# EDU015 Design and evaluation of a capstone course for accounting students: aligning an academic course with the competency required by the professional body

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### **Abstract**

A capstone course was introduced at a South African University in 2012. It is compulsory for all students studying towards becoming chartered accountants.

The primary concern of this paper is to improve this capstone course for accounting students by making use of Action Research techniques. In the first part of this paper, the context, research problem and rationale for the study, are presented. The literature review explores the nature of capstone courses and the suitability of Action Research as a tool for reflective accounting education practitioners.

The data collection methodology of student evaluations, tutor and lecturer focus groups, is then discussed. The findings suggest that students believe that pervasive skills are being developed although with different degrees of success amongst the educational innovations included in this capstone course. The development of the capstone course through Action Research techniques has also been documented so as to help accounting education practitioners interested in developing a capstone course.

**Keywords:** Capstone course, Action Research, Innovation, Collaborative Educational Practice, Accounting

### **Section I: Introduction**

This paper describes the design and evaluation of a capstone course for accounting students. It evaluates the development of pervasive skills amongst students and also evaluates the perceived value of various innovative educational initiatives. The evaluation of the course over the past three years has been conducted using the tool of Action Research. In the first part of this study the context is presented whilst the literature review explores the nature of capstone courses and the suitability of action research as a research methodology for the reflective accounting academic practitioner.

### **Section II: Context**

### a. Why did was a capstone course introduced?

The introduction of the new competency based framework by the South African Institute of Chartered Accountants (SAICA) resulted in the University conducting an extensive mapping exercise to determine the extent to which the College of Accounting was meeting the new requirements (SAICA 2010). There were two significant issues that needed to be addressed.

The first issue was the need to enhance the pervasive skills of the students. SAICA has defined pervasive skills as those relating to ethics and professionalism, personal attributes and professional skills. These pervasive skills have been identified as being important by SAICA and are included in the new competency based framework. (SAICA, 2010) Additionally, since assessment often drives student behaviour, SAICA has changed the nature of the final qualifying exam from 2014 onwards and it will now be an Assessment of Professional Competence (APC). (SAICA, 2011) The APC will consist of a case study and the assessment will be focussed, in particular, on students' ability to demonstrate professional competence as opposed to technical competence (SAICA, 2014). Some of the pervasive skills required for the APC will be the ability to research an industry, analyse complex business scenarios as well as clear communication skills. (SAICA, 2010)

The second issue identified was the need to cover more Management Accounting and Finance material at an undergraduate level.

### b. What is the capstone course?

Given the need to enhance the pervasive skills of students as well as the desire to cover more Management Accounting and Finance content, the decision was taken to introduce a new course at the final year undergraduate level. The decision had the support of the College of Accounting across the respective disciplines and a working group was tasked with designing the course. It is important to acknowledge that the College of Accounting agrees with van Acker and Bailey (2011:71) when they say that "Generic skills are too multi-layered and complex to simply be taught in one or even a few courses.". The onus for developing all the pervasive skills cannot be placed on the capstone course but needs to be carried by all the courses in combination.

The design of the capstone course was informed by existing academic literature and also shaped by the ideas generated by the working group. The working group had a list of Management Accounting and Finance content that had been identified by the mapping exercise as needing to be reinforced. It was the feeling of the team that the course didn't need to introduce a lot of new content but rather needed to apply knowledge already acquired to practical business scenarios. Corporate Governance topics were therefore added as it was felt that these were best tested in an integrated manner. The focus of the working group then shifted to designing assessments that would test pervasive skills and that would not be too onerous to grade from a resource perspective given the large class expected (over 450 students). The focus on assessment was agreed as the next step in the design process for several reasons. The first reason was that there was a fear of an additional course placing too great an assessment burden on the students during their crucial final year of studies. The second reason was that students would be especially anxious about assessment and would need to receive clarity on assessment because no prior assessment practices could be referred to. As Ramsden (1992:187) points out "From our students' point of view, assessment always defines the actual curriculum.", and so the design thereof was a crucial element that the group

needed to address. The teaching model was then aligned to prepare students for these assessments. That meant that tutorials would be on an equivalent standard to prepare them for assessments and that the lecture material would need to be geared towards greater integration and inclusion of business issues faced by South African companies. Additionally ideas to enhance pervasive skills, like a Johannesburg Stock Exchange (JSE) share trading competition and tutorial presentations by students, were then added to the course design.

