

Information Systems as a Social Space: Developing academic and social literacies in students

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ABSTRACT

This paper describes an enquiry-based teaching programme using Scenario Learning and Pedagogy (SLP), an approach to teaching that is cooperative and multi-layered. The authors review teaching professional communication practices by embedding learning to write and reference a journal-style article in the specific real-world scenario of Business Processes Management (BPM), at a development organisation, the Student Health and Welfare Organisation (SHAWCO), based at the University of Cape Town. The aim of the programme was to develop academic writing and social practices to transform and broaden what can be achieved educationally in the classroom. An interpretative approach, based on student and staff perceptions as well as framing the data through the lens of a multimodal pedagogy such as the New London Group's Multiliteracies Pedagogical Framework seemed the most appropriate methodologically. A qualitative analysis of classroom pedagogical processes as observed, reported and reflected upon was therefore used. In the past, Information Systems Honours programme students wrote an individual essay at the start of the year but with no input on research, planning and writing. In 2009 students investigated BPM (a real world scenario) related to among others: volunteers on specific education and sports projects, or the BPM in place for marketing education projects. The course started with a lecture on SHAWCO and specific education involvements there, and students were handed two academic papers on BPM before starting their investigation of the scenarios in teams of three. In four two-hour workshops students' learning was scaffolded. Taking turns in their groups, they presented their work and got feedback on their draft products from lecturers in incremental stages. Simultaneously overt instruction on academic writing (e.g. style and citation) was given and students finally submitted their eight- to twelve-page written document as individuals a few weeks later. Viewing the data through a Multiliteracies Pedagogical Framework lens proves useful from both a theoretical and methodological perspective. For students learning challenges and opportunities in critically evaluating BPM in a development organisation were evident. There was also 'transformation value' in embedding learning in an institutional scenario in terms of students learning about IS as a social space. As an open-ended problem-solving framework, Scenario Learning and Pedagogy in addition allowed students to develop academic knowledge and practices based on informed reasoning and analysis. In reflecting on the social world contingent on business processes, students developed metalanguage needed to negotiate between different contexts effectively, an aspect of active and critical/reflective learning and mastery. Pleasing by-products were raised awareness, motivation and collegiality among staff across the university.

Keywords: Information Systems; Business Process Management (BPM); Professional Communication Unit (PCU); Student Health and Welfare Organisation (SHAWCO); Scenario Learning and Pedagogy (SLP); enquiry-based learning; situated learning; academic practices; multimodality; overt instruction; critical framing; transformed practice.

1. INTRODUCTION

The main focus of this paper is a teaching initiative of a short course using Scenario Learning and Pedagogy (SLP) (Grant, 1999; Grant and Kalil, 2008; Kalil, 2009; Grant, 2009). The course was developed for Information Systems (IS) Honours students in the Commerce faculty at the University of Cape Town (UCT) in February/March 2009.

The aim of the course was to develop academic practices of students, specifically writing, but simultaneously their social literacies. By sharing the experience with using SLP with the community of educational practitioners, we aim to contribute meaningfully to the field of experiential teaching/learning of technically orientated students. In the past the PCU taught academic writing taking a genre approach in which the teacher provided input on the writing process and the journal article genre. The practical workshops dealt with principles of communication, the form and function in an academic article, appropriate language and style, planning and structuring and referencing. Students selected a topic of their choice in their field of study and without formal consulting with the lecturer wrote their own article. The resulting articles were characterized by cut and paste from the Internet, a reliance on secondary research, often an adaptation of an earlier essay from another course, and the results ranged from very good to outright failures.

SLP has been used by the PCU in the science faculty with computer science students for many years but only more recently introduced to the commerce faculty. The term, Scenario Learning, was coined in the early 90s to describe a situated teaching and learning approach (Grant, 1999). With its focus on “a pedagogical framework that is grounded in cooperation, collaboration and experience” (Rassool, 1999, p.239), the term evolved to include pedagogy in 2009. Our interest in developing SLP is not on understanding how learning happens *per se* – involving the cognitive internalization within students – but rather on how participants, both students and facilitators, engage with and negotiate meaning, particularly in the sphere of professional communication practices (Rogers and Kincaid, 1981; Holquist, 1990; Kress and Van Leeuwen, 2001; Grant and Kalil, 2008).

