Realising Corporate Social Responsibility Through Simulated Learnings: An Action Research Study of MBA Students in a Supply Chain Management Masters

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Abstract. We argue that modern approaches to teaching Corporate Social Responsibility (CSR) rely heavily on abstract descriptions of poorly framed problems. Such problems often point to a reality that does not favour the development of CSR. Instead it creates a level of abstraction between "business" and "social responsibility" because there is no real experience of the challenges of integrating CSR into business practice. The number one challenge of making CSR work is integrating it into culture and business practices. To assist in helping the future leaders of tomorrow understand their studies, we propose that a deeper integration between theory and practice is important. In this paper it is argued that this deeper integration can be achieved using small simulations in which students attempt to integrate CSR into real world situations and reflect on this experience. The reflection enables them to capture insights that are often absent from abstractions such as case studies. We offer an action research study to demonstrate how this reflective cycle works in two separate courses where this approach was applied. From this, these lessons are developed into a discussion where future directions are discussed.

Keywords: corporate and social responsibility; problem solving; simulated learning; action research.

1. Introduction and Background

Much has been written about Corporate and Social Responsibility (CSR) and how it 'should' be taught (Owen 2005, Christensen *et al.* 2007, Roos 2017). However, in recent times the argument of how to include such a focus has been the subject of speculation and debate (Stubbs and Schapper 2011). Cordoba and Campbell (2007) for example discuss how teaching CSR seems to raise a contradiction about how the concepts need to be framed (Stubbs and Cocklin 2008, Stubbs and Schapper 2011) due to the inherent conflict that lies between traditional views of business and an integrated CSR view. It has been argued that it's more about shifting mindsets (Aras and Crowther 2013, Owen 2005, Stubbs and Cocklin 2008) by changing the way students consider the conflict that lies at the heart of CSR philosophies (Stewart and Gapp 2013).

Authors have recognised this is a central challenge of CSR which is to find avenues to move organisations into "real" conversations about actions taken instead of endless theoretical framings of what is or what "ought" to be (Dunfee and Robertson 1988). The risk is that without framing the embeddedness of value of CSR as a practical and theoretical concern, the long-term usefulness of the values are lost or as some argue invalid (Thompson and Purdy 2009). The conflict is at the heart of CSR values (Stewart and Gapp 2013) and the desire for business educators to be leaders in integrating these values (Heidt and Lamberton 2011, Neal 2017, Rasche, Gilbert, and Schedel 2013, Rusinko 2010) which presents a difficult challenge and the overarching research question: How do we expose students to the reality of integrating CSR values into the business process? In particular, these authors point out some of the inherent "conflicts" between the economic rationalism and the underpinning philosophies in CSR (Collins and Kearins 2010, Ghoshal 2005, Jones Christensen, Mackey, and Whetten 2014, Stead and Stead 2010). As the authors work in a business school that has sought to embed CSR principles in the business degree, the challenge faced was how to not only integrate these values, but how to assess their impact on students. At the heart of this conversation is the idea that teaching CSR relies on a hidden assumption which is that of embedded practices (Cornelius, Wallace, and Tassabehji 2007, Dunfee and Robertson 1988) which are integrated in line with the expectations of change (Aras and Crowther 2013, Barter 2009, Barter and Russell 2012). This means CSR scholars have argued that the curriculum for CSR is best thought of as shift towards an integrated view (Rusinko 2010) into both the course mapping and the way in which business students interact and are exposed to CSR concepts like poverty for example (Neal 2017). That is, how can the reality of an experience such as CSR, which strives to integrate its views into business education (Cornelius, Wallace, and Tassabehji 2007)?

Following on from this the research question we need to address how we expose students to the "reality" of CSR in education so that:

1. They are aware of the moral dilemmas.

2. They understand the ethical problems.

3. Students can understand the common conflicts that exist in underpinning CSR philosophies.

4. How can we create an Authentic learning experience (Herrington and Herrington 1998) that both embeds these values but simulates an experience that stimulates higher-order thinking and facilitate an intrinsic motivation to learn about practice (Ghoshal 2005, Gulikers, Bastiaens, and Martens 2005, Vos 2015).