### c. How is the capstone course structured?

The capstone course is a full year course but with only two 45 minute lectures a week. Tutorials lasting 90 minutes each are presented every second week. Two hour tests are conducted in April and June and the final exam is in September to avoid the final exam timetable being too crowded at the end of the year. The final assessment task is a teamwork project that is performed throughout the year and completed in October.

### **Section III: Literature Review**

The literature review consists of two areas of focus. The first area consists of the literature related to capstone courses. It will focus on definitions of a capstone course and then look at the objectives of capstone courses. This will then allow for an understanding of what is trying to be achieved by a capstone course and therefore what would be a good theoretical framework to implement if attempting to improve a capstone course.

The second area of this literature review will focus on action research, the methodology that will be used to evaluate the capstone course. The definition of action research and its appropriateness for the task will be explored.

### What is a capstone course?

There are many definitions of a capstone course. Crunkilton, Cepica and Fluker (1997:3) regard it as "A planned learning experience requiring students to synthesize previously learned subject matter content and to integrate new information into their knowledge base for solving simulated or real world problems". Holdsworth, Watty and Davies (2009:2) also offer a definition, "The term 'capstone' is widely used to describe a course or experience that provides opportunities for a student to apply the knowledge gained throughout their undergraduate degree. This involves integrating graduate capabilities and employability skills, and occurs usually in the final year of an undergraduate degree."

As pointed out by Bailey, van Acker and Fyffe (2012:4),"In practice, our research found varied notions of what capstones are, and considerable variation in the extent to which these subjects reflect their intended purposes as defined in the literature." The approach taken by Bailey, J., van Acker, E. and Fyffe, J. (2012:4) was therefore to focus on defining the features of a capstone course as follows:

"In essence, a capstone subject gives students the opportunity to:

• Integrate the knowledge they have gained and to see how it all fits together.

- Consolidate the key skills they will require in their professional lives, including:
  - o the ability to collaborate and work effectively in a team;
  - o the capacity to communicate effectively; and
  - o the ability to think critically and to reconcile theory with practice.
- Apply their knowledge in exploring an issue or solving an authentic problem, in a way that simulates professional practice.
- Reflect on and evaluate their actions and experiences, to equip them to be reflective practitioners and citizens.
- Develop their professional identity and confidence to participate in the workforce."

Jervis and Hartley (2005) published a study focused on an accounting capstone course. The reason for introducing the capstone course was very similar to this study. It was in response to an American accounting body advocating the development of lifelong learning skills. In their review of the literature they found no previous studies that had focussed on an accounting capstone course. They generated a six step process that they believe will help to develop a capstone course regardless of the discipline. The major difference between the Jervis and Hartley course and the capstone course studied is the difference in class size. The capstone course studied has over 450 students per year whereas the other course has student numbers between 15 and 20. The approach taken is therefore seminar based where students are encouraged to participate and this is not easily replicable in the large lecture venues required by the capstone course studied.

As Holdsworth, Watty and Davies (2009:9) point out that "The conclusions that Jervis and Hartley (2005) arrive at do not presume that their model of capstone course development is a perfect solution, as each university has its own constraints and curriculum foci. It is however a reasoned starting point for new capstone development."

The case for the need to reflect on the capstone course is also made more acute when reflecting on the literature that surfaces the challenges of presenting a capstone course. A problem that is particularly relevant is that large class sizes limited opportunities for discussion as well as engagement with tasks and pervasive skill development (Jervis and Hartley 2005). The large class size also compounds a further challenging factor which is that the workload for academics developing a capstone course is considerable. The additional tasks can include case study and research question development. The marking load is also considerable with several or frequent oral presentations and project assignments in addition to the usual assessments. (Jervis and Hartley 2005)

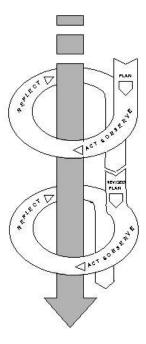
### What does Action Research offer a reflective accounting academic who is looking to improve a capstone course?

