Academic literacy in management education: developing complicated understanding

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ABSTRACT
Although management education aims to equip students with relevant knowledge, skills and competencies, making explicit and developing the cognitive thought processes necessary for management students to deal effectively with the current and future demands of the world of work, have been neglected. This article argues for the development of “complicated understanding” (Bartunek, Gordon & Weathersby 1983) in management students, through cultivating academic literacy. Using mediation, reflective inquiry and reflective writing interactively, it is illustrated how academic literacy could be promoted at the post graduate level.

INTRODUCTION
With the education and training systems and processes of South Africa being transformed, greater emphasis is being placed on the outcomes of education. Part of this national transformation has required universities to critically review the processes and results of their educational endeavours.

In reviewing the field of Management education, cognisance also needs to be taken of the requirements of the business community and other stakeholders. From the perspective of the business community, decisions on what to teach and how to teach it, need to be based on the premise that universities should produce graduates who are able to enter the world of work with the necessary skills, knowledge and competencies. The current shortage of managerial skills in South Africa therefore places additional pressure upon those working in the field of management education to find ways of making management education more effective, efficient and relevant to the demands of the business community.

As part of the ongoing process of evaluation, development and transformation of university curricula, this article explores academic literacy of management education in tertiary institutions.

The need to examine academic literacy arises from several areas of concern. Firstly, the nature of the business environment is changing in fundamental ways, requiring the business community to think about how it does business in new ways. Educational institutions need to take cognisance of these changes to ensure that the quality of their graduates meets the requirements of the workplace. Secondly, it has been our experience that students of management fail to appreciate, grasp and master the mode of thinking characteristic of management. If this mode of thinking is important in itself, and relevant to the workplace, then teaching and learning approaches need to be found to develop the requisite mode of thinking. Thirdly, as part of an outcomes based education system, we believe that thinking is an outcome that also needs to be made explicit. In other words, it is argued that management educators have an obligation to make explicit the thinking processes necessary for successful management, and to develop these within their students.

These aspects will now be addressed in more detail, below. Firstly, the notion of complicated understanding and its relevance to the nature of the business environment is explored. Thereafter, some ideas on how to develop a complicated understanding in management students, are explored.

THE NOTION OF COMPLICATED UNDERSTANDING

The notion of “complicated understanding” which appears to have been coined by Weick in 1979, has been further developed by Bartunek, Gordon and Weathersby (1983). Bartunek et al (1983) suggest that the concept “complication” is similar to and
compliments the principle of complementarity, as well as various theories of cognitive complexity and adult development. Drawing upon these theories, Bartunek et al (1983:275) eclectically describe complicated understanding as: “… the ability to apply multiple, complimentary perspectives to describing and analysing events. Such understanding reflects the high capability to differentiate and integrate ... Compli- cated understanding increases the probability that individuals will perceive events (especially complex events) more accurately, synthesize diverse perceptions and experiences more completely, and generally behave more effectively. ... such suitable action also depends on an individual’s ability to make choices and sustain commitments in the face of ambiguity, relativism, and multiple interpretations of situations.”

It is argued that complicated understanding underlies the way in which managers engage in various tasks, and indeed the effectiveness of their response to these tasks. Bartunek et al (1983) provide an array of evidence suggesting that complicated understanding is related to assuming a leadership role, making accurate predictions, taking the perspective of others, being less prejudiced, making principled moral judgments, resolving conflicts cooperatively, showing empathy with others who hold conflicting views, accepting responsibility for actions and their consequences, tolerating stress and ambiguity, using participative decision making, acquiring power on the basis of reward or expertise, and being able to commit to a considered action in ambiguous and relativistic circumstances.

THE BUSINESS ENVIRONMENT IN SOUTH AFRICA AND THE IMPLICATIONS FOR MANAGERS

The emerging characteristics of the new environment of business has been well documented, even finding its way into basic management texts (eg Ivancevich & Matteson 1999; Robbins & Coulter 1996; Robbins 1997). For the purpose of this article, two characteristics are highlighted, to illustrate the relevance of developing a complicated understanding within management education. They are the nature of change and globalization.

