from the lecturer and also making the lecturer more focused on content and strategy teaching that are vital in professional skills transfer.

Key words: self-monitoring, misbehavior, procedures, positive variance, grade achievement, benefits

Introduction

Teaching students in Integrated Case Study class (MAF680) for January-April 2011 semester could be demanding not only because it is new in the local tertiary education, designed for the final year students in the Bachelor in Accounting (Hons), but also because it requires students to recall contents studied a few semesters back. Using a case study approach may be open for multiple challenges ahead in classroom if proactive strategy is dormant. Great preparations, in the forms of case study guidelines and summaries, had been prepared ahead geared as a minimalistic way towards students who understand the least, the poorest and the hardest. Less performing students are few in classrooms exhibiting unacceptable behaviors such as coming to class unprepared, keeping away from studying and reading assigned topics, late submission of assignments, copying other friends' work, engaged in electronic games. More so a number of students are used to cramming for the next day's exams are distracting behaviors. Lecturers are faced with off-task behaviors in classroom. Failing to arrest these scenarios signifies lecturer's conformance to wrong conduct that may lead to multiple professional and real life mischief. This paper is aimed aims at applying a strategy and evaluating its impact on students' behavioral disabilities, academic performance, and lecturer's assessment. One such strategy is self-monitoring which is designed to increase students' focus on academic tasks by encouraging them to monitor their own behaviors Hallahan, Lloyd, & Stoller (1982) and acquire metacognitive skills and tasks required in this integrated case study course.

Literature Review

Daly and Ranalli (2003) have discovered many benefits of self-monitoring: (1) It is an effective tool for changing behavior; (2) It promotes generalization of the appropriate behavior to other environments; (3) It makes the teacher focus on content; (4) It increases students independence by making students responsible for their own behavior; (5) It is less expensive; (6) It is relatively easy to implement; (7) It can be used on a variety of behaviors; and (8) It can be used successfully by students with different ability levels.

Vaderbilt (2005) has outlined ten (10) key steps for implementing self-monitoring in classroom: (1) Identify the behavior; (2) Define the target and develop a replacement behavior; (3) Collect baseline data; (4) Schedule a conference with the student; (5) Select self-monitoring behavior; (6) Teach the student to use self-monitoring procedures; (7) Students to implement the self-monitoring; (8) Use specific verbal phrase; (9) Monitor student progress; and (10) Maintenance and follow-up.

Teaching students on how to learn by embedding strategy instruction within the subject matter of a given course is an ideal move Pressley and Woloshyn (1995); good strategy lecturer must know which strategies are effective and how to teach students not only by embedding strategy instruction into content teaching but by introducing the strategy, show how and why it works and where else it is useful Kiewra (2002); assessing metacognitive skills by examining the students knowledge, task knowledge and strategy knowledge helps the students to perform many cognitive tasks more effectively Metcalfe & Shimamura (1994). These issues are relevant to exploring the impact of the strategy to students' performance Fuchs (1989).

Research Methodology

This section outlines the research design and approaches to accomplish the research objectives. The cohort involved 36 final year bachelor students taking Integrated Case Study (MAF680) of the faculty of accountancy, UiTM Pahang comprising female (82%) and male (8%) students.

The cohorts were given a case study and were placed in the position of a decision maker and were required to search and collect for information by interviewing a decision maker in a related organization of a given industry in the case. The lecturer had provided the necessary training and orientation of handling a case study through the first case study and all procedures specifically on what to do, how to do and why they were doing it had been thoroughly discussed in class.

As case study is meant for discussion, the students were required to read and understand the story of the case, fact and figures cited before coming to class and are ready for answers. Grades were given based on their answers to discussion questions. Assessments were based on individual written assignments and group real life case study analysis of their choice but no two groups having similar sample organization. The cohorts were required to present their findings of the case with any text reading.

Lesson plans were distributed to students highlighting the time duration, specific week of the month, what the students are expected to do, form and substance of work outcomes and the date of submission were highly emphasized. There were vital requirement in administering self-monitoring program. Students' grades were recorded and analyzed not only to monitor student progress across time but also evaluate the effectiveness of self-monitoring endeavor. Assessment results were translated into a performance graph and shown to the sample. Routine observations in class on misbehavior and academic progress were undertaken and analyzed. Required forms were distributed; procedures were discussed, agreed upon and taught for the cohort to follow through. Figure 1 shows the theoretical framework of the study.