Action research is described by McNiff and Whitehead (2006:7) as "a form of enquiry that enables practitioners everywhere to investigate and evaluate their work". What makes action research distinctive is that it is undertaken by the practitioner rather than a professional researcher. McNiff and Whitehead (2006:46) correctly point out that "Practitioners should be

regarded as competent professionals whose practical knowledge is key to developing human capabilities, their own and other people's".

Action research has the potential to bring together the dual benefit of improving teaching practice and student learning. As van der Westhuizen (2008:1301) stated "The personal significance of this research is that I have learnt to improve my practice and student learning simultaneously". McNiff and Whitehead (2006:65) argue that "most books on professional education simply do not mention the idea of theory generation, or that practitioners should get involved in it. The subject rarely exists as a subject for discussion" and so there could appear to be dividing wall between practitioner and researcher. Proponents of action research however point out that such a dividing wall does not need to exist. Action research is commonly employed in classroom research as a process for practitioners to explore the efficacy of teaching and learning (Arhar, Holly & Kasten, 2001).

The action research cycle spiral is depicted as **Figure 1**. It starts with a **plan** which is a set of interventions designed to improve on what is already happening. These interventions are then **acted** upon and the effects are **observed**. **Reflection** then takes place and forms the basis for further planning. The spiral shape indicates that the action research cycle is intended to be a succession of cycles as opposed to a once-off event. (Kemmis and Mc Taggert, 1988) There are slight variations on this process. Stringer (2013) advocates a Look, Think and Act approach. This involves building an idea of what is going on and gathering information (Look) and then interpreting and explaining (Think) and then resolving issues and problems that were observed (Act).



**Figure 1:** The Action Research spiral (Kemmis and Mc Taggert, 1988:11)

Recently Kiener, Ahuna and Gray Tinnesz (2014) made use of action research to document the development of critical thinking in a capstone course. The study focussed on a capstone course that was implemented for the first time at a small private Midwestern university in the United States of America. The course was a compulsory undergraduate professional program capstone course. The class comprised of six students and therefore is materially different to the large class size of the capstone course in this study. The aspect of the study which was the most encouraging was that the process of action research enabled the researchers not only to study the development of the students but it also created a lens to review their entire curriculum. As Kiener, Ahuna and Gray Tinnesz (2014:119) point out, "Action research provides an excellent means to study curriculum in the context in which it is occurring. It also allows for immediate reflection and modifications to the teaching process to maximize learning. Systematically studying the capstone course provided information on student development but equally importantly it provided information on the entire program."

This would suggest that Action Research is an approach that enhances both student development and reflection on the entire program. Given the requirement to meet the SAICA competency framework, a tool that enhanced reflection on program development would be beneficial.

Coetsee (2011:97) writing in the South African Journal of Accounting made the point that "Many accounting academics are calling for a move away from mainstream accounting research to other research frameworks to develop a greater pool of accounting knowledge.". Action research should be considered by accounting researchers in South Africa. It appears to largely be utilised in education (Downhower, Melvin & Sizemore, 1990; Nihlen, 1992) as well as amongst health professionals (Mubuuke and Leibowitz, 2013; Kember, 2001) and there is no reason to think that it could not equally be applied by accounting practitioners and researchers. McNiff, Lomax and Whitehead (2003:4) have also pointed out that the scope of action research "has broadened to include virtually all professions"

What is attractive about action research is the emphasis that it places on the iterative process of planning, acting, observing and then reviewing before starting the cycle again. This means that evaluation is not regarded as an event but rather a process.

Action research also encourages the use of multiple perspectives. Jacobs, Brandt and Kruger (2006:228) write that a "A community of practice is the bedrock of powerful learning environments in which action and learning, improvisation and experimentation, tacit and explicit knowledge feed on each other". When trying to evaluate the effectiveness of a capstone course it is important that not only the views of the students are taken into consideration. Likewise it would be unwise to only listen to tutors or the academic staff involved. The collaborative process encouraged by action research helps to surface multiple perspectives that can be used to improve the capstone course.