The nature of change and complex ambiguity

The world of business, both in South Africa and internationally, is characterised by change and turbulence. According to Lundy and Cowling (1996), turbulence has two dimensions. The first dimension of turbulence is the changeability of the environment, which is characterised by the degree of novelty of challenges. The second dimension is the speed with which these challenges develop. For Ansoff and McDonnell (1990), the conditions of change are expected to continue into the twenty first century.

Given the nature of change referred to above, managers typically operate in an environment that is not only complex and turbulent, but in Strohm Kitchener’s (1983) terms is increasingly ill structured in nature. Students of management therefore have to be skilled in managing such an environment, where there is no single, unequivocal solution to problems. Strohm Kitchener (1983) distinguishes these (ill structured) problems from puzzles, which are well structured problems with only one correct final solution and which can be guaranteed by using a specific known and effective procedure or formula. To deal successfully with ill structured problems, sophisticated forms of cognitive activity are required. A solution or response needs to be generated by the manager by synthesising or integrating information from diverse sources, evaluating the information from the sources (Rescher 1976), making judgments about information on what may be opposing sides of the problem (Toulmin 1958) and constructing a reason-able solution (Rescher 1976; Toulmin, Reike & Janik 1979).

It is clear then that managers who have a greater level of complicated understanding will be able to deal with complex ambiguity more effectively. This fact seems to have been recognised by business. Meyer (1996) notes that the work of Elliot Jacques on Stratified Systems Theory is being used in many South African companies to assess reasoning ability and the level of complexity that can be managed by an individual. This assessment is used to guide decisions on organisational design, managerial procurement, succession and development.

Globalization and differentiation and integration

A second characteristic of the world of business is globalization. With South Africa’s re entry into the international community, business has now become a global player, in a highly competitive global economy. Given South Africa’s socio economic problems and poor competitiveness record particularly on management dimensions the role of effective management is seen to be indispensable in the future economic prosperity of the country. Not only has globalization led to heightened competitiveness, but it has also resulted in the development of a diverse client base and a diverse workforce, which have to be
managed. Thus, the implication of globalization for students of management is that they have to be skilled in managing a culturally diverse work force and in dealing with global issues, in an increasingly competitive working environment. Managers with a more highly developed complicated understanding should be able to manage this diversity better, given the association of complicated understanding with being less prejudiced, resolving conflicts cooperatively, and showing empathy for contrary viewpoints (Bartunek et al 1983).

Furthermore, managing in a global context, demands of managers to be able to think on a global scale to be able to identify both universally common and unique features in the environment. In describing the way in which global leaders can constructively manage the conflict between local and global issues and activities, Gregersen, Morrison and Black (1998:25) suggest that leaders need to be able to “embrace duality by managing uncertainty, essentially knowing when to act and when to gather more information, and balancing tensions, understanding what needs to change and what needs to stay the same from country to country and region to region”. Complicated understanding underlies this balancing act of leaders in their ability to synthesise and analyse information, to integrate (developing of complex associations among differentiated characteristics) and differentiate (being able to perceive several dimensions in a stimulus array) (Bartunek, Gordon & Weathersby 1983:274).

DEVELOPING COMPLICATED UNDERSTANDING IN MANAGEMENT STUDENTS

Having described the implications of change and globalization for managers, the question arises as to how students of management can be equipped with the complicated understanding required by the world of business, so that they are able to deal with the challenges managers face.

Complicated understanding and academic literacy

It is suggested here, that the notion of complicated understanding can be regarded as a subset of what Langer (1987) refers to as a broad definition of academic literacy. As a narrow definition, academic literacy refers to the ability of the student to read and write effectively within the university context in order to succeed from one level to the next (Liebowitz 1995). Given the current demands placed upon educational institutions as previously discussed, this narrow definition is too inhibiting and the broader definition of Langer (1987) is preferred, which incorporates the dimension of thinking. It is argued that the notion of complicated understanding sheds some light onto the way of thinking being required of students. Students should not merely learn “imitation subjects” where they acquire factual knowledge of limited usefulness, no personal relevance and no relation to the real world. Rather they should learn “real subjects” where ideas are combined and related to each other, used effectively to analyse the unfamiliar, and propose solutions to real world problems in a critical manner, where the way in which the student interprets the real world is changed through a developed understanding of the subject at hand (Ramsden 1992).

Langer (1987:4) describes academic literacy as “a purposeful activity people read, write, talk and think about real ideas and information in order to ponder and extend what they know, to communicate with others, to present their points of view, and to understand and be understood”. Students of management therefore need to develop not only a set of skills but also the structure of values, attitudes and way of thinking and doing necessary for success within the discipline (Langer 1987, Trow cited in Fisher 1995). This can be referred to as the ground rules of management. They define what can be construed as knowledge, as they relate not only to textual conventions but also to how a discipline poses and solves problems, how it conceives of and defines knowledge, what forms of explanation and argument are allowed, how new knowledge is produced and the ways in which what counts as knowledge within specific disciplines is explored and construed (Boughey 1994). Morrow (1992) conceptualised this as “epistemological access” to higher education, but Fisher (1995:7) prefers to call access in this more complex sense “substantive access”.

In the context of management education as described earlier, this broad definition of academic literacy highlights the need for students “to mobilise the necessary cognitive processes required for success in dealing with ill structured problems” (Amos & Fischer 1998:21). Thus, academic literacy promotes deeper learning, rather than mere surface learning (Radloff & Murphy 1992). In deep learning, the student’s intention is to understand or actively make sense of what is conveyed and hence be able to maintain the structure of what is said through having related the parts to the whole (Ramsden 1992). With surface learning, the student is not concerned with understanding, but merely completing the task requirements and so approaches the material as
separate, disjoint components, which need to be remembered and recalled by rote (Ramsden 1992). For example, a surface learning approach to motivational theories will merely require the student to reproduce a particular theory. By contrast, a deep learning approach will require students to explain how the various motivational theories can be used by a manager to motivate subordinates.

Academic literacy not only fosters deeper learning, but it also promotes the development of all three levels of cognitive processing, namely cognitive tasks, metacognition and epistemic cognition (Strohm & Kitchener 1983). For example, in addressing the challenge of affirmative action, students should not only be able to recall what current legislation demands of South African Businesses (a cognitive task); they should also be able to develop a suitable strategy for implementing affirmative action in a particular organisational context (metacognitive task), and be aware of the constraints imposed on the selected strategy and its likelihood of success (epistemic cognition).

It has been our experience that prior and even concurrent learning does not provide students of management with the substantive access they require. While recognising that learning is a life time experience, the management educator has a primary role to play in promoting the substantive access of students. This will compel the management educator to make academic literacy as it pertains to management as a discipline, more explicit. This task is beyond the scope of this article. However, academic literacy also exposes the limitations of lecturing as a mode of instruction (Radloff & Murphy 1992), and requires the management educator to incorporate other modes of learning and instruction into the curriculum. Some suggestions will now be made in this regard.

Complicated understanding and the teaching and learning environment

Bartunek et al (1983) make several suggestions on the design of programmes to develop complicated understanding in the workplace. These suggestions fall into two main groupings. Firstly, they suggest a two stage process of perceiving multiple perspectives in a differentiated way, followed by the incorporation of these perspectives through integration. Secondly, they identify aspects of the learning environment that will promote complicated understanding. These suggestions for developing a complicated understanding in the workplace, are taken into account in the recommendations provided below for the development of complicated understanding in management students in the University context. The recommendations briefly cover what is taught, with more attention being paid to how teaching and learning can take place to promote complicated understanding.

Firstly, in considering the content of learning, clearly deep learning needs to be fostered, so as to develop complicated understanding. For deep learning to take place, the selection of the content of a subject needs to be influenced by the demands of the real world. In management education in particular, this implies that students need to be schooled in contemporary management practices and challenges. Furthermore, the subject matter needs to deal with ill structured problems (Strohm & Kitchener 1983; Amos & Fischer 1998) that relate to this real world, so that complicated understanding will be promoted.

Secondly, in considering how teaching and learning takes place, it is recommended that a complex learning environment needs to be created, promoting “… both cognitive content and personal experience; opportunities for participant goal setting and self initiated action; a supportive interpersonal climate that allows for risk taking and self disclosure; time for personal and group reflection; opportunities for personal comment on events; multiple teaching approaches … multiple observational frameworks; and a design that allows periodic recycling of concepts at successively greater depth” (Bartunek et al 1983:277).

Amos (1999) has described how a tutorial system can be used to create an increasingly complex learning environment at the undergraduate level, over the different years. To illustrate how a complex learning environment may be created at the post graduate level, an example of the approach to teaching and learning which has been developed for the Management Skills course at the honours’ level at Rhodes University, is presented below. This course combines Mediation with Reflective Enquiry and Reflective Writing. These techniques will now be explained.

Mediation

Mediation is a key to understanding how and why people acquire abstract cognition. Van Der Riet (1995:5) describes mediation as the “process where by a more experienced person structures and conducts an interaction with another less experienced other, over a particular task”. In the educational context, this often occurs in small groups, such as a tutorial programme. But, simply putting students into small groups, does not guarantee superior learning outcomes (Radloff & Murphy 1992:21). A learning
environment needs to be created, where the teacher or tutor acts as a facilitator rather than the fount of all knowledge (Radloff & Murphy 1992:21). Small group teaching is generally considered, argue Radloff and Murphy (1992:21), to be better than lecturing in achieving deep learning.

On the Management Skills Course, the lecturer acts as mediator in the classroom setting, facilitating dialogue with and between students on the task at hand. The course is largely experiential in nature, with the students being presented with an ill-structured problem to solve. This problem is related to a particular skill being developed, such as team functioning, negotiation or interviewing. Thus, the task at hand deals with relating the theoretical knowledge gained prior to the class (through reading key references) to the ill-structured problem they have been given to solve (metacognitive level). Further learning takes place through the lecturer mediating dialogue on how the problem was approached and how it could have been approached instead (epistemic cognition).

Reflective inquiry

Reflective inquiry is a structured method used in action research, to promote more intensive reflection on the learning process (Keating, Robinson & Clemson 1996) and hence deeper learning. The method consists of four steps. Firstly, there is the generation of alternative perspectives of a problem by participants. These perspectives are consolidated and then each individual assesses the different perspectives privately and anonymously. After pooling the assessments, the individual is given the opportunity to reflect on personal assessment versus those of the group. Finally, having had the opportunity for personal reflection, a group discussion is held based on these reflections.

On the Management Skills Course reflective enquiry is used as follows: At the end of a class session, students are provided with several questions to consider and reflect on, that are related to the skill being developed. For example, students may simply be asked to explore their feelings about something that happened during the session. They may be asked to consider how they can develop a particular skill, or what hindrances they foresee to its development. After several days, these reflections are forwarded by e-mail to the lecturer, who aggregates the reflections of all the students and then e-mails them back to the class. Students then have the opportunity to contrast their reflections with those of other students and to further reflect on the similarities and differences. The next class session opens with a discussion of these aggregated reflections.

This method has two main advantages in the tertiary education setting. The technique is built upon the social and dialectical nature of learning. Through providing feedback to all participants on both the individual’s personal viewpoints as well as those of the other participants, the participant has the opportunity to further reflect upon and make explicit personal learning approaches, mental models and assumptions before entering into further dialogue on the focal subject with the other participants. Thus, metacognition and epistemic cognition (Strohm Kitchener 1983) is developed in the student. Secondly, the method has the potential of making tacit knowledge explicit and thereby making the domain to which students are attempting to gain substantive or epistemological access, visible. That is, academic literacy as it pertains to management is clarified.