Using SLP involves embedding teaching and learning in institutional scenarios or broader technological, social or environmental phenomena, happening in real time. The scenario chosen is topical, within the students’ field of study and broad enough for a class of 35 or 40 upwards to work on a variety of foci within it. These features of the approach encourage primary over secondary research although not exclusively. The aim is to enhance student meaning making, professional communicative practices and multimodal, participative pedagogy. Although the end product may focus on writing, the many visual and verbal modes inherent in communicative practices are relevant, hence the alignment with the New London Group’s (NLG) Multiliteracies pedagogic framework¹. Written, spoken and visual modes and media together with elements of readability such as formatting, layout, spacing, colour and numbering together constitute an ensemble of multimodal resources and designs from which participants (students and staff) may select (Cope and Kalantzis, 2000; Kress, 2003, 2010; Jewitt, 2006, 2009).

The purpose of our research is to gain understanding of and insights into SLP in teaching academic practices and fostering interpersonal relations among various stakeholders, and the concomitant value systems and norms of practice, i.e. the social space of information systems. It also aims to assess how this approach can be applied in an atypical context compared to previous applications, that of a student-run development agency, UCT’s Student Health and Welfare Organisation (SHAWCO).

The article describes the:

- theoretical underpinnings of SLP and its use historically
- rationale for its use in teaching IS Honours students
- methodological lens for viewing the approach and the data
- scenario in which SLP was applied in this study
- teaching initiative and educational challenge
- use of, and reflection on SLP’s implementation in IS
- benefits to teaching and learning that this approach may bring

2. SCENARIO LEARNING AND PEDAGOGY

Theoretical underpinnings

The terms Scenario Learning and Scenario Pedagogy were coined to describe an approach to teaching and learning that aims to respond to the social and pedagogical demands of ‘graduateness’: the development of professional, technical, communicative and socially competent students who can compete in the world economy. Achieving graduateness beyond technical and cognitive knowledge and skills is what getting a degree from UCT should be aiming to achieve, according to past Vice-Chancellor (VC) of UCT, Mamphela Ramphele (1996/7). Current VC, Max Price, continues in similar vein.

¹ ¹ The New London Group (NLG), comprising 10 theorists from the United Kingdom, the United States and Australia, met in New London, New Hampshire in 1994 to consider literacy practices and teaching. They coined the term ‘multiliteracies’ (Cope and Kalantzis, 2000: 5) to provide an expanded view of literacy as multimodal social practice “where the textual is also related to the visual, the audio, the spatial, the behavioural, and so on.”

Playing a transformative role in society and developing a “thoughtful citizenry” is what a UCT education aims to reinforce as a lifelong endeavour (2009). By seeking to enhance the interest and motivational aspects for participants of an educational experience and to broaden the educational goals achieved in the classroom beyond ‘skills transmission’, we hope, through SLP, to contribute to the university’s mission. The term *scenario* has a multiplicity of meanings surrounding it. The term encompasses, among others, important notions of role play, choice and situated practice. In the 90s, business strategist and author, Anglo-American Corporation’s Clem Sunter, used the term to identify and evaluate collaborative thinking strategies, to plan for the future and assess possible socio-economic outcomes and their consequences (Sunter, 1987; Illbury and Sunter, 2001). The concept has been adapted educationally with the aim of helping participants to think strategically and problem solve within a real-time situated context (Grant, 1999).

SLP has much in common with the experiential learning movement which has long advocated “active learning methods to engage students academically, socially and emotionally” (Brzovic and Matz, 2009 p.21). Examples of this movement are case- problem- or enquiry-based learning (Evangelos, 2006; Moore, 2008). Although SLP is a form of enquiry-based learning, it has “unique characteristics that make it a distinct contribution to the field” (Moore 2010). Although enquiry-based learning approaches adopt similar experiential approaches in their attempt to engage participants dialogically, they focus more on learning than pedagogy and do not necessarily rely on real-time events of situated practice, the co-option of external real-time event partners or an array of thematically linked scenarios (which may or may not involve problems). SLP aims to be a ‘shared’ pedagogy where teaching, learning and authority are negotiated between teacher-facilitator and student participant in the main, with external scenario experts peripherally engaged. It aims to create an educational triangle between the subject matter which is embedded within a particular set of institutional scenarios and these groups of participants.