The core problem of CSR is that it asks for a holistic world view which does not separate out business from the planet it inhabits. This immediately raises questions about traditional viewpoints because it asks people to think about the bigger picture of what is happening in society as it relates to business. While we have a great deal of research on how to "integrate" CSR viewpoints we still struggle to understand how to move beyond the integration of these values and embrace the wider discourse about sustainable development from the holistic frame of reference (Neal 2017). That is, this isn't about embedding values, it's about changing the way we think about business to see it as part of our overall ecosystem (Ellis 2017). The problem this study seeks to resolve is: what kind of approach can we use to begin this process of "shifting mindsets?"

2. Motivation for the Study

For educators, the challenge is often met with the reality of realising that core values are abstract but can be best learned through experiencing meaningful practice (Carreras and Kaur 2011). While the CSR research is rich with teaching cases and exemplars, the challenge of moving students into an environment that teaches them the context of CSR through experience is challenging. Several studies point towards the difficulties of moving students through a "shift" in their mindset to completely grasp the underlying aspects of CSR (Ellis 2018, Shrivastava 2010, Stubbs and Cocklin 2008, Thompson and Purdy 2009). As mentioned above this change of mindset is the aim of CSR education broadly speaking.

One way this can be done is through simulated learning experiments (Moratis, Hoff, and Reul 2006). This moves the mindset problem into a more practical situation in which students can visit their own reflections and learn about sustainable contexts (Dickson *et al.* 2013). While this addresses the core situation of the conflicting values to some extent it presents a problem in how students reflect on their values, learn from the situation and at the same time have an authentic experience. That is, while simulations and case studies show students the way and provide an experience of sorts, what is it really like to have to integrate these values. Many studies point out, that we need these experiences so students can see what CSR looks like in practice, but fail to demonstrate how the values of CSR are explored, reflected on and debated (Warwick, Wyness, and Conway 2017).

Students don't just need to be exposed to real situations about CSR practice but to have their mind shifted (Stubbs and Cocklin 2008). Studies show that a problem exists between the way business schools tackle CSR and how organisations adopt it (Setó-Pamies, Domingo-Vernis, and Rabassa-Figueras 2011). They argue that in spite of a five-fold increase in CSR programs across the globe, business education still does not have integrated management training

that tackles these issues in direct proportion to demand. Further to that problem, it's difficult for executives to take a proactive stand on CSR (Stonkut, Vveinhardt, and Sroka 2018, Wu, Wu, and Wu 2018) because of the conflict at the heart of CSR philosophy (Stewart and Gapp 2013). To further redress this conflict the MBA in the Griffith Business School decided to create a program that had embedded CSR values.

Part of that program involved a course called Managerial Problem Solving which was originally designed to help MBA and Masters level students to improve their problem solving skills. The course is now taught as part of the MBA program that is specifically designed to be Sustainability focused. The MBA takes its core value from the United Nation's Sustainable Development Goals which means every course has to teach some aspect of this perspective to the cohort. It's a deliberate positioning of the MBA to reflect the values of Sustainable Development.

The cohort are taken through different values of Sustainable Development during different phases of the MBA program. The goal of the problem-solving course is not just to facilitate an understanding of problem solving but to also impart strategic level ideas of how to incorporate Sustainable Development in management practices. Prior to undertaking this course students are exposed to Sustainability and Systems Thinking in their MBA to set the context for their studies. Each course is designed in this way to move students along a traditional pathway (i.e. Economics, Strategy and so forth) through values that reflect a Sustainable Development focus. The primary goal of all courses in the MBA is to reflect theses values while this course also has to walk students through problem solving theory and practice for managers from a variety of backgrounds.

