Report on the Project "Teaching Company Law to Students of Accounting and Finance: Enhancing the Students' Learning Experience and Outcomes"

Project Code: LTG12-15/SS/AF)

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A. Introduction

In this project we built two learning and teaching tools, namely pre-unit quizzes (PUQs) and a case study. The goal was to help students of company law gain a better learning experience and attain better outcomes. The company law course is delivered as part of the Bachelor of Business Administration programme at the School of Accounting and Finance, Faculty of Business, the Hong Kong Polytechnic University. This is a semesterlong, compulsory course taught to third-year students. It consists of a one-hour weekly lecture followed by a two-hour seminar during a 14-week period. The lectures (large-size class) and seminars (small-size class) are delivered regularly by a team of two to three lecturers in all three semesters of our academic year.

Students of accounting and finance face particular challenges when studying company law. It has been observed that the students taking this course often show little motivation and engagement in class. These students tend to adopt a passive attitude in their learning of company law, especially where the students do not see a connection between the content taught, on the one side, and their accounting and finance chosen profession, on the other side. Similar problems have also been identified in the existing literature where non-law students are instructed to resolve legal problems whose content is distant or unrelated to the core areas of the students' study programme. \(^1\)

A second problem has also very often been observed. A significant proportion of the students taking the company law course has very often failed to complete the assigned pre-class readings and, to this extent, these students attend the class unprepared. By talking with the students we learnt that, in their own experience, reading the chapters of the company law textbook was to them an arduous if not overwhelming task. Doubtlessly, this task differs significantly from the quantitative problems that the students of accounting and finance are better prepared for and more used to tackling. Especially, the students find it difficult to read lengthy course material containing complex legal terms and concepts. These problems of lack of preparation and of difficulty in understanding

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¹ S. Douglas, "Student Engagement, Problem Based Learning and Teaching Law to Business Students" (2012) 6(1) *E-Journals of Business Education & Scholarship of Teaching*, 33-47, p. 38; V. Allen, "A Critical Reflection on the Methodology of Teaching Law to Non-law Students" (2007) 4 *Web JCLI*; L. Byles and R. Soetendorp, "Law Teaching for other programmes", in R. Burridge, K. Hinett, A. Paliwala and T. Varnava (eds), *Effective Learning and Teaching in Law* (London, Kogan Page, 2002).

legal texts have also been documented in the past by other scholars teaching law to non-law students.²

In our company law course, pre-class readings are assigned weekly. And these readings can be extensive. The content of our course relies on multiple resources including a law textbook in Hong Kong company law, selected handouts and case law extracts. Our assumption has been that the students will learn better in class if they complete their pre-class readings. We expect that through pre-class readings our students will acquire a basic knowledge and understanding of a topic. This basic preparation will allow them to integrate more easily the content of the lecture and acquire higher-level skills in the seminar to the extent that the seminar time can be better spent in problem-solving activities and/or in critical discussion of legal problems and questions.³

In order to address the problem of students' insufficient preparation before attending the class, we introduced the PUQs. We borrowed from the experience depicted in Monseau (2005) that used 'reading quizzes' to tackle a very similar problem in her law course on the 'Social and Legal Environment of Business' taught at the Business School at Rider University, New Jersey, USA. According to Monseau, introducing the quizzes drew positive results in class. It was perceived that after working on the reading quizzes the students were better prepared for class and thus engaged more and better in class discussions. Consistently with Monseau's experience we found that on average the PUQs assisted our students very satisfactorily in their preparation for class with positive outcomes in their in-class learning experience. In order to address the problem of motivation and engagement we designed and implemented in blackboard a case study assignment, with positive results as well.