Figure 1: The theoretical framework
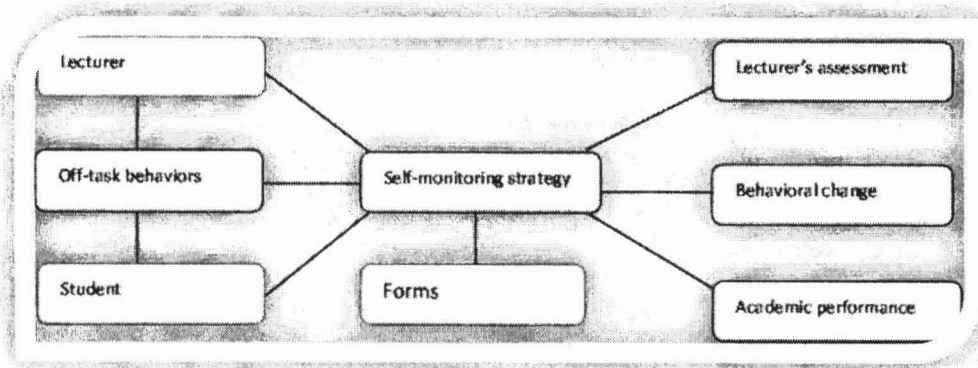
Findings and Discussion

Observation results for the first week of January 2011, as shown in Table 1, indicated that some students (31%) participated in class discussion while 69% remains quiet even when asked to answer. Other investigation revealed 62% were not prepared for the day's class indicative of some inherent problems. Tolerance to inactive learners in classroom is unacceptable as it inhibits these cohorts to perform the required cognitive tasks and could lead to dismal performance as well as non-conformance to the academic quality standards of the university.

Results of the initial quiz were not satisfactory. Sixty percent (60%) of those students who participated in class discussions earned a grade of 2.50 (62.5%) out of the full mark while the remainder had 2.00 and below. Comparatively, a lot of improvements need to be done if the academic quality standards of 50% of students to graduate with cumulative grade of 3.00 (65%) and above is to be met. Other student' pitfalls which include vague sentences (70%) and inability to identify main issues (80%) were disturbing. Applying sensitivity analysis indicates that students' attitude to active participation and professional English proficiency should be developed and enhanced in classroom to afford strong communication and metacognition skills build up.

Another behavioral disability is tardiness. Despite lengthy prelude on class punctuality, 36% of students came late to class denoting their incomprehension of what the lecturer expected them to do. This scenario is considered

problematic because it is distracting to both the lecturer and the peers while class is in session. Applying demerit where students are deducted some points, on graduated scale based on the number of minutes late to class, would result in accumulating lower marks thus affecting students' final grades. This move is not logical as the cohorts that understand the least, the poorest and the hardest are those fond of tardiness.

Prior to the end of the first 2-hour session, the students were given an assignment on identifying the main problem or issue in a given case study to be submitted the following session of the week. It was discovered that 50% of the students failed to submit the assignment on time while the other 50% submitted promptly. This is another signal of misbehavior ahead because it could delay the completion of course syllabus and lesson plan. Additional class hours have to be allocated as prompt completion of lesson plan is essential. These classroom misbehaviors that restrain quality management in classroom have to be overcome prior to irreversible impact sets in.

Table 1: Misbehaviors in class

#	Misbehavior/cognitive pitfall	Incidences in percent
1	Passive participation in class	69
2	Vague sentences	70
3	Late submission of assignments	50
4	Inability to identify main issues	80
5	Tardiness	36
6	Not prepared for the day's class	62

Prior to the start of the second week and given those misbehaviors in MAF680 class, a proactive decision to make teaching and learning easy, interesting and creative has been made after much reflections and contemplation without delay. Self-monitoring, as put forward by Daly and Ranalli (2003) and Vaderbilt (2005), was in the forefront and to be implemented the ensuing week. The literature recommends collecting baseline data but this study did not waste time of collecting the frequency of behavioral disabilities due to time constraint as topic completion has been laid out in the lesson plan. In addition, making the cohorts adhere to the metacognitive pursuit; skillful in handling of varied specific matters relevant to each case is a lecturer's foremost concerned in MAF680. Advantages accruing are many; among others, it simultaneously leads these cohorts to become responsible in examining their own misbehaviors, knowledge acquisition, task knowledge and strategy knowledge as propounded by Metcalfe & Shimamura (1994). Further, the cohort has to conform and stick to agreed procedures and requirements to afford convenient monitoring and feedback processes.

