Group work OB Assignment, 2014

Chapter 6: Learning and Innovation

Module: Management and Organizational Behaviour

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Introduction

For the last 100 years, our society has moved from the industrial age to the information age and now to the 21st century knowledge age. Increasingly today and in the future our contributions to society will be valuable innovations which we will build using a combination of our skills, things we have learnt in the past and most importantly, our ability to adapt and learn in the future. This paper will take an in-depth look into the topic of 'Learning and Innovation'. This article will explore the links between learning, creativity and innovation that will shape the future of organisations and how people embark on navigating organisational life. Learning can be explored and interpreted from many different perspectives. The concepts that this paper discusses are deeply embedded in this era of the knowledge age worker. It will look at the concept of the learning cycle which views adult learning as a continuous process. This paper will also look at a relevant reference paper from which concepts such as personality, self-efficacy and the cognitive approach will be discussed, which will help us develop the core concepts of this paper.

Creativity

The first concept which this paper will discuss is creativity. According to Bratton et al (2010), creativity in the workplace is the development of ideas that can potentially enhance individual and organizational performance. There are different forms of creativity which include technological, economical, artistic and cultural. Most people have creative potential but need to learn how to unleash it and learn how to think about a problem in different ways. People have different thinking styles and in relation to this, Siegal and de Lisi's (2003) idea of distancing becomes relevant. Distancing provides a way for people to solve problems. People need to be exposed to learning environments that foster distancing on a regular basis to help them respond thoughtfully and creatively to situations that they encounter in organizational life. According to Dougherty (1999), informal learning is seen as a key step for creativity. Nowadays, top organizations are seeking to attract creative individuals as they can substantially contribute to organizational innovation, effectiveness and survival (Novak, 2010). These companies are developing multifaceted centres designed to encourage employees to think creatively. Even in industries that traditionally would not

have been associated with a need for creative and knowledge based workers, such as financial institutions and manufacturing, a change can be seen. Times are moving on from traditional factory work, with manufacturing work nowadays involving automated systems, designing tools and programming computers (Florida, 2012). Knowledge workers need to realise the importance of creative thinking and look to organizations that provide this supportive learning environment. Creativity is conceptualised as a first step that is necessary for subsequent innovation, which is the second concept that will now be discussed.

Innovation

Innovation is the creation of any new service, product or process that is new to an organisation. Organisations try to promote innovation as it is a major driver of change, that when implemented correctly, can contribute positively to the work place. The innovation process involves generating ideas and linking up idea generators with change agents. These idea generators are the core assets of the 21st century organisation as they help provide stimulation and creativity. Idea generators are often newcomers to the company and are normally enthusiastic individuals who are not institutionalised and approve of change (Galbraith, 1996).

Innovation is a key attribute of any competitive organisation, and in order to build this, the environment must foster innovation and "out-of-the-box" thinking. This can be seen through the design of offices of companies such as Google, where creativity is encouraged. Organisations can also encourage innovation by developing internal linking networks that bridge disparate functions. Classical learning theories, specifically learning through reinforcement, can help extend the innovation concept within an organisation. Within these concepts, the classical conditioning theory disregards the significance of 'black box' activity (internal cognitive activities). This contradicts the concept of an idea generator, but it can be used to build an ideal environment for innovation (Bratton et al, 2010).

To promote innovation, the simplest tool is continuous positive reinforcement: that is, every desired behavioural response is followed by a reward. For example, if an employee's job performance is related to bonus payments, there is a strong chance that he/she will be more innovative in the workplace. Within an organisation, management can reward or

compliment every time that innovation occurs, and this in turn will lead to an environment which fosters creativity and innovation.

Learning Cycle

While creativity and innovation are important in the modern working environment, how we learn is equally as important. The learning cycle, which was developed by Kolb in 1984, is a cyclical learning model, which incorporates many different learning styles and theories, without being overly reliant on any one (Bratton et al, 2010). It contains behaviourist approaches (learning through reinforcement), cognitive approaches (learning through feedback), learning through active participation and perception, therefore creating a holistic approach to learning.

