Assessment at the centre of strategies of [accountant] learning in groups, substantiated with qualitative reflections in student assessments

Keith Dixon

University of Canterbury

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KEITH DIXON

University of Canterbury, New Zealand

Corresponding author:

Keith Dixon
Accounting and Information Systems Department
College of Business and Economics
University of Canterbury
Private Bag 4800
Christchurch 8140, New Zealand

Email: keith.dixon@canterbury.ac.nz

Phone: +64- (0)3 364 2987 x3681

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ABSTRACT   Having students learn and be assessed in groups is a means to develop among students intellectual and interactive skills/competencies described as generic or "wicked", as well as of producing deeper learning of various types of knowledge (e.g. organicistic, contextualistic, formistic, mechanistic). This paper reports assessments constituting and reflecting strategies of learning in groups. The assessments and the strategies were crafted while working with students on four courses presented annually in recent years and covering accounting, management and finance for public services and private activities in various organisations. Data about group experiences and their implications for working as accountants were collected from students during assessments and are used to elaborate the strategies. The paper provides insights into reducing impediments among students and teachers to shifting learning from teacher-centred to learner-centred, and suggests areas for further research in reducing institutional impediments.

KEY WORDS: Student engagement, generic skills/competencies, group assessment, group learning

Introduction

Accounting educators have been exhorted for more than two decades to improve the curriculum of accountant learners for two distinct sorts of reasons: to increase student engagement, and so the quality or depth of learning of knowledge (Adler and Milne, 1997; Carini *et al.*, 2006); and to develop generic competences, such as intellectual, interpersonal and communication skills, on the grounds that these are vital to professional accounting practice (Jackling and de Lange, 2009; Tan *et al.*, 2004; Wells *et al.*, 2009). The improvements in question are often associated in course design with distinguishing between learning and teaching; and incorporating a greater volume of learner-centred (or student-centred) learning into individual course units and for this learning to be a feature of entire programmes (see Fortin and Legault, 2010; Lord and Robertson, 2006; Mohamed and Lashine, 2003). Much of the responsibility for making improvements falls on course unit designers, although those who facilitate their activities, including through academic

administration, managing learning spaces and evaluating programmes (e.g. see Willcoxson *et al.*, 2010) should consider its implications.

My paper is addressed primarily to people in these roles. I focus on having students work in groups, both to learn and be assessed. Within this approach to learner-centred learning, a wide range of possibilities exist and they present various student, institutional, teaching and other problems for educators (see Adler *et al.*, 2000, about learner-centred approaches generally). These problems seem to deter many educators from attempting the approach in question and perhaps make many more wonder why they have done so. However, according to an old proverb, "a problem shared is a problem halved", hence this paper.

Although inspired by this proverb, the academic credibility of my paper rests on ideas underpinning action research. Action research involves data-gathering, participant (student and teacher) collaboration, learning progressively (about teaching, learning and assessment) and being a self-reflective practitioner. A further necessary condition of action research is to share these matters with others in similar situations and make them public, which is the intention of this paper (Kelly *et al.*, 2000). Above all, however, action research involves personal reflections, actions and improvements regarding, in this case, educational situations. Presently, I am involved annually in staging four courses, including their planning (including designing the curriculum and organising the events), presentation and evaluation; and facilitating the learning undertaken by the students and assessing the students. This designing is something of a crafting process, in which the various course components are developed, revised and improved side-by-side to form and stay part of an integrated whole. Mostly, it is performed before a course is presented, and in between one course presentation and the next, but designed into the course presentation is some flexibility to vary according to how things are going. It is usual to make alterations during presentations, if only in minor ways, even when major earthquakes strike, as happened midway through Semester 2 of 2010 and at the beginning of Semester 1 of 2011, and affecting physically and emotionally everyone involved in one of the courses and the institution where it was being staged. Strategies of learning in groups have been incorporated in all four courses, the strategies varying according to other differences among the courses. For example, subjects covered by the courses lend themselves or call for different strategies; the amount of space in each course makes it impossible to include all aspects of the strategies in all the courses; and the strategies of the courses have been crafted contingently apropos successive presentations of the separate courses.

The next section is a preamble to the main analysis and discussion. It comprises some personal data to indicate my motivations for using learner-centred methods, including passing references to courses I stage, have staged or have studied. The main analysis then follows, addressing how and why I have incorporated working in groups into courses, drawing from a growing literature on these matters and inducing potential components of what I refer to as *a strategy of learning in groups*. This blend of experiential data and literature is supplemented, and so substantiated, with data gleaned from students on courses I stage presently. For part of their assessment, these students are asked to reflect on their experiences of working in groups and to speculate about how they might apply what they learn from these experiences when as

accountants they work with other people. In the concluding section, I synthesise my reflections and make suggestions for further research.

Why Learner-centred Methods and Groups?

Knowing something about the researcher is important in action research because of human-as-instrument considerations (Ary *et al.*, 2010). Moreover, the practices of a teacher (i.e. how s/he teaches) stem from that teacher's way of being not only a teacher but also a person generally; and changes to these practices are directly related to "some realization about oneself as a teacher, and the resulting changes in identity" (Feldman and Weiss, 2010, p. 33). My social background is one in which I and children like me, and our parents and their ancestors were told, and taught didactically, by our social betters what to do, how to behave, what to believe and about our (lowly) place in society. Early in my adult life, I rebelled against this cultural hegemony and have encouraged others to do likewise since, in collaborative fashion, including through "learning" in broad senses. While this particular pre-requisite is not necessary before one can organise learner-centred learning or collaborate in learning and teaching, I strongly suspect one needs some socio-political, professional or other motivation for wanting to adopt this approach in preference to others.

As for carrying change through, I doubt if anyone can change their method of teaching overnight, especially by merely following a recipe compiled by someone else. However, there are plenty of resources that are in easy reach through the Internet and other electronic means, and that can be drawn on for ideas to start, develop and improve. This differs from when I started having students work in groups, in the 1980s. I used groups to try to vary the normal format that particular undergraduate classes were accustomed to. I did not start using groups because of exhortations in the literature, but nor was it blind intuition. I based my choices of method on personal experiences as a full-time student taking a bachelor degree and as a part-time student, first, preparing for professional accounting examinations and, later, taking a certificate in education. These experiences ranged from interminable hours of sitting passively in a day-release classroom being prepared by the teachers to sit the professional accounting examinations[1] to group project tasks and similar proactive experiences, mainly during the certificate programme. Without articulating it at the time, I suppose I believed that having students work in groups would generate some new enthusiasm inside and outside the classroom, such as Cunningham (1999) discusses. I put my faith in what amounted to student learning being enhanced by increasing active and collaborative learning, in particular, and student engagement, generally (Adler and Milne, 1997; Carini *et al.*, 2006).

Although I did not see my particular efforts as part of some grand strategy to improve students' learning of generic skills/competencies (Adler and Milne, 1997; Ballantine and Larres, 2007; Fortin and Legault, 2010; Willcoxson *et al.*, 2010) and "wicked" competences (Knight, 2007; Knight and Page, 2007), or to increase their employability (Willis, 2009), these matters were beginning to find favour, including among professional accounting bodies. One early adopter was the Chartered Institute of Public Finance and Accountancy (CIPFA), whose education and training scheme is contrasted with others elsewhere by Wardlow (1986)

and that I taught for 3 years (1980-83). In contrast, despite their implied learning outcome of employability, other British and Irish professional examination schemes, some of which I taught or acted as a script marker for, seemed concerned with disciplinary 'knowledge', which Willis (2009) associates with traditional academia and characterises as "based on an assumption of there being a solid, immutable base, on which future empirical facts can be built, and the acquisition of which can be tested objectively" (p. 4). Such knowledge might also be described as formistic-cum-mechanistic, and differs from organicistic and contextualistic knowledge (Tsoukas, 1994).

It was having come from a spell in local government politics whilst also working in two local government accounting departments to take up the teaching of CIPFA courses, alongside , and then in various other undergraduate and professional programme courses, that first kindled some enthusiasm for using case studies to expose students to knowledge and understanding that had at least some context: and having students work in groups to tackle these was a natural extension of their usage (see Fortin and Legault, 2010). The examinations set externally on behalf of CIPFA included short management cases and an office case study, and so as a learning facilitator, one had to help student prepare for this type of assessment. In the three decades since, some combination of case-based resources and learning-teaching (and assessment) strategy has been a deliberate part of the design and delivery of most of the score of courses I have been involved in since at half-a-dozen institutions, as a designer, author, coordinator, tutor, assessor and evaluator. The courses have been at a mix of bachelor and master levels, in supported distance and on-campus semester modes, for accountants and for managers and professionals (e.g. health and social workers), and involving part-time and full-time students, ranging in age from late-teens to mature and with a range of ethnic and national backgrounds.

As I was able to observe informally during the courses, and using course and teacher evaluation questionnaires completed by students, mostly the experiences of the students and the teachers have been positive. However, problems have arisen perennially, mostly to do with students being confronted by an unfamiliar learning format, with some of them not getting along with each other, and with some doubting whether they were learning efficiently and effectively, bearing in mind their somewhat surface conceptions of learning (e.g. as "increasing one's knowledge", "memorizing and reproducing", "applying" and "understanding" – see Lord and Robertson, 2006, p. 49).