Self-monitoring Strategy (SMS)

In the second week, SMS program was introduced to students, explaining those earlier unwanted behavioral experiences in class, including the benefits accruing to the students as opposed to continuing the MAF680 class at the current state of affairs. Cohort members have been made aware of the respective disabilities which should be ceased if he/she wants to graduate on time and in conformity with the academic standard. Some motivating elements have been embedded in the plan that promises good assessment standing once full adherence to SMS is in place. The students have been asked to review the lesson plan prior to class session and make it visible all the time by putting it in the cover page of their respective MAF680 file which is now a compulsory requirement. Another procedure is the date of submission and what to do columns in the lesson plan have to be coloured once the job has been completed and checked in class by the lecturer on a given specific date as reinforcements to students' efforts.

Additional worksheet, as shown in Figure 2, was handed out to students for them to physically monitor the submission of assignments and other requirements on time.

Figure 2 Lists of Case Study and Date of Submission

#	Name of students	MAF680 Case Study & Date of Submission				Comment
		Case 1 (date)	Case 2 (date)	Case 3 (date)	Case 4 (date)	
Case 1 -		Case 2 -		Case 3 –		Case 4 -

Another SMS form is the daily tally sheet of students' participation where the grades of the students are recorded as shown in Figure 3. It shows the daily participation worksheet used to tally students' grades. It has been highly emphasized and agreed upon the principle of no question no grade; no answer no grade. The students could made referral from the lecturer on the grade earned each session for their own monitoring.

Figure 3 Daily Tally Sheet of Students Participation

#	Name of student	Week/GRADE														Note
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	

Few other appropriate moves were agreed upon such as students' written strategy of how not to miss the university bus schedules, teaching the students how to create a meaningful analysis of fact and figures in the case, how to identify the main issues and challenges in a given case, using 5-tier questioning to identifying the main cause of the problem, evaluating the appropriateness of recommended strategy and learning points in strategy implementation. All these are vital in getting good grades on assessments in a case study approach. Figure 4 shows the list of case study milestone and checklist; forms are fundamentals in tracking the SMS compliance.

Figure 4 Case Study Milestones & Checklist

#	Name of Cases	Checklist		Discussion Date	Assignment & submission date	Fieldwork & date of presentation	Individual written assessment
		Done	Not yet				

The cohort had been taught to practice SMS together with the lecturer in classroom by leading the student through the various processes. The students were encouraged to ask questions for clarity, repetitions and avoid confusions during the implementation process. As a self-control strategy, the lecturer also reminded the cohort to use and fill up the pre-formatted forms by making a tick. This approach has been to be strictly followed. Once the lecturer was assured and confident that the cohorts understood and were familiar with the self-monitoring elements and procedures, then implementation began. Initially, the lecturer had to conduct spot checks over the individual cohorts' self monitoring compliance for feedback and ensure that the fulfillment of the processes was fully complied. As the class progressed, spot checks could be reduced when the lecturer reckoned that the compliance of course works was effectively performed and that on going assessments were on the positive. However, the lecturer had to maintain some occasional monitoring and assessment of plan's progress for potential corrective measures.

Assessment of SMS plan was supported by comparing the pre and post misbehavior incidences. Table 2 shows the comparative incidences of cohort descriptions and reveals a remarkable improvement or reduction in the misbehavior and cognitive pitfalls. Changes in all the six (6) items monitored were substantial indicating the worth of SMS program struggle. Continuous and diligent compliance of SMS procedures proves that self-monitoring is effective in transforming students' disabilities in MAF680 classroom in line with the previous review by Hallahan, Lloyd, & Stoller (1982); Daly and Ranalli (2003). But, uniquely, this study did not focus only on misbehavior transformation but also on self-monitoring students' cognitive performance. The author believes that tertiary students need to balance the social and cognitive performance as an added intrinsic edge built-up of cohort in job landscape.