To match the values of these programs and still teach basic problem solving theory the course was designed as a practical, reflexive authentic learning experience (Herrington and Herrington 1998). After a survey was conducted by colleagues in the Masters of Supply Network Management this course was commissioned (see the original research that led to the creation of the course (Tatham *et al.* 2017) to respond to the need for our Masters students to have increased skills in problem solving at a managerial level. This was coupled with the embedded values of the business school which was to have CSR front and centre. The challenge became how to teach embedded values, problem solving skills at a higher order managerial level and build in reflexivity at the same time. This paper reports on how a real world CSR problem was used to frame deeper conversations and explorations about how CSR values might be embedded as people who have to solve difficult management problems. What follows is a discussion on the Action Research methodology used to explore this problem. After this, we present the findings from a two cycle and two-year exploration and conclude with an argument for change.

3. Theoretical Framework

This current study follows similar methodological and epistemological constructs to studies of this nature (Deer and Zarestky 2016, Setó-Pamies, Domingo-Vernis, and Rabassa-Figueras 2011, Wu, Wu, and Wu 2018) that use action based approaches to assess the veracity of CSR projects. There is a long tradition of using action research in studies to help structure better outcomes for students (ZuberSkenitt 1993). To help us structure this case for a management audience we drew upon the Checkland and Howell (1998) research model which is shown below and involves three overarching phases – framework, methodology and area of concern.

The FMA (framework, methodology, area of concern) model is based on three continuous loops of learning that can then be iterated as needed. The first phase is to establish an intellectual framework for you inquiry. We wanted to learn more about how CSR could be improved through exposing students to simulated learning. This formed the basis of our F – the theoretical framework in which we test. The methodology (M) of applied action research where we embed the ideas through simulated learning exercises (discussed below) and the area of concern (A) which was the MBA course called *Managerial Problem Solving*. The FMA framework helped us to understand what we were learning. The benefit of applying Checkland and Holwell's (1998) model is that it's rigourous enough to help the researcher structure inquiry in stages. First, develop a theoretical framework (F) that you wish to test, second create the methodology in which to embed the ideas (M) and then apply to an area of concern (A). We applied this FMA framework three times to help us learn more about why students struggled with the reality of CSR. The next section briefly describes the process.

4. Methodology

To test students' assumptions there were two separate studies done in Checkland and Holwell (1998) style of action research. Checkland and Holwell (1998) refers to this as a theory to be tested, a connected set of ideas and the basis or fundamental concepts that shape the inquiry. This inevitably leads to the embedding of those ideas into something that can measure the inquiry to provide a learning system that delivers outcomes consistent with the framework. In other words, you embed the ideas inside an action-based research process, such as Soft Systems Methodology (Checkland 1981) with the explicit focus of testing the ideas for their usefulness (Metcalfe 2007). The third part of the action research equation according to Checkland and Holwell (1998) is the application of the methodology, which has the ideas embedded in it, to an area of concern where they can be explored.

In this way, the research team created an intellectual framework to engage with the area of concern through the application of it in the course. The main practices involved asking students to conduct an assessment (discussed below), reflect on that assessment and then provide solutions to a real world problem. Students were introduced to problem solving theory at various junctures according to: traditional concepts of human problem solving (Newell and Simon 1973), then complex problem solving (Ackoff 1978) and problem structuring techniques as discussed in the Data Analysis section below.

Cohort Involved

Two separate courses were selected. The first was a management course for third year Bachelor of Business students who were enrolled in a Management Major as reported in Houghton and Stewart (2016). The student body for this course is made of undergraduate students who are doing this course as part of their overall management major. The course provides a capstone experience in which students get to experience real world problem solving that "reflects" on their theory from the management major. Students in this cohort are primarily between the ages of 19-20 (school leavers) and have had no formal management experience. Normally there are about 100-150 students who take the course in the final year. The other course was a three-year study involving a post graduate MBA course, as mentioned earlier, which explicitly asked students to study a sustainability problem that was pre-selected. As discussed earlier, the MBA sustainability focus is a part of the underpinning philosophy of the program. Students in this course are considered to be more advanced. They are required to have five years of management experience, a current management role and are approved by the program director. Students in this age bracket are normally over the age of 35 and inherently have more experience in solving problems than the undergraduate cohort.