Students have often expressed these problems in terms of the amount of work they have become conscious of doing over the entire duration of a course; and anxiety over how they will cope with assessment, particularly major end-of-course assessments, which have often been formal examinations in accordance with institutional policies and longstanding practices. In the midst of these problems, I have wondered sometimes whether it would not be easier for me, and less onerous for the students, if I had ignored how students would go about learning, including whether they would develop generic skills/competences, and been content just to conduct standard lectures to deliver primarily formistic-cum-mechanistic knowledge with PowerPoint slides, and set tests and examinations accordingly. However, I am conscious that

in the past decade or so generic skills/competences have become increasingly important to the employability of accountant students, in addition to continuing to help them fare among their fellow workers (see Jackling and de Lange, 2009; Tan *et al.*, 2004). Thus, in the four courses I have been involved in designing and delivering from 2007 to the present, I have felt obliged to persevere with working in groups and related learner-centred methods, with the teacher(s) playing facilitative roles alongside the role(s) of assessor (see Figure 1, as devised by Harden and Crosby, 2000, for possibilities) both in the classroom and outside it. This includes through constructing, maintaining, encouraging use of, coordinating and monitoring the virtual learning environment (VLE) facility.
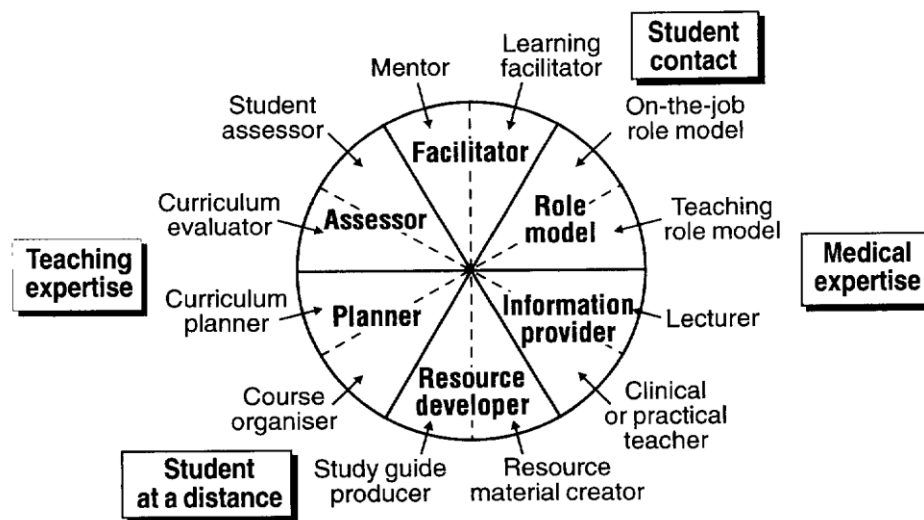

Figure 1   The 12 roles of the teacher (Source Harden and Crosby, 2000, p. 336) (NB adapt this to accounting education, by substituting "accounting" for "medical" and "clinical")

These methods go hand in hand with aspirations one can have as a teacher for accountant students as learners (e.g. about how they learn and are assessed analytically and reflectively) and when they become accountants (e.g. about professional work, experiential learning, working with others and for others, and dealing with situations). Based on the work of Wells *et al.* (2009, see especially pp. 410-411), these aspirations are significant to improving education of aspiring accountants (hereafter "accountant education") in universities. However, that these methods seem more effective in developing deeper learning of worldly, professional and technical knowledge (see Adler *et al.*, 2000), and provide greater classroom enjoyment for students or teachers (see Cottell and Millis, 1993), seem only supplementary considerations in the greater scheme of things of present day accountant education. They are important to me personally, nonetheless, and I live in hope that students see them as intrinsically and extrinsically rewarding, albeit eventually.

Particulars of the four courses as they were staged in 2010-11 are set out in Table 1. Although their official learning outcomes vary according to subject and level, explicit in all the four

courses are references to skills and competences that may be classified as generic. For example, one of the overarching learning outcomes publicised about ACCT341, is:

> To successfully complete the course, students must be able to exemplify and discuss, with some critical awareness, skills that are inherent in working in groups and in achieving group project outcomes successfully. These skills include communicating, negotiating, coordinating, presenting, questioning and evaluating the work of others, and other inter-personal skills.

The importance of this kind of outcome is instilled in the minds of the students in various explicit ways that have some commonality across the four courses. From the start, students are informed how important working in groups is regarded, as exemplified in this extract from ACCT342:

> Group skills are an important part of accounting education because the roles of the accountant in the profession and in industry and public services entail exercising judgement, proffering organisational and financial advice, and performing management. Much more than only technical skills and procedures are involved. Aspiring accountants who lack the inter-personal skills needed in teamwork and management are unlikely to make a significant contribution, or to reach levels of responsibility for which they are otherwise qualified.

Although they come to a course and eventually are assessed as individual learners, students form or are assigned to groups for the majority of the learning hours. Within groups and across groups, group members work collaboratively with various learning resources, including instructional case studies, case-study research articles, official reports about particular organisations or public services, and articles and materials about cooperative/collaborative learning and group work. The learning of each individual student arising from these collaborative efforts is assessed to evaluate the extent to which s/he is attaining or has attained the expected learning outcomes for the course.

Strategies of Learning in Groups and Assessment of Learning

As indicated above, the strategies of learning in groups have been varied among the courses listed in Table 1, giving rise to four different strategies of this type. These strategies are an integral part of the designs of these courses. As the majority of students who enrol are reckoned to be motivated by achieving their expected grades in summative assessments, that the summative assessments shape their learning (see Beckwith, 1991) has been recognised since the earliest designs.

To synthesise these two design requisites, significant proportions of the items used to assess the students summatively on all four courses are either the product or process of work done by a group; or the product of work done by an individual but based on learning while, or recounting learning experiences of, working in groups. For much of the rest of the assessed work, particularly on the undergraduate courses, encouragement is given and methods are suggested and exemplified of how working in groups and similar forms of collaborative

Table 1. Particulars of the four courses staged in 2010-11[ab]

Course code (hyperlinked to web page)	Subject Area	Level	CATS Points	Enrolments 2010-11[c] (2008 for comparison)
ACIS316	Public management	U/g 3[d]	14	51 (15)[e]
ACCT341	Public sector accounting	U/g 3[d]	15	55 (17)[e]
ACCT342	Management accounting[f]	U/g 3[d]	14	70 (45)
ACIS644	Public and third sector accounting and financial management	M	15	7[g] (5)[e]

Notes

a All the courses are electives in the sense of not being a compulsory part of a qualification but that students can choose this course or choose another, for example, one that is more teacher-centred, and still obtain the same qualification. All the courses are of one semester (about 18 weeks) duration. Class contact hours total about 30 hours for each student during the semester. Within an on-campus mode of study, classes are scheduled within a weekly timetable for the duration, except for a mid-semester break and a study week followed by an examination fortnight. Classes are staged in classrooms or small tiered lecture theatres (mine and my colleague's preferences are the flatter the better). A virtual learning environment (VLE) exists on all four courses and is now based on Moodle, having previously been based on Blackboard. The extent that this VLE is integral to the four courses is greater than for many other courses the students are studying: in particular, the conferencing/discussion, group organising and assignment functions are used. Course code prefixes were in an administrative transition between 2010 and 2012 but this did not affect the actual courses.

b ACIS316 was staged in semester 2 of 2010, and so was affected by the Canterbury earthquake in September of that year; and the other three courses are being staged in semester 1 of 2011 and have been affected by the major aftershock in February of that year. Course schedules were interrupted and temporary facilities were used for class meetings.

c The students enrolled on all four courses since 2007 have had similar mixes of gender (about 50-50) and ethnic, language and national backgrounds (mostly New Zealand residents of British and other western European descent (60%) and Chinese and other north-western Pacific descent (30%), and foreign nationals mainly from around the Pacific and Indian Oceans (10%). The majority have been full-time, about age 20 and aspiring to be accountants, but significant proportions (25%) have been part-time, at least a few years older and/or have had other work aspirations.

d The full-time students study one of these courses alongside three other courses, most of them lecture-focused and with little formal group work. Up to a dozen students annually or in consecutive years have studied two or even three of these courses, sometimes simultaneously in the case of ACCT341 and ACCT342.

e In 2008, class meetings for courses ACIS316 and ACIS644 were staged jointly but assessments differed to reflect their different levels. The same applied in 2009 with courses ACCT341 and ACIS644. These arrangements were to take advantage of the participation of visiting professors for a few weeks in each case but in addition meant undergraduate students were helped along by postgraduate students (which the latter did not all find favour with) and there were some resource savings.

f Students taking this course are required to have successfully completed a 200-level course in management accounting, which id technique-oriented and lecture-focused, only a little informal group work in tutorials. No previous specialist study is required of public services by students studying the courses dealing with that area.

g Enrolments on ACIS644 were affected by a scheduling anomaly in 2010 that caused them to rise to 23. Otherwise, enrolments on all four courses have increased gradually year on year.

learning can help individuals be better prepared for completing the individual work that is summatively assessed, particularly that carried out under examination conditions. Summative assessment of groups and their individual members is conducted mainly by the teacher(s), with some within-group input about the performance of individual members.

