

Chapter 2

Co-Creation and Learning

2.1 Introduction

This chapter essentially provides an introduction to different learning methodologies. It believes that co-creation is a learning journey. Two or more parties that are involved in co-creation have to adopt new practices and processes in place of the established routines and habits.

To implement co-creation in an organization, it is necessary to tag on to collaborative culture (Owen et al. 2008). Creation of collaborative culture requires creative thinking in solving problems, leadership, knowledge management, institutionalized learning, experiential learning, communication, quality management, and continuous improvement in an organization (Roser et al. 2013).

Today, the success of most organizations is dependent on consumer's involvement. Active consumers are well aware that they too can contribute to value creation at certain points of exchange. This has led to responsive consumer behavior which in turn leads to open innovation and consequently, co-creation. Co-creation takes place as collaboration between the company and the consumer and is in turn exchanged with the consumer. This depicts that there has been a paradigm shift to the experience-centric view of value from a product-centric or service-centric view involving improved communication between the company and its consumer. Here, it is clear that the organizations are prioritizing consumer end experience.

From the above text, we can understand that learners are the key indicators in a learning environment. At present, traditional pedagogy is overruled due to the emerging knowledge-based economy and creativity met at its best. There is a requirement of new learning and teaching methods (Hartley 2003). Aardweg and Aardweg (1993) state that: "experiential learning focuses on the interests of a learner and also helps in personality development. The main role of a facilitator is to assist the learners with an enthusiastic environment, personalized learning experience, sorting down of the right objectives, collaborative learning along with the

co-learners and so on. The importance of experience is that an individual gets to endure a situation, analyze it and understand the meaning and value of the particular situation in his own perspective. The experience is both cognitive (conceptual), affective (emotions/feelings) and conative (behavioral).”

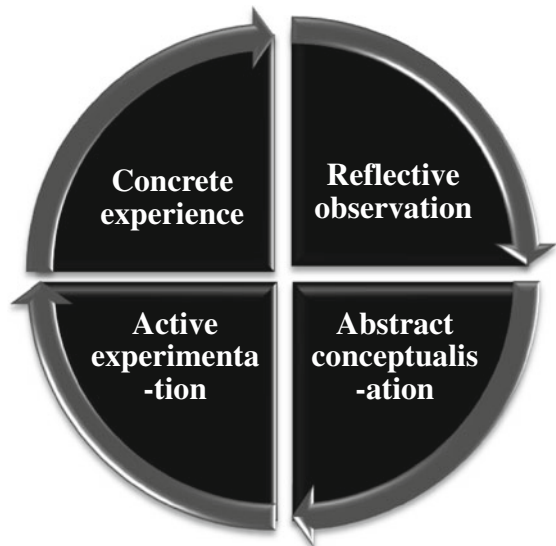
2.2 Experiential Learning

Many organizations and universities have gradually started to implement learner-centered approaches like flexible delivery and technology-enhanced learning (Shurville and Browne 2006). Hence, it becomes important to appreciate experiential learning. Experiential learning was initially acknowledged by Kolb (1971). According to him, learning is a process wherein a learner actively involves himself in series of learning cycles. These cycles comprises of actual experience, reflective observation, abstract conceptualization, and diligent experimentation.

Experiential learning sees the learner from the cognitive, emotional, and physiological outlook, and as being ardently involved in learning process. This approach brought about holistic and experiential-based learning in which learners should be supported to learn from their own unique experiences (Kolb 1984) (Fig. 2.1).

We can define experiential learning as a process in which learners are encouraged to fathom their actions, reactions, observations, and perceptions of a particular situation. This can be accomplished by the participants by directly sharing any of their experiences or by taking part in role plays (related to some facts, incidents, etc.) so that the other members can assimilate the situation in detail and improve their appropriate competence. Kolb (2008) construed Experiential Learning as a

Fig. 2.1 The learning cycle
(Kolb 1984)



multidisciplinary approach based on management, education, and psychology, and involving a comprehensive course of action built on experience. Experiential Learning is mostly implemented in management education which is inclusive of areas like talent management, leadership performance, competence development, change management, volunteering, cross-cultural training, and entrepreneurship that is perceived to be effective in the support of training and education. Experiential Learning enables an individual to analyze and observe various approaches applied in diverse situations, both indoors and outdoors. David Kolb's (1984) Learning Cycle emphasizes that people remember better when they learn and understand through experience and react to situations better.