It is a challenging undertaking to evaluate the effectiveness of a capstone course no matter what tools are used to accomplish the task. What is appealing about action research is that the process is understandable and transparent. The action research process can be quickly understood and the documentation of each step allows others to read about the problems

identified, see which interventions have been attempted and then read what has been said by participants. That does not mean that everyone will have the same views but the transparent nature of action research allows for great scrutiny. If practitioners want to be regarded as competent at evaluating their impact in the classroom, they need to be open to scrutiny. As McNiff and Whitehead (2006:70) state "Practitioners have to make their evaluation processes visible, show that these are rigorous and robust, and produce strong evidence to show that they as practitioner-researchers are competent and capable.". Gronhaug and Olson (1999:13), when exploring the merits and challenges of action research, stated that "in order to legitimate action research, detailed recording of observations and events to allow for detailed re-examination of reported findings is needed". The rationale and research design that follows will hopefully meet these requirements and also point out some limitations.

#### Rationale

The capstone course studied is new and although it was designed by a team with the best of intentions, there no doubt are areas for improvement. The majority of the courses taught on the undergraduate chartered accountant programme have been developed over decades through much trial and error. It would therefore be expected that this new course would also need to be refined through applying the principles of Action Research.

As course convenor for the capstone course, there is a personal desire to improve the course every year. SAICA has also shown a great interest in the course and there is the potential for other universities to implement the course or a modified version of it. The University of Zululand, University of Witwatersrand and Walter Sisulu University are all for instance implementing a version of the course from 2015 onwards and it is hoped that this study will help to ensure that they are able to learn from our mistakes. Universities that are accredited by SAICA to train chartered accountants are mandated to develop the pervasive skills amongst their students. As van Acker and Baily (2011:74) stated, "Staff are at times confused and unsure about their role in producing graduates with professional skills. However, capstone courses are a key strategy for embedding graduate skills in the undergraduate business curriculum. Thus close attention needs to be paid - sector-wide, institutionally, at program level and course level - in order to heighten awareness of such courses, and of their key role in embedding graduate skills." There is a great need to share knowledge in this area and it is hoped that by researching the capstone course and making information available, academics at other institutions can engage with our efforts and offer additional insights or questions that could result in further improvement to the course.

Another reason for the study is that students were initially very resistant to the addition of another course to their final year of undergraduate studies. Clearly listening to the concerns of the students and redesigning the course would hopefully over time decrease this resistance. It is important that the capstone course has a positive overall impact on the students so that they are able to complete their chartered accounting studies successfully.

Finally there is the desire to research whether or not the capstone course met its original intention of filling the gaps found during the College of Accounting mapping exercise to

SAICA's competency framework. The course is intended to help to develop the pervasive skills. This proposed study will go some way to evaluating whether or not this has been the case and where possible improvements could help to ensure greater success in meeting these goals.

Ultimately the capstone course was designed with achieving these objectives in mind and there is a need to evaluate whether or not that has been the case. Furthermore it is hoped that as problems are identified, ideas that lead to greater alignment with these objectives are generated and implemented.

This proposed study is therefore an attempt to pay close attention to this capstone course and make this process transparent and widely available so that interested parties can engage with our process of action and reflection.

### **Research Question**

The study responds to the following primary research question:

### Did the introduction of the capstone course lead to an improvement in students' pervasive skills?

The sub-question following from the primary research question is:

### (i) What interventions were the most beneficial?

### Section IV: Research Methodology

The Action Research process, as discussed in the literature review was adopted. The research method therefore consists of teams of people being asked to reflect on the capstone course and to offer suggestions for improvement. The interventions decided upon were then observed the following year and the cycle repeated.

### Research Method

Selection of students, tutors and academic staff and methods of data collection

The students registered for the capstone course in 2012, 2013 and 2014 were invited to participate in the study. The students were asked to complete an online questionnaire. The following participation rates were experienced:

	2014	2013	2012
<b>Total students</b>	489	466	522
Completed questionnaire	443	412	465
Participation rate	91%	88%	89%

Table 1: Student participation in online questionnaire

The tutors of the course for these years were also invited to reflect on the course once the academic year had concluded. Their participation took the form of a focus group discussion. Academic staff members who had either played a role in teaching and/or designing the course were invited to participate in focus group discussions. The inclusion of academic staff is regarded as particularly important given that unintended consequences of the introduction of the capstone course might have been felt in the other final year subjects.