The scenario or teaching-learning context is specifically chosen for topicality and relevance to the discipline at hand. This is so that all communication development and practice happens within an authentic setting, a *situated practice* (Cope and Kalantzis, 2000), with some characteristics of a *learning community* (Tinto, 2003). Although these post-graduate IS students are not yet members of a fully-fledged *community of practice* (Lave and Wenger, 1991; Wenger, 1998; Barton and Tusting, 2005), they do share what Gee (2003, 2005, 2008a/b) calls an *affinity group* of like-minded ‘apprentices’ who are on their way to mastering essential professional and social discourses and practices: perhaps a community of practice in the making. Enabling students to acquire domain specific knowledge and master academic, professional and social discourses may provide them with opportunities to select, from a repertoire of meaning-making visual and verbal resources, those which seem most apt for purpose and audience (Kress, Jewitt, Ogborn and Tsatsarelis, 2001; Kress, 2003, 2010; Gee, 2003, 2005; Jewitt, 2006, 2009).

Historical use of SLP

SLP was used from the early 90s to teach professional and academic writing practices (verbal and visual) to computer science students at UCT. The scenarios included, for example, the Project to Revolutionise Information Systems and Management at UCT (PRISM) and the implementation of Germany’s ERP SAP/R3 as well as issues around the millennium ‘bug’ (Y2K compliance and implementation). In more recent years ICT infrastructure renewal, development and maintenance projects at the university, known by various acronyms such as ISIS, AIM and SupaTsel, formed the basis for selecting scenarios. Popular current issues are concerned with Cloud computing and the feasibility of using social media, such as Facebook, as an alternative to UCT’s Learning Management System (LMS), Vula, (a bespoke system built on a Sakai platform). Scenarios involving environmental reporting and sustainable development based on the Green Campus Initiative (GCI) at UCT have proved topical and motivating for commerce students learning about corporate governance and the ‘triple bottom line’².

3. RATIONALE FOR USING SLP

The main question we asked ourselves was whether an enquiry-based cooperative approach such as SLP would contribute more to transformative meaning making and enhanced multiliteracies in Higher Education (HE) and beyond, than other pedagogies. The writing course and use of SLP described in this paper are part of a broader project of transformation in education in IS at UCT. There are many imperatives to transform teaching and learning in the South African and global contexts (see Methodology). On a visit to UCT, Truth (personal communication, February 2007) stated that an IS degree should expose students to knowledge and contemporary issues around diversity, education, health and energy and the environment.

² The triple bottom line refers to profit, people and planet (financial, social and environmental reporting). The GCI was launched at UCT in 2008 amidst global climate change and sustainability concerns.

Trauth (2005) also claimed that global proliferation of IT, the heterogeneity of development contexts, and distributed nature of IT work and usage are compelling reasons for addressing and developing cross-cultural understanding in IS students and professionals. Research indicates that so-called 'soft skills', particularly communicative practices, are growing in importance in all areas of IS, and hence their explicit teaching and learning needs to be incorporated into the IT curriculum (Noll and Wilkins, 2002; McMurtrey, Downey, Zeltmann and Friedman, 2008). Practices include "writing, working in a team environment, delivering presentations, managing projects, and developing interpersonal relationships" (Noll and Wilkins, 2002, p.153).

Dawson and Newman (2002) make a case for empowering learners to believe that they can work in groups on problems not previously encountered and apply and transform their existing and new knowledge to deal with the rapidly changing environment that the world of IT presents. They advocate a way for students to gain knowledge and recognise that they have done so through subjects studied by other means, thereby demonstrating the close relationship between 'doing' and 'learning' in IT. The authors consider experiential learning to be a requirement for enhancing autonomy and agency. SLP as an enquiry-based form of teaching and learning that gets students to investigate aspects of a real scenario in real time, and which requires them to use their knowledge from their degree in an applied way, promises to be just such a strategy. Using SLP by embedding teaching and learning in an institutional scenario was thus considered an opportunity to improve the quality and character of the IS Honours programme in regard to social and curriculum transformation goals.

4. METHODOLOGY

Overview

Given that the subject matter of professional communication has multidisciplinary origins and intersects across many research fields (Wardrope, 2001), it is apt to weave the threads of various disciplines and theoretical and methodological perspectives together. This interdisciplinary characteristic can be seen as an advantage as it "affords some flexibility" (Wardrope, 2001, p.244) both pedagogically and methodologically. Although academic and professional writing domains and practices – the focus of this article – form but a small sub-section of communication studies, they too intersect across many fields and disciplines. In illustration, a typical communication association website (2009, Association of Business Communication) describes itself as "richly interdisciplinary, drawing membership from such disciplines as management, marketing, English, communication, linguistics, information systems, to name only a few" (<http://businesscommunication.org>).

