Understanding Learner-centredness: does it consider the diverse needs of individuals?

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ABSTRACT  In light of the significant changes happening in all sectors of our society, we in the education sector and in particular in the universities, have adopted a number of innovative ideas for delivering education. Many of these innovations deal with procedural aspects related to learning and consequently little concern has been shown to individuals’ beliefs about knowledge and dispositions for learning. Beliefs and dispositions are powerful tools to effect a more meaningful and sustainable change to how individuals engage in learning. This paper discusses some recent findings from research into university students’ beliefs about the nature of knowledge and their conceptions of learning, and identifies the implications for a learner-centred university education. Learners’ beliefs both informal and formal may influence the way they approach learning. Do they learn to apply, or learn to understand? The effort they make to learn depends on their perception of how the learning will reward them. The paper also explores the cross-cultural beliefs about knowledge and conceptions of learning.

Background Literature

As we experience significant changes in our societies we have witnessed the emergence of new ways to conceptualise production and distribution of commodities and services, including educational services. Amongst the new models for university education is the “learner-centred education”, which presumably emerged from the constructivist paradigm of learning. As the concept of learner-centredness has emerged, it has been used to refer to such notions as active learning, self-directed learning, autonomous learning and learning through the Internet (Sparkes, 1999). However, one of the most commonly mentioned attributes of learner-centred education is that it considers learners’ needs to be central to the design and delivery of instruction. In an attempt to satisfy the learners’ needs there has been a large number of propositions advocated for facilitating learning through learner-centred educational programs, such as contract learning and problem-based learning. The majority of these propositions have addressed procedural aspects of delivering educational services without due consideration to conceptual and philosophical changes in our understanding of the nature of knowledge and the learning process.
The current social changes are more fundamental and deal with new ways of thinking about how we perform our everyday business. It is increasingly being recognised that our beliefs and values can be a strong influence on our daily actions, as noted by Brown and Duguid (2000) in their discussion of the social life of information. They argue that our beliefs and perceptions that Information Technology is very liberating and decentralised is misplaced but widely accepted by society. If anything, they say it is perhaps the most centralised and controlled system because all information has to go through servers where it can be scanned and controlled. Thus to educate the social implications of Information Technology, one has to probe beyond the physical activities associated with Information Technology use. Similarly, when considering innovations in educational practices to support learner-centred education models, one must be conscious of the emerging issues such as learners’ beliefs and values about learning and the nature of knowledge (Pillay & Elliott, 2001). Evidence for this need can be seen in recent research in epistemology and conceptions of learning, which supports the argument that learners’ approaches to learning may be influenced by their beliefs about the nature of knowledge and conceptions of learning (Biggs, 1999; Meyer & Boulton-Lewis, 1999; Schommer, 1993).

Whilst learner-centredness initially was about catering for learners’ needs by providing choices, it now seems to have assumed a degree of universality in learners’ needs and it is further assumed that by considering such needs we encourage construction of personal meaning. Learners are now required to take responsibility for their own learning and develop deep and personal understanding. It is also argued that from such understanding learners will be able to continuously learn and adapt their knowledge as their life circumstances change. However, we know that the only universality in learners’ needs is variations, which at a fundamental level may be effected by their conception of learning and beliefs about the nature of knowledge. Thus the current impetus driven by innovations in delivery systems may address some of the variations considered necessary under the learner-centred educational practice, but may not be sufficient to transform the ways in which we think about and engage in learning activities necessary to promote sustainable change and self-development. There are examples of a superficial shift in delivery methods that claim learner-centredness in many technology-mediated, learner-centred education programs (Jonassen, 1989). To maximise learning from learner-centred education in our knowledge-driven society, we first need to identify and transform our beliefs about the nature of knowledge and the learning processes to match the needs of contemporary societies.

Conceptions and beliefs about knowledge and learning is increasingly being recognised as influencing individuals’ perceptions and judgements about tasks in a learning context and helping learners to determine what needs to be done to acquire certain types of knowledge or behavioural outcomes. For example, consider the situation when a student has to write an assignment. The preparation (learning) for the assignment will be shaped by the learner’s perception of what is required to successfully pass the anticipated scrutiny in a given context (Entwistle, 1998). If learners perceive significance in a particular aspect of writing assignments, such as
providing a large quantity of information or demonstrating a critical understanding of the content, then their judgements about what is important will be shaped accordingly, which in turn will influence their approach to the task. Support for this view can be seen in Perry's (1981) argument that learning problems can be related to students' beliefs about the nature of knowledge itself. That is, if learners consider knowledge to be “static”, they perceive learning as a process of accumulating information. Learners direct their effort to aspects of tasks that satisfy the learner’s intention. Intention in this context is more than individuals seeking to develop meaning of the subject content. It also includes their desire to understand how the learning experience will serve the learner beyond the classroom, a basic premise on which most adults engage in learning (see Knowles, 1990).