Table 2: Comparative misbehavior changes

#	Misbehavior/cognitive pitfall	Incidences in percent		Change
		Before	After	
1	Passive participation in class	69	19	-50
2	Clarity of sentences	70	22	-48
3	Late submission of assignments	50	0	-50
4	Inability to identify main issues in a case	80	20	-60
5	Tardiness	36	0	-36
6	Not prepared for the day's class	62	0	-62

This study however has modified the procedures by Vaderbilt (2005) into seven (7) easy implementation steps. They are: (1) Identify the behavioral and cognitive pitfalls; (2) Validation and verification by collecting data; (3) Discuss with the students; (4) Provision of forms for self-monitoring; (5) Teach the student how to use the forms and procedures;

(6) Implementation of self-monitoring; (7) Monitoring progress and follow-up. Uniquely, self-monitoring has been implemented on cohort bases as opposed to single sample as cited in most literature. In addition, simplification of the processes and procedures supports the timely completion of lesson plan and matches the level of students' maturity.

Student Assessment Results

The author attempts to link self-monitoring to cohort's academic performance through the on-going assessment and final result Fuchs (1989). It is believe that students' attitude and behavior in classroom bring impact to academic performance. Figure 5 shows the learning point check list form that has been distributed to cohort as part of the self-monitoring program. The primary purpose is to let the students continuously assess their level of metacognitive skills acquisitions and their readiness to taking the on-going assessments including the final examination.

Figure 5: learning point checklists

#	Learning Point	Tick (if acquired)			
		Case 1	Case 2	Case 3	Case 4
1					
2					

The intent is to let the students develop and monitor the metacognitive acquisitions such knowledge, task and strategy adopted in all the four (4) cases mentioned earlier as adopted by Metcalfe & Shimamura (1994). The lecturer, on the other hand, needs to entrench effective case study content learning in an interesting way; visualize the case; use compare and contrast of case content; and adopt minimal view to case study learning to fit the varied needs of learners, a learning strategy that supports Pressley and Woloshyn (1995); and Kiewra (2002). The metacognitive acquisitions and academic adeptness of the cohort in a given case study is monitored and evaluated through on going and the final grade results.

Finding reveals, as shown in Table 3, that 83% of students were able to achieve higher grades of 3.00 and above signifying better metacognitive acquisitions through self-monitoring and considering that MAF680 is a newly introduced during the semester. In an undisclosed data of another new subject that is non-supportive to SMS program of the same cohort, findings indicating the highest grade were 64% or 2.99 and the passing rate was 50% was acknowledged to be comparatively far below the MAF680 performance. It is deduced that SMS is an effective approach in using a case study approach in classroom. It is not only being useful in changing misbehaviors of some students but also academic performance given the right approach. But, self-monitoring needs great preparation at initial stage.

Table 3: Final Grades in MAF680

#	Grade Point	Frequency	Percent
1	3.00 and above	30	83
2	2.99 and below	6	17

Lecturer's Assessment

Another objective of this study is to see the impact on lecturer's assessment through the student feedback online available at the university as shown in Table 4. Students' assessment based on 20 criteria indicated that 97% of the students strongly agreed that the lecturer had performed the job expectations of the university while 3% agreed; except on the other three criteria where only 94% strongly agreed and the remainder of 6% agreed. The criteria are: encourage students to ask questions, easily contactable for discussions and satisfied with the lecturers' teaching. The average assessment rating was 3.98 on a scale of 4. Presuming that the students' ratings are reliable, it can be construed that the students were satisfied with the lecturer's way of managing the learning process as manifested by the high rating (99.5%) afforded by the students. The SMS implementation is considered exploratory yet it is proven to be mutually beneficial and effective to both the students and lecturer as it increased students independence by making them responsible for their own behavior in class and academics as rigidity in the teaching and learning is adhered to taking into consideration the code is novel in its substance.