Individuals in an organization are divided into groups based on an objective or an assignment that has to be completed. Lissack (1999) and Olsson (2006) are of the opinion that these individuals are the basic component of organizations and that the organizations portray the relationships that the individuals have within and among the subsystems. Hence, we can conclude that individuals learn better when they get the opportunity to experience new and different methods of performing activities (Argyris 2003).

Kolb (1984) explains that individuals grow in life in three phases, namely, acquisition, specialization, and integration. Generally individuals gain elementary competence, knowledge, and intelligence from their birth to adolescence. This phase is called *Acquisition phase*. *Specialization phase* includes formal education, industry/career training, and the wisdom gained as a result of personal and professional experiences in the early stages of adulthood. The outcome of individual experiences, the differences in social expectations, the requirements for personal accomplishments, and the ability to identify self-as-object results in the final phase, called the *Integration phase*. Kolb goes on to say that more often than not, people who confront harsh incidents, for example loss of a loved one or a job, are the ones who reach the Integration phase.

Brewer and Hewstone (2003) advocate that an individual's attitude is predominantly based on the social and circumstantial occurrences they come across at different walks of their personal or professional life. Experiential learning theory is established on the fundamental concept of effective, straightforward, and personal experiences (Schön 1983; Kolb 1984; Corbett 2005). Kolb (1984) says that it can be defined as a "cyclical process where individuals move back and forth between opposing modes of reflection versus action, and feeling versus thinking."

Oxendine et al. (2004) have deduced that the cyclic process of experiential learning includes the following steps—planning, setting goals, and thinking to actual experimentation, observation, and a careful review of the results. By following these steps, the learner will cultivate intellectual, psychological, and tangible expertise which will strengthen his learning experience, boost his morale, and facilitate him to apply his learnings in real-world problem-solving. According to Kolb et al. (2001), Experiential Learning Theory (ELT) administers a complete, comprehensive method of learning to indicate how people learn, grow and develop, and accentuates the importance of experience in the course of learning.

Experiential learning model – the process of perception and experiential learning

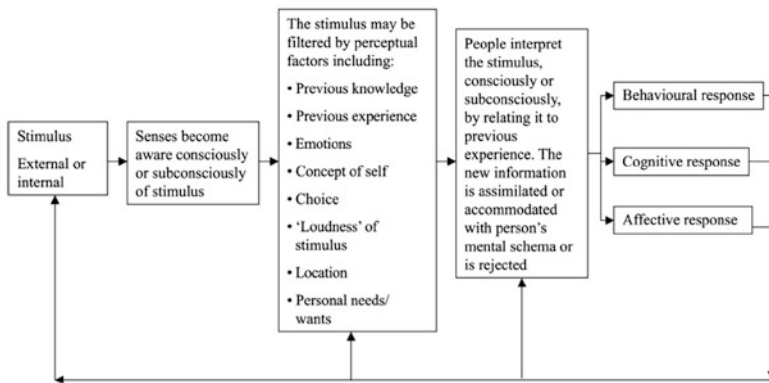


Fig. 2.2 The experiential learning model (*source* The learning combination lock—an experiential approach to learning design)

The figure below represents an experiential learning model which is based on Gibson et al. (1985) perception process model and Massaro and Cowan's (1993) information processing models. The model has five predominant components (from left to right): (1) stimuli (2) our senses (3) the filtering process (4) interpretation (5) response(s) (Fig. 2.2).

Learning is essential for co-creation. A culture of creative thinking, learning from concrete experiences, reflective observation, abstract conceptualization, and active experimentation needs to be strengthened. Leaders need to be sensitive to the individual differences in learning and problem-solving. Research clearly demonstrates that co-creation can be analyzed systematically using appropriate learning theories and built to develop capacity for co-creation.