There are four main parts to the learning cycle. The first is the Concrete Experience. This is concerned with creating authentic experiences and being actively involved in learning. Reflective observation is then employed which involves thinking about the experience just encountered and its implications. Then abstract conceptualisation occurs, when the learner considers the learning outcomes of the exercise and examines how they, along with past knowledge, might be used to aid future learning and experiences. The final stage to the process is active experimentation, when learning theories are trialled in real or fictional scenarios. By using many different learning theories, this model proposes that learning is best achieved through a multi-faceted approach.

In the workplace, a manager who may have considered leaving a written list of tasks or procedures for their employee may now consider allowing them to experience a related task, draw conclusions and learning outcomes from this task and apply them to a future scenario. The cycle can also be utilised as a compass, whereby an assessment of what stage of learning is being experienced can be carried out and a plan can be devised in order to return north, where a new process can be started following the successful learning of a previous task. Enabling workers to become involved in their own learning is paramount to success. Understanding the way in which the employee learns is also very important in the 21st century.

Due to such limitations, in 2006, the cycle was revised (Kolb, 2009). Critics proposed that the stages of the cycle were not in fact discrete as Kolb initially described them, and that social issues, which are not taken into account in the original cycle, may influence learning. The new cycle recognises that individuals learn differently, and most will favour certain learning styles. It has evolved from containing four different learning styles: Accommodating, Assimilating, Converging and Diverging, to nine: Initiating, Experiencing, Imagining, Reflecting, Analysing, Thinking, Deciding, Acting and Balancing. This expansion of learning styles should better help define unique learning styles and decrease uncertainty in the case of learners who do not fall into one of the original four learning styles.

This assignment focuses on the concept of innovation, which stems from creativity which are both encompassed in the learning cycle. "The Effects of Personal and Contextual Characteristics on Creativity: Where Should We Go from Here?" by Shalley et al (2004) will discuss personality, self-efficacy and the cognitive approach in the hope of providing a deeper understanding of how this will in turn affect these concepts.

Personality

Chances are, when applying for a job, companies are requesting candidates to do psychometric and personality tests in conjunction with the normal curriculum vitae. Personality is believed to have an influence on creativity so through these tests, recruiter's can measure the creative potential of a candidate. Creativity has become an important criteria which recruiters search for in a candidate, as it fosters innovation and hence, progress.

According to the reference paper by Shalley et al (2004), there are two main works that examine the effects of personality on creativity. The first is Gough's Creativity and Personality Scale (CPS), which is an index that measures ones creative potential through their personality. With this scale, those that score high on the index approach problems with a broad perspective, recognise different opinions on the problem, have more original contribution and a high potential for creativeness.

The other approach is through the Big Five Model of personality, which divides personality into five core dimensions (Openness, Extroversion, Agreeableness, Neuroticism and Conscientiousness). According to this approach, individuals who score high on openness are seen to have more potential for creativeness. They are curious, imaginative, reflective and artistically sensitive, traits which cultivate creativity.

One can argue that with many corporations using automated systems (eg. car manufacturing and food processing industries) to replace human labour, there would be no place for creativity. This is true in the sense that less creative human output is needed in these environments. Creativity promotes profitability and innovation within a company, but the main disadvantage is the resulted reduction in human capital, which has ethical and social implications.

According to the psychodynamic theory of personality "The Freudian Iceberg", personality can be divided into three individual, but interconnected components. These are the ego, the superego and the id (Carlson et al, 2005). The id is the structure that contains all the human desires, instincts, memories and experiences. According to the Iceberg theory, this structure is inherent at birth and can be moulded by experiences and memories. The superego is the moral arm of personality that determines the actions that are moral and permissible, and punishes wrongdoing with feelings of guilt (Bratton et al, 2010). Finally, the ego strives to achieve a level of compromise between the superego and the id.