The following focus groups were conducted over the course of the project and the author can be contacted in order to obtain transcripts:

Tutors - 31/10/12, 07h30-08h30, 31/10/13, 10h00-11h00 and 22/10/14, 11h30-12h30 Academics - 6/11/12, 09h00-10h10, 14/11/13, 10h10-11h10 and 17/11/14, 11h30-12h15

The particular questions from the student questionnaire which shaped the reflections of the focus groups were the following:

Question 28. If you would like to make additional comments (positive or negative) about this course, please do so in the box below

Question 28 looked to categorise or classify problems that students might have identified. These then could be reflected upon by the tutors and academic staff in the focus groups. The question surfaces the aspects of the course that students regarde as beneficial so that a balanced perspective is received. It might be the case for instance that a group of students dislike the teamwork project but others might make the comment that they really found teamwork to be beneficial. The question therefore specifically invites both positive and negative comments to be made.

Question 29.

What do you think could be done differently in 2013 to improve the capstone course?

Question 29 takes it a step further and invites students to provide ideas for what could be done differently in the following year. Action research encourages reflection, followed by action and that is what the question order is attempting to emulate. Once again there could be a range of responses that could contradict one another but they provide food for thought for both the tutor and academic staff focus groups. .

### Question 15:

The course has helped to develop my pervasive skills as defined by SAICA

Question 15 is specifically designed to gather student perception on the level to which the capstone course has developed pervasive skills.

The other questions that were analysed relate to specific innovations in the capstone course that would have been new to the students. There innovations were also the subject of many of the interventions in the subsequent years and they therefore give insight into whether or not these interventions were regarded by students as being improvements.

### Question 20.

The Mergers & Acquisitions project has contributed to my learning

**Question 20** focusses on the Mergers and Acquisitions teamwork project. This project formed the focus on the pervasive skills and solicited the greatest response from the students.

### **Question 21.**

The research question in every test has contributed to my learning

Question 21 asks about the research question that was included in every test and required students to research current business issues that were supplied to them a month before the test.

### Question 22.

The company analysis in every test has contributed to my learning

Question 22 relates to the business analysis that was included in every test. The students were given the name of the company on which the question would be based in advance and were therefore able to research their performance in advance of the test.

All of the assessment practices mentioned above have unique elements when compared to the other undergraduate assessments that the students had experienced during their degree.

### Data analysis

Trying to improve a capstone course is not an easy process because what one person regards as an improvement might not be so for another participant. The nature of the data collected was contradictory in places and that is to be expected. The action research analysis therefore is not expected to deliver the uncontested truth about the capstone course but hopefully leads to overall improvements by providing a process that allows for diverse participants to engage. The interventions that were implemented, in light of the feedback received from students, tutors and academic staff, are reviewed in the subsequent year. The iterative nature of Action Research lends itself to this process of reflection. The nature of action research is that it is not easy to isolate the impact of every change but it is hoped that by collecting data from students, tutors and academic staff at least some useful inferences about the impact of the interventions will be developed.

The student questionnaire contains categories that can be quantitatively analysed over the years (Questions 20, 21 and 22). It is a more subjective matter to read the comments that students have made and give them appropriate weighting. A few comments from a student body of over 450 must not be disproportionately weighted but neither can they be ignored. That is why the tutors meeting was held after the student evaluations were completed to elicit comment on matters arising from the students. Once again, when analysing the transcript of the tutors meeting it is not always easy to gauge the level of consensus. The final step of asking academic staff for comments on the observations of students and tutors was the decision making step as to what changes would be implemented in the following year. Thus each step of the process was designed to incorporate the information provided by the step before.

### *Validity concerns and limitations of the study*

As the course convenor and lecturer on the course there is a real danger that my reflections are hampered by my lack of objectivity. It was therefore important to involve students, tutors and other academic staff in the process. In the focus groups involving tutors, another facilitator was used so as to help create an environment where more junior members of staff are encouraged to share their perspectives and ideas even if they might not be in line with the thinking of the course convenor. This is however a limitation of the research and all findings must be regarded through this lens.

This study is unable to clearly isolate cause and effect relationship. The impact of interventions will be explored and multiple perspectives gathered but at no point can it be precisely determined what has been responsible for the impact observed. It is far more likely that inferences and some tentative suggestions about correlation will be the outcome. This is not to say that these might not be helpful to others looking to establish a capstone course in accounting but the research output must not be viewed through the lens of providing conclusive evidence for a particular approach. It must also be noted that some interventions might help to improve a problem identified in a prior period but in so doing might have an unintended consequence that gives rise to a new set of problems. This too is a further limitation of the paper because these problems might not be identified at this stage.