Of further significance is that some formative assessment is incorporated into the products or processes of work done for summative assessment; and formative assessment is applied to virtually all the products or processes of work done by groups that are not assessed summatively (see Figure 2, as devised by Crisp, 2009, for this summative-formative distinction). For example, groups compare and contrast their ideas with those of others by viewing and discussing classroom displays of each others' work. This and other forms of formative assessment of groups and individuals are also conducted by the teacher(s) and by other students within the student's group as a continuing part of student activities on the courses. This formative assessment is not an optional extra but is vital to student learning and the effectiveness of summative assessment. It is in contrast to my observations of several courses over the years in which a significant loss of effectiveness has occurred because a teacher has designed and staged a course by focusing on the subject matter and its presentation to students, and then just bolted on willy-nilly a group assignment or other assignment type in which students were not well-versed (e.g. an individual presentation).
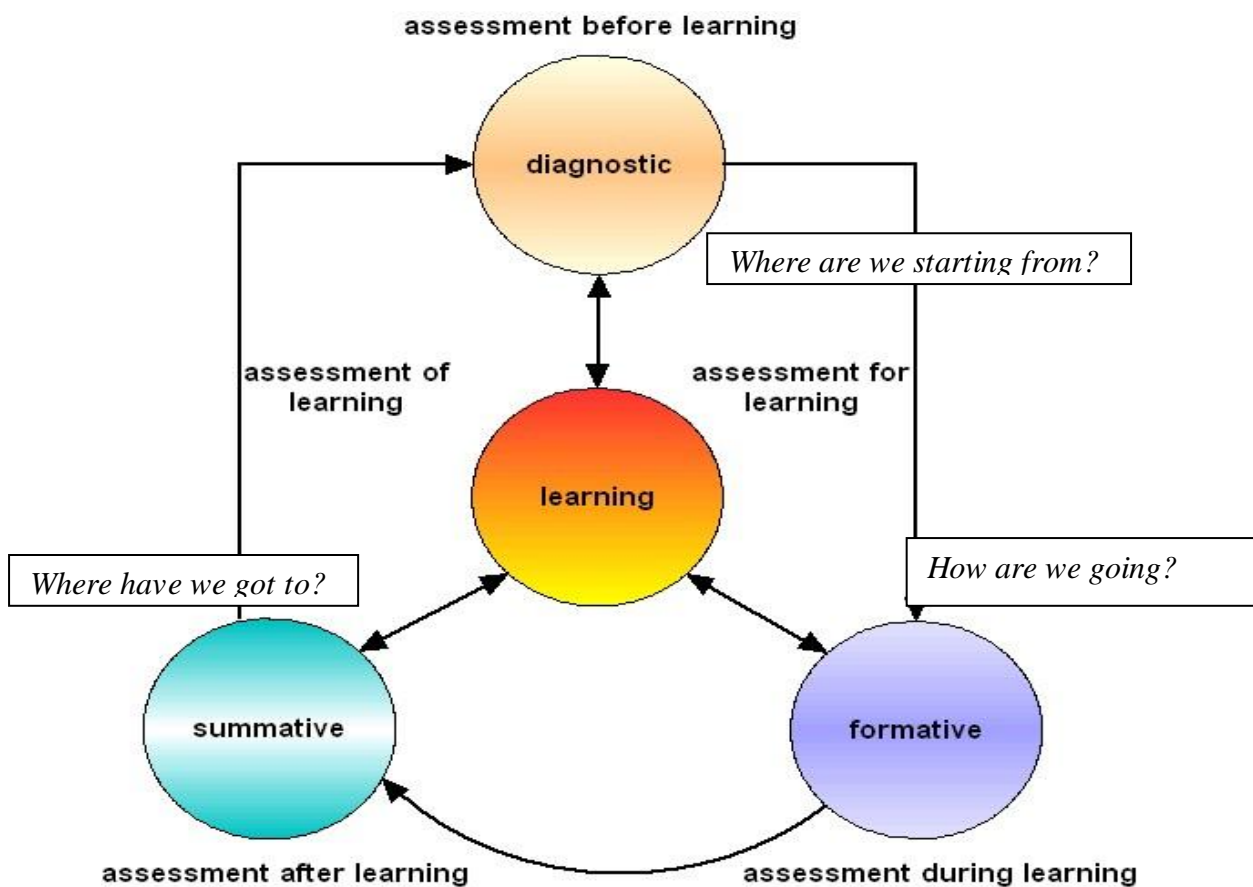

Figure 2 Classification of assessment by purposes and how the classes are related (Crisp, 2009)

If teachers are to employ group assessments, students need to acquire knowledge, understanding and practice of working in groups, and of individual as well as group learning through this means. Some clear theoretical links must be established to the desired outcomes embracing generic skills/competences. Thus, the teachers in question are under an obligation to consider these matters in the course design (Willcoxson *et al.*, 2010). What I term a *strategy of learning in groups* is the outcome of this consideration and comprises several components that are integral to a given course.

Components of Strategies of Learning in Groups

As this paper is primarily for course designers, outlines and examples of components are presented in an order reflecting how the designer will probably continue after making some progress on the pre-requisites dealt with already (i.e. learning outcome matters and an outline scheme for synthesising the strategy of learning in groups and summative assessments). Using the metaphor of a course being a learning journey, the first subsection elaborates about assessments used at least summatively, including assessments at journey's end and assessments that might be seen as constituting major milestones along the way. Dealing with assessment first also reflects that this topic is probably the most valuable part of this paper, given that the extant literature pays much less attention to assessment than to learning (Ballantine and Larres, 2007). The second subsection deals with learning activities and events, in effect working backwards and forwards along the route of the journey, outlining and explaining occurrences before and between the assessment milestones. The third subsection deals specifically with group formation. The fourth subsection elaborates on some important loose ends arising in the first three subsections. As this order differs from when components occur in the structure of a course's events and the order in which students encounter them on their learning journey through the course, I have tried to signal when they occur in the courses and why.

Summative Assessments

The postgraduate course culminates in a final individual assignment and the three undergraduate courses culminate in final examinations. These circumstances are in keeping with longstanding practices of end of course assessment at the institution where the courses are staged. All four courses also have two or three other assessments and, as signalled above, the items assessed take one of three general forms. Either they are the product or process of work done by a group (hereafter, Form One); or they are the product of work done by an individual but based on learning, or recounting learning experiences, of working in groups (Form Two); or they are a combination of these two (Form Three). Examples of the three are provided below. All are components of the strategy of learning in groups of their courses. In my judgement, they are the most important components as far as the students are concerned.

Three items are used on the postgraduate course to assess student's learning. The final assessment comprises an individual extended essay whose title is devised by the student and agreed by the assessor. It is preceded by two other assignments and must follow on from these assignments and related learning during the course. The two earlier assignments

comprise an introductory essay, whose titles vary among students; and a group project. The group project is about a topic that each group induces from their essays and agrees with the assessor, and culminates in a presentation and an inter-group question and answer session.

For the 2010 course presentation, titles of the first essay had to take the general form:

> Using examples, describe, explain and discuss the [purposes] [roles] of [financial accounting] [finance] [information systems] [tax] [auditing] [cost accounting] in [public services] [public sector bodies], as they have come to be by 2010.

The words in square brackets were alternatives, and so 24 alternative titles were possible. This number of possibilities was enough to accommodate the 23 students writing under different titles. However, the similarities in the titles promoted collaboration among students who spent a great deal of formal and informal study time together in any case, and classes leading up to the assignment were organised around group discussions of ideas and issues relevant to the essays. Examples of group projects in 2010 were: "accountability and transparency in public sector reporting in New Zealand"; and "performance measurement and performance management in three New Zealand local authorities". Example titles of the final essays in 2010 were: "From supplicants to stakeholders: How the development of 'public accountability' has manifested in actual accountability to the public, or whether this is merely rhetoric"; and "Trade-offs between economic efficiency and service effectiveness: New Zealand health sector reform". In addition to the two earlier assignments being examples of Form Two and Form One assessments, respectively, they and the end-of-course assignment also exemplify:

- continuity in terms of both learning level and learning diversity
- learner-centredness, by virtue of students choosing titles, inducing tasks, and deriving titles; and
- collaboration, explicitly in a group task and implicitly because the students are "in it together" although their individual learning is directed towards a variety of ideas, etc., especially in that final assessment.

Regarding the three undergraduate courses, their final examinations have similar formats, representing something of a compromise between institutional expectations that there is a final examination and the courses being unusual at the institution in question for being learner-centred. Entailed in the latter is that the learning that is assessed varies significantly among students, although it is consistent with the officially sanctioned learning outcomes, and does not fall below standards explicit in them. The formats reflect the following principles. The students sit the examination as individuals. There is a strict time limit of three hours. The scripts are written under invigilated conditions. The students are not permitted to consult notes or any other learning material during the examination. A bank of possible examination questions is provided to students at the start of their course. The examination paper consists of questions drawn directly, without alteration, from this bank of exam-type questions; and the students have a limited choice of which questions to answer[2].

In outline, most questions adhere to the following format. They are in two only loosely-coupled parts, the first asking for an explanation and some examples, and the second asking for a discussion. In keeping with their purpose of assessing learning performed on learner-centred courses, the questions are constructed so that answers generate divergent responses and allow individuals to express their ideas, give personal examples and reasoned opinions. Answers vary widely among students, particularly in the matters of examples, concept application and drawing from experiences. The marking guidelines recognise this and encourage marking commensurate with judgment being exercised to interpret a script and assess it by comparison with the learning outcomes being assessed. Box 1 contains an example of an exam-type question, and one that refers directly to generic skills (there are two questions in all three courses' exam banks that do this).

Box 1. Example of an Exam-Type Question

Using examples, explain how the following skills are entailed in accounting practice associated with governmental and third sector bodies:

- communicating and negotiating with people with a variety of backgrounds and expertise

- coordinating tasks and people

- being part of an audience, and questioning presenters and evaluating their message.

(18 marks)

Consider the context of relations between, on the one hand, government policymaking bodies and, on the other hand, bodies involved directly in delivering public services that derive from the policies in question. In this context, discuss how accounting is a form not only of economic control (e.g. control of monetary costs) but also of social control (e.g. control of human behaviour and sustaining conformity to social group rules).