Given the political and educational climate and context, the overall methodological standpoint falls broadly into a critical studies framework. Educational policy in South Africa has always been a seat of struggle and protest and was highly contested even at the height of Apartheid with its enforced policy of Christian National Education. In particular, pedagogical power, questions of agency as well as socio-cultural factors involving both personal and institutional identities need to be acknowledged. Our key concern is to contribute to developing professional communication pedagogy that encourages communicative transparency, sustainability and redress for all students. Historically, disadvantaged black students suffered greatly in terms of lack of access to educational, economic and cultural resources but *all* students suffered in isolation from each other and the rest of the world. Educational redress needs to value multiple voices, not just those previously privileged, and, as Trauth (personal communication, February 2007) has vouched, cater for diversity while helping to correct past imbalances among students in general.

A qualitative analysis of classroom pedagogical processes as observed, reported and reflected upon (post-course questionnaires) was used. This entailed an interpretative approach, using content analysis to analyse student perceptions (Krippendorff, 1980; Walsham, 2006). The NLG's Multiliteracies Pedagogical Framework (Cope and Kalantzis, 2000) was also used as a lens through which to analyse SLP. This seemed a sound combination methodologically. Krippendorff (1980) uses a structured framework comprising sampling, recording and context units in his content analysis research methodology. In this study the sampling and recording units consisted of texts (student questionnaires and reflections) within the context of the scenario context. The sample comprised all the questionnaires completed and handed in. Specific recording units (words and phrases) as used by the students within the sample were thematically identified and grouped using a grounded theory approach. Although there are specialist software programs such as NVivo for qualitative analysis, it was possible with such a small class, to do the analysis manually.

"The strengths of qualitative research derive primarily from its inductive approach, its focus on specific situations or people, and its emphasis on words rather than numbers" (Maxwell, 2005, p.17). Major interests are:

- exploring the *meanings* for students of the discourse practices they engage in, design, select, apply and their reflections and accounts of their participation in and out of the classroom;
- exploring the particular *contexts* and circumstances in which actions and discourses occur and how these shape, influence, reframe and transform one another;
- exploring the *processes* and not just outcomes of events and practices and their dialogical, participative, collaborative and experiential nature; and
- exploring the *explanations* and *interpretations* of these events and practices without fixating on assessment or finding, testing and proving factual causation.

The Multiliteracies framework comprises four elements as follows:

- *Situated Practice* which relates to the embedded scenario and what happens (activities and processes) in and out of the classroom;
- *Overt Instruction* which incorporates both explicit and implicit teaching and learning of the various academic and social constructs, conventions and practices inherent in course design;
- *Critical Framing* which provides the space for participants to reflect on their doing and learning towards enhanced domain and discourse mastery; and
- *Transformed Practice* which relates to their ability and capacity to transfer and apply their knowledge within the IS environment and beyond.

As all four elements are crucial in SLP, conscious attention needs to be paid to their inclusion. However, the accelerated nature of the course results in many activities occurring simultaneously. These elements are therefore not neatly sequential but rather iterative and convergent.

Sample and data collection

The IS Honours class of 2009 comprised 30 students, approximately 80% of whom had completed their undergraduate degree in the IS department in commerce at UCT. The remaining students came from the computer science department in science, or from universities elsewhere in South Africa or the region. For at least approximately 50% of the students English is not their mother-tongue. The students who did their undergraduate degree at UCT would have done a professional communication course including business writing such as correspondence, reports and proposals. This was essentially a preparation for entry level into the workplace, but with no explicit focus on academic writing. The students from UCT had not written essays, bar an opinion piece in first year, in their undergraduate studies. Open-ended student questionnaires were used as a primary source of data collection to gauge student opinion; informal discussions were held with IS staff to get their perspectives on the scenario approach compared to previous years; and classroom observations of student team discussions and presentations provided further insights into student attitudes and behaviours.