Much talk has gone into altering the ego in order to enhance creativity. Introducing experiences and memories that help cultivate creativity could do this, especially during childhood. The id is also altered by the learning experiences that individuals go through during their lifetime. This idea questions the cognitive style of learning that most educational institutions use. Some argue that this style of learning does not promote creativity, but instead suppresses it.

Self-efficacy

Leading on from the personality of the individual and the role this plays in the innovation process, it is clear that their ability and belief also plays a key role. Self-efficacy refers to a person's belief about her or his ability to perform the actions needed to achieve desired

outcomes (Bratton et al, 2010). Therefore, an individual with a high level of self-efficacy will set difficult targets and will strive to meet those targets by overcoming obstacles. This determination is a key characteristic of the 21st Century Knowledge worker, who is required to meet high targets using their own initiative. In addition to this, the self-efficacy of an individual not only determines the extent to which the knowledge worker will be driven, but it also determines the extent to which they will sustain that drive in the face of adversity. High self-efficacy can facilitate both the frequency and the quality of behaviour-environment interactions, and low self-efficacy can hamper both (Carlson et al, 2005). It is clear that the level of an individual's self-efficacy therefore has a major impact on an individual's belief and ability. Recent research would also dictate that an individual's creativity is influenced by the their level of self-efficacy. For example, recent research by Tierney and Farmer (2002, 2004) has led to the coining of the term "creative self-efficacy". Creative self-efficacy is the extent to which an individual believes that they have the ability to produce creative outcomes (Shalley et al, 2004). Further research by Farmer et al (2003) analysed this concept of creative self-efficacy further, but also examined the relationship between creativity and creative role identity. The results indicated that a number of factors influenced an individuals creativity, including; the persons self-view of what creative behaviour is, the creative expectations of a workers colleagues, and their exposure to culture. The research concluded that an individual had the highest level of creativity when they felt a strong creative role identity and that the organisation they worked for valued their creative input (Shalley et al, 2004). This research once again links back to the notion of self-efficacy and it's importance in the innovation process. In order for an individual to be creative, they must have faith in their own ability and be shown by the organisation that they are placing trust in their workers. This trait of trust is crucial to the 21st Century Knowledge Worker, as a major prerequisite of the knowledge worker is that management provide the opportunity, freedom and belief for the worker to complete a project under their own initiative. This leads into the next topic, the cognitive approach.

Cognitive Approach

When utilising the Cognitive approach it is believed that the cognitive processes of how individuals perceive, evaluate feedback, represent, store and use information play an

important role in the learning process. As the cognitive approach involves an in-depth analysis of an individual's thought and learning process, it is important to develop an understanding of the internal state of mind (the black box) of the learner, in order to analyse the cognitive approach (Bratton et al, 2010).

The cognitive approach to learning can be traced back to research by three European psychologists, Max Wertheimer, Wolfgang Kohler and Kurt Lewin. The research they conducted varied in approach to that which had previously taken place. Their research involved analysing the human consciousness by looking at the sum of all its parts and the overall shape or pattern which is constructed. This is in contrast to previous approaches to research that attempted to unscramble all of the parts of the human consciousness and to evaluate them individually. Their research concluded that learning is insightful and occurs quite suddenly, however, more recent interpretations suggest that the learning might not happen quite as suddenly as they concluded. Insightful learning might only occur after a mental 'trial and error' process in which individuals envisage a course of action, mentally evaluate its results, compare it with logical alternatives, and choose the option that is most likely to aid decision-making (Bernstein et al, 2000). While the research in both cases would present the view that learning is insightful and would support the cognitive approach to learning, the question therefore is centred on how quickly insightful learning can occur.

When compared with the behaviourist approach to learning, the cognitive approach is much less restricted in the approach individuals can take in receiving, interpreting and learning new information. The Cognitive approach offers the opportunity to reshape previously learned models and for the individual learner to establish their own approach to learning.