During this project several groups were involved and consulted. The main two groups were the education team (the facilitators) and the student cohorts. After these sessions were completed the program directors were notified and meetings were held for feedback. During these meetings the program directors made suggestions as to what could be learnt from the project but it should be stressed here that input from the faculty in terms of the project developments was minimal. This was not due to the lack of consultation of faculty stakeholders but because we were given the autonomy to design the educational process as we saw fit without any interference. After the project was completed there was a short debrief with convenors during official faculty meetings. Again, no feedback was offered by faculty even though it was requested.

Data Analysis

In this way others have argued that Action Research is a critical endeavour (Dick 2006; 2017). That is the foundation of action research is based less on empirical

findings, although surveys and interviews/focus groups were used at strategic parts of the research presented here, and more on the change needed in this situation. To break it down further in this iteration of the study we can define the following:

1. The Framework: To use a practical experience to demonstrate the problem with integrating into corporate experiences.

2. The Methodology: In the post-graduate version we used engaged the ideas into an experience in a matter similar to "problem based learning" (Herrington and Herrington 1998). The problem was presented, and students had to use the knowledge from the previous modules in the course to develop their perspective on solving the problem. In this way they were shown several key things to assist. Firstly, they were exposed to problem framing techniques, methodologies such as concept mapping and others and finally they were exposed to the basic concepts of problem structuring and creative thinking (Engeström 2006, Mullekom *et al.* 1999).

3. The Area of Concern: The case selected was something called the "green train" initiative. A steel smelter in the Northern Territory (anonymised) that ran steel from Mount Isa to just outside of Darwin. The people who owned the smelter were sustainable mineral advocates and had gone to extraordinary trouble to make their process as symbiotic with the environment as possible. They had hired an intern to assess how they could make their transport "green" by using different energy alternatives. The problem the students had to frame and solve was similar to the one framed earlier: How can this company, who clearly is not in an industry that is known for its excellent CSR record, manage the problem? During the simulation students had to firstly define which angle they wanted to tackle for solving the problem. Secondly, they were asked to define the major stakeholders in the problem and finally create a strategy that could potentially integrate political, finance, technical and other considerations without resorting to compromise (ideally). The simulation focused explicitly on the political reality of problem solving in organisations which some have argued is overlooked in research (Jackson 2001, Ulrich 2003).
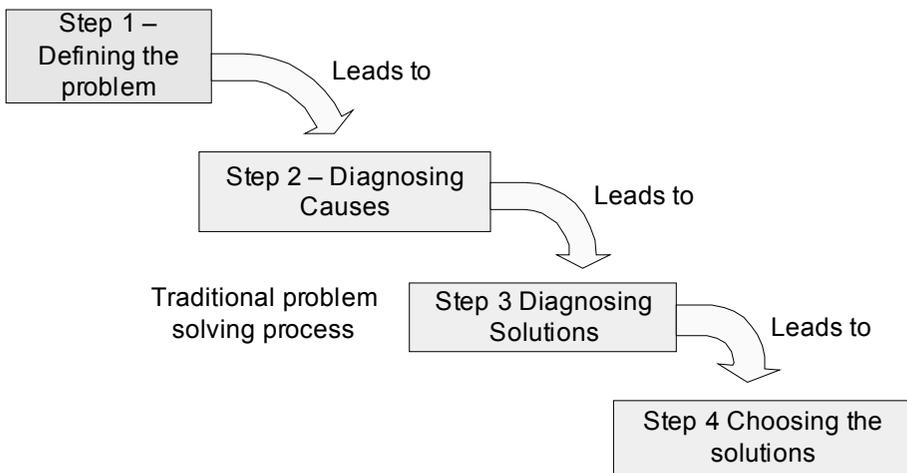
Data gained from this included student assessment (anonymised), interviews that were conducted during and after the experience and surveys conducted. The authors decided not to use the previous studies findings as this was a different cohort (Houghton and Stewart 2016) which used a somewhat different

methodology. Instead, this approach relies on data produced from the MBA course.