B. The Design and Operation of the Tools

Pre-Unit Quizzes

Our company law course covers 12 core topics (a topic per week). Hence, 12 PUQs were designed (1 PUQ per topic). Each PUQ asks students to complete a set of eight multiple choice questions (MCQs). In order to allow for a random element 12 MCQs per topic were drafted. Adding all 12 PUQs, a total amount of 144 MCQs were designed by a team

² F. Ewang, "Teaching Law to Accounting and Business Students: A Cumulative Dual Model" (2008) 5(2) *Journal of University Teaching & Learning Practice*, pp. 16-17; Douglas, *supra* n. 1, pp. 37-38; Allen, *supra* n. 1; S. C. Monseau, "Multi-Layered Assignments for Teaching the Complexity of Law to Business Students" (2005) 17(4) *International Journal of Case Method Research & Application*, pp. 533-34.

³ K. Exley and R. Dennick, *Small Group Teaching: Tutorials, Seminars and Beyond* (Routledge, 2004), chapter 1.

⁴ Monseau, *supra* n. 2.

⁵ Ibid., p. 537.

of four teachers during the period of Jun-Nov 2013 and following the best practices explained in Burton et al. (1991).⁶

It was decided that the PUQs be operated on the blackboard learning system. The idea was to provide the students with easier and more flexible access to the quizzes and the teachers with a way to grade the quizzes rapidly, consistently and transparently using the grade centre in Blackboard. Each PUQ along with its corresponding MCQs were built in a blackboard template by a technical adviser who also set up the quiz functions to work automatically throughout the course. These automatic functions included, among others, the quiz's opening and closing date, the release of the quiz's results to the students, and the randomization of each quiz's MCQs.

Since the MCQs were aimed not only at encouraging our students to learn from pre-class readings but also to help them identify and understand the unit's key legal terms and concepts, a written feedback function in Blackboard was added. Through this function, feedback for each MCQ was provided automatically by the system together with the result of the quiz. Results and feedback were released to the students at the same time after the deadline had passed. The scope of the written feedback provided to the students in the PUQs ranged from a few sentences to an entire paragraph in which the reasons for the correct/incorrect responses were explained to the students. In some MCQs the feedback would refer the students explicitly to legal rules and to the relevant course material and/or offer links to sites containing supplementary resources online.⁷

In terms of assessment, the PUQs constituted an individual graded task. Altogether, the 12 PUQs added up to 10% of the total course grade. Importantly, the students worked on each PUQ on an open-book basis. They were encouraged to utilize all the course materials in order to complete the quiz. The other components of the course assessment included class participation (10%), a case study (30%) and a final written exam (50%). The process of completing the quiz was straightforward. Each week the students log into Blackboard and identify the relevant PUQ for that week. For each MCQ in the quiz the students select the option that they perceive as correct by ticking the relevant box. The students repeat this procedure for all the eight MCQs and, when the test is ready, they press the submit button. The PUQ opens about 5 days before the unit's lecture and closes after the deadline a few hours before the lecture. The students are therefore given ample time to work through the assignment. The students can make two attempts. If a student

⁶ S. J. Burton, R. R. Sudweeks, P. F. Merill and B. Wood, "How to Prepare Better Multiple-Choice Test Items: Guidelines for University Faculty" (1991) Brigham Young University Testing Services and the Department of Instructional Science, see https://testing.byu.edu/handbooks/betteritems.pdf (accessed 1 June 2015).

⁷ D. Boud and E. Molloy, "What is the problem with feedback?", in D. Boud and E. Molloy (eds), *Feedback in Higher and Professional Education* (Routledge, 2013), p. 1; D. Boud, "Written Feedback: What is it good for and how can we do it well?", in D. Boud and E. Molloy (eds), *Feedback in Higher and Professional Education* (Routledge, 2013), p. 105.

attempts the PUQ twice, Blackboard grades the MCQ by selecting the attempt with the higher score.

As mentioned in the introduction of this article, it is expected that the use of the PUQs will generate benefits in line with our course's intended learning outcomes. By encouraging the students to complete the weekly pre-class readings, the PUQs are expected to facilitate the acquisition by the students of the basic knowledge and comprehension required for a more profitable in-class activity. Equally important, the PUQs were designed to encourage the students to learn independently.