Table 4: Online feedbacks about the lecturer

#	Assessment criteria	4	3	2	1	Average grade
1	The lecturer informs the students about the teaching plan for the course	35	1			3.98
2	The lecturer provides a clear explanation of the course and learning outcome	35	1			3.98
3	The lecturer clearly explains the assessment procedure of this course	35	1			3.98
4	The lecturer conducts lecture sessions based on the teaching plan	35	1			3.98
5	The lecturer observes the scheduled teaching hours of this course	35	1			3.98
6	The lecturer replaces every lecture sessions which has been postponed	35	1			3.98
7	The lecturer is concerned about the students' attendance	35	1			3.98
8	The lecturer uses English language during lecturers	35	1			3.98
9	The lecturer is always prepared for every lecture	35	1			3.98
10	The lecturer makes effort to help students understand the lessons	35	1			3.98
11	The lecturer uses suitable teaching aids	35	1			3.98
12	The lecturer uses effective and appropriate teaching techniques	35	1			3.98
13	The lecturer encourages the students to ask questions and give opinions	34	2			3.94
14	The lecturer is prepared to provide academic guidance top students	35	1			3.98
15	The lecturer gives tests/evaluation/assignments in line with the learning and course outcomes	35	1			3.98
16	The lecturer informs every assignment result to the students	35	1			3.98
17	The lecturer is appropriately attired	35	1			3.98
18	The lecturer discusses relevant issues pertaining to the course during lectures	35	1			3.98
19	The lecturer is easily contactable for discussions	34	2			3.94
20	In general, I am satisfied with the lecturer's teaching	34	2			3.94
Average rating						3.98

4 = strongly agree; 3 = agree; 2 = disagree; 1 = strong disagree

Comparing the grade performance of cohort in MAF680 and the lecturer's rating, it could be deduced that SMS is an effectual tool not only in discarding behavioral distractions in class but also in making the cohort more focused on the content and cognitive aspects of the learning domain. It also brings more positive impact to improving cognitive skills through making the students aware, lead, govern their own strategy to better performance or make prompt remedial measures over their own inadequacies. Table 3 and 4 show parallel improvement in teaching and learning performance of both the lecturer and the students and denoting that the 83% of students obtain good grades similar to the ratings they cast to the lecturer, 97% of the students were satisfied in MAF680. On the other hand, untoward incidence may occur where the lecturer obtains good rating yet the students are failing or obtain mediocre grades; a scenario that any academic averts. The variance of 14% is brought about by the way the data was collected. The students' performance was measured on semester basis at numerical and cumulative manner while the lecturer was on one-time measurement approach based on perceptions and acuity of the sample on the particular instance. This also proves that students are fond of giving more ratings to their lecturer as compared with the grade they earned.

Conclusion

Self-monitoring strategy was implemented in MAF680 class where the lecturer had initially observed some early signals of students' misbehavior and inadequate metacognitive skills in classroom. Seven (7) procedures were adhered to and agreed upon by the lecturer (the program owner) and the students (implementer). They were: (1) Identify the behavioral and cognitive pitfalls; (2) Validation and verification by collecting data; (3) Discuss with the students; (4) Provision of forms for self-monitoring; (5) Teach the student how to use the forms and procedures; (6) Implementation of self-monitoring; (7) Monitoring progress and follow-up. Overall, the SMS program was successful and effective in transforming students who were believed to be capable of doing the lessons in and off classroom but choose not to do as manifested by Table 2: comparative misbehavior changes. The grade performance of the students was far above than those of the non-SMS class as shown in Table 3 where 83% of the students obtained grades of 3.00 and above. One of the learning points in SMS program was the lecturer had led the students to scrutinize their own sub-standard academic progress achievement and attitudinal misbehaviors promptly and apply remedial measures. SMS forms were vital and fundamental to the program.

In addition, the lecturer had to ensure that the students understand the modus operandi, benefits, the objectives, and usage of forms including giving feedbacks and follow-ups without obstructing the flow of the scheme of work or lesson plan. Other benefits were the students could adopt this SMS program generally in all subjects and endeavors pursued so long as he/she could govern his/her own behavior. This study is not free from limitations where the findings and discussions are wholly based on a segment of the entire university population. Future SMS studies focusing on secondary school's juvenile students on a large scale basis would be encouraged. Likewise, SMS program is highly suitable to a code or class of high failure rates.

Acknowledgment

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