The Course
The course used is part of an MBA online and face to face course that teaches the basics of managerial problem solving from a complex problem standpoint. The course mainly tackles the core part of managing problems by walking through three key stages of managerial problem solving. Firstly, it asks students to identify a problem using a waterfall style 'traditional' linear optimisation model. This typically looks like the model below:

Figure 1 - Traditional Problem Solving Process


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┌──────────────┐
│  Step 1 –    │
│ Defining the │ ──────▶  Leads to
│  problem     │
└──────────────┘
        ┌────────────────────┐
        │ Step 2 – Diagnosing │ ──────▶  Leads to
        │      Causes         │
        └────────────────────┘
 Traditional problem   ┌──────────────────┐
 solving process       │ Step 3 Diagnosing │ ──────▶  Leads to
                       │    Solutions      │
                       └──────────────────┘
                              ┌────────────────────┐
                              │ Step 4 Choosing the │
                              │     solutions       │
                              └────────────────────┘
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The second part relies on "risk analysis" style of problem solving in which creative strategies are required to define new solutions to problems that are a little bit more complex in nature. This includes things such as: investment decisions, retrospective analysis, concept mapping and so forth. At this stage of the course students are asked to find ways and means to explore "possible solutions" to a complex issue. They then select one and justify (Jonassen 2000) the solution that seems to be most effective. The model used to navigate this terrain is a simplified problem solving framework called "Engagement" (see Houghton and Stewart (2016).

Finally, the students are asked to consider "wicked" problems. These are problems that are notoriously difficult to manage. In this part of the course we expose students to design questions. That is, we ask them how changing the design of things might yield new solutions. This is akin to what (Ackoff 1978) called dissolving the problem. In these situations, students are asked to design a solution that changes the conditions that cause the problem, so it can no longer exist. We often move in our discussions in class during this time from how one

might manage the situation to how one might redesign it. How could the environment be reconfigured, in other words, so that the problem doesn't exist any longer?

For the assessment the students are given the problem mentioned earlier and asked to apply three different modes of thinking, at three different levels to the problem at hand. A CSR problem was chosen for this study because it aligns with the core values of the Griffith Business School MBA and the research centre where this was offered at the time. The aim of this was twofold: firstly, to assess students' ability to solve complex issues and secondly, to provide a simulated real-world experience of attempting to drive a sustainability initiative.

The Task for Students to Apply Problem Solving Theory
From the course profile:

> "… you have been asked to work with a newly purchased business entity specializing in business optimization. From the start of your time working with these people you have had a problem with their lack of communication with the rest of the team. They have good ideas but fail to integrate with the group. Currently they reside in another building and don't feel the need to cross the street to liaise with you or your newly appointed team. The problem is this unit has the information you need. What can you do to learn to work with this eclectic bunch of nerds?
>
> At the moment they simply go about running mathematical models without sharing the results with the team other than through email. This annoys you and your team because this crucial data is essential to the successful design of the merger."

Students were asked to develop a plan to solve the communication breakdown.

The second part of the simulation was slightly more complex:

> "After the success of the first communication exercise, you feel a boost of confidence. The data from the optimization team has led to several service improvements. The sales coming in have made your bosses happy. The growth in the core logistics business of moving freight from one part of the country to the other have resulted in a couple of good opportunities for development.
>
> The first opportunity is a new green energy company that is asking for the rail services you provide. They want to ship coal from Queensland to Western Australia, which is a route you already provide. However they want to do it in such a way that you are no longer uses your own rail carriages. They want to use their own rail carriages with their own branding on it. Further, your big boss is a sustainability advocate and got his current job by promoting sustainable development in the rail industry. He has put pressure on you to accept this proposal. To make matters worse your finance team has crunched the numbers and this deal would mean that for every three trips, there and back, the profit margin is likely to be less than one half of a percent (0.5%). To add to your woes

in making this decision, your boss is a powerful political figure. He has organized a site visit to see the trains to promote the business.   He wants you to present a case for and against the adoption of the trains using common sense English."