(15 marks)

Total: 33 Marks

Although the other assessments on the undergraduate courses vary, they follow the three general forms, Form One, Form Two or Form Three. The examples (Example One, Example Two and Example Three) below clarify these forms and illustrate how, as with the postgraduate course, the assessment process and the learning process run in tandem, are learner-centred, promote reflective and collaborative learning, and are both summative and formative. Example One is of a Form One assessment. It is drawn from ACCT342 and is about organisational control in entrepreneurial businesses, using two case studies *Black Water Rafting (A) – 1990* (Paisley, 1999) and *Koorana Crocodile Farm* (Thomson and Bretherton, 2008)[3]. It is positioned early in the course, is the second assessment and the first summative one (the first is formative only), and comprises constructed responses. Each group of students constructs an initial answer to their case study situation, displays the answer on

PowerPoint slides, receives feedback from another student group (doing the alternative case but focusing on the same issues), views that other group's initial answer, and revises and elaborates its answer. Groups submit their final answers as PowerPoint files; and each group member submits his/her evaluations of the other group members. To illuminate matters of specification and process, full details are set out in Box 2. The questionnaire by which each group member submits his/her evaluations of the other group members is outlined and discussed later.

Box 2. Example One - a Group Assignment Task from ACCT342 in 2011

Assessment 1 is weighted 15% in the overall course grade. It comprises working in a group to complete a two-stage task sequentially and there are deadlines for each stage.

Deadlines

The last dates and times for submission are as below but earlier weekday submission is encouraged:

Ø Tuesday 5 April (11.59 pm) (to a LEARN [i.e. the University of Canterbury version of Moodle] forum as designated)

Group to exhibit in a LEARN forum on a PowerPoint slide show the results of their work on either the *Black Water Rafting* business or the *Koorana Crocodile Farm* business done in conjunction with research reported by Collier (2005).

Ø Saturday 9 April (12 noon)

Group to submit to LEARN the "final answer" PowerPoint slides of the above work; and each individual to submit a questionnaire to evaluate his/her group (i.e. the Peer Evaluation Form). Work to be submitted through the assignment feature on LEARN.

Process

You are expected to participate fully in this assessment, including by working in a group that submits the work referred to above. The qualities expected from you in this working in a group are set out in the Peer Evaluation Form, namely effort, cooperation with others in group, initiative, technical knowledge and/or expertise, leadership, and overall contribution to group. The Peer Evaluation Form is available on LEARN and you should look at it before participating in the following process.

The *Black Water Rafting (A) 1990* case study and the *Koorana Crocodile Farm* case study will be distributed during class on Tuesday 22 March and discussed in subsequent classes. Also distributed then is the following article:

Collier, P. M. (2005). Entrepreneurial control and the construction of a relevant accounting. *Management Accounting Research*, 16, 321-339.

The article is also available on LEARN, so that, in addition, you can review its contents using a pdf search facility (the cases are also there but in a non-word-searchable photo format).

In class on Thursday 24 March, you'll be assigned to work in a four-person group (some groups may be five-person to absorb remainders) and your group will be assigned EITHER the *Black Water Rafting* case study OR the *Koorana Crocodile Farm* case. In subsequent classes, you'll be working through the ideas in this article to help you to make sense of these ideas and how they might apply to *Black Water Rafting* or *Koorana Crocodile Farm*. The specific issues your group has to grapple with for the assignment are as follows:

1. How and why are controls in the case study your group is assigned as they are? and

2. What changes may have to be made to these controls, given the trends in the business featured in your assigned case?

By Tuesday 5 April, the group should have synthesised its findings on these two issues and put them onto a PowerPoint slide show. The slideshow should be posted onto the group's designated LEARN forum ready for viewing by another group. This other group's work will also appear in this forum.

Over the few days after these postings the two groups should view each other's work to share their learning, including by comparing and contrasting the two slideshows, and questioning, clarifying, commenting, discussing and evaluating their authors, including at class on Thursday 7 April.

After taking into account any of this last opportunity to reflect on its work, your group should submit its "final answer" PowerPoint slide show for marking through the assignment feature on LEARN before the deadline; and you as an individual should complete and submit through LEARN a questionnaire to evaluate your group (i.e. the Peer Evaluation Form). This form is to assist in grading individuals based on group outputs. As indicated earlier, the Peer Evaluation Form is available through LEARN and you should have consulted it at the beginning of this process to see what qualities you are expected to bring to your group.

Outputs (including size limits)

As part of your group, a PowerPoint slideshow file, posted on a LEARN forum, as designated by Keith Dixon. [Before by date: Tuesday 5 April (11.59 pm)].

As part of your group, a revised/final PowerPoint slideshow file [Before by date: Saturday 9 April (12 noon)]. Please submit through the assignment feature on LEARN and include your group identifier as part of the file name (e.g. Group 1 ACCT342 Assess 1.ppt) †.

The maximum number of slides is 15. The maximum number of words is 500 but 250-300 words are better and graphics are encouraged (see Tips for creating an effective presentation in among the PowerPoint Help topics).

As an individual, your completed Peer Evaluation Form [Before by date: Saturday 9 April (12 noon)]. Please submit through the assignment feature on LEARN and include your name as part of the file name (e.g. Fred Singh ACCT342 Assess 1.doc) †.

†file names MUST include group name or student name, as appropriate

Marks Allocation

Initially, a group grade will be given for this assessment, based on work included in the final PowerPoint slideshow. Note, however, that failing to submit a reasonable attempt at a PowerPoint slideshow by Tuesday 5 April (11.59 pm) will incur a 50% penalty (i.e. your group will lose half its allotted marks).

The group grade will be then be apportioned among individuals in the group using data provided in the Peer Evaluation Forms submitted by members of the group, supplemented with observations during discussions, etc.

Review

This will be done during a class later in April. Marked work will be returned electronically in time to facilitate this review.

Example Two is of a Form Two assessment. It is drawn from ACIS316 and is in two parts, both comprising constructed responses, one being a 750-word and the other a 1,200-word essay. The first part requires the individual student to reflect formatively on his/her experiences of working in groups, drawing on a selection of relevant articles and materials, and projecting forward as to how working in groups and obtaining generic skills are likely to be useful in his/her intended accountant or similar career. In the run up to the assignment, students participate in a class that focuses on working in groups, in which newly-formed groups reflect on such questions as what has worked well during group experiences in the

previous 3 or 4 weeks of the course and how group experiences can be improved on the remainder of the course. A similar task is part of assignments on the other two undergraduate courses. Data obtained from student essays are analysed later in this paper. The second part is about governance and accountability in a social enterprise, using the case study *Asociación Chilena de Seguridad* (*ACHS*) (Koljatic and Silva, 2005) and a selection of articles from among which each student must draw two ideas and show how they are exemplified or apply to the case study. The lead up process includes collaborative learning in groups during and outside class using ACHS and other case studies and related materials, including web sites and video clips on YouTube of organisations featured in the cases (e.g. Oxford University).

Example Three is of a Form Three assessment. It is drawn from ACCT341 and entails students making inquiries into organisations and public services that have featured in performance audit reports published in the previous 12 months by New Zealand's Controller and Auditor-General (C&AG) (see C&AG, 2010). It is positioned in the third quarter of the course and is the second summative assessment. It comprises a process extending over a calendar month in which six constructed responses are made, including four group responses during the process and two individual responses at its end, indicated as CR1 to CR6 in the following outline.

Groups are formed at the beginning of the process and each group chooses a different report, and so a different organisation or public service. A week or so into the process each group makes a 10-minute presentation to the class outlining matters of accounting, financial management, performance and so on that the group believes are interesting and relevant to its audience (CR1). Materials are expected to be drawn from official websites, publications (including strategic plans and annual reports) and articles. Note that a précis of the performance audit report is not wanted. The process also involves each member of each group choosing a peculiar or interesting aspect of the organisation or service about which they must complete further inquiries. They are encouraged to do these in conjunction with the other group members, who will have made different but probably overlapping or contrasting choices. The aspect has to be something to which the relevant C&AG report refers and have an accounting, finance or information connection.

After two more weeks, each group makes a second presentation, this time of 15-20 minutes, during which the members air and synthesise the work of the group on their peculiar or interesting aspects inquired into by each member (CR2). While each presentation is in progress, the audience groups compile questions and then after the presentations submit one written question per presentation per group (CR3). At the next 50-minute class, groups are paired for 20-25 minutes and each group poses its question to the other group in the pair. This activity is audio-recorded for assessment. A second set of pairings takes up the second half of the class. Thus, each group gets to ask, answer and discuss two questions it has posed and two questions posed to it (CR4). In addition, it receives the questions posed on its presentation by other groups and can learn from them, including by following them up with the groups posing the questions. In 2010, there were eight groups, and so six questions per group were dealt with in this informal way.

The fifth and sixth constructive responses comprise two individual essays. The first essay is based on the student's peculiar or interesting aspect (CR5); and the second requires the student to identify one valuable accounting, finance and/or information systems lesson s/he learnt from the work completed and presented by at least one of the other groups, and to discuss how and why it is valuable (CR6). Both these continue to encourage students to reflect, consider and reconsider concepts and exemplify their application, which are activities that prepare them well for the final examinations. At this juncture, the student also submits a questionnaire providing his/her evaluations of the other group members. This questionnaire is in the same format as that referred to in Example One and is outlined and discussed later.