An alternative view on the cognitive approach to learning is Kirton's Adaption-Innovation Theory. The idea behind Kirton's theory is that individuals have a pre-determined method of learning, which is not altered through experience. Kirton states that there are two different cognitive styles, each of which has a contrasting view on learning. Individuals with an adaptive cognitive style tend to operate within given parameters without questioning their validity, whereas those with an innovative style tend to be more willing to take the risk of doing things differently in order to develop unique problem solutions. Further to this, the results of the research would suggest that individuals with an innovative style tend to be more creative than those with an adaptive style (Shalley et al, 2004). This links with the 21st

century knowledge worker, as an innovative cognitive style among an individual would be extremely conducive to creativity and innovation, as it allows individuals to think and act "outside-of-the-box", traits of the knowledge worker. However, previous research has not examined whether cognitive style and personality make independent contributions to creativity or whether they interact with one another to affect individuals' creative responses. The Cognitive approach therefore views learning as self-driven through the means that an individual will learn through insight and by challenging previously given concepts.

Conclusion

In conclusion, learning and innovation within an organisation are influenced by four major theoretical perspectives. The first, the Managerial Perspective, views learning as being structured, stable and a specific function of the organisation. The critical perspective views creativity as a tool for growth and power. The Symbolic-Interactionist Perspective looks at how workers interact and communicate with each other to foster creative ideas within an organisation, and how some, such as Google, provide an inspiring environment as a platform for this. The Patriarchal perspective then looks at the role of gender and innovation in the workplace. When looking at learning and innovation in the workplace, it is important that all four should be taken into account. Each offers a unique insight into the behaviour within an organisation and when analysed together, offer a better understanding of the importance of learning and innovation in an organisation.

Reference List

Bernstein, D.A., Clarke-Stewart, A., Penner, L., Roy, E. and Wickens, C. (2000) *Psychology* (5th edn), New York: Houghton Mifflin.

Bratton, J., Sawchuk, P. Forshaw, C., Callinan, M., & Martin Corbett (2010) *Work and Organisational Behaviour*. London: Palgrave Macmillian.

Carlson, N., Buskist, W., Enzle, M. and Heth, C. (2005) *Psychology* (3rd edn), Toronto: Pearson Education.

Dougherty, D. (1999) 'Organising for innovation', In Clegg, S., Hardy, C. and Nord, W (eds), *Managing Organizations: Current issues*, Thousand Oaks, CA: Sage.

Farmer, S. M., Tierney, P., & Kung-McIntyre, K. (2003) 'Employee creativity in Taiwan: An application of role identity theory', *Academy of Management Journal*, 46: 618–630.

Florida, R. L. (2012) *The Rise of the Creative Class: Revisited*. New York: Basic Books

Kolb, A. Y., & Kolb, D. A. (2009) 'The learning way meta-cognitive aspects of experiential learning', *Simulation & Gaming,* 40, 297-327.

Novak, J.D. (2010) *Learning, Creating, and Using Knowledge: Concept Maps as Facilitative Tools in Schools and Corporation*. London: Routledge.

Shalley, C.E., Ehou, J. & Oldham, G. R. (2004) 'The Effects of Personal and Contextual Characteristics on Creativity: where should we go from here?', *Journal of Management*, 30(6), pp 933-58.

Siegel, I. and De Lisi, A. (2003) 'Red Cocking's Legacy: the development of psychological distancing', *Applied Developmental Pyschology*, 24, pp 697-711.

Tierney, P., & Farmer, S. M. (2002) 'Creative self-efficacy: Potential antecedents and relationship to creative performance', *Academy of Management Journal*, 45: 1137–1148.

Tierney, P., & Farmer, S. M. (2004) 'The Pygmalion process and employee creativity' *Journal of Management*, 30: 413–432.