Increasing Relevance for Decreasing Student De-Motivation in a Mandatory Course: how to research it?

Cate Jerram
University of Adelaide Business School

Abstract

Motivating students has become a focal point at all levels of education in recent decades, in recognition of a lack of self-motivation among student cohorts. However, for many subjects, the issue goes beyond passive lack of motivation to active – almost aggressive – student de-motivation. This paper is exploratory in terms of the questions regarding motivation and de-motivation, but is also exploratory in terms of research. It raises questions as to how to legitimately research student de-motivation effectively without detriment to subject delivery, course accreditation or student learning. The teaching approach used is located within a critical realist paradigm (Bhaskar, 1997) that students' learning needs to adequately prepare them for their professional career, within an authentic learning framework (Herrington & Oliver, 2000) that posits that this can only happen when student learning is authentic to the experiences they will encounter as professionals, and the students perceive the course as relevant to their needs and authentic in nature. One course infamous for student misperceptions of irrelevance and consequent de-motivation to engage is discussed, outlining the sweep of changes made to the course to make it clearly relevant to student degree, learning, and future career and the consequent changes to student perception, motivation and results. Because the changes discussed were implemented rapidly in direct response to accreditation and professional needs, the changes are grounded in sound practice, but with no methodological research framework applied that might provide clear means of evaluation of results. There have been strong indications of a major shift in student perceptions, an elimination of de-motivation grounded in resentment at imposed 'irrelevant' studies, but the question remains – what research methodology can be applied before, during or after affecting pedagogical change, to generate valid research findings from the results and aftermath of changed practice?

Keywords: motivation; de-motivation; relevance; authentic learning; career-focus; validity.

Decreasing de-motivation

Motivating students has become a focal point at all levels of education in recent decades, in recognition of a lack of self-motivation among student cohorts. However, there is a corollary that is sometimes over-looked: for many students and/or for many subjects, the issue goes beyond passive lack of motivation to active – almost aggressive – student de-motivation.

The use of the double-negative "Decreasing Student De-motivation" in this paper's title is deliberate. While it would be more positive – and better English – to use the phrase "Increasing Student Motivation", this paper is an exploration of a potentially larger primary issue to be dealt with before being able to

increase motivation to learn – addressing de-motivation. There is very little literature to be found on de-motivation, particularly in recent publications (the few publications I have found are primarily located in Psychology or Linguistic journals in the 1990s – eg: Gorham & Millette, 1997). However, education literature recognizes that students often need to "unlearn" false understandings before they can acquire new understandings (Gardner, 1983 & 1995), similarly, experience is demonstrating that students cannot be motivated to learn while retaining strong reasons for de-motivation against learning. Before motivating reluctant learners, it is first necessary to remove the de-motivating factors and perceptions that prevent the necessary preliminary engagement in learning or willingness to be motivated.

This paper does not answer questions, it asks them. It is not possible in the scope of the paper to go into all the possible de-motivating factors that might disengage learner interest before they begin a subject or course; instead, this paper focuses on the de-motivating factors that have most impinged on one particular course (a foundation course in Information Systems for business students) as an exemplar of the issue of de-motivation where misperceptions and misconceptions inhibit learning. The paper is exploratory in terms of the questions regarding motivation and de-motivation, but is also exploratory in terms of research. There are no finished results of research presented here, but rather questions are raised as to how to legitimately research the question effectively without detriment to subject delivery, course accreditation or student learning. As an educator, I approach my teaching from a critical realist paradigm (Bhaskar, 1997) that my students' learning needs to adequately prepare them for their professional career, within an authentic learning framework (Herrington & Oliver, 2000) that posits that this can only happen when student learning in my course is authentic to the experiences they will encounter as professionals, and the students perceive the course as relevant to their needs and authentic in nature.

Thus far, in response to my theoretical and professional beliefs as a practitioner needing to address a near-30% fail rate in a critical course, I have altered course outline, objectives, text book, delivery, assessment aims and methodologies. These changes were not based on a carefully laid action research plan which requires iterative cycles of progressive development, but implemented simultaneously, guided only by student feedback, tutor feedback, intuition, experience and conviction. The direction of the changes has been guided by the results emerging from my ongoing current research into future employer requirements, gained by interviewing managers across a wide range of industries and business sizes, about what they require of graduate-employees. Simplistically, I might "evaluate the changes" through comparison of cohort grades from before and after the changes, but there is no method or structure that can reasonably be applied to isolate and evaluate different motivating and de-motivating factors, or aspects of change which worked and aspects that did not. The course in question usually has 600 – 800 students in a semester, and lectures and repeat lectures have 250 – 350 students in attendance, while tutorials are usually scheduled for 15 students at a time. The major changes to the course for 2008 included a new text book with a radically altered focus (from technology to business); lectures doubled in length and halved in number; inclusion in lectures of a series of movie clips of a relevant business case; inclusion of in-class discussions during lectures – small and large group; replacement of lectures falling on public holidays with online delivery of talking PowerPoints (instead of cancelling the class); learning of software (MS Excel & MS Access) was relegated to self-directed learning out of class, while the emphasis in tutorials became engagement of theory into practical application to case-based exercises (tied heavily both to text book and to specific future careers); assessment of software was changed to in-class practical

exams (to combat plagiarism from previous assignment-based assessment); and theory exam assessment was tied specifically to the tutorial exercises, again emphasizing engagement of theory to practical application for solving real business case problems.

'Scholarship of Teaching and Learning' requires "evidence based critical reflection on practice aimed at improving practice" (Prosser, 2008, p2). When planning the changes, I hoped to shape them within a methodological framework that would enable straightforward analysis, both to better inform my teaching and to be able to publish the results as well-researched pedagogy (Stierer & Antoniou, 2004; Trigwell, et al, 2000). However, within the short time-frame available, I was unable to think of methods to isolate each necessary change, unless I only changed one aspect of the course each semester, taking four or five years or more to implement all the necessary changes (eg: Sharma & McShane, 2008). This was unacceptable as the needed change was immediate and comprehensive, and I needed to simultaneously implement all the changes I perceived as necessary. Consequently, in terms of analyzing the implemented changes pedagogically, there are too many competing issues all contributing to positive and negative results, with no discernible means of teasing out which factors contribute to which issues or which results, other than practitioner awareness and personal evaluation, guided by experience. As Ragland summarizes: "No study can investigate everything at once" (2008, p17).

Since I was unable to work out an evaluation methodology before implementing the changes, how do I now evaluate in retrospect? At this point, only conceptual understanding and literature can help frame what might, or might not, have taken place in this large-scale reframing of a course, and the potential for the changes to both reduce de-motivation and increase motivation for participating students, toward an overall goal of improving student learning and outcomes and future employability.

Relevance

Relevance – or more accurately, **perceived** relevance – has long been recognized as necessary for learner engagement in adult education (Boud, 1981; Knowles, 1990). There is less literature dealing with the necessity for relevance of subject matter being made clear to students in the tertiary field, but Power (1991) makes a strong case for the need of relevance for motivation for Accounting students, which is particularly pertinent as accounting students are the focus of my current courses. Apart from an inherent assumption that university or tertiary students are not "adult learners" (Jerram, 2005), there are issues bound up in traditional university approaches to teaching (Herrington & Herrington, 2005) that can prohibit efforts toward cognitive realism in subject delivery (Smith, 1986), provision of authentic learning (Herrington & Oliver, 2000), or contextual relevance and situational learning (Brown, Collins & Duguid, 1989). It is interesting to note, however, that when Malouff et al (2008) list their "about a hundred methods of motivational teaching", the first ten hints are raised under the first topic of "Make content relevant to student values and goals" and a second topic that ties the learning to students achieving their career goals (pp1-2). This emphasis on relevance to career goals relating to motivation is consistent with findings across various disciplines (Nilsson & Stomberg, 2008; Lens & Decruyenaere, 1991; Power, 1991). Then, too, the necessity for perceived relevance for student motivation to learn is implicit in Biggs' (2003) explanation of the conceptual change that needs to occur for students to learn, including: "1 it is clear to students (and teachers) what is 'appropriate', what the objectives are…[and] 2 students experience the felt need to get there…" (p13). Yet Biggs continues, "the art of good teaching is to communicate that need where it is initially lacking. 'Motivation' is a product of good teaching, not its prerequisite;" (*ibid*).

Most teachers with classroom experience would be familiar with the difference between the work required to motivate students who are basically interested in their course to do the preparation involved, engage with the readings and class discussion, and to commit energy to their learning, compared to the much more uphill-battle of motivating students who fiercely resent a subject and consider it a complete waste of their time and irrelevant to what they want to do. If Biggs is right, and motivation is the teacher's responsibility, then as teachers we need to first **make** our courses relevant, interesting and engaging, and then **convince** the students that the courses are relevant, interesting and engaging.

> Frequently, students are skeptical of the significance of the material taught to them in the classroom. A question they often pose to teachers is 'What's in it for me?' Making content relevant to students' personal and career goals addresses these concerns. (Frymier& Shulman, 1995, p1)

This paper discusses relevance matters in the historically unpopular, often resented, foundation Business subject of Information Systems. This is a course that consistently deals with student misperceptions and resentment that are so strong they inhibit or prohibit learning.

Perceptions versus Reality

Information Systems is a core subject for any business student who needs or might need CPA (Chartered Professional Accountants) or ICA (Institute of Chartered Accountants) accreditation, and most Business or Commerce students cannot graduate without it (University of Adelaide 2008, p 20). The accounting profession demands Information Systems training for professional accreditation, and there is a strong insistence that accounting education be more strongly rooted in broader business understanding and awareness of the business environment (Power, 1991). The discipline/subject "Information Systems" (alternatively, "Business Information Systems" or "Management Information Systems") has a long history of misperceptions and misunderstandings, most commonly being perceived as being an Information Technology subject. Business or Commerce based Information Systems is not Information Technology, and a student taking a *business course* in Information Systems would have very little overlap in course content with a student taking Information Technology or an *IT based course* in Information Systems. Yet, historically, when starting this course, business students are very resentful at being "forced to take" "an IT subject" when it has "nothing to do with" their chosen degree or future career. To clarify how significantly different this perception is compared to reality, I will give a brief overview of Information Systems and its relationship to business and to IT.

Studying Information Systems (for a business student) means studying information and its systemic and systematic use for decision-making and problem-solving. Information Systems in use have always incorporated four main components – tools that support the management of information; data; procedures; and people. In ancient Information Systems, the tools supporting information management might be: reed pens and parchment; scrolls carefully filed in libraries; and human couriers for rapid transmission of messages (Lewin & Jerram, 2004). As technology progressed, the advancements that supported information management grew to include various other tools such as printing presses and books, and telegraphs. Even in Australia 2008, there are small businesses that only use tools, data, procedures and people and manage to run successful, profitable businesses without computerization. On the whole, however, in those countries with widespread computerization and automation as standardized tools, modern Information Systems recognise five components to any system designed to manage

information for decision-making and problem-solving (see diagram 1): hardware, software, data, procedures and people (Kroenke, 2008). Obviously, the first two tool components (hardware and software) are IT or computer focused. Information Technology is, in fact, a highly specialized subset of Information Systems, in which Information Technology students study the first two components of Information Systems and the technically focused aspects of data. A common overlap subject between IT/IS and Business IS is databasing, which deals with data and is half technical and half management focused.

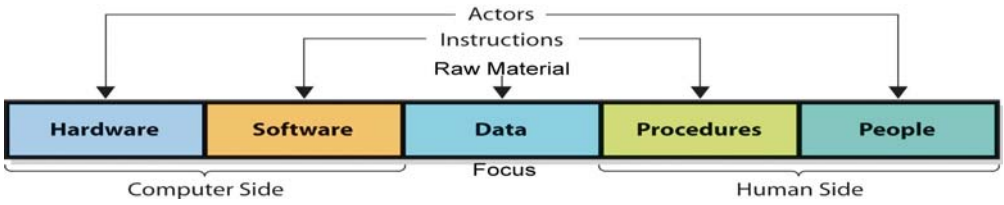

Diagram 1: The Five component of an Information System *modified from Kroenke, 2008, p 28.*

Business Students, however, are expected to understand the relationship between the five components of Information Systems and Information Management; to use systems thinking (decision-making and problem-solving with systematic and systemic approaches); to understand enough about the two first components to be able to converse intelligently with IT personnel, understand IT issues and budgets, and make intelligent decisions about what IT support will best meet their Information Systems needs for their particular business' (or business division's) decision-making and problem-solving; but to focus their learning and application particularly on understanding and working with the three more complex components: data (with an emphasis on business processes); procedures; and people.

When these fundamental understandings of Information Systems are grasped, it becomes immediately very clear **why** Information Systems is a critical core component of business studies, and an absolute requirement for certification as a CPA or ICA. The discipline training in systems thinking alone, which is named by Senge (1990) as being the "Fifth Discipline" or conceptual cornerstone of a learning organization and a key to effective organizational management, should make clear the business focus, rather than technology focus, of a business Information Systems course. Yet in a research study currently being conducted into causes for student drop-out, or "university student-retention failure", one student who dropped his entire business degree program cited Information Systems as a strong factor influencing his failure to complete his degree:

> I found Information Systems, which is one of the big reasons I didn't go well at uni, I didn't find that relevant. I don't think it's a good course, but it's compulsory for a lot of the [Commerce] pathway (ex-2007 Accounting student).

This student plans to go on to a career in Hospitality Management. My current research into workplace demands and employer requirements makes it very clear that he will find that the practical demands of that career rely heavily on Information Systems thinking, training and skills, yet this student perceived Information Systems to be irrelevant and of no value to him. Why?

At the time that student was studying, the Information Systems course for students was constructed to emphasize the IT component of hardware, software & data communications. Chapter headings in the text book focuses almost entirely on the technological aspects of handling data, with constant reference to

"technology" and "technical". Even the chapter on Ethics and Security focused on the IT components and functions, barely recognizing any involvement of people as relevant (O'Brien & Marakas, 2007). The new replacement text book has chapter headings and content focused on business, business processes, business professionals, competitive advantage, organizational strategy… and is overwhelmingly targeted at business students, not IT. The new text actually includes an early segment on "Duller than dirt" – in which the boredom or interest factor of the subject, and its relevance to a business student, is discussed. In every class I have taught prior to using this text, I have had to field questions from frustrated students: "Why do I have to take this IT stuff when I want to have a business career?" This year, I have not only not had a single student ask that question, I was approached by an IT student taking the course, who anxiously enquired: "Am I going to be disadvantaged in this class since I've never studied any business?" (student, Summer School 2008). The choice of text book has already created a clear and significant difference to student approach to the course. This is tied, inextricably, to the emphasis given in course delivery to the role of information systems in business, why it is a mandatory core component of business courses, and a clear delivery of the "relevance" issue in every lecture and every tutorial, tying each week's learning to students' current degree programs and future careers.

Results and Reasons

However, since course delivery and assessment methods have changed, the requirements for passing the subject altered significantly from one set of learning challenges to another. The course used to require rote learning of an irrelevant and meaningless subject and the ability to regurgitate that memorized material in an exam. Examination has now changed to assessment of applied problem-solving using systems thinking and systems theory in a subjective-judgment-based case-approach. Students now believe the course is relevant to them and enjoy the subject more. But students are now frustrated that they are refused "past exams and sample answers" for memorizing in exam preparation; as well as being frustrated by a refusal to publish "exactly right" samples of how tutorial exercises should be completed. Students make it clear that they prefer black-and-white, right-and-wrong answers, despite constant iteration that business problem-solving means that three different – and even conflicting – answers can all be excellent answers which would garner high marks, and that of the three answers, none of them might be significantly better than the other two… or all three might be poor answers that exhibit lack of systems analysis, poor thinking, weak strategy and other qualities that will not acquire good results in business or good marks in an exam.

Information Systems is a first semester first year foundation course, and this redirection of learning and assessment style is necessary preparation for the students since the Commerce program emphasizes learning that accomplishes judgement-based outcomes not rote-learning, and the Accounting program tries to engender an understanding of 'decision-making' and 'policy-creation' as learning outcomes, rather than a 'book-keeping' approach to accounting, auditing and consulting practices (Lynch, 2008). However, while necessary, it is not an easy learning-curve, and the leap from 'memorizing right answers' to acquiring systems thinking and deep understanding for application, is not an easy one to accomplish – or measure.

Students have commented favourably on how much more readable the text book is than most – but many still do not read the text before classes, despite ongoing experience that not doing prior-reading prohibits or delays engagement in the majority of tutorial exercises, considerably reducing the amount of hands-on

engagement time they are then able to have with the material. In the undergraduate course, 40% of the student body comprises international students for whom English is their third or fourth language, and in the postgraduate course, 95% of the students are Internationals. There is no space in this paper to explore the myriad ramifications of this heavily internationalized component of the student cohort, but it raises issues not just about struggling with a foreign language in understanding of a complex, judgement-rich class, but even more importantly, cultural issue for students struggling to comprehend "memorizing answers" as a bad practice that will cause failure, and being required to critique experts, make judgements, analyze and synthesize theories and problems and generate their own solutions to questions for which there are few "right answers". However, it might be considered unrealistic to label this as an international student problem, as local students also strongly resist judgement-based assessment criteria and also demand "right and wrong answers" at both undergraduate and postgraduate level.

Effectively, changing the course, the objectives, the assessments and the text book to meet the actual professional and accreditation requirements of the course has addressed the critically de-motivating issue of relevance and interest that caused an unacceptably high failure rate at both undergraduate and postgraduate levels. It has also generated in its place new challenges to learning that have certainly motivated students and captured their interest, and been recognized as valuable, important and relevant. Unfortunately, the problems arising from these new challenges (particularly qualitative assessment) have consequently retained similar grading results as the previously irrelevant and de-motivating course content and structure.

More questions

This raises the inevitable question – were irrelevance and de-motivation really significant, after all? So much invested change, and clearly changed student perception and motivation, have resulted in almost identical grades that have not improved the long-term fail-rate (27% to 28% fail grades). It is possible that the irrelevance of the subject and consequent de-motivation of the students were genuinely important factors in student failure that have been removed but replaced with new, challenging problems originating differently-caused failure-rates. It is equally possible that they were unimportant non-issues that had no meaning for the improvement of my students' educational experience and professional preparation. As a teacher and educator, I am absolutely convinced that the relevance issue was significant, and that my previous students were severely de-motivated by the irrelevance of the course to their needs; and that my current students believe in the value and relevance of the course, and no longer face that de-motivation. This is evidenced both negatively, in the now-complete-absence of previously-frequent complaints about irrelevance; and positively, through student comments and engagement in tutorial and lecture discussions in which they are required to tailor discussions, issues and questions to aspects relevant to their chosen future career, whether accounting, finance, marketing, management or other. However, as a researcher I must acknowledge I have no genuine evidence to support my practitioner-conviction, and have no clear idea how to design a research program that could generate that evidence for me.

In terms of what and how to research "to work towards improving our students' learning" (Prosser, 2008, p4), the aspect of student preference for right-or-wrong, black-or-white learning, and their frustration with qualitative judgement-based and case-based learning, thinking, and assessment is rapidly emerging as one of the most significant issues arising from the course changes. If no other aspect of these changes

can be researched, this one aspect requires really rigorous and methodologically sound research. This is reassuring, as it is a singularly focused issue, which will be more conducive to a planned methodology – whether using action research or another approach – targeting the complex but specific issue of student preference for right-wrong learning and assessment, and parallel student resistance to qualitative decision-based learning and assessment. But this still leaves unanswered the issue of investigating and evaluating the large-scale reconstruction of the course for the elimination of de-motivating irrelevance.

As a practitioner who constantly seeks to improve the quality of learning in my courses, I consistently change my course delivery and assessment methods, and need methodologies for setting up those changes within a research framework for quality assessment and evaluation. I agree whole-heartedly with the statement that 'Scholarship of Teaching and Learning' is about "improving student learning within the discipline generally by collecting and communicating results of one's own work on teaching and learning within the discipline" (Trigwell et al, 2000, p159). As an education research community-of-practice, we have been challenged to improve the quality of our research by locating it more soundly in methodology sited within theoretical frameworks (Tight, 2004). However, at this point I find that - while I have clear theoretical frameworks of authentic (Herrington & Oliver, 2000) and situated learning (Seely Brown, Collins, & Duguid, 1989) within a critical realist paradigm (Bhaskar, 1997) – I have no clear methodology to apply.

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