Example Three is worth a higher proportion of the final course grade than either of Example One or Example Two. Part of the justification for this is that the work done differs markedly from group to group, as each group's activities are initiated with a different report, whereas with the earlier examples there is some crossover and basis of comparison among groups because the same case studies are used. This variation or diversity is an important feature of learner-centred courses but it can present problems for marking. Thus, it is important to develop marking guidelines that recognise this and, as with open-ended examination answer guidelines, encourage marking commensurate with judgment being exercised to interpret the presentations, questions, audio-recorded discussions and essays, and assess them by comparison with the learning outcomes being assessed.

In ACIS316, a similar scenario transpires with a Form Three assessment featuring materials about performance budgeting in several countries, based on Organisation for Economic Co-operation and Development (2007) and a growing selection of articles featuring different countries. Each group of students has to analyse this idea in a different country and compare it with New Zealand. In 2010, the disruption caused by the earthquake led to this particular assessment being replaced. However, had the assessment gone ahead as planned, one new problem arising in 2010 was that the size of the class had grown such that all students sitting through all presentations by the extended number of groups would have meant fast diminishing learning returns to participation time, not to mention the need for increased class contact time to accommodate the presentations. The planned solution (before the quake intervened) was to have each group stage its presentation on camera using Virtual-i Presenter (see Cochrane, 2010) and the collection of virtual presentations then being viewable by other groups through the VLE, with a rearrangement of formal class time to allow viewing, question formulation and related inter-group learning, including for an essay similar to above focusing on a *valuable lesson*. This tactic is intended for use in the 2011 versions of ACCT341, ACCT342 and ACIS316 because of further expected growth in class sizes and because a response to the February Earthquake is to move much learning and assessment activity into informal space and online. This anecdote exemplifies that the courses included in this action research are continuously developing according to various factors, teacher, student, institutional and contextual.

Learning Activities and Events

As the examples above intimate, the courses incorporate the principles that before their learning is assessed summatively, students are given opportunities not only to learn about knowledge and skills on which they are assessed but also to practice and reflect about the means used to assess them. Thus, by the first time students are involved in producing items that are summatively assessed, most seem more comfortable about working with others than at the start of their courses, and have clearer ideas of what is expected of them as group members and what to expect from other group members and from teachers. As they are studying at 300-level undergraduate and postgraduate level, one would expect students to come into the courses with much of this sort of practice already but my experience is of considerable variety from student to student and course to course in their abilities to work in groups in real time and virtually, to prepare and deliver presentations, to listen to presentations and ask questions and make comments, to evaluate each other's contributions, to work with case studies, official reports and research articles, to write essays and examination answers, and to reflect on their learning. To improve these abilities, various activities and events are built into courses, and so they too are components of the strategy of learning in groups for each course. Some important considerations and responses follow, starting with how ready student are for learner-centred approaches.

Vital is the issue of how to overcome their initial lack of readiness, and the lack of willingness that inevitably comes with it. It is important to understand reasons for students being unready. Much of what many students lack seems to derive from most courses in their programme being teacher-centred, content delivery oriented and focused on formistic-cum-mechanistic knowledge. Many of these courses are staged with large classes (150-600 students), even in 300-level courses, because they are compulsory for the popular accounting bachelor degree. Not only is their emphasis on individual learning but discouragement of plagiarism may often be interpreted by students as signalling that collaboration is wrong. Indeed, despite mostly studying alongside each other for at least two years, many students join the four courses under discussion seeming barely to know more than a few others, if anyone, let alone having cooperated or collaborated much in their learning. Further reasons for this lack of student interaction seem to include that students vary in ethnicities, first languages and cultures; there are significant numbers of part-time students and students residing well away from the campus; a wide range of elective courses is available, and so students vary widely in their course combinations; students lack exposure to VLE interactive facilities and their VLE skills are poor; and other logistical and social reasons.

How many students feel about this situation and how it compares with the experiences they can have on the four courses under discussion is reflected in the following open response by a student in an evaluation questionnaire: "Good doing group work regularly, gained a lot of confidence, nice to talk to people you have been going to uni with for 3 years but not yet talked to!" Important to bringing this transformation about are to inform students about their roles and those of the teachers, and about the learning process, and reinforce this during the early classes with effective ice-breaker and follow-on activities in order to foster warm

relations among students. For example, the following passage is included in the information distributed and discussed in the first week of ACCT342:

> The main learning resources are you, your fellow course participants and the lecturers[4]. Your roles are to participate in the learning activities, learn and teach others by sharing your learning successes and learning difficulties, and allow us to assess your learning. Our roles are to facilitate your learning alongside that of everyone else in the class, to monitor your experience and adjust the course design as necessary, and to assess your learning rigorously and fairly.

The first few classes are designed so that students make each other's acquaintance as much as possible and share in some learning episodes that are at least as social as they are technical. Small casual groups tackle a one-page case study in the first class meetings of ACCT342 and ACIS316; and small teams participate in a pub quiz in that of ACCT341. For the next activities, group memberships are changed to increase familiarity among students on each course, and other matters of group dynamics, processes and techniques are surfaced. As a backstop, students are referred at the start and during courses to several items on these matters (e.g. Cottell and Millis, 1992; Cottrell, 2009; MacTavish, 2001; Open University, 2009; Ravenscroft *et al.*, 1999; Tempone and Martin, 1999).

Given explicit encouragement to exchange names, say something about themselves without interruption and generally introduce each other, most students quickly start conversing within these groups or quiz teams. However, teacher intervention in quiet groups is important, particularly where members seem reluctant to even make eye contact or form a huddle. Encouraging brainstorming approaches to tasks can also facilitate all-round interaction, as it enables everyone in a group to call out ideas without fear of having to explain or defend the ideas. An incentive to work efficiently and effectively, and a way to provide formative assessment, is to require groups to write its output on flipchart sheets (size A1) and, at the end of a group discussion, display these, notwithstanding any reluctance among students to do this at first. When group activities span more than one class, encouraging students to swap contact details and putting an onus on a group to hold meetings and attend formal classes is part of the teacher's facilitation role. So too are explaining that occasional absence of group members is a fact of life not just among groups of university students but also in all organisational situations, where members of groups have other, more pressing work to perform, or may be off sick or on leave; and that in all organisational situations, the issues the students meet in classes (e.g. variation in commitment, ability and effort, and personality differences) will recur.

Carrying through these practices over the duration of the four courses yields groups of three to five students engaged in discussions for significant periods of most class sessions. Within a group, one member acts as a scribe, recording ideas and comments, often in bullet-point form, on the provided flipchart sheets with the provided marker pens. The teacher(s) wanders, observes, listens, poses and, occasionally, answers questions, and otherwise joins group discussions. When an allotted discussion time expires (keeping groups to time can be

problematic), the sheets are displayed on the walls (Blu-Tack® is provided) of the classroom, lecture theatre, adjacent foyer or hallway.

The classes then go into plenary mode, when be-seated students are encouraged (and goaded) to walk around among the displays, to read answers of the other groups, to address comments to and question them, to take notes from and, possibly, photograph the sheets (using mobile phones and other gadgets for this purpose usually occurs to someone by the third or fourth class), to make short presentations, to generally review each others' work with the teacher, to formatively assess their work and the work of other groups, and otherwise to conduct general educational and social interactions. The teacher can orchestrate the plenary in among the thronging students, making comments, asking questions, and soliciting opinions from particular students and groups. Indeed, once students have become comfortable with this form of conducting classes, groups have few qualms about making informal presentations. Afterwards, the teacher can arrange for sheets to be summarised and the summary posted on the VLE, giving students opportunities for further reflection, and so opening up the possibility of further discussion, formative assessment and learning.

As courses move on quickly to using longer cases, and cases in conjunction with articles, so individual students are obliged to prepare before classes, group work occurs that spans class meetings, and group discussion meetings and intra-groups interactions occur in between classes. To encourage initial preparation, rather than just saying "read Item X by next class, and we'll discuss it then", the teacher must set individual preliminary tasks (e.g. introductory case study questions) alongside the start-up reading; and encourage group members to take a dim view of any student coming to meetings unprepared. A particularly interesting example is associated with the preliminaries to Example One. Each student is tasked with interpreting a few sentences or a paragraph in the introduction or the literature review of one or other of the three articles listed in that assignment; and then with discussing the result with a group of students to whom adjacent sentences were assigned. This has helped many students overcome some initial characterisations of their article being "b***** difficult" (and dauntingly long) and of some ideas being "not really accounting". The exercise not only helps them access the particular articles, which turn out to be engaging stories for most of their lengths, but demonstrates a way to tackle similar articles. Further ideas conveyed to students through this approach are that group members can share work among the group, instead of everyone reading everything; and that by groups across a course working on different questions or issues, then groups can share differing but complementary results across a class.

Vital aspects of the teacher-as-facilitator role (Harden and Crosby, 2000) are to assure students on some inter-related matters, which resonate with findings of Adler *et al.* (2000) about student readiness for learner-centred approaches. First, the teacher is competent and "knows his/her subject", as it were. Second, all wisdom does not reside entirely with the teacher (far from it!) and that other students are a valuable learning resource. Third, they are going to learn knowledge and skills and other competences relevant to the subject and featured in summative assessments. Achieving the latter two assurances seems easier among students of some cultures than of others. Generally, however, assurance that learning is taking

place becomes evident when flipchart sheets are displayed, and as they are viewed, shared and reflected on in plenary style, as the teacher analyses and criticises them. Providing summaries and further analyses through the VLE immediately after plenaries, further signals the value of students' efforts. Assuring that learning features in the assessment is supported by publishing assessments at the start of the course and bringing their particulars to the attention of students frequently during the course. This is particularly apposite in regard to the final examination: in particular, that this examination is in the students' minds throughout their learning and they prepare answers for the possible questions cumulatively (and so do not ignore it until the last weeks of the courses and turn it into a cramming exercise).