5. IMPLEMENTATION OF SCENARIO PEDAGOGY: A MULTILITERACIES APPROACH, SCENARIO CHOICE AND EDUCATIONAL CHALLENGE

In the IS Honours programme students do formative assignments aimed at developing writing and research practices apt at postgraduate level. The practice has been to start the process early in the course by providing students with two seed articles and giving them a topic such as a statement in one of the articles to debate in an essay. The focus has been on students demonstrating use of evidence-based writing, systematic referencing, and an academic style and register, but with no formal input provided on how to achieve this. Information on citation was available on the departmental website. This has been followed up with a second assignment of writing a literature review for their major systems development projects and from this point there was some input on writing. For this intervention, it was agreed that writing an article in a style suitable for publication in an academic journal on a real-world subject would be more 'useful' as a real-world genre than an essay (written for a lecturer). It may also stimulate benefits of enquiry-based learning in making classroom walls more permeable and provide a space in which students' social practices, knowledge and expertise are honed.

Situated Practice

As a first step for those setting up the course, a theoretical angle and a suitable scenario as an example of situated practice were explored. Business processes in SHAWCO education projects and related marketing and transport systems were decided on. SHAWCO is a student-run development organization founded in 1943 by a medical student who was moved to improve the quality of lives by what he saw in impoverished areas in and around the city of Cape Town, South Africa. The organization aims to be innovative in increasing access to primary health care and transferring skills, knowledge and capacity, and encouraging communities to manage their own development. At the same time, it seeks to foster student involvement to educate them for life and to address inequality and promote responsible citizenship among volunteers and partner communities in the African context (<http://www.shawco.org>).

SHAWCO currently strives to improve the quality of life for individuals in developing communities within five dedicated centres and other locations in the Cape Metropolitan area. It has 1200 volunteers spanning over 15 health and education projects and is divided into two main sectors: Education and Health, and a third staff sector. The staff sector “coordinates the SHAWCO community centres, transport, resource development, administrative oversight and project support” (<http://www.shawco.org>). After choosing the scenario, the Honours’ convenor, SHAWCO Coordinator of Education Projects, a cohort of Student Leaders in SHAWCO, and the authors, lecturers from the Professional Communication Unit (PCU) in the School of Management Studies, collaborated on selecting suitable projects as sub-scenarios within the bigger SHAWCO scenario for different groups of students to investigate. These were then written up in a formal letter for each group. (See example in Appendix A.) Examples among others include teams critically evaluating the business processes and systems currently in place for the UCT-based Saturday school, transport related to SHAWCO health and education projects and marketing of SHAWCO education projects. (See Appendix B for full list).

Overt Instruction

The first step for the students, after having the objective of the course and ultimate outcome in the form of the article explained, was for the SHAWCO coordinator to introduce SHAWCO as an organisation. He provided information on the project areas, in a 70 minute lecture, an example of overt instruction, with explicit focus on the organisational goals of the project. Students were then randomly grouped into threes and given an opportunity to select a specific sub-scenario within the situated practice to investigate, depending on their interest. Each group received the name of a Student Leader in SHAWCO as a first point of contact for interviewing and being directed to sources of information. Students were also given two seed articles on BPM to launch their research into the theoretical aspects of the exercise.

Over a period of four weeks, four two-hour workshops facilitated by the PCU were held. In these students received more overt instruction on scoping and planning their article as well as practice in draft writing paying attention to style, vocabulary, register, visual representation of information. Students cooperated on their research within self-selected groups of three at this stage. In class members of each group took turns presenting the three class assignments which comprised a:

- mind map (on poster)
- topic outline of main headings and sub-headings on transparency with feedback from PCU and IS staff
- PowerPoint presentation (oral report) on their key findings and conclusions related to BPM in their scenarios, with feedback from a lecturer in BPM in IS, the author of one of the seed articles the students had received.

Critical Framing and Transformed Practice

Where possible groups were given feedback on their planning and content, including their theoretical perspectives/literature on Business Process Management (BPM) as applied to the scenario, before the hand-in of their final journal article. The teaching and feedback sessions were generally a collaborative effort of the SHAWCO co-ordinator (initially) followed by PCU and IS staff. Classroom discussion and peer feedback contributed to students’ growing awareness and this element of critical framing was crucial for them to reflect on their processes and products on their trajectory towards enhanced multimodal and social literacies as well as domain knowledge in IS and BPM.