It is acknowledged that the above discussion can be wrongly construed as suggesting a strong influence of individual agency in the engagement in learning activities. It must be noted that a learner's intentions are just as much an individual’s own construct as it is a socio-culturally influenced construct (see reciprocal determinism in Bandura, 1978). Thus, like most other human thought structures, conceptions of learning should be seen in terms of the individual and his or her social and cultural situatedness (Marton & Booth, 1997). Learners’ perceptions of what is useful in a learning task are shaped by their informal and formal conceptions and beliefs about the nature of knowledge, the learning process, the context, prior knowledge and experiences, and how it will benefit them in the future (Pillay et al., 1998; Schommer, 1993). Just focusing on the processes of learner-centred education is not sufficient; it is necessary to broaden the scope to include learners’ beliefs and conceptions about knowledge and learning and how such learning experiences articulate into productive activities in the “real world”. For example, Pillay and Boulton-Lewis (2000), in comparing students in a learner-centred program, found that the first-year university students who came directly from secondary schools differed in their conceptions of knowledge and learning from students who had full-time employment and were part-time students. The part-time students conceived the nature of knowledge as being interrelated between domain, practical and self-development knowledge types, whereas the conceptions of students who came straight from the high schools tended to reflect disparate units of information, focused on acquiring knowledge and skills, obtaining grades, and jumping the hoops to get through the degree program. Thus, if a learner-centred program was developed around the needs that reflected the conceptions of students who came straight from schools, then the part-time student group would have been disadvantaged. This further illustrates concerns with conceptualising learner-centred education as a universal concept. However, programs that explicitly provide choices rather than singular learner-centred models may positively influence learners’ intentions and consequently enhance their engagement in the learning process.

In considering beliefs about the nature of knowledge, Hammer (1994) and Marton and Booth (1997) argued that learners who believe that knowledge is dualistic do not emphasise the need to integrate new information with prior knowledge to construct meaningful understanding. Dualistic knowledge refers to a belief that knowledge is a fixed entity and that it exists as discrete units, separate
from other pieces of information and the learner. When learners believe knowledge is assigned singularly to a concept, then they do not see the need to reflect on and search for connections that integrate elements within the given information and with existing prior knowledge (Pillay et al., 1998; Schommer, 1993). Such epistemological beliefs encourage conceptions of learning that support approaches to learning that are very surface oriented and utilitarian. Adherence to an absolutist and or relativist view of the nature of knowledge can have a significant effect on how individuals interact with learning material within a learner-centred learning environment. Students may enrol in learner-centred education, but if a learner’s basic beliefs and values are not transformed and sustained then very little real benefit may be achieved. Innovations in learner-centred systems need to recognise the variations in students’ perceptions of learning and the nature of knowledge in order to facilitate an effective learner-centred education system.

Several studies over the past years have identified remarkably similar conceptions of learning which, unintentionally, seems to have been represented by a notion of universality of how people experience learning (Marton & Booth, 1997; Marton et al., 1997; Tynjala, 1997). Saljo (1987) cautions against this misunderstanding by arguing that “… learning does not exist as a general phenomenon. To learn is to act within human-made institutions and to adapt to the particular definitions of learning that are valid in the educational environment in which one finds oneself” (p. 106). Considering this variation in how individuals perceive learning, begs the question “does learning have the same meaning for all learners?” Furthermore, Saljo argues that different educational environments will define learning according to “different socially and culturally established conventions with respect to what counts as learning” (p. 104). The above observations, together with Marton and Booth’s (1997) acknowledgment of the complexity in understanding the variance in learners’ conceptions of learning, suggest a need for further research and careful consideration of variations which will influence the design of learner-centred education.

Considerations for the Design of Learner-centred Education

In placing the learner at the centre of the learning process it is assumed that those concerned with the design of learner-centred education have a reasonable understanding of the possible variations that may emerge as the learner engages in learning. This may be true when one considers the external artefacts (tools of delivery of instruction) that influence learning. However, with increasing understanding of how, why and when humans engage in learning, we know that their prior knowledge, including beliefs, can significantly influence learner participation in learner-centred learning environments. Consider studies in self-efficacy (Bandura, 2000), empowerment (Freire, 1970) and self-directed learning (Caffarella & O’Donnell, 1990)—they all focus on the individuals’ self-knowledge and their predispositions, many of which are intangible and difficult to address.

In light of the changes evident in our society, an increasing number of mature-age students now enrol in universities for either upgrading their academic qualifications or for professional development purposes. These learners are different from those
who come directly from secondary schools. Thus, there is a need to understand how these people perceive learning in order to promote a learner-centred model that captures their needs. Investigating the effect of work experience on individuals’ conceptions of learning, Pillay and Boulton-Lewis (2000) compared a group of building construction students, some of whom had work experience and others who came into the course directly from secondary schools. The work-experience learners’ conceptions of learning emphasised understanding, self-development and lifelong learning whereas the non-work-experience learners’ valued acquiring knowledge and skills and obtaining grades to complete the degree. Acquiring knowledge and skills is considered a very simplistic view of learning where learners are concerned with accumulating a large quantity of information without much understanding (Marton & Booth, 1997). Learner-centred programs that reflect the learning outcome emphasised by the non-work-experience learners will not prepare students to function effectively in our dynamic and changing world. Elaborating on the variation in conceptions between the two groups, the work-experience learners saw the conception “application” to mean both applying knowledge to enhance their understanding of a concept, and applying their knowledge to get a task completed. The rhetoric in learner-centred models is to make the learning practical and applied. Very often, in an attempt to cater for the learners’ needs for a more applied focus, it is misunderstood to mean only the latter type of application, which was what the non-work-experience group emphasised. Also, application in learning was often seen as some form of physical interaction or being practical in nature. The work-experience learners recognised that application can be at an abstract level such as working with worked examples where one applies knowledge to enhance understanding, as opposed to performing a physical task. Marton and Booth (1997) and Saljo (1987) both argued that individuals have certain conceptions of learning and they respond to learning tasks according to their conceptions. Hence, one needs to rationalise external interventions in learning which are often in the form of procedures and personal values and dispositions, in order to achieve the most from a learner-centred model.

Increased global mobility has propagated a greater cultural mix in our classes and is particularly important for the Australian higher education industry as it attempts to cater for learner-centred education for the Asian market. Considering the variation required to address diverse cultural groups, any learner-centred design cannot assume universality of needs of the learner. In investigating Japanese culture (Purdie & Hattie, 1996) and Malaysian culture (Pillay et al., 2000) it was found that Asian learners have different conceptions of learning compared with Australian students. One of the categories of conceptions of learning that is of significant interest, and non-existent in the Australian population, is “learning as a duty”. Purdie and Hattie (1996) argued that such dispositions may be due be a societal and individual obligation to learn, often referred to as the “loss of face syndrome”. It is seen as instilling individuals’ responsibility to themselves and, more importantly, to their community. Hess and Azuma (1991) argued that Japanese culture socialises children into conformity (acceptance of group rules), obedience (respectfully carry out instructions) and persistence (persist in the face of boredom). These predispositions
from a Western perspective may appear docile and associated with lower level conceptions of learning (see Marton et al., 1997, for a detailed discussion on conceptions of memorisation and understanding). However, inherent in these perceived docile predispositions, exist new conceptions that may not be visible in the Western categories of conceptions of learning and models of learning. Despite an apparent display of compliance on the part of Asian students, they exert considerable self-control in the pursuit of academic achievement, and are persistent and effortful in relation to their studies, resulting in the superior performance of Asian students on many tests (Baker, 1993). In the Australian context, students do not place the same emphasis on “duty to learn” and more readily seek help from others to achieve a goal. One must not confuse the notion of seeking help to get a task completed with getting help to learn how to do a task and then doing it themselves. Similarly, collaborative discussions are seen as a resource but not the means to solve a problem. The latter is a significant attribute of Asian learners—they value the ability to be able to accomplish a task by themselves. The need for individuals to engage in and persist in solving problems is a very important learning process to Asian students. Another example of culturally induced variation can be seen in how we perceive the act of memorisation in learning. Asians see memorisation as an integral part of understanding—you understand by memorising and you memorise the understanding, whereas in the Western models memorisation is often associated with rote learning and viewed as poor learning (Watkins & Biggs, 1996). Western learners have conceptions that are in some ways at odds with those of Asian learners. This presents an interesting dilemma for designers of learner-centred education. How do we cater for learners’ needs in a learner-centred education program that successfully meets the needs of all cultural groups? These are the issues that need further investigation and careful consideration when contemplating learner-centred educational models.