The concept of independent learning has been given different meanings in the literature. The definition we use in the context of the PUQs relies primarily on the notions of responsibility and autonomous work. Williamson (2005) uses the term independent learning to indicate "... the situation where students take at least some responsibility for their own learning and where a range of resources is used in the process". Souto and Tuner (2000) characterize independent learning in terms of promoting "...more independent modes of study on the part of the learner (learner autonomy) and, on the other hand, the provision of materials and resources which are aimed at facilitating this independence (self-access centres)". Independence (self-access centres).

The PUQ assignment is particularly challenging because by working on it the students gain on their own a first, direct exposure to the weekly topic. The corresponding lecture and seminar on that very topic will take place only after the quiz deadline has passed. In the process of answering the MCQs it is expected that the students will learn for themselves from the course textbook, selected course material or even online resources. The PUQ's feedback function also works as a tool that facilitates the students' own learning.

Case Study

Together with the PUQs, the case study was designed to enhance the students' learning experience. The case study took the form of a role play where the student will take the

⁸ J. Broad, "Interpretations of Independent Learning in Further Education" (May 2006) 30(2) *Journal of Further and Higher Education*, pp.119-143; S. Mckendry and V. Boyd, "Defining the 'Independent Learner' in the UK Higher Education: Staff and Students' Understanding of the Concept" (2012) 24(2) *International Journal of Teaching and Learning in Higher Education*, pp. 209-220.

⁹ K. Williamson, "Independent Learning and the use of resources: VCE Australian Studies" (1995) 39(1) *Australian Journal of Education*, pp. 77-94; C. Souto and K. Turner, "The development of independent study and modern languages learning in non-specialist degree courses: a case study" (2000) 24(3) *Journal of Further and Higher Education*, pp. 385–39.

¹⁰ Williamson, *supra* n. 9, p. 78.

¹¹ Souto and Tuner, *supra* n. 9, p. 385.

role of a judge (drafting a final judgment) or of a young lawyer (writing a legal opinion to its client). The case study was based on a real-world law case, which was adjusted and simplified for teaching purposes. The topic was shareholder litigation which is a topic relevant to the accounting and finance profession. Such a design allowed the students to delve deeply into a case and apply legal rules and concepts while also making an evaluation of facts and rules towards realizing the case outcome. Ultimately, the case works as vehicle for the students to apply and discuss critically legal concepts and problems in an environment that motivates them, while fostering student-teacher interaction, engagement and independent learning.

As a graded seminar, the case study constituted 30% of the total course grade. A template for the case study was designed in blackboard with the help of an IT adviser. The students will work on the case study by following the instructions and steps as indicated in this template. An instruction sheet and assessment rubric were also uploaded in blackboard for their guidance. Four phases or steps had to be completed throughout the semester:

- 1. The submission of a one-page brief (individual task) in blackboard explaining the key elements of the case at hand (week 5)
- 2. A group discussion and submission of the key elements above mentioned followed by a session of oral feedback provided by the teacher (week 7)
- 3. An individual submission by each student of the full case assignment (1000 words assignment by which the student presents arguments and explains his/her legal opinion as a lawyer) and the completion of a poll containing a few questions in relation to the case (week 10)
- 4. A group discussion of the case assignment and oral feedback provided by the teacher (week 11)

The step no. 2 above allowed the teacher to provide oral feedback and to check that all the students have a reasonable understanding of the basic facts of the case. The step no. 4 goes in the same direction. It allows the teacher to provide oral feedback and discuss with the students the whole case assignment. These two steps enabled fluent student-teacher interaction in class. In order to complete the steps no. 1 and no. 3, however, the students worked out of class, autonomously.