After the workshops finished students then worked on their own to write an eight- to twelve-page fully referenced article which was then graded by a member of staff in the IS department. The course therefore included both team and individual work. Marks were not allocated for any of the developmental products presented in class but only allocated to the final article.³ Selected articles were forwarded to SHAWCO as a means of directly benefitting that organisation with regard to their critical evaluations of their business processes and the possibility of transformed practice, not only in terms of content or strategy but also in ways of thinking and behaving. Students could aim to put their new-found experience and knowledge to work in other IS contexts and assignments and transform their own practice both at university and beyond their Honours programme. Although the course aimed to create opportunities for students to learn about organization of information, constructing an argument, using language, style and formatting according to purpose and audience, as well as the communication principles of coherence, unity and emphasis within a specific genre, this was only one objective and a secondary one at that.

³Variations are possible with organising classes, mark allocation and assessment of the specific products or assignments when using SP. Specific class assignments such as the mind map and topic outline and PowerPoint presentation have been allocated marks – up to 25% of the final mark in use of SP with computer science and commerce students. It is also worth noting that it is possible to embed an entire professional communication course over a whole semester in a specific scenario as an alternative; this approach is not only feasible for a short course on one specific aspect or genre of communication.

The enquiry into BPM in a development context primarily provided an opportunity for students “to explore contemporary issues in the world and specifically technological, scientific and ethical knowledge implicated in the concept of sustainable development” (Rassool, 1999, p.239). This transformative agenda was the primary consideration.

6. CONTENT ANALYSIS OF QUESTIONNAIRES AND STAFF AND STUDENT REFLECTIONS

Survey results

Twenty two questionnaires were completed (73%). Of these 17 respondents were male, 4 were female and one was unidentified. Mother tongue languages included English (9), Swahili (2), with one each for Afrikaans, Ndebele, Setswana, Sepedi, Shona, Nsenga and Serbian. Four respondents did not identify their mother tongue. Although most students on the course were South African, the number of African languages in such a small sample is evidence of the cultural diversity within the group.

A content analysis of student responses follows.

In answer to a question about *benefits and advantages* of SLP, six related key themes emerged:

- Collaborative learning (n 23)
This proved to be the most noticeable characteristic of SLP. Students reflected on the ‘collaborative’, ‘shared’, ‘participative’ and ‘interactive’ focus of team discussion and learning.
- Communication skills and feedback (n 20)
As this was a professional communication course, the focus on communication is not surprising. However, most students highlighted the role of feedback and linked their comments about communication to practice allowing for improved ‘thinking’, ‘researching’, ‘presentation’ and ‘writing’ skills.
- Realistic scenario (n 19)
Words such as ‘real’, ‘realistic’, ‘authentic’ and ‘real world’ were used to identify SLP as more ‘relevant’, ‘interesting’ and ‘useful’ than ‘traditional’ approaches. Traditional approaches were identified as more ‘lectured’ and ‘theoretical’ than ‘practical’ and ‘active’. They mentioned that this ‘added value’ and introduced them to the ‘world of work’.
- Scaffolded learning (n 12)
Students talked about the experiential ‘process’ approach taken and the ‘support’ and ‘mentoring’ offered by staff so that students could learn ‘personally’, ‘at their own pace’ and ‘by mistakes’ as they moved from mind maps and topic outlines to finished deliverables, both written and oral.
- Varied perspectives (n 12)
Students linked this to the focus on scenarios and how this helped them ‘move out’ of their ‘comfort zones’, ‘expand horizons’ and take on ‘different roles’.
- Understanding and comprehension (n 8)
Improving understanding of process and products of communication were mentioned and linked to improved comprehension, clarity and insight.

In answer to a question about the *drawbacks and obstacles* of SLP, the following issues were identified.

- Time consuming (n 10)
Students found the scenario investigations took up a lot of time (which they did not always have so they were forced to work within time constraints)
- Unavailable sources (n 5)
Some sources of data were difficult to find and scenario experts from SHAWCO were not always readily available, leading to time delays and frustrations.
- Complications (n 4)
Students had to work through the complications of the scenario issues which were sometimes confusing; some felt they were ‘thrown in the deep end’ and could have done with more guidance particularly from the SHAWCO staff
- Intimidating (n 3)
Although there were only three comments about the ‘demanding’, ‘scary’, ‘intimidating’ level of participation and presentation, this feeling could be linked to the ‘unpredictability’ of the scenario and students having to ‘adjust to the environment.’

A number of characteristics seem to go hand in hand and may reflect the personality and preferred learning style of a particular student. While some students were energised by being pushed out of their comfort zones, a few felt anxious about the unpredictability of a real-world scenario (lack of control?) and having to rely on other people. The amount of effort and time was at once rewarding for many but frustrating for others.