There is also a contention that learners’ conceptions of learning are often not only determined by the way they see learning; rather, it is their perception of the learning outcomes. For instance, Ramsden (1988) suggests that the achievement approach to learning is driven by students’ intentions to obtain the highest grade, their organised study habits and an awareness of assessment demands. Ramsden argues that when learning approaches are associated with assessment requirements, it encourages an instrumental conception of learning. Thus an intention to understand at an instrumental level leads to the processes required for such understanding, and those processes culminate in a particular level of understanding (Entwistle, 1998). Coupled with the levels of understanding, assessment also influences the type of knowledge one acquires. If the assessment emphasises procedural or communicative knowledge then learners will select appropriate learning processes to achieve that type of knowledge. Often, even when learners have higher level conceptions of learning, they strategically adopt approaches to meet the assessment requirements that may be very simplistic. Similar suggestions can be seen in Biggs’ (1996) article on constructive alignment of teaching, learning and learning outcomes. The learning outcomes that are currently valued are difficult to measure and may not be evident in the short space of time learners spend at universities. This shift reflects an
acknowledgment of a non-absolutist nature of knowledge, which has seen a change from evaluation processes seeking quantitative indicators (numeric or percentage value for learning outcomes) to portfolios and project work. If knowledge is relativist and non-dualistic, then the intervals at which it needs to be assessed become critical. Also, since there is increasing recognition of lifelong learning and learning on and off the job, it makes it difficult to quantify what one has learnt. There is a need to analyse how learner-centred education measures learning outcomes. Does it employ strategies that are different from the traditional methods?

One of the more significant shifts in our education system has been the attempt to merge formal and informal education or merge education and work. The resistance to this change is a classic example of the superficial way in which interventions to bring about the merger are being introduced. As a result, these interventions do not address the deep-rooted values and beliefs about what learning and work mean in today's society. In some cultures the differentiation between formal and informal learning never existed. For example, Boulton-Lewis et al. (2000) found that Australian Aborigines had a non-dualistic view of knowledge. In fact they had extreme difficulty in relating to formal learning, as it did not explicitly show the links with informal everyday activities. Similar arguments can be seen in Lave's (1991) proposition regarding situated cognition, where she argues that knowledge is best acquired in informal settings where the knowledge was first created, rather than in contrived formal settings. The Western model of education created formal systems, which were detached from informal everyday learning to increase efficiency and to be able to ensure comparability of knowledge for specific groups of people. Proponents of situated cognition are now challenging this dualistic model. This new way of thinking about learning has become a key issue in vocational education and training in many countries, as evidenced by the relocating of training from formal colleges to workplaces. Are the learners fully appreciative of the need to combine formal and informal education, and of the learning processes that facilitate best outcomes? One of the main arguments for situated cognition is that knowledge is best learnt in the context in which it was generated. How does this impact on a learner-centred educational system?

Finally, one must ask what happens to learners who do not have the necessary dispositions or whose beliefs about knowledge and learning are different from those assumed in a learner-centred educational model. As evident in studies of self-directed learning, whilst a capacity for self-directed learning is a valued attribute, not everyone prefers the self-directed approach to learning—some need structure and direction. The constant challenge for educators has been determining the question of how much structure and how much self-direction is appropriate. So does it mean that by not being self-directed you become a poor learner? One can be a self-directed learner working in a learner-centred environment but for different reasons. For example, it could either be seen as taking control of learning to pass the course or doing well in applying the knowledge because it may lead to good jobs. If students see their intention in learning a task as a means to an end, then their engagement may be different from those who see learning as a lifelong continuous process. This distinction between intention and process can
also be seen in Pask’s (1988) work. He argues that students either transform the given information or construct personally meaningful structures to comprehend or accept the structures inherent in the given information. The personally meaningful structures are presumably responsible for the development of lifelong learning conceptions, whereas accepting the inherent structures suggests an intention of not seeking beyond the given information and using it as is to accomplish the task. Thus, just by having a learner-centred education model does not guarantee enhanced learning outcomes because individuals will still have variation in their ways of dealing with the learning task.

Conclusion

Given the significant changes made in higher education in recent years it is encouraging to note that the majority of the efforts have been very effective. As we continue to seek innovative ways of operationalising our research findings in human learning, we must not only focus on the operational issues in learning, because our actions are to a large extent an overt manifestation of our conceptions and beliefs about the given learning activity. The most significant and sustainable changes are those that address the fundamental issues associated with such changes. Human behaviour is strongly influenced by our perception of the tasks at hand and in this case it is our knowledge of learning processes and the epistemology of what we are learning. As Marton (1998) suggests “From the flux of the seemingly chaotic flow of an ever changing reality, we discern and delimit phenomena and situations, and within these we delimit and discern parts and part–part and part–whole relations” (p. 194). He goes on to say that, in learning, what we learn are contingencies of variations set within a space, which includes the phenomenon, situation and features that we are able to deal with. The more differentiated and integrated this space is, the better we are equipped to deal with the future. Such understanding allows us to appreciate how an individual learner’s beliefs about the nature of knowledge, conceptions of learning, judgement and motives can manifest as different learning experiences from the same activity. Thus, in adopting learner-centred models we must not only be well versed in the variations associated with the delivery processes but also with variations in conceptions and beliefs about the nature of knowledge and learning processes. Insights like these are essential for conceptualising good learner-centred programs.

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