C. Testing the Contribution of the PUQs and Case Study to Learning & Teaching

The PUQs were fully implemented in our teaching of company law at the start of the second semester (January-May) of the 2013-14 academic year and tested in three consecutive semesters thereafter by means of a poll in Blackboard. This e-poll was administered to the students in each of the three semesters before the opening of the last PUQ (quiz no.12) with the purpose of collecting their perceptions on the contributions of the PUQs to their learning of company law. The poll was made compulsory for the students who could not access quiz no.12 without first submitting the poll. The poll was

anonymous and the students were told so in written form as stated in the title and introduction to the poll and verbally in class in the weeks before the poll opened. The questions in the poll raised no ethical considerations. Poll questions capturing the students' characteristics, such as gender or nationality, were omitted.

The poll consisted of nine questions. The first seven questions were closed-ended and used a 5-point Likert scale between 1 (Strongly Disagree) and 5 (Strongly Agree) to quantify the students' perceptions of their learning experience using the PUQs. Two open-ended questions were included at the end of the survey in an effort to collect the students' comments on their best and worst experiences with working on the PUQs. Adding open-ended questions to a poll allows the researcher to offer insights not captured by the closed-ended questions. The questions read as follows: "Question 8 - What did you find the most useful/helpful about the pre-unit quizzes?" and "Question 9 - What did you find the least useful/helpful about the pre-unit quizzes?" The students could complete these two questions voluntarily.

It is expected that question no.8 (Q8) will tell us about the perceived best contributions of the PUQs to the students' learning, whereas question no.9 (Q9) will shed light on the perceived limitations of the PUQs. The responses to Q8 and Q9 were read and grouped into categories. The categories were defined by identifying and grouping comments that shared the same central idea.¹³

The case study was first implemented in semester 3 2013-14, and was assessed for two consecutive semesters through an e-poll in blackboard. The method was similar to that used for the evaluation of the PUQs. Compared to the PUQs' poll, however, the poll in the case study was voluntary and thus its completion rate was much lower than that in the PUQs. The two polls though were designed similarly. The case study poll also consisted of nine questions (seven closed-ended and two open-ended questions). But the questions were tailored to the purpose of the case study measuring, for example, levels of engagement and motivation. The two open-ended questions were included at the end of the survey in order to collect the students' comments on their best and worst experiences with working on the case study.

Results from the Poll's Closed-ended Questions

Table no.1 below shows the poll results from the closed-ended questions for the PUQs. In each cohort the students perceived that the PUQs provided them with a very satisfactory

¹² N. Sproull, *Handbook of Research Methods: A Guide for Practitioners and Students in the Social Science* (2nd ed, Lanham, MD, Scarecrow Press, 1988).

¹³ K. M. Jackson and W. M. K. Trochim, "Concept Mapping as an Alternative Approach for the Analysis of Open-Ended Survey Responses" (Oct 2002) 5(4) *Organizational Research Methods*, pp. 307-336; M. Miles and M. Huberman, *Qualitative Data Analysis: An Expanded Sourcebook* (2nd ed, Thousand Oaks, CA, Sage, 1994); D. Silverman, *Doing Qualitative Research: A Practical Handbook* (London, Sage, 2005).

learning experience. A mean higher than 3 points can be interpreted as that on average the PUQs created a positive perception among the students. The first three poll questions contained the most essential objectives for introducing the PUQs, namely increased knowledge, understanding and independent learning. The students perceived that the PUQs met these objectives well. The higher means shown in semester 3 2013-14 may be explained by the fact that the course is delivered during the summer semester. Although the course content is the same as in the spring/winter semester, the summer course is delivered in a shorter time, a 7-week period. The students work more intensely and with better focus, and they tend to have more available time to study the subject.

Table no. 1: Results from the Poll's Closed-ended Questions

	semester 2 / 2013-14			semester 3 / 2013-14				semester 1 / 2014-15							
Poll's Questions	n	RR	MN	MD	SD	n	RR	MN	MD	SD	n	RR	MN	MD	SD
1. The pre-unit quizzes helped me to prepare for the lectures by giving me first knowledge into the topic of the lecture	221	0.87	3.70	4	0.94	69	0.84	4.13	4	0.62	89	0.99	3.90	4	0.75
2. The pre-unit quizzes helped me to understand the meaning of key legal items and phrases in relation to the topic of the lecture	222	0.88	3.46	4	1.01	70	0.85	4.01	4	0.63	90	1.00	3.68	4	0.88
3. The pre-unit quizzes helped me to learn independently (For example, in order to answer a MCQ, I read the course textbook or handouts or made a search in the Internet) $\frac{1}{2}$	224	0.88	3.87	4	0.88	70	0.85	4.19	4	0.71	90	1.00	3.90	4	0.81
4. Working on the quizzes enriched my learning experience	222	0.88	3.52	4	0.98	70	0.85	3.97	4	0.7	88	0.98	3.61	4	0.86
5. I understood the criteria for the assessment of the quizzes	220	0.87	3.68	4	1.03	67	0.82	3.99	4	0.73	90	1.00	3.89	4	0.68
6. I received good quality feedback on the answer to the MCQs	223	0.88	3.29	4	1.05	70	0.85	3.86	4	0.72	88	0.98	3.18	3	1.05
7. I received a sufficient amount of feedback on the answers to the MCQs	221	0.87	3.18	3	1.08	70	0.85	3.86	4	0.8	89	0.99	3.21	3	1.01

^{5 =} strongly agree; 4 = agree; 3 = neither agree nor disagree; 2 = disagree; 1 = strongly disagree

It is meaningful that the category 'independent learning' scored the highest in each cohort. Learning from the pre-class readings (as promoted by the PUQs) requires the students to act with a degree of responsibility and autonomy as learners. The students are encouraged to learn for themselves. The fact that through the PUQs the students gain a first contact with the weekly topic may have exacerbated their perception of independent learning because this approach draws from the students extra effort in terms of making choices and acquiring new knowledge and understanding on their own.

In contrast, the feedback function obtained the lowest average score in the poll. Despite showing a mean value above 3 points in each cohort, there is room for improvement of this item in the quiz to the extent that the students' demand for feedback has seemingly remained unmet. Although such improvement seems to be needed at the level of quantity and quality of feedback, from the poll (questions no.6 and no.7) there emerged no clear distinction between the quality and quantity of the feedback.

n = sample size; RR = Response rate (total number of poll responses/n); MN = mean; MD = median; SD = standard deviation

A factor that may have influenced the students' perception in relation to feedback is that the teachers did not discuss the MCQs subsequently (i.e. during the unit's lecture or seminar) with the students. The feedback function in the quiz was originally conceived as a built-in and self-contained function, yet the students are likely to profit more from further in-class discussion with their peers or teacher of the rationale and results of the MCQs. Another factor can be that the written feedback attached to each MCQ was drafted by different teachers likely having divergent interpretations about the need for, scope and type of feedback given.

Table no.2 below shows the results from the closed-ended questions in the case study poll. In terms of engagement and identification with the topic (Q1 and Q2) the students granted a high score. So they did in relation to independent learning (Q4). Results for motivation (Q3), however, were not as encouraging as one would have wished. One of the reasons, which emerged from the students' comments in the open-ended questions, may have been the high degree of difficulty of the case study assignment. The feedback (Qs6-7) was well perceived by the students. This result was expected because the case study provided ample opportunity for the students and the teacher to interact with feedback. By and large, the responses from students suggest that the case study met its objectives satisfactorily.