Reflective writing

“Deeper” and more explicit learning can be further promoted through the use of the reflective writing method. “So often, at university the experiences of students are devalued when compared with established authors and ‘research’” (Hogan 1995:5). This in itself can inhibit the cognitive development of students, discouraging them from thinking for themselves. Hogan (1995) introduces the method of journaling as a means of enhancing the learning gained from other settings, by providing students with the opportunity to reflect in depth and in private on their learning experience. Techniques recommended by Hogan (1995) to aid journaling include doodling, stepping stones, critical incident/event analysis, dia logging, the unsent letter, mind mapping and man dalas. These techniques have the potential to aid both integrating and differentiating cognitive processes. For example, the stepping stone technique would encourage integrative thought if the student was required to identify the stepping stones of personal life history and reflect on their overall significance. The critical incident/event analysis on the other hand, would hone differentiating skills through the dissection of an incident.

The interaction of mediation, reflective inquiry and reflective writing

On the Management Honours Skills course, there is an interaction between Mediation, Reflective Enquiry and Reflective Writing. The individual student interacts with both his or her peers as well as with a
lecturer or more competent peer in the classroom setting and via e-mail. The processes governing the form of interactions, are reflective inquiry and mediation, as illustrated previously. The output of the mediation process can serve as the input for the process of reflective inquiry, and vice versa. Concurrently, the individual student will be reflecting on these experiences in solitude, and writing down his or her reflections. This reflective writing can then serve as a basis of capturing the learning process which would otherwise be elusive (Hogan 1995) and thereby making tacit knowledge more explicit. It would also have the benefits of developing complicated understanding, and of providing new material as input for further reflective inquiries and/or mediation. For example, cognitive and metacognitive tasks engaged in through mediation, may be further explored at the epistemic level during journaling, as the students reflects on the personal worth of the subject matter. The product of this personal reflection could then be introduced by the student during subsequent interactions with a mediator or with peers.

It can therefore be argued that Mediation, Reflective Enquiry and Reflective Writing are not only distinctive but also complimentary techniques in creating a complex environment conducive to the development of complicated understanding. Firstly, they unlock different modes of learning and hence a variety of cognitive activities. In doing so, the thought processes utilised become more visible, and students are able to understand the path which was followed in arriving at a particular outcome, and thereby make adjustments so as to arrive at a better outcome. Also, learning takes place in differing contexts, namely with an expert, with peers and alone, respectively. Thus the personal, as well as social and dialectical nature of learning is capitalised upon. It is suggested that with this interactive process, the whole is greater than the sum of the parts. Thus, in combination, Mediation, Reflective Enquiry and Reflective Writing have a greater potential to enhance complicated understanding, which in turn will equip students to deal with real problems in the world of work.

CONCLUSION

The thought processes mobilised by a manager in dealing with his or her world of work, ultimately impacts upon the behaviour and effectiveness of that manager. Yet, students tend not to be provided with opportunities within higher education to learn to mobilise the necessary complicated understanding. With pressure on higher education to ensure relevance and to make explicit the outcomes of its teaching and learning processes, it is incumbent on those in management education to make explicit the cognitive processes necessary for successful management and to develop these within management students. On the other hand, students have a responsibility to take charge of their own learning and to actively engage in the complex learning environment being created.

The purpose of this article has been to encourage the management educator to begin to build cognitive skills development into the management curriculum. As a result, the focus of this article has been on providing the management educator with a model of how the complicated understanding of students may be developed at the post graduate level.

Furthermore, academic literacy was referred to in a general sense, rather than by attempting to describe academic literacy as it would apply to the discipline of management education in particular. This is an area requiring further research and development. If a management specific definition of academic literacy could be generated, it will then be possible to revisit the way in which academic literacy may be developed in students of management.

REFERENCES


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