A real learning curve was the need for time management, the reality of deadlines and having to work within the constraints of other people's busy schedules.

The following student reflections speak to all four prongs of the Multiliteracies Pedagogical Framework and project a sense of shared and negotiated meaning making (Cope and Kalantzis, 2000). Student opinion related to the perceived authenticity of the *situated practice*, the meshing of theory and practice by way of shared *overt instruction*, their *critical framing* of course challenges and opportunities in their reflections as well as their belief in transferring newfound discourse and domain 'know-how' "in the year ahead": *transformed practice*.

- Good and realistic: we learn more than we are taught, which is good. Teaches the practical and not just the conceptual – so we get to make use of theory immediately. Allows one to learn in one's style of conduct – not rigid...I think it is good preparation for the year ahead.
- I think it was valuable in terms of experiencing real-life situations. Benefits: Improve[d] communication...thinking ability...Drawback: Having to adjust to the environment.
- Full class participation really helps. The sharing of ideas allows one to think in different ways of different possibilities.
- It does require participation from every individual which assists with learning from each other rather than [from] the speaker/lecturer above.
- The [scenario] method is a bit (a lot) more engaging than the traditional methods...keeps attention...more interesting.
- It's a very good idea as it helps us/students to familiarize ourselves with the events used for the content and it boost[s] our morale knowing that we are working on something real and of which we can provide some added value on it at the end...Just be careful in selecting events/topic to make sure they are relevant and our final product will be of value to them.
- This interaction (participation of staff) was helpful to instill quality in every aspect of the writing process.
- (outside transfer student): Nice as it lets us get to know our fellow students and gives everyone a chance to present something.

Comparative results

This study did not aim to statistically compare courses or the grades of the student articles with essays from previous years. Anecdotal evidence and staff reports from those in a position to compare – the IS convenor and marker – are that there was definitely "added value" compared with previous years with firstly, students getting more involved in the subject matter and secondly, better marks i.e. an improvement in overall quality and fewer outliers (bad failures).

7. CONCLUSION

It is possible to draw tentative conclusions on the 'transformation value' of using SLP in the Honours course, and using the particular scenario relating to SHAWCO's business management processes. The initiative has raised awareness among different constituencies within the university community with an effect on motivation and promoting greater integration and collegiality among IS and PCU staff within the commerce faculty as well as external stakeholders in SHAWCO⁴. In terms of drawbacks, some students felt that there were challenges in critically analyzing BPM in a student-run development organization. In future courses, the difficulty of this challenge, particularly the theoretical angle for analysing the chosen scenario, may need to be considered more fully. On the upside, as can be seen in student reflections, the challenges are what made the scenario interesting to the majority of students, as an emergent professional body.

The collaborative interplay of various methods and media, a characteristic of SLP, was also recognised as advantageous in minimising weaknesses in the research and writing abilities of individual students. This dialogical approach, within a co-created affinity space contributed to enhanced rapport, socialization and 'know-how' in a scaffolded manner (Gee 2005; Varela 1999). The process approach and team work before they were required to write their individual journal articles seemed to provide the necessary support to put theory into practice. There were also broader benefits of promoting improved communication practices, and societal and cultural awareness through workplace and enquiry-oriented SLP. As an open-ended problem-solving framework, collaboration, co-operation and experience were harnessed, allowing students to develop knowledge based on informed reasoning and analysis (Rassool, 1999, p.239).

⁴ A collaborative commerce project is being planned with SHAWCO to investigate entrepreneurial flair which aims to enhance student motivation, involvement and fund-raising abilities.

Students were involved in “dialogue across difference, seeking out commonalities, experimenting with identities, tracing borders and moving in and out of discourse communities” as they practised their IT and social skills in and out of the classroom (Lankshear, Gee, Knobel, and Searle 1997, p.157). The legacy of Apartheid coupled with bitterly contested educational policies in post-apartheid South Africa has put a vast strain on curricular and transformational development. Responsibilities to improve access, privilege voices so long silenced and encourage shared and negotiated meaning making rests with all educationalists. SLP seeks to benefit HE (and the specific IS Honours application reviewed here) in a number of ways which may be summarised in the following passage:

[This approach] clearly aims to support the goals of HE by assisting in producing graduates with the skills and competencies of critical and analytical problem-solving, effective communication, working in diverse teams, self-management and organisation, information processing and use of technology within a real-life context. [It] also seems to enhance the potential for accelerated intercultural synergy because of its emphasis on joint-venture teamwork and role play (Grant, 1999; Grant and Kalil, 2008).