There is also the limitation with respect to students recording their perceptions in the questionnaire as opposed to what was really experienced in the course. Even if this is the case this data is still useful in that at very least the impact of interventions on student perceptions can be explored. It is also helpful that the students are in the final year of undergraduate studies and therefore have a greater level of maturity than would be the case if this was a first year course.

A further limitation is that the capstone course is partially designed to equip students for the world of work but this evaluation process occurs whilst they have just completed their undergraduate studies. There could be the tendency to evaluate certain practices unfavourably at this stage but that at a later stage there helpfulness in the work environment might become known. This is a limitation that cannot be avoided other than to continue to communicate with students once they have graduated. This could be an avenue for further research that would supplement this paper.

Finally, it is the case that all universities that are accredited by SAICA need to teach the pervasive skills, but this research is personalised and localised to a particular context and capstone course and so the findings should only be applied with prior critical reflection about the context.

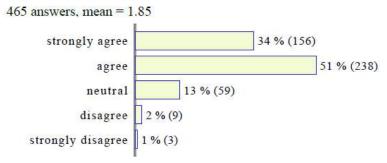
### Section X: Research findings

Perceived development of pervasive skills

**Question 15** asked for student perception of the development of pervasive skills. It would be expected that Action Research would have resulted in this score increasing as the interventions mentioned in the tables above were implemented.

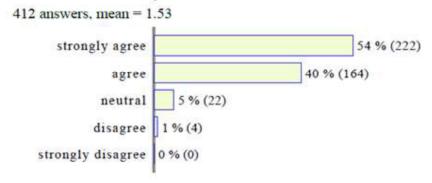
#### 2012

### 15. The course has helped to develop my pervasive skills as defined by SAICA



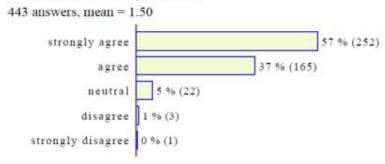
### 2013

### 15. The course has helped to develop my pervasive skills as defined by SAICA



### 2014

### 15. The course has helped to develop my pervasive skills as defined by SAICA



It has been pleasing to note that students on a scale of 1 (strongly agree) to 5 (strongly disagree) have rated the capstone course at 1.50 in 2014 (2013: 1.53, 2012: 1.85). A steadily improving score would suggest that the Action Research methodology has helped.

The following two tables represent some of the biggest interventions suggested after conducting Action Research. This was based on Question 28 (If you would like to make additional comments (positive or negative) about this course, please do so in the box below)

and Question 29 (What do you think could be done differently in 2013 to improve the capstone course?). These comments were then discussed at the Tutor and Academic focus groups before an intervention was agreed upon.

What was observed in 2012	Which interventions were implemented in 2013 to take observations into account
Project was too concentrated in the 4 <sup>th</sup> quarter	<ul> <li>Project started in 1<sup>st</sup> quarter</li> <li>Deliverables spread out over the year</li> <li>Sector Night with investment speakers to launch the Mergers and Acquisitions part of the project</li> <li>Grand Finale a week earlier</li> </ul>
Too many small companies in various sectors	<ul><li>International companies to be included</li><li>Only 8 sectors included</li></ul>
Answers to the research questions were memorised in advance	Research areas with key words introduced and specific questions only revealed at the test
The company used in the assessment only being released 24 hours before meant undue pressure on students	The company is released 72 hours before a test
No Integrated Reporting or Tax material covered in the course	Both of these topics included

What was observed in 2013	Which interventions were implemented in 2014 to take observations into account
Analysis questions were easily anticipated and answers prepared and memorised beforehand	<ul> <li>Multiple perspectives required for analysis questions (investor, auditor, provider of finance)</li> <li>Greater variety in assessment questions (i.e. more specific questions based on the company)</li> </ul>
The companies for the project were not regarded as equally exciting	<ul> <li>Greater representation of international companies</li> <li>Only 4 exciting sectors included – Retail, Financial Services, Industrial and Information Technology</li> </ul>
Some teams struggled to work together over the course of the whole year	<ul> <li>Greater emphasis on teamwork skills in lectures and with readings on the online learning platform</li> <li>Tutors trained specifically on how to deal with teamwork problems as they arise</li> </ul>
Share trading competition generating less interest	Challenged the Actuarial Science cohort of students to compete with the CA(SA) class

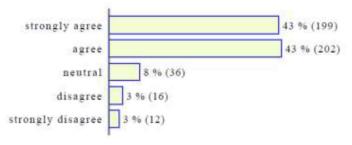
The particular teaching innovations in the capstone course were then analysed.

Question 20 looked at the Mergers and Acquisitions teamwork project. This project formed the focus on the pervasive skills and solicited the greatest response from the students.

### 2012

### 20. The M&A projecthas contributed to my learning

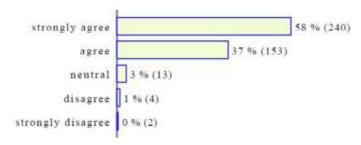
465 answers, mean = 1.80



### 2013

### 20. The M&A projecthas contributed to my learning

412 answers, mean = 1.48



#### 2014

### 20. The M&A projecthas contributed to my learning

443 answers, mean = 1.40

strongly agree

agree

neutral

2 % (11)

disagree

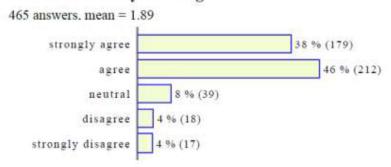
o % (2)

strongly disagree

0 % (2)

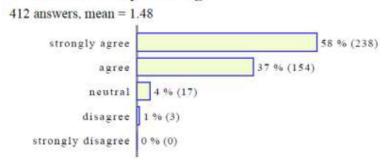
Question 21 asked about the research question that was included in every test and required students to research current business issues that were supplied to them a month beforehand 2012

### 21. The research question in every test has contributed to my learning



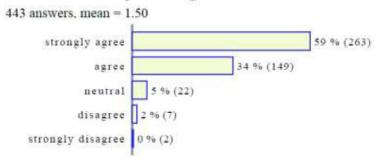
#### 2013

### 21. The research question in every test has contributed to my learning



### 2014

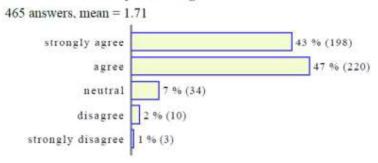
### 21. The research question in every test has contributed to my learning



Question 22 related to the business analysis that was included in every test. The students were given the name of the company on which the question would be based in advance. 2012

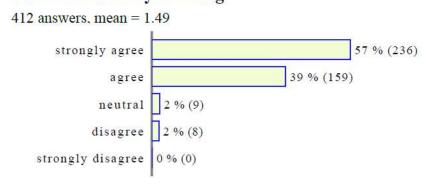
### 22. Thecompany analysis in every testhas

### contributed to my learning



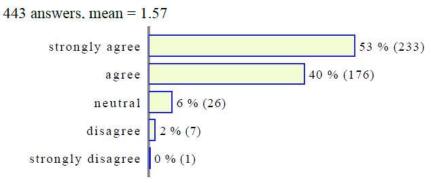
#### 2013

## 22. The company analysis in every testhas contributed to my learning



### 2014

## 22. The company analysis in every testhas contributed to my learning



It was the Mergers and Acquisitions project that students perceived to contribute the most to their learning. It is beyond the scope of this paper to expand on the project but it will form the basis for further research. Both the research question and company analysis saw an improvement from 2012 to 2013 but then dropped slightly in 2014. It could be the case that the interventions in 2014 were not as successful as planned.

#### **Section IX: Conclusion**

This study has shown that accounting students have perceived that a capstone course has helped to develop their pervasive skills. The use of Action Research generated improvements to that capstone course every year and the perception of students improved after every set of changes. These improvements have been suggested by students, tutors and lecturers over the past three years.

Specific teaching innovations were studied and the Mergers and Acquisitions project in particular was believed to be the most beneficial, followed by a research question and company analysis. It is hoped that this study will serve other accounting academics with the development of a capstone course at their institutions.

Using Action Research as a tool to improve educational practice is recommended as it has led to annual improvements to the capstone course and increased student's perceived pervasive skills.

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