2.3 Andragogy and Pedagogy

In 1980s, few researchers began to notice the differences between school learning and workplace learning (Resnick 1987). School learning, traditionally *pedagogy* is formal, and is separated from the context in which the knowledge and skills are to be used without any practical experience. In contrast learning at work is, mostly informal and incidental (Eraut et al. 1998; Marsick and Watkins 1990) and is in the context of use and application. It is in a concretely embedded in everyday problem-solving (Billett 2002; Brown and Duguid 2001; Eraut et al. 2002; Gherardi 2001). In workplace learning, experience is a key dynamic, as adults are focused more on the process rather than the content being taught and this conceptual framework is termed as *Andragogy* (Taylor and Kroth 2009a).

Workplace learning can be categorized into the following types (Päivi Tynjälä and Päivi Häkkinen 2005):

- Learning that occurs as a consequence of work or incidental and informal learning (Eraut et al. 1998; Marsick and Watkins 1990).
- Learning that occurs through guiding, voluntary implementation, and usage of certain skills and tools, etc., or intentional, but non-formal learning.
- Formal on-the-job and off-the-job training.

This learning takes place at all levels irrespective of the rank or position (trainee, expert, subordinate, etc.) of the learner and the position affects only the content that is learnt.

Andragogy allows individuals to make use of all sources of knowledge and insights, including intuition, artistic experience, introspection, analytical case histories, action-research and controlled experimentation (Knowles 1973b, p. 40). According to Knowles (1973b, pp. 45–46), trainers need to adjust the learning experiences based on the characteristics of the learners. An andragogical approach works best when individuals

- Shift from being dependent to self-directed;
- Gather experiences that serve as learning resource;
- Orient learning to a social role development;
- Change their motivation to apply knowledge from a subject-centered to a performance-centered outlook.

2.4 Action Learning

According to Everon C. Chenhall and Thomas J. Chermack, Action is the heart of any action learning model, process, intervention, or project. It also acts as a medium through which learning happens. In the learning process, the goal should be self-directed learning rather than just teaching. In the case of adult learners, they have the power and capacity to embrace self-enrichment. Their experiences in everyday life benefit substantially from doing andragogical learning—a behavioral process. The trainer’s role is to provide structure so that learners can plan their own learning. This transitional approach is consistent with Shank’s (2005) argument that people learn by doing, and self-discovery serves as a catalyst for people to grow intellectually. It is essential for the trainers to share responsibility and authority with learners.

Adult learning, aims to benefit both personal development and organizational learning processes, and is organized in flexible ways. Its theories emphasize on personal reflection on the learner’s experiences. For example, Schön (1983, 1987) describes the significance of reflection-in-action and reflection-on-action for learning. Similarly, Kolb (1984) in the experiential learning model talks about the

reflection on experience as one key element in the learning cycle, in addition to abstraction and experimentation. Mezirow (1991) introduced the concept of transformative learning. It is a process in which a learner challenges and questions his or her existing assumptions and through critical reflection creates new meanings and new assumptions (Päivi Tynjälä and Päivi Häkkinen 2005).

Action learning has also become one of the most widely used instructional methods for management development in both public and private organizations (Boaden 2006). The growth of action learning is attributable to the notion that participants' best learn new behaviors and problem-solving skills through real-world issues (Bowerman 2003, p. 333; Conger and Toegel 2002). Action learning has a variety of contexts and applications. For example, Mellon Financial Services used an action learning program to overcome resistance to change due to organizational restructuring (Siranni and Frey 2001). General Electric used action learning to train business strategists to more effectively penetrate international markets (Day 2000). A Korean manufacturing company, Sunkyoung Group (SK), used action learning to promote cross-functional learning and to develop cross-cultural competencies among global leaders (Boshyk 2002).

Today, organizations have also started to adopt action learning as a human resource development intervention to be used in combination with other organizational interventions for "organization development, management development, team building, and transformative learning" (Dilworth 1998, p. 29). In fact, action learning has been applied in a wide variety of contexts, that includes: "education, andragogy, management/executive development, hi-potential development, OD, knowledge management, learning organization, competencies, teams, unions, leadership, open space research conference, quality, and communities of practice" (Smith and O'Neil 2003).

The action learning approach developed by Revans is crucial to examine learning cycle. This approach facilitates people and organizations to change by developing a social approach to learning. It is an effective learning process that helps participants in finding a satisfactory answer to difficult unsolved problems. In action learning, participants typically work in small groups where they meet regularly to solve the issues encountered by them. They analyze, develop solutions, choose the most appropriate one, and implement their recommