

THE INTENTION-DECISION-STRATEGY NEXUS: ANTECEDENTS TO TEACHING PRACTICES OF ACCOUNTING ACADEMICS

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Abstract

Studies of behaviour in human resource management and related areas have highlighted the significant influence of beliefs and intentions as antecedents to these behaviours. In the field of higher education, relational studies, using both quantitative and qualitative methodology, have highlighted the logical and systematic relations between beliefs, intention and the subsequent teaching strategies adopted by academics. This paper describes an empirical study that investigates these same issues in relation to the teaching practices of a group of accounting academics working in Australian universities. The findings, based on interview data and statistical analysis, indicate that decisions regarding teaching strategies are strongly related to academics' teaching intentions and to their beliefs as to the nature learning and teaching.

The study highlights the value of a research approach that focuses on understanding the relationships among the antecedents to and teaching behaviours, as a means of more fully understanding the teaching process and its influence on potential accounting practitioners. This has implications for the initiatives of all parties with a vested interest in professional accounting education particularly, the universities, the accounting accreditation bodies and professional accounting institutions.

1. Introduction

Research in human resource management and related areas (behaviour in organisations, marketing and information systems) concerning intentions, beliefs and associated behaviour is well established [7]. In articulating their Theory of Reasoned Action, and in subsequent work [1] Ajzen and Fishbein demonstrated that attitudes to an object will influence intention and behaviour to that particular object. Empirical studies have re-enforced the importance of intention in influencing user behaviours with both decision support and information systems [2] [9] [14].

The focus of this paper also concerns the nature of and the relationship among beliefs, intentions and subsequent behaviour. It outlines the findings of an empirical study into accounting academics' beliefs about, and attitudes to aspects of their teaching, and discusses the relationship between these and the decisions they make with regard to what and how they teach - their strategy. The findings of the study, which are based on interview data collected from academics across seven Australian universities, suggest that these decisions are strongly related to academics' teaching intention and to their beliefs as to what constitutes learning and teaching.

One premise of this study is that behaviours and their antecedents are considered to be neither homogeneous nor context-free, but are instead varied and situationally specific. Additionally, it has been argued [10] that in order to understand behaviour as a consequence of intention, the relations between factors rather than factors in isolation must be appreciated. The research approach adopted in this study is relational. It is less concerned with identifying causal relations for purposes of prediction and control, but aims to identify the variation and to describe its logical and systematic nature. The findings to date of relational studies such as these are consistent with and complementary to important elements of the rules of behaviour formulated through experimental studies.

The impetus for a study incorporating the intention-decision-strategy nexus in relation to professional accounting education is twofold. Firstly, there is a growing recognition that the traditional focus of identifying what lecturers actually do in the classroom - their teaching strategy - is insufficient for a better understanding of teaching practice unless as a corollary, the intentions and conceptions associated with those strategies are analysed as well. This enables the meaning of the strategies chosen to be more readily appreciated and to be seen as part of a logical and coherent set of relationships which characterise teaching. Secondly, there are very few studies to date which have investigated this

nexus and none have focused on teaching within accounting. Given the importance of accounting courses in our university curricula, the large numbers of lecturers and students involved and the added responsibility of accounting education to comply with professional as well as institutional standards, a study of such a key discipline is warranted.

Prior research into teaching and learning in universities indicates that concentrating solely on what students do to learn or lecturers do to teach-their strategy, is of limited usefulness in enhancing our understanding of how to improve both processes. A key observation of those charged with improving teaching within universities (eg., Academic Development Units), is that attempts to help interested academics improve their teaching by instruction and suggestions for better strategies may be missing their mark unless lecturers' intentions and conceptions about learning and teaching are also addressed [22] [24]. Of interest is the empirical research, both quantitative and qualitative, which indicates that the decisions made by lecturers about their teaching are not arbitrary but are grounded in a number of influences. Early insights into choices of action within education was undertaken in relation to learning. This identified two qualitatively different learning approaches, (surface and deep) [3] [6] [12] [13] and that approach itself is constituted by two components: an intention or motive in adopting a particular strategy, and the strategy itself [4]. These factors are strongly related to beliefs about the learning [8] [12] [15] [18][21] [25]. More recently, the choices lecturers make about their teaching strategy has been the subject of research. Trigwell and Prosser [22] found a match between the intention and strategies within a group of university science lecturers consistent with the parallel situation for learning. Furthermore, in another study the authors found a logical and consistent relationship between lecturers' intention and strategy and their beliefs about teaching and learning [23].

In the following sections the research approach, the findings and a discussion and conclusion in relation to the issue of quality teaching in professional accounting education are presented.

2. Research approach

Relational research into university teaching has traditionally adopted a phenomenographic approach which aims to identify the full range of beliefs about a particular phenomenon or experience. The focus is twofold. Firstly, it concerns classifying and describing the experience on a collective basis and secondly, it aims to identify the critical areas of variation in this experience. It is the nature of variation that tells the story. The results of a phenomenographic study are conveyed as a set of categories which must be qualitatively distinct from the others. Importantly, categories are related structurally in that they form a hierarchy, each successive category incorporating aspects of those below it whilst incorporating qualitatively distinct characteristics as well. The set as a whole describes the full range of understanding about a particular phenomenon (such as the nature of teaching, teaching intention). In this study, three hierarchies were constituted - one for teaching intention and strategy, and one for each of beliefs about teaching and about learning.

2.1 Data collection

Since the object of the study is to capture the maximum possible variation in beliefs, and since these are not pre-determined, it is important that the sample reflect variety as opposed to homogeneity. Sample sizes in phenomenographic studies are generally in the mid-twenties. Samples fewer than 20 risk failing to capture the range of possible variation whilst using larger numbers has been shown as unlikely to yield anything new [19] [5]. Twenty six accounting academics from seven Australian universities took part in this study. Their positions ranged from associate lecturer to professor and their age and length of experience varied between 21-65 years and three to 35 years respectively. There were equal numbers of males and females and Financial and Management accountants.

Data was collected through interviews. These were semi-structured, of 60-90 minutes duration and focused on various aspects of each lecturers' work including their beliefs about teaching, their students' learning and how they go about the practical and intellectual tasks associated with giving classes. The questions sought responses that related to each lecturer's own situation rather than responses which were generic. The data analysis in phenomenography is undertaken in stages. Initially transcripts are pooled and scrutinised in order to identify common themes and to distinguish these from each other. This allows a preliminary set of categories of description to be formed. There follows a lengthy and detailed process of analysing the structural relationship of the categories-how they relate to each other and how together they form a hierarchy. Each successive category in the hierarchy must encompass all aspects of those below it and incorporate qualitatively distinctive characteristics as well. The final stage of the analysis involves another researcher verifying both the classification of the transcripts and the resulting categories.

3. Results

3.1 Strategy and intention

As noted earlier, teaching approach itself is treated as being comprised of two aspects-strategy and the intention in using that strategy. In reality these aspects do not operate within separately in experience, but coalesce to comprise

what lecturers understand as their overall approach to teaching. For analytical purposes however, they are treated separately and then later combined for the purposes of explanation. Intention relates to what a lecturer aims to impart or encourage in their students as a result of the strategies they employ. Table 1 shows that four qualitatively distinct intentions and three strategies were articulated within the group. Many of the types of actions or activities, which make up the strategy aspect of an approach to teaching, are listed by lecturers across all three strategies identified. Most mention prior reading, selection of content, provision of notes (overhead transparencies or power-point, handouts) and asking and answering questions. They are however, qualitatively different in one important respect. This difference lies in the orientation or point of reference the lecturer adopts in describing their strategy. Whilst some select strategies based solely on their own perspective, others frame their answers in terms of the student perspective

Table 1 Summary of intention and strategy in teaching accounting

Category	Overall Approach	Strategy	Intention
D.	A student centred approach with the intention of encouraging growth and change.	Student-centred	Encouraging personal growth and change
C.	A student centred, lecturer centred approach with the intention of encouraging conceptual development.	Lecturer-centred, student-centred	Encouraging conceptual development
B.	A lecturer centred approach with the intention of helping students to acquire concepts.	Lecturer-centred	Helping students to acquire concepts
A.	A lecturer centred approach with the intention of transmitting information.	Lecturer-centred	Transmitting information

The intention and strategy aspects of each of the four approaches to teaching are briefly described below. Note that where quotations are included they are intended to provide an insight only rather than to illustrate each approach in its entirety.

(1) Category A. A lecturer-centred approach with the intention of transmitting information

Lecturers who teach with this intention aim to supply students with sufficient disciplinary information and demonstrations of procedure to enable them to master the technical aspects of the subject. This information is generally factual and the ultimate goal expressed is to enable students to fulfil assessment requirements and to pass the examination. The intention parallels the input-output model of teaching where the lecturer's efforts are regarded as inputs and learning outcomes as outputs. Both are viewed in quantitative and tangible terms.

The teaching strategy chosen is one in which the lecturer plans and conducts their classes using their own perspective or world-view as the point of reference. It reflects a view of the lecturer as the primary agent of learning and in which they place themselves centrally in the learning and teaching process. The practical aspects of this strategy involve preparation by reading and making notes on overhead transparencies, using the textbook, syllabus and assessment requirements as a basis.

The focus on subject content tends to be quantitative. The facts and concepts emphasised are disciplinary and generally come from the lecturer or the text. In class the dominant activity is the lecturer talking whilst students take notes from overhead transparencies, accept handouts and follow the demonstrations of problem solving. The lecturer uses exercises, examples and assessment tasks to test recall and understanding. Student questions and comments are viewed as opportunities to clarify understanding of the material. Whilst students are expected to participate, the level and type of activity is initiated and often directed by the lecturer. There is an expectation that it is up to the student to adapt to the situation rather than the lecturer. Both the preparation and delivery aspects of this strategy tend not to vary.

The following statement helps to illustrate why a lecturer-centred strategy would be adopted quite naturally when the intention is to transmit information to students.

Jack

How do you deliver your first year lecture accounting lecture? What sort of things do you do?

Ah, . . . always use the overhead projector if I had stuff which was relevant to the whole lecture which was like reference material I'd put that on the blackboard so I could refer to it. Um, ah, use point headings . . . um . . .

What's your intention of using point headings?

Well I mean, it's the classic rule for giving lectures. Tell them what you're going to tell them, tell them and tell them what you've told them, and using the point headings is a cue for me as a lecturer and a point at which a student can um, see the argument being developed.

(2) Category B. A lecturer- centred approach with the intention of helping students to acquire concepts

The intention here is one of conveying to students the basic concepts of accounting to enable them to appreciate links between them and to apply these to different situations for technical competence within the subject. Whilst the intention remains basically functional in its emphasis on transmission, information and technical procedures, its scope is wider since acquiring concepts requires a more active involvement of the learner. Lecturers aim to ask of and expect questions from students which encompass aspects of accounting at a more abstract level than that of represented in category A. The intention remains however, for the lecturer to transmit or convey disciplinary concepts to students.

As with the previous category, the teaching strategy chosen is one in which the lecturer plans and conducts their classes using their own perspective or world-view as the point of reference. Whilst the practical aspects of this strategy vary a little in respect of the greater involvement expected of students, it nevertheless reflects a view of the lecturer as the primary agent of learning and one in which they place themselves centrally in the learning and teaching process.

The following statement helps to illustrate this category. Although Kay's approach remains lecturer-centred, the way in which her strategy is articulated indicates that it is less so than Jack's and is more focused on conveying concepts .

Kay

What is your intention in the way you prepare a class for your third year group? And what do you do after you have walked into the room?

. . . I try to get that medium where students aren't madly copying everything down, um, but they're not sitting there with everything given to them . . . there's several things you're balancing. You're balancing what you are delivering verbally to them, which is not exactly the same as what is on the dot points . . . so I'm delivering a lot more than a dot point . . . I'm trying to convey this understanding while I'm talking. I'm putting the main issues up but I'm conveying how things link together, trying to convey this way of thinking to people.

(3) Category C. A student- centred, lecturer- centred approach with the intention of encouraging conceptual development

The teaching objective described here is to encourage students to see past the procedural and technical aspects of the subject and to develop those skills necessary to think "outside the square" so that they are able develop their own ideas about accounting. This additional perspective then opens up the possibility for students to critically evaluate those concepts which are presented to them, to develop ideas and concepts of their own and to communicate these in some way. The challenge for the lecturer is to encourage their students to look beyond facts and the numeric accuracy of answers and to embrace ambiguity in the theoretical and practical aspects of accounting in order to appreciate a wider picture. Intention here includes personal objectives for the lecturer - the challenge is not only to devise and implement their strategies, but to reflect on successes and failures in order to improve their own performance

Strategy is similar to those previously outlined but the orientation is qualitatively different however, in that lecturers also consider strategy from a student viewpoint. This expanded awareness as to what constitutes a strategy translates into a more flexible and less routine approach that incorporates preparation and delivery methods that allow for greater student involvement which are not exclusively lecturer initiated or directed.

The following statement illustrates some of objectives encapsulated within this category. In comparison to Jack and Kay, Gary's intention is one of encouraging conceptual development, more student involvement and is one in which the lecturer supports rather than dominates the learning process in class.

Gary

What sort of things you do to prepare and present a typical lecture for your first year class and what is your intention in doing so?

Well, basically a typical lecture would have to fit in with the overall structure of the course. What am I trying to achieve for this particular lecture? From there I would then break that down into objectives, what do I want to achieve for that particular topic? I would then strangely, go to the exercises from the book and have a look at those and say, "These are the ones" or I would have to write one myself. The reason is that I think reflects their [the students'] understanding. I would then say "OK here's what I think that we need to do" and then I'd go back into the lecture and say "OK what are the ideas and the concepts?" and then as an introduction trying to put it into context . . .

(4) Category D. A student- centred approach with the intention of encouraging growth and change

In summary, the intention here is to encourage students to develop an awareness of themselves and their world that is transformative in some way. That is, to develop ideas, attitudes and capabilities that extend beyond the classroom and the subject to issues which are more universal in nature. The lecturer's intention is to promote personal change and growth by challenging and encouraging students to take as full responsibility for their learning as possible in order to confront issues, personal, disciplinary and social in nature, in the belief that self-reflection, rather than instruction will induce meaningful learning. At the same time, the lecturer wants to evaluate their own performance in this respect and will adapt their strategies in order to accomplish this.

The strategy chosen is one that is framed around the student perspective in which the student is seen as the chief agent of learning. This involves considering many factors such as students' prior experience, their current understanding and their relationship to the professional and social milieu in which accounting operates. Adopting the perspective of another person(s) entails devising strategies that are varied and flexible. This flexibility extends into the personal realm as their accounts suggest that strategy is devised not only to structure the learning experience for students, but is also used monitor and evaluate their own performance. The devices described in the previous categories of using questions, problems, examples and assessment tasks to test understanding are turned back on the lecturer reflexively and used to monitor, evaluate and improve subsequent strategies. This entails personal growth a on the part of the lecturer as well.

Mark

What are you hoping that your teaching (strategy) would impart?

Well, I think that there are only a few people who have a lot of power and I think the more people we can get to challenge that power base the better um, so I have students who I grade their essays perhaps very highly because they have a point of view which they express and justify very well . . . I **totally** disagree with where they are coming from but I'm **so pleased** that they are willing to express themselves. I try and get my students to argue with each other and I do believe that very often the results of their arguments do help them to improve their knowledge and their feelings about the world. I believe in holistic education and I attempt to get the students to talk about intuition, emotions, spiritual matters and logic.

The four approaches to teaching identified fall into two distinctly different groups. One (Approaches A and B) is based on transmitting information to students where the lecturer selects a strategy which is centred around and based on their perspective rather than that of the student. The other (Approaches C and D) is based on encouraging a conceptual view of accounting where the strategy selected is either partially or entirely student-centred. As with Trigwell and Prosser's study [22], there are no instances where a lecturer-centred approach is associated with an intention to develop concepts or vice-versa, where a student-centred strategy is associated with an intention to transmit information. This indicates that the decision on how and what to teach is logically associated with intention. Those lecturers working with the more complex approaches to teaching are aware of the range of possible approaches and select from this range. On the other hand, those lecturers who work with the least complex approaches are likely to be unaware of the range and have a limited number of options available to them therefore. Deciding what strategy to employ therefore is constrained by the level of sophistication in conceptualising both intention and strategy. If strategy is to be improved or altered in any way, it must involve a change in the lecturers' intention as well.

3.2 Beliefs about what constitutes teaching and learning in accounting

The logical relationship between intention and strategy can be extended to beliefs about teaching and learning also. Selecting strategy is closely associated with beliefs as to what constitutes both teaching and learning as well as with intention. In this section the categories describing teaching and then learning beliefs are presented which is followed by a discussion of their relation to teaching intention and strategy.

Four categories which describe the range of lecturers' beliefs as to what teaching means to them were constituted from the data. The range from A. to D. indicates increasing complexity in that each successive category encompasses the key characteristics of those below it as well as additional distinct characteristics of its own. In summary, the role of teaching accounting as described by the academics in this study involves (A) increasing knowledge through the transmission of information, (B) in order to help students acquire the disciplinary concepts, (C) which will help them to develop their own concepts and to (D) change these concepts and in the process, to change as a person. Lecturers who hold the lowest conception may not view teaching as anything more than information transmission whilst those who work with the most complex beliefs are aware of the full range. They may not always use this range in devising strategies, but they understand them and also how they relate to each other. These are summarised in Table 2.