On the matter of plenary sessions arising out of flipchart sheet displays, these are best carried out in the same session as groups complete their deliberations. However, as one is never sure about the answers groups will construct or how they will express their answers, they have to be done somewhat off the cuff and are not easy for a teacher. For example, they can be a far bigger challenge than delivering a prepared formal lecture. One needs to try to anticipate what groups might say and might not say, and what they should say and should not say. Retained sets of flipcharts from previous use of an activity can be a useful resource for facilitators in this regard and otherwise. It is also important to realise the limitations of plenary sessions for covering all one might like to cover and everything that students raise. Using the VLE in conjunction with a plenary provides much greater possibilities. Posting summaries and further analyses is usually much appreciated by students and can sustain the momentum of the learning from one class to the next and into the summative assessments.

Regarding surfacing group dynamics, processes and techniques, as signalled earlier, it is important to provide practice in methods of learning, and have students reflect formatively and summatively on their experiences of working in groups. Thus, class time is set aside on each course to focus on group processing; to consider what is working well, what things being done could be improved on and what is not being done but should be; and illuminate how important process is to successful cooperative learning (Cottell and Millis, 1992). For example, using MacTavish's (2001) check sheets as a resource, groups discuss such questions as "what am/are I/we learning?", "how do I/we feel about learning?" and "how are groups of which I/we've been part functioning, and how can future ones improve their functioning and produce better results?". A list of the six categories of group work identified by Tempone and Martin (1999) is circulated, and students are asked to discuss how their groups have fared compared with the seemingly most desirable of these, that is, "The group becomes a mechanism for learning. The focus of this is that knowledge in general, not just knowledge as it is presented in the individual assignment, is extended" (p. 180) (see also Cottell and Millis, 1992, p. 98 and the concept of "positive interdependence"). These activities build up to a summative assessment essay, such as that in Example Two, requiring students to reflect formatively on their experiences of working in groups.

Reflecting on how well students are and can be learning in groups improves many students' awareness of the possibilities, and so improves the actual learning, or so it has seemed to me from class observation and interaction, and from the answers that are received to questions in

assignments and examinations. The latter include the essays on experiences of working in groups. To help substantiate these claims, student data from these essays are reviewed in the penultimate section of this paper. Reflecting on group discussions seems to have further benefits. For many students, it clarifies differences in assessment and examination questions between those that ask them to define, describe and explain, and those that ask them to analyse, discuss, compare and contrast. By holding discussions with others, most students improve their ability to discuss things as an individual and commit this personal discussion to written words. Arising in many discussions are a variety of viewpoints on a topic or situation, and ones that often conflict. By attempting to understand the ideas of others in a group, each member restructures their extant knowledge. Through explaining and defending each other's views, members of the group try to reconcile conflicts. The end result is an opportunity for each member to observe the reasoning, logic, and decision-making and problem-solving behaviours of other members in the group.

Group Formation

So far, the process of students forming or being assigned to groups has been skated over. As "appropriate grouping" is important (Cottell and Millis, 1992), this subsection is intended to put that right. At the start of courses, letting students join groups of their choosing for the initial activity seems satisfactory for most students. However, students seem to tend to choose people with whom they are already acquainted, or with whom they expect to get along, based on gender, racial characteristics, sharing a mother tongue, etc. This often leaves out a few students, who end up as a group(s) of remainders, and is socially unsatisfactory. Thus, some form of assignment may be preferable, particularly in larger classes, which seem not to gel as naturally as smaller ones can do. Furthermore, when using student choice a second time in succession, some intervention is necessary to force all students to form new groups, and so work with another set of partners.

Assigning can take various forms (for suggestions, see Cottell and Millis, 1993) within the general categories of formal assigning to groups (i.e. by lists of names being prepared before classes and groups meet) and casual assigning to groups. Random formal assigning using a VLE group function is straightforward but may not avoid undesirable outlier groups (e.g. single gender groups), while manual, non-random formal assigning can be time-consuming for the teacher. In any case, any form of formal assigning is often thwarted by variability in class attendances, particularly in the first few class meetings, when significant discrepancies arise between official lists of enrolled students and students attending classes. Thus, casual assignment is an at least satisfactory expedient when learning activities and events are not assessed summatively. Casual assignment is done in class at the start of a group activity, and is either class by class or, if a task is to span more than one class meeting, task by task. The latter should provide for group stability that is needed for such tasks and allow individual members to report back to their group at subsequent classes about tasks they have agreed to complete in between classes, although sometimes students renege on undertakings and do not turn up for meetings.

If group activities and events are assessed summatively, then believing that on balance heterogeneous groups are desirable (see Ballantine and Larres, 2007; Cottell and Millis, 1992, 1993; Scofield 2005; Schullery and Schullery, 2006), I assign students in a formal manner for these activities, as Example One and Example Three above indicate. The institution's student record system is a good source of data about such important factors as gender, age, appearance, location of last secondary school (i.e. domestic or overseas), fee type (i.e. domestic, international), mode of study (i.e. part-time and full-time) and past academic performance; and using the VLE for assignment processing results in marks and comments from earlier assignments being available when assigning students to groups for later assignments.

Further Reflections on Components

Practice in working in groups and formative assessment of group products help to prepare each student for summative assessments involving working in groups and to clarify for the student in question other students' and teachers' expectations. These expectations are made even clearer in the design of the group member evaluation questionnaires through which each group member submits his/her evaluations of the other members of a group. The questionnaires used on ACIS316 and ACCT341 are adapted from Johnson and Smith's (1997) Complex Peer Evaluation Questionnaire. That was designed to address an oft cited problem of working in groups and of assessing group work: that is, the variation of effort, technical competence, etc. within groups, possibilities arising from which include free loaders, "free riders", "sandbaggers", "coasters", "workhorses" and "dominators" (Adler *et al.*, 2000, p. 127; Cottell and Millis, 1992, p. 98). The questionnaires ask individual students to assess contributions of other group members according to the following attributes: effort, cooperation with others in group, initiative, technical knowledge and/or expertise, leadership, and overall contribution to group. Through specifying these attributes and conveying their significance to students, so expectations are clarified and signalled as behaviour that will be rewarded. For the questionnaires to send such signals, it is essential that students are made aware of their importance to summative assessment very early in the process of working in groups. They are told that the data are used to distribute marks within groups. This is reaffirmed once an assignment is assessed and provisional marks are released to students individually. The data are also used to provide individual feedback but without breaking confidentiality of who said what about whom. Students have a few days to consider provisional marks and raise any issues with the assessor before marks are finalised.

Having used adapted versions of the questionnaire for various assignments involving more than 50 groups, only a handful of awkward situations have arisen. Sets of questionnaires from two groups, each of four persons, indicated that the groups in question had divided with two pairs having not gotten on. Another two sets indicated that there was a student who had not participated but who was claiming s/he had. Many sets of questionnaires indicated variations that were agreed on and accepted by the groups and individual participants, including that some members had gone the extra mile or shown particular skills, and that some members had not but still did their best in the circumstances. Many others indicated a coming together

of the group members such that strengths and weaknesses in knowledge, etc. were less important than individual enthusiasm and group synergy.

By providing time in class for a review of an assessment (e.g. as per Example One shown in Box 2), many students appreciate that summative assessment is also an opportunity to learn, and so is also formative. This is particularly so of the first summative assessments on each course, which may be the first time a student has worked in a group whose products or process are assessed summatively. Although the scores for these first assessments influence the final marks and grades for the courses, their weights are much less than weights applied to the scores for the second assessment and end-of-course assessment. Thus, if a student does badly because of lack of familiarity, they can still recover on the second assessment and end-of-course assessment. Pennies begin dropping for many students and groups when they see examples drawn from the answers of others to the assignments in which they all participated.

Reviews can sometimes cause complications, with some students and groups querying scores on the basis of how the assignment specifications were applied and interpreted by the assessor. Examples are varying how word limits, hand-in deadlines and similar are applied. One response to this is might be to conceal the work actually produced and the marks awarded but that is unsatisfactory, to say the least, and anyway cannot be done when class presentations are involved. Students learn much from seeing other students' work, whether it is displayed on flipchart sheets during class, shared in discussions through the VLE or reviewed collectively following submission for assessment. Better is to be careful in drawing up assignment specifications and then in applying them appropriately, including being able to justify varying them should the need arise. In any case, although it is not free of hassle, having a period between releasing provisional marks and finalising marks in which students can discuss and perhaps renegotiate provisional marks, can satisfy principles of natural justice and be part of learning more of the skills that come within the category of *"wicked" problems* and *"wicked" competences* (Knight, 2007).

At least one assessment on each course usually involves a presentation, as was exemplified in the Example Three above. Although many students are obviously still affected by this potential ordeal, affording opportunities in activities/classes from early in a course and in processes associated with first summative assessments clearly bring on many students in terms of confidence, technique and so on. Having an audience that is attentive and supportive also helps. A related matter is that as a student and a teacher I have sat from time to time through students making presentations in which one after another the presenters dealt with the same topic using the same source materials. I have found this worthless and tedious, and believe it unfair for an audience of students to be subjected to such situations. Thus, in common with Example Three above, the assignments involving presentations are designed so that the content, source materials, theories, applications, etc. differ (e.g. analysis of similar forms of report but about different public services, consideration of a particular activity but conducted in different jurisdictions) even though the overall specification and framework is the same. This means that each presentation is a different learning episode for the audience as well as the presenters. Furthermore, the members of the audience are required by the

assignment specification (and the marks distribution for the assignment) to formulate questions, which are then posed to presenters in a subsequent session separate from the presentation session. The sessions are audio-recorded and the assessor observes the actual session and then listens to the individual discussions afterwards. The answers attract significant marks in the overall marks distribution for the assignment. I was uncertain of how well this would work the first time it was tried, including because of how audible the recordings would be. The noise level in the room rose within 30 seconds of the start but even so the recordings turned out to be clear, and I have no hesitation in recommending this approach.