Table no. 2: Results from Closed-ended Questions in the Case Study Poll

	semester 3 2013-14				semester 1 2014-15					
Poll Questions	n	RR	MN	MD	SD	n	RR	MN	MD	SD
1. By working on the case study, I felt more engaged in the activities of the course	45	0.55	4.04	4	61	29	0.31	3.8	4	0.71
2. By working on trhe case study, I identifies better with legal topics even when I am an accounting/finance student	45	0.55	3.93	4	0.72	29	0.31	3.9	4	0.62
3. By working on the case study, I felt more motivated in studying company law	42	0.51	3.69	4	0.84	29	0.31	3.4	3	0.73
4. As part of my work in the case study, I took action to learn independently (for example, by searching for information other than the course material in the library or internet)	45	0.55	3.98	4	0.72	29	0.31	4.2	4	0.47
5. I understood the criteria for the assessment of the case study	44	0.54	3.77	4	0.57	29	0.31	3.5	3	0.74
6. I received good quality feedback on my work in the study	44	0.54	3.86	4	0.67	28	0.29	3.5	4	0.64
7. I received a sufficient amount of feedback on my work in the case study	45	0.55	3.84	4	0.74	29	0.31	3.6	4	0.68

^{5 =} strongly agree; 4 = agree; 3 = neither agree nor disagree; 2 = disagree; 1 = strongly disagree

Results from the Poll's Open-ended Questions

The total number of comments obtained from the students' responses to the open-ended questions Q8 and Q9 is shown in Table no.3 below. In order to explain the content of the table, consider semester 2 2013-2014. In that semester 253 students registered to take the course and 226 of them managed to submit the poll. Since completing Q8 and Q9 was voluntary, only 113 students (44.7%) did so. After excluding comments that were very difficult to read or discern, a total of 111 and 99 comments, respectively, remained and

n = sample size; RR = Response rate (total number of poll responses/n); MN = mean; MD = median; SD = standard deviation

were subject to categorization and analysis. Another point to note is that the students' responses rarely contained more than one comment, yet when they did, the comments were treated and categorized separately. This is the reason why in semester 2 2013/14, for example, Q8 was responded to by 37 students yet generated a slightly higher number of comments.

Table no. 3: General Description of Respondents and Observations

	semester 2 / 2013-14		semester :	3 / 2013-14	semester 1 / 2014-15			
ltem	n	%	n	%	n	%		
Students registered to take the course	253	100	82	100	95	100		
Students completing the poll	226	89.33	70	85.37	90	94.74		
Students responding Question 8	113	44.66	37	45.12	39	41.05		
Total comments obtained from Question 8	111	-	39	-	37	-		
Students responding Question 9	113	44.60	35	42.68	37	38.95		
Total comments obtained from Question 9	99	-	20	-	33	-		

n = total number; % = fraction of the total students registered to take the course

Among the categories we identified, the category 'better preparation for the lecture' was the most popular. After completing the PUQs the students felt more familiar with the lecture's topic. A reason can be that in order to answer the MCQs the students read through the pre-class readings. This way they acquire knowledge on the weekly topic. In addition, a high proportion of the students felt that their greater preparation for the lecture helped them to understand the lecture better. On a different fashion, the comments also confirmed the merits of the PUQs in fostering the students to learn more independently. Overall, the students perceived that working on the PUQs helped them to learn more for themselves about the topic covered in the next lecture. A smaller proportion of students felt that working on the PUQs added clarity to the topic's legal terminology as well.

Table no. 4: Comments from question no. 8 of the poll Question no. 8: what did you find the most useful/helpful about the pre-unit quizzes? (no. of comments)

	semester 2 / 2013-14		emester	3 / 2013-14	emester 1 / 2014-1			
comments	n	%	n	%	n	%		
1. Better preparation for the lecture	56	50.45	19	48.72	26	70.27		
2. More independent learning	29	26.13	12	30.77	7	18.92		
3. Clearer legal concepts	8	7.21	1	2.56	2	5.41		
4. Useful feedbacks	12	10.81	1	2.56	2	5.41		
5. Other comments	6	5.41	6	15.38	0	0		
Total comments generated	111	100	39	100	37	100		

 $n = total \ number \ of \ comments; \ \% = comments \ in \ the \ category \ \textit{I} \ total \ comments \ generated$

Some students perceived that the degree of difficulty posed by the MCQs was the least helpful feature of the PUQs. Other students saw the PUQs as time-consuming. The limits in the feedback function were also mentioned. Finally, a small proportion of students were unable to find a purpose to the PUQs.