Each application of this scenario approach in the science and commerce faculties helps fine-tune the implementation to further minimise obstacles and maximise benefits for enhanced professional communication effectiveness.

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APPENDIX A

Task letter



Professional Communication Unit

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4 February 2009

Investigative Project Team 1, Shawco, University of Cape Town

Dear Task Team Members

EVALUATION OF BUSINESS PROCESSES (OPERATIONS AND PROJECTS) AT SHAWCO, UCT

SHAWCO, the Students' Health and Welfare Centres Organisation, is a dynamic, innovative and passionate student-run NGO based at UCT, striving to improve the quality of life for individuals in developing communities within the Cape Metropolitan area. SHAWCO was founded in 1943 by Andrew Kinnear, a medical student who was moved to action by the need which he saw in the impoverished communities of Cape Town. A one-man initiative quickly grew into one of the country's largest student volunteer organisations, now boasting over 1200 volunteers running over 15 health and education projects in 5 SHAWCO centres as well as other locations around the Cape Metropolitan area. SHAWCO is divided into 2 main sectors: Education and Health . A third "staff sector" coordinates the SHAWCO community centres, transport, resource development, administrative oversight and project support.

The structure and operations of SHAWCO have been based on various development models, initially a welfare one and more recently one of a development agency. Since 2005 the organization has become less reliant on employed professionals and instead UCT students, a large number of whom are international exchange students, lead and run the various projects with support from key professionals. The organization's operations however are hampered by severe limitations and long-term sustainability problems.

The business processes remain largely paper-based; and the separation from the central UCT network for example impacts on effective communications. The high turnover of students is a social factor which affects continuity. It is clear than many of the existing IT systems are inefficient, outdated or non-existent and an effective solution is necessary. For this reason, and because of the great expense involved, your team has been asked to investigate and evaluate the situation. In particular, could you please:

Topic 1: critically evaluate the business processes and systems currently in place for the academic education project KenSMART and the non-academic Sports project in terms of how **learners** are recruited and go through the system.

You are required to present your findings in the format of a referenced article. As your audience for this document will consist of a cross-section of university leaders, managers as well as administrative and academic staff and students, who may only have a cursory knowledge of these issues, please explain all technical concepts where necessary. A full and serious understanding is crucial. You will also be given the opportunity to address members of this audience at a meeting. It is recommended that you use graphic/visual aids to illustrate your findings. (See your course material for precise instructions.) As the PCU has been asked to oversee this exercise, please contact me if you have any queries.

Yours sincerely

[Names and contact details of PCU staff convenor and IS contact person]

APPENDIX B

EVALUATION OF BUSINESS PROCESSES (OPERATIONS AND PROJECTS) AT SHAWCO, UCT SHAWCO Education Sector Coordinator: (contact details provided)

Topic 1: critically evaluate the business processes and systems currently in place for the academic education project KenSMART and the non-academic Sports project in terms of how **learners** are recruited and go through the system. Kensington project co-ordinator (name and contact details provided)

Topic 2: critically evaluate the business processes and systems currently in place for the academic education project KenSMART and the non-academic Sports project in terms of how **volunteers** are recruited and go through the system. Kensington project co-ordinator (name and contact details provided)

Topic 3: critically evaluate the business processes and systems currently in place for the **UCT based Saturday School**. Saturday School co-ordinator (name and contact details provided)

Topics 4 & 5: critically evaluate the business processes and systems currently in place for the **Masizikhulise Centre project** (Topics were divided up into areas). MC project co-ordinator (name and contact details provided)

Topic 6: critically evaluate the business processes and systems currently in place for **transport** related to SHAWCO health and education projects. Transport and student office management contact person (name and contact details provided); Transport contact person (name and contact details provided)

Topic 7: critically evaluate the business processes and systems currently in place for **marketing** of Education projects. Marketing co-ordinator (name and contact details provided)

Topic 8: critically evaluate the business processes and systems currently in place for the **business centres for ICT education project**. ICT project co-ordinator (name and contact details provided)

Topic 9: critically evaluate the business processes and systems currently in place for the **evaluation** of all SHAWCO projects. Evaluation contact person (name and contact details provided)