A feature of Form Two/Example Two and Form Three/Example Three are their individual student components. This makes for what Cottell and Millis (1992) refer to as "individual accountability" (p. 98). As these authors suggest, this feature provides individual incentives to participate in groups in order to learn and prepare work that is summatively assessed. It also tends to increase the distribution of deviations from the class mean mark that would arise from group scores alone, thus apparently giving stronger students the chance to shine. Moreover, it also seems to lift the performance of weaker students, particularly in cases in which positive interdependences have developed.

Regarding undergraduate courses and their obligatory final examinations, the examination questions are known to students, albeit in among twice as many that will not be on the examination paper. In order that they more likely to be a true test of learning than a test of the ability to recite someone else's work, they have to be open-ended, in the sense of having no single right answers (i.e. generate divergent responses) and requiring individuals to express their ideas, give personal examples and reasoned opinions. Of course, this requires the assessor to judge the similarity of standards from work that is different in content (as is true of most of the other assessments in the courses). One behaviour this practice anticipates and seems to prevent is that of students asking "What will be on the examination paper?" Now, they wrestle with what their answers could look like!

As the practice of using seen questions is unusual, many students do not grasp the situation at the first time of telling and some have to be reassured a few times before they believe it. Having grasped the situation of being tested using seen questions, many students realise that the difficulty in the questions lies in demanding some deeper learning/revision than if unseen questions are posed, including thorough explanations backed by clear examples and thorough discussions. Many also realise the potential of carrying on cooperating with other students in the matter of revision, including identifying examples and conducting discussions. They seem more inclined to do this once they are assured that the method of assessing is criteria-based rather than norm-referenced (re distinction, see Sadler, 2005), and that cooperative behaviours among a cohort are more likely to be beneficial individually than competitive ones. In classes towards the end of the courses, some starter assistance is given in cooperative approaches to the examination. For example, groups tackle questions and share their output, including on VLE discussion areas.

Student Qualitative Reflections on Group Learning and Assessment

To evaluate what is transpiring during a course, a teacher can use various informal and formal means (Hand and Rowe, 2001). One means available at the institution where the courses are staged are standard-format student evaluation questionnaires. Alongside some compulsory questions requiring Likert-scale answers, some discretionary space is available to pose questions that permit open-ended responses. A few of these responses obtained since 2007 have been in line with Adler et al.'s (2000) finding that students can be a substantial impediment to using learner-centred methods of learning and assessment. For example: "Teacher should teach not just give the materials that we read by ourselves" and "Would rather have lectures." However, the balance of these responses were positive, although some were constructively critical: "Although this course is mainly based on group discussions, I think it might be better for the facilitator to explain some of the key points related to the topic and explain some of the "big" words in the journal articles for better understanding" and "Group work was great but there could have be a lecture for each topic to give notes/main points before group work started." Others were just enthusiastic: "Though daunting at first, this method of teaching greatly enhanced group skills that will be necessary as an accountant or any profession dealing with other people" and "Enjoyable course where finally a University course now understands the inefficiency of learning by lecture method. Good use of new learning techniques." However, compared with other means designed into the courses, these responses do not tell much about student learning and assessment.

Someone in the teacher-as-facilitator role is well-placed to observe how well learning is occurring from listening and talking to individual groups during class meetings. Attendance, punctuality, evidence of preparation (e.g. students arriving with copies of cases and articles that contain highlighted passages), student body language and flipchart sheet or similar written output are also useful guides to student engagement and progress. Used on the courses in question, these generally indicate that students vary in the extent to which they engage at first and in how engagement changes thereafter, but that mostly student engagement increases during a course, and with it learning and level of performance in assessment. This is borne out by responses in the student evaluation questionnaires, such as:

> I was definitely motivated to do more work so as not to let down my group in assessment activities, did much more work during the term for this course than my other papers. These activities were not more difficult but required more time which paid off at exam time and allowed us to accumulate valuable points during lecture time.

It is also borne out by the following means available to collect evaluation data across the courses in question but to which I can find no reference in the accounting education literature for one as a systematic source of such data.

As signalled above, data were derived from individual student essays akin to that outlined in Example 2. The essays required individual students to reflect formatively on their experiences of working in groups, as follows: "Prepare a short essay about an aspect of your experience of group working and its implications for future work as an accountant (or similar

vocation / profession)". Nearly 200 such essays have accumulated over the past three years on a wide range of topics, as facilitated by use in the essay specification of the flexible term, "an aspect". Although "bias" arises because the individual essays are written by students wanting to score marks in order to pass their courses, they provide further insights into experiences during the courses and how students were adapting their expectations of and behaviour in learning and assessment situations. For example, one 2010 ACCT341 student wrote:

> Through the involvement in group work, one important aspect I have experienced, is the ability to be able to share and gain knowledge from other group members. Talking in a group regarding the task at hand I find, is the best way to learn, as not only do you get your perspective on the task, but also the perspective of the other members in your group, and these perspectives can often be quite different. This gives you the chance to look at every task/assignment from as many different angles as possible, and therefore gives you the ability to be able to complete assignments more thoroughly and with more variation in how you go about answering each question. I often find I do better in assignments and even tests or exams, when I have had the chance to be part of a group to throw ideas around and discuss concepts that I may not be sure about. I also find in groups, that talking ideas over with others in that group, also gives me a better understanding of what I already know.

And one 2010 ACCT342 student wrote:

> After spending most of my tertiary study working alone, I can conclude that my time working in a group in ACCT342 was more efficient method of learning than any other method I have experience in my four years of university education. . . . accountants work in teams so it seems a logical progression that accounting students should be taught in groups. The core reasons why team work is more efficient than working in solo are brainstorming, the scrutinization process and the delegation of duties and consequent teaching of theories to other team members.

The majority of students wrote essays that accomplished the following: demonstrated their ability to choose a topic in keeping with "an aspect"; explained why they chose the aspect in the context of a broader experience; described the aspect analytically and again in context; and extrapolated the significance of experiential knowledge they had of the aspect to their mainly secondary-sourced knowledge of working as an accountant or similar. From these writings I derived data about aspects that are important to groups either having worked well or needing to be addressed in order for groups to work better. Deriving inspiration from Jackling and de Lange (2009, p. 377-380) and Tan *et al.* (2004, p. 61-62) and the items referred to above from Wells *et al.* (2009), I took aspects and associated issues that surfaced frequently in the essays and induced six categories into which they fall or form a bridge between. The categories are group-member process, group structure and process, group outputs being the shared results, group member skill development and application, and group member learning. I arranged the categories into a model showing how inter-related they are,

and where the issues fit generally. The result is shown in Figure 3, with the categories in blue on yellow and the aspects in red. The model illuminates issues and products of learning as induced from student experiences of working in groups.

As to the significance of the essay assignments in terms of group-member learning, from observation of group activities after the essay was completed, and from the work I assessed and the student evaluation data, students were better at working in groups because the essay had encouraged them to reflect on their pre-essay experiences. Most individuals surmounted the challenges presented by member processes and by group structuring and processes, which were what most essays had been about, and moved onto groups as ways to generate results, develop and apply skills, and learn. In my judgement, this was evident in student responses to presentation assignments, such as Example Three, and in examination scripts.

As to other student achievements, it seems that the learning and its assessment inspired some students to change their ways of studying and their conceptions of leaning. These ways had a certain novelty value, opened up opportunities for networking, and were in line with things students expect to be doing when they are in organisational work. I suspect, more than was realised explicitly and recorded through evaluation questionnaires and other data presented in this paper, that they helped clarify for participants several qualities: what the courses were about, the courses' espoused and *de facto* learning outcomes, how to study, when to study, who to learn with, what learning is and how to demonstrate learning for assessment purposes. Having strategies of learning in groups was working for most of the students studying these courses. That is not to say, however, that these particular strategies need no further design work to maintain them and that they cannot be improved, so roll on the next series of presentations.