Table 2 Categories describing beliefs about teaching

Level	Category
D.	Teaching in accounting as encouraging personal change
C.	Teaching in accounting as encouraging concept development
B.	Teaching in accounting as helping students acquire concepts
A.	Teaching in accounting as transmitting facts

Five categories describing lecturers' beliefs of learning were identified in the data. In summary, these lecturers see their students' learning in accounting as involving (A) accumulating accounting facts, (B) acquiring accounting concepts, (C) developing disciplinary concepts, (D) developing a changed understanding of the discipline which ultimately, (E) encourages personal change and development. As with teaching, lecturers who work with the most complex belief can see each of the other levels of learning and how they relate to each other. Those at the lowest level may not view learning as anything more than the acquisition of accounting facts and procedures. These are summarised in Table 3.

Table 3 Categories describing beliefs about learning

Level	Category
E.	Learning in accounting as personal change and development through student-directed engagement with course material and requirements.
D.	Learning in accounting as a changed understanding of the discipline.
C.	Learning in accounting as concept development
B.	Learning in accounting as acquiring accounting concepts from sources external to student.
A.	Learning in accounting as accumulating accounting facts from sources external to student.

3.3 Relationship between beliefs on learning and teaching, and teaching intention and strategy

A statistical analysis of these relationships is provided in Tables 5.-7. The numbers in the table represent individual transcripts in each category. These tables confirm the relationships between the categories identified in the data for each of the three areas investigated. Table 5. shows a large and statistically significant relationship between beliefs about teaching and learning. Tables 6. and 7. also show a large and significant relationship between teaching intention and strategy on the one hand and beliefs of teaching and conceptions of learning respectively. These results confirm previous findings about the consistency between lecturers' beliefs and the practical aspects of their work [22] [11].

Table 5 Relations between conceptions of learning and teaching

Beliefs about teaching	Beliefs about learning					Total
	A	B	C	D	E	
A	3					3
B		8	1			9
C			8	3		11
D					3	3
Total	3	8	9	3	3	26

Pearson $p = 0.00$ $p < 0.001$

Table 6 Relations between conceptions of teaching and approaches to teaching

Beliefs about teaching	Approach to teaching				Total
	A	B	C	D	
A	3				3
B		8	1		9
C			10	1	11
D				3	3
Total	3	8	11	4	26

Pearson $\rho = < 0.001$

Table 7 Relations between conceptions of learning and approaches to teaching

Approach to teaching	Beliefs about learning					Total
	A	B	C	D	E	
A	3					3
B		7	1			8
C			9	2		11
D			1		3	4
Total	3	7	11	2	3	26

Pearson $\rho = < 0.001$

4. Discussion and conclusion

The decisions lecturers make about how and what to teach their accounting specialism are not arbitrary. The findings here are consistent with previous relational studies that confirm a logical and coherent relationship between key aspects of academics' teaching experience. Decisions about strategy can be seen as a logical extension of a lecturer's beliefs as to what constitutes teaching and learning and what they aim to achieve as a result of their classroom activities. An important contribution of empirical, relational research such as this, are the insights it can provide into the full range of understanding of these factors by particular groups of individuals and the key areas upon which their understandings differ. Those accounting lecturers who work with the more complex understandings are aware of and can decide between a greater range of strategies. Those lecturers working with lower level beliefs may find it impossible to conceive of anything that reaches beyond their own level of awareness. This is not to suggest that their classes are necessarily less enjoyable or interesting. The effects of say, lecturer personality or perceived interest in the accounting unit taught, cannot be discounted nor can environmental factors such as the size of classes and workloads. All these factors have been found to influence intentions and can inhibit the range of strategies adopted. What it does suggest however, is that intention and choice are in a real sense, limited by level of awareness of the lecturer concerned.

Further, within higher education, studies have consistently revealed a strong correlation not only between intention, strategy and beliefs about teaching and learning on the one hand, but also its relationship with the quality of subsequent student learning outcomes on the other. It has been shown that a student's intention, study strategy and academic outcomes are influenced by the way in which they are taught. It is not unreasonable therefore, to expect that their perception of accounting as a discipline will be influenced as well. Those who attend classes in which accounting is taught as a set of technical procedures which reflect an unambiguous and quantifiable reality, will experience and most likely come to view the discipline differently to those students who have procedures conveyed to them from within a social, cultural and professional context which is complex and relational.

One implication of this is that if the relevant -industry or accreditation bodies hope to influence the direction of change and development of professional accounting education the task will be greater than curriculum review and revision. Influencing decision-making about how a subject is conveyed to students and ways of instituting this will require a change in the way in which accounting lecturers conceptualise the nature of learning and teaching within the discipline and how they frame their objectives. The latter, it is suggested is a profoundly more difficult task than the former.

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