Table no. 5: Comments from question no. 9 of the Poll Question no. 9: what did you find the least useful/helpful about the pre-unit quizzes? (no. of comments)

	semester 2 / 2013-14		semester	3 / 2013-14	semester 1 / 2014-15			
comments	n	%	n	%	n	%		
1. Difficult questions	23	23.23	2	10	7	21.21		
2. Increased workload	13	13.13	6	30	7	21.21		
3. Insufficient feedback	23	23.23	7	35	12	36.36		
4. Unhelpful	15	15.15	1	5	3	9.09		
5. Other comments	25	25.25	4	20	4	12.12		
Total comments generated	99	100	20	100	33	100		

n = total number of comments; % = comments in the category / total comments generated

The identification of categories in relation to the case study is ongoing, yet tentative findings suggest that better understanding of legal concepts and the task's high level of difficulty have been the most and least useful elements as perceived by the students.

D. Final Considerations

The poll results suggest that the PUQs and the case study met reasonably well the purpose for which they were created. The quizzes guided the students to work through the course's pre-class readings and learn in the process. The students perceived that this assignment helped them to better prepare for and understand the weekly lectures. Importantly, the PUQs were instrumental in fostering independent learning by our students as they worked autonomously in their effort to find answers to the MCQs and grasp the solution and feedback received. Here, the limits in the written feedback function are regrettable and much improvement can be done by adding extra thought and effort into this function. Using a few minutes to iterate with the students through oral feedback in class may prove a suitable, complementary step to enhance the students' understanding of the key legal terms and concepts. It is precisely the feedback function that makes sure that the PUQs are above all a formative assessment.

Feedback was better perceived in the context of the case study. The provision of oral feedback in a couple of sessions specifically created for that purpose ensured a sufficient interaction between the students and the teacher. The case study also engaged students very satisfactorily and led them to work with autonomy, although the complexity of the facts and issues involved in the case seems to have proved detrimental to some students' motivation.

Our experience suggests that the maintenance of the PUQs and case study tools is time-consuming and must be balanced against their positive contributions to enhance the students' learning experience.

There are certainly limitations in the method we used to assess the performance of the PUQs and case study. Since forming a control and intervention group was unfeasible a

causal effect of these tools on the students' learning could not be identified, and the evaluation concentrated on the less ambitious task of surveying our students' perceptions. In order to draw a deeper understanding of the impact of the PUQs, however, a general invitation was sent out to the students in the first and second semesters of implementation of the PUQs to join focus groups. Regrettably, the number of responses received from the students willing to participate was insufficient to render the focus group a source of relevant data for our study.

Nor did we evaluate the impact of the PUQs on other important activities in our course such as class participation (CP). After completing the weekly PUQ and attending the subsequent lecture on the topic, the students participate in the respective seminar. Class participation was graded in five seminars (out of twelve seminars) and the students were able to identify the date of a graded seminar in advance. In these CP graded seminars the tutor acted as facilitator by creating discussions on the seminar's topic. A student was taken to have participated if he/she engaged orally in the seminar's discussions by providing answers and explanations, making comments, raising relevant questions, stating arguments or making critiques. It is worth noting that, as in Monseau (2005), we also observed a correlation between the students' work on the PUQs and their performance in CP. That is, those students who obtained high marks in the PUQs tended to also gain high marks in CP. Though likely explained by several factors, this association is important and can be the subject of further research.

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¹⁴ The correlations were measured using Excel statistics 'CORREL': sem2 2013/14 = 0.44; sem3 2013/14 = 0.55; sem1 2014/15 = 0.23.