In addition to what they indicate about the 300-level undergraduate and postgraduate courses they are written for, these qualitative essay data tell various things about the degree or other programme(s) students are studying. Given other things that students said about their courses and about working in groups, not only do they lack for reflection on experiences of learning but also they lack experience of a wide range of learning possibilities. In particular, the data provide a further signal that before they studied these courses, many students have not spent much time learning collaboratively and working in groups, let alone reflecting on the mechanics of these, such as how group structures, individual and group processes, etc. can be improved by addressing even basic issues of getting organised, etc. Thus, in earlier level courses, and in other 300-level classes, little use occurs of working and learning in groups, a finding consistent with and, more worryingly, a decade on from Adler *et al.* (2000). As the student informants have studied or are studying an accounting major programme and more widely for a bachelor degree in business subjects, this is not encouraging for anyone expecting these programmes to develop intellectual, interpersonal and communication skills and similar generic competences.
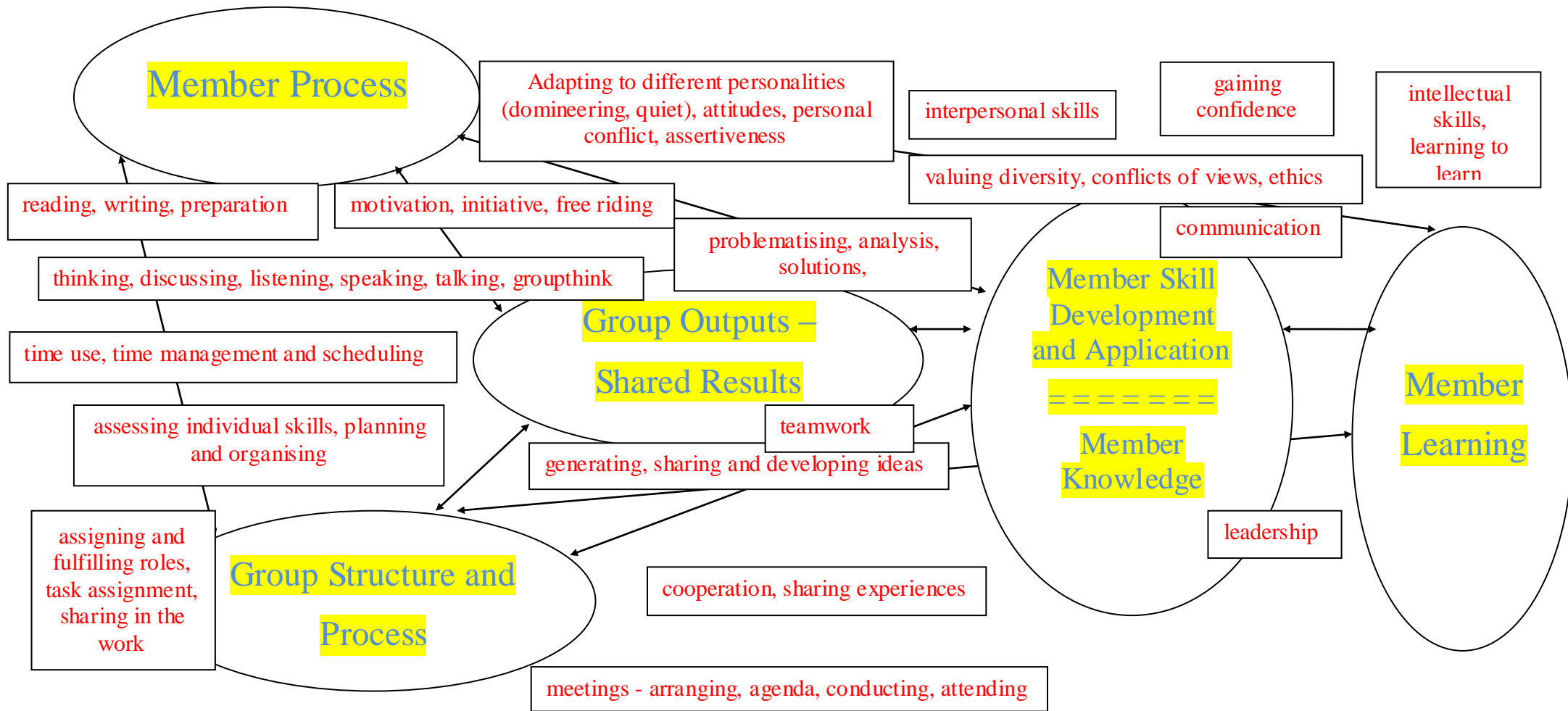
Member Process

Adapting to different personalities (domineering, quiet), attitudes, personal conflict, assertiveness

interpersonal skills

gaining confidence

intellectual skills, learning to learn

reading, writing, preparation

motivation, initiative, free riding

valuing diversity, conflicts of views, ethics

communication

thinking, discussing, listening, speaking, talking, groupthink

problematising, analysis, solutions,

Member Skill Development and Application

= = = = = = =

Member Knowledge

Group Outputs – Shared Results

Member Learning

time use, time management and scheduling

assessing individual skills, planning and organising

teamwork

generating, sharing and developing ideas

leadership

assigning and fulfilling roles, task assignment, sharing in the work

Group Structure and Process

cooperation, sharing experiences

meetings - arranging, agenda, conducting, attending

Figure 3. A classification of issues and products of learning as induced from student experiences of working in groups

Another matter to emerge from the essays was how many accountant students were not as aware of the nature of accounting work as one might expect; and how many seemed unable to find out more about this work, or were inclined to expend little effort doing so. This applied to a significant minority, whose essays were of a lower quality than the rest. It restricted their ability to make links between experiencing of working in groups as students and the prospect of working with others in organisational and professional contexts. Although many who struggled with this part of the essay seemed willing to accept that the learning they were partaking in about working in groups would be as important to how employers regarded their qualifications as learning technical knowledge, some 5% or so clearly did not accept this or were not interested in it. One suspects an overlap between these students and those whose evaluation questionnaires (5-10%) indicated unequivocally that they would have preferred a predominantly didactic form of course to the working-in-groups form. On the other hand, there were far more whose struggle with this part of the essay and participation in their course in general increased how valid they considered the working-in-group form of course to be. A related inference is that there are many accountant students for whom it would be useful if the topic, "the nature of accountant work" were to run through their degrees.

A further way in which a minority of students (10-15%) struggled with the essay was not to reflect on their experience but to write about working in groups in a way that included defining the technique, explaining it normatively and listing its pros and cons. There were probably various interdependent reasons for this but three that I came to suspect from ad hoc discussions with students are as follows. They are rarely asked (or allowed) to write in the first person and about themselves (some reported that they had been told by other teachers at various times that using "I" is wrong). They lack the skills of reflecting on personal experience or similar as a means of learning (re reflective learning, see Adler *et al.*, 2000; Bruce, 2001). In the run up to the essay, they had not engaged as much as other students with working in groups, and so needed more help to do so from the teacher/facilitator in the rest of their course.

Conclusions and Further Research

In this action research, personal experience paper, I have leant my support to the view that developing intellectual and interactive skills/competencies described as generic or "wicked" is an essential part of accountant education; and I have explained and exemplified the approach of having students learn and be assessed in groups, believing also that this produces deeper and more intrinsically satisfying learning among students. Prominent in the philosophy and design of the courses discussed in the paper are formative and summative assessment, and I have provided examples of these. I have also analysed qualitative data derived from students about their group experiences, and drawn some inferences. These include that if reflective learning is desirable then students need more practice in it, which can be achieved by bringing reflection into the summative assessments. And that, if working in groups and its potential benefits (e.g. skills development) are desirable, then it is not happening, at least where I am writing from, and almost certainly at many other places, given the findings of others as cited above.

As for scope for further research, in my experience of the courses discussed in this paper, institutional factors are significant impediments, which is consistent with findings of Adler *et al.* (2000) about accounting courses in New Zealand of a learning-centred nature. Examples of these impediments that I have had confirmed or become aware of during the courses are:

- room configurations and weekly timetabling
- use of the terms *lectures* and *lecturers*
- traditional examinations and other forms of assessment that focus more on measuring increase in formistic-cum-mechanistic knowledge than on contextualistic and organicistic knowledge or on skills and personal development (see Lord and Robertson, 2006; Tsoukas, 1994)
- student evaluation regimes based on didactic methods of teaching (see Kember and Wong, 2000; Sadler, 2005)
- poor or non-existent programmes of teacher development (in contrast to the pride of place being given to PhD programmes for researcher development)
- research reduced to discrete events culminating in an article (as is reflected in measuring performance by the number of articles published in a given period), rather than research as a process associated directly with sharing knowledge among students (among others), including through students undertaking inquiry-based, student-centred learning alongside their teachers (see Jenkins *et al.*, 2007).

These matters are areas in which there is scope for further research: reduce these institutional impediments and it will be easier to address the impediments among students (e.g. lack of student readiness for learner-centred approaches) and teachers (e.g. nonreflective education practices) identified by Adler *et al.* (2000) and that persist where the courses reported in this paper are staged.

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Notes

[1] This programme entailed four years of part-time day release (i.e. the working week comprised one day at an English polytechnic and four days in the finance department of a metropolitan local authority). One sat at a desk in a packed 30+-space classroom for most of the 10-hour polytechnic day transferring the notes that a stream of lecturers had compiled about their specialist subjects of law, tax, audit, management, accounting and so on into what came to constitute one's own notes, which one then used to swat for the end-of-year external examinations. I recall the welcome relief experienced on some of these otherwise tedious days when a lecturer would let us loose for a quarter of an hour or so to attempt a bookkeeping or cost accounting exercise. If one took into account the four weekdays that students were at work, perhaps one could argue that this professional training had a significant element of student-centred learning. However, it was not obvious that there was any conscious attempt to align the learning on the polytechnic day with the learning on the workdays, and any assessment of the latter was not only virtually all by accident but also the assessors seemed oblivious to the importance of such assessment or how difficult it is to perform, as Knight (2007) found three decades on.

[2] In 2010, the original exam-type question banks each comprised 12 questions, but after the earthquake disrupted course ACIS316 this bank was reduced to nine. Three answers from a choice of four questions were required in the examinations of ACCT341 and ACIS316; and the equivalent for ACCT342 was four answers from a choice of six questions. The rubrics differed to accommodate the variations in learning outcomes and events as devised by the different teaching teams on the three courses.

[3] Incidentally, these are among case studies that are copyrighted and can only be distributed in hardcopy under a licence agreement, which I obtain from the European Case Clearing House using a licence peculiar to undergraduate programmes. This permits unlimited copies to be made for a single fee for two years for specified usage. I mention this aware that some lecturers find that their institutions baulk at purchasing copyright licences for case studies. Under this particular licence the price can work out at less than $2 per student on even small courses.

[4] This is the generic word for teacher, even ones who do not deliver lectures from the podium.