During the course the facilitator presents the problem and actively participates in helping students to apply the strategies to the problem without offering a clear alterative. As discussed later in the paper this can be quite challenging as it often requires people to find key alternatives that are not in the course material. The point of offering simulated learning experiences is that it helps students to be able to experience authentic learning in a safe environment (Gulikers, Bastiaens, and Martens 2005). For example, during one of the iterations a tutor was hired to go around to groups to ask provocative questions to stimulate learning. While this role proved unrewarding, it helped students to be able to see beyond the context and to immerse themselves deep within the context of the problem.

Finally, at the end of the semester, students were asked to reflect on their experiences on learning in this way. This provided a way for students to capture the essence of what was learned so that they could take some of the framework with them. In the following section we will outline two cycles of using the simulated experience and discuss the key findings of the project. Bearing in mind that this is an action research project and generalisation is problematic (Checkland and Holwell, 1998). This is a shared experience that others may find useful in their attempts to drive home key points about CSR.

5.   Findings – Assuming New "Realities" – Cycles 1 & 2

To synthesise the flow and logic, the reporting of the findings will be written following the above mentioned FMA methodology.

Cycle 1 - Framework
During this initial stage the plan was to assist people in the course to develop real world problem solving skills. This began with a discussion in the group on the green train initiative. The decision was made to divide the assessment into three parts. First, the students had to go through three simulated learning experiences. The first was to take the traditional framework and apply it to solving a simple organisation of team issue.

Students in the course again had to draw on the theory of problem solving to successfully complete this task. Finally, students were exposed to wicked problems:

After your stellar performance in implementing the green train strategy your bosses are almost convinced that you can stay in your position. Suddenly, on the

way from the depot in Townsville to the Mount Isa the train derails. The paper-thin margins used to forecast the profitability of the "green train" are completely thrown out the window. Your big boss storms into your office demanding an explanation. He wants you to explore the issue of "paper thin margins" and figure out what it means for the company. Should we have a disaster management plan? Should we find something to do instead? Is the deal to be cancelled? How should be structure this problem? To successfully complete this task you need to:

A) Identify four different ways to structure this problem – that is what are four different ways of thinking about and defining this problem?

B) For each of these different strategies what can be done to better understand this issue?

Students were required to go through the stages of firstly, structuring the communication problem, secondly working through the business case aspects of the sustainable enterprise model and thirdly to navigate the political terrain by suggesting reasons why the train project needs to go ahead.

Cycle 1 - Methodology
During the first cycle the problem structuring activities included several key tools. Firstly students had at hand a linear optimisation process taught during lessons. They could apply this, model the constraints (not mathematically but through a simplified process of linear optimisation) and then select the alternative model for office communication that was the most efficient. This task proved no problem for the MBA students largely because of its simplicity. Feedback from this first task indicated that the process was simple enough to be sorted through and organised. During the second phase the students had to use concept mapping and/or causal maps to map out the main areas of concern. During the class exercises the students were asked to structure and organise their management roles to understand who was in their sphere of influence. After this activity, they applied the task to the green train problem. The results in this section varied and this is where the reality of what CSR is hit home. The constraints in the problem are obvious. How can you have a "green train". Students largely fell into several categories. Those that suggested alternative modes of transport. Secondly, those that had different worldviews (i.e. financial, managerial, socialist) and finally those that were focused on the logistics problem and the CSR problem simultaneously.

Cycle 1 - Area of Concern
During the application sessions where students could take what they had learned and apply it to the green train initiative during intensive concept mapping sessions, a great deal of complexity emerged. What was even more surprising was

that the concept maps took on a life of their own. In this way, students began to ask questions about the legal problems, some have questioned the veracity of the case, some asked if I had made this up and others drilled down to the core problem. Sadly, the majority simply accepted the fact that the train had to work. From a problem solving standpoint this was not necessarily a great outcome. However, from a CSR point of view it raised an interesting point about management thinking and leadership CSR that correlates with what others have found (Stewart and Gapp 2013). That is, if the CSR values are explicated in a way that they are not optional, managers find a way to make it work.

Cycle 2 – Framework
Due to smaller numbers of students being involved and engaged in the course in the first version, the second version had more numbers so only minor tweaks were made to the framework. The main change in this version was a more explicit effort to focus on structuring problems and as such more material was added including discussions on systems thinking and soft systems methodology (Checkland and Scholes 1990). This helped people in the course to be able to understand the core concerns of problem structuring which was noticeable absent in the first version.   In adding this more time was spent overviewing creative strategies, how they work, different types of core ideas that might be useful in different situations and so forth.   One idea that students latched on to for some inexplicable reason was Russell's Ackoff's (1978) schema for solving problems. Ackoff broke problem solving strategies into three core groupings. Firstly, problems that could be left alone through a process he called absolving the problem.   Secondly, that problems could be resolved or mediated through compromise alternatives and lastly that problems could be dissolved. This last one introduced students to the idea that problem solving is about systems thinking or changing the constraints that cause the problems to exist. This one is by far the hardest one for MBA students to grasp. This is because there is a tendancy to want to drill down to a solution through analysis as opposed to synthesis. Dissolving a problem involves finding new interpretations of the situation to better frame it.

Cycle 2 – Methodology
This newer focus on problem dissolving and structuring drew students towards a tools and techniques mentality. In the final "green train report" it could be seen that the students were relying on Ackoff's trichotomy and from there making the leap to strategise solutions for the company. This time around the students were becoming more aware of their own thinking. The discussions on problem structuring lead to more exploration on framing the problem. For instance, a member of the course when doing the exercises on concept mapping remarked at the end of the session that he had no idea that his role influenced so many other

decision makers. The introduction of these new ideas helped students to integrate their ideas into the problem.

Cycle 2 – Area of Concern

The same case was selected but this time around a renewed focus was used to capture the reality of the situation. In Cycle 2, the students fell for much the same problem, with the emerging concern of how to integrate the CSR view with the core problems of the case. This time around more logistics students had taken the course so it was noted that the solutions were focused more on "green transport". The main aspects of this broke down to rethinking modes of transport that would meet the CSR requirements and how to exemplify and share the core values. It also had a negative connotation. Several students challenged the core concept that this could even be a green train. The discussion had moved from an analysis to a challenge about the core concepts of the problem which is one of the desired learning outcomes of the course. A key part of the final report was to address the political concerns to keep it viable. Several students had a problem with this and one student noting that green investments rarely worked. This will be addressed in the discussion.

When the lessons were collected after the second cycle what became obvious was that the students in the class were struggling with the key CSR views. The main problem was that the great majority of the students didn't seem to believe the case was real. Indeed, the irony here is that it was real because the person running the case studies was a personal supervisor to the lecturer in charge of the course. This became problematic. The problem on them not believing the story showed a couple of key findings. Firstly, that the core attitudes towards CSR were surfacing. When this was investigated it was found that the students in the course had just completed a course on CSR as part of their MBA. While this isn't a bad thing, a majority of them had an "engaged" view of CSR from looking at cases that had been explained in a previous course. Those that didn't, or perhaps had taken the course as an elective, didn't realise this influence. This leads to the most interesting finding of the study with the big difference in the experience and that the students have two main tension points (see Houghton and Tuffley 2016) to contend with. From this finding, the issue of how does one balance an integrated view of CSR with the desire to make money can be extracted.

Due to the fact that the sample size of students in this offering was much larger these assumptions began to surface. Many students in the course felt that this tension didn't make sense. Why should we "balance" anything, with others commenting that they felt the course was trying to indoctrinate them. Others, created unique solutions in which the solution to the problems introduced new concepts to help keep the green train initiative alive. The robust debates in class made the course interesting but challenging. One student commented in the feedback that they didn't believe it was possible to run a sustainable mining company. Yet, this real company was working through these difficulties. There

were assumptions surfacing (Argyris and Schön 1997, Mitroff and Emshoff 1979) that helped to structure the debate and look for solutions which was very difficult, if not impossible problems. The implications for CSR are discussed in the following sections.

6.   Discussion: Realising CSR

Our original hope was that by asking students to actually solve real problems through a developed problem-solving framework, that it would enhance their ability to structure and solve real sustainability issues. What emerged from this study was two main outcomes. Firstly, to tackle problems in CSR the students need to know the context. This involved the lecturing team going and finding a real problem that was currently being solved. The challenges that this brought were incredible. Students resisted the idea because it was innovative and difficult. The industry partner was also helpful as they gave us the problem freely but ceased communicating after that. Yet, this problem drove home the point that to really teach managers, which made up the majority of this class, they must be embedded in something that is realistic. This was a challenge because they often dissected the case from their own experience. It took the conceptual idea of a "green train" and made it a real problem, which is the world these people inhabit. From there, new ways of seeing the problem could be explored by using the theoretical frameworks in the course. Through student feedback of the course, this major outcome was reported by students in terms of the "rich experience". The case made the CSR problem real. It wasn't an issue that CSR was up for debate but it had to be implemented. This challenged a lot of students who had thought CSR was a box checking exercise.

Secondly, on a deeper second level of learning (Argyris and Schön 1997), students had their assumptions tested. For example, one student said, "Luke forces me to think outside the box". This is deliberate. The theory in the course points students to traditional cognitive ideas (see Checkland 1981) that sees problem solving as a set of steps. One idea that was pushed is that new ideas are often the solution to messy problems, such as making a mining company green. The way in which having to actually work through the problem challenged students that manifested in the surfacing of a lot of hidden assumptions. Several students felt confused, unsure, frustrated and unable to see how this could work in practice. Yet, they had no choice. After two cycles the students were challenged to test their own assumptions to the point where many of them saw the problem as real, even though it was a simulated learning environment. In many sessions when the concept mapping exercises took place, students were often challenged to go beyond their own assumptions, skill sets, knowledge and experience and try to find new solutions to a complex evolving environment.

7. Implications

At the start of this paper, we discussed the role of CSR in ways assist students in shifting their mindset. What emerged from the study was how difficult this challenge can be. Previous studies had indicated that CSR is a major concern for academic disciplines (Christensen *et al.* 2007). The core problem introduced was that it's very difficult for students to grasp the context of CSR and its connection to the broader sustainable development paradigm that sees business as part of the ecological framework.

The challenge for us is waiting on students to recognise the business case for CSR and how the potential as a business case. Even though students begin to understand the necessary components of corporate and social responsibility as being a part of the business framework they often reduce it down to things like auditing, environmental reporting and other quantifiable related matters. We found that the students even though they had a passion for CSR and wanted to see it be a part of the business framework, they inevitably failed to grasp how companies who at their heart are still not focused on CSR as a paradigm. This conflict manifested itself in discussion on the development of CSR in the mining industry for example. If we go the way of some institutions and just simply have case studies that are general and talk about ordered and quantifiable aspects of CSR. If this is the situation, we have missed the whole point which is that this needs to be part of a broader framework in society not just a business that is taking care of its legal and policy implications.

In closing, it remains to be seen how the context of seeing us I can be embedded into practical studies. That said when students were in bedded in the studies, we saw a lot of them deeply engaged in the topic and they became quite skilled at balancing out the framework of CSR and the business case study we used. This is some progress towards helping people realise CSR as something that's important and something that is part of a general framework for society not just something that is done to tick a box.

8. Conclusion

In this study we explored a 2-cycle action research study in the development of a course on Managerial Problem Solving that used a CSR case to teach students about how to solve difficult problems. The key outcome and contribution here is that if we want students to talk about CSR we have to show them the reality of making it work. It cannot be an abstract case study that walks them through what a major corporation has done to improve its perception in the marketplace. Real change must come from those that are in management that we educate. How can we as educators look at the world and show them how easy it was to save millions of dollars on water when the planet is calling out for an integrated view to both business and CSR. Approaches like this, though flawed, must be implemented to

move people out of their comfort zones and into a place where this reality is faced, structured and action upon. Many students who came through this course disagreed. It really doesn't matter what people think, it's the reality we are facing. To invest in people, we must first put them through experiences that will show them how. If we don't, we will remain embedded in our ivory tower surrounded by our ideologies instead of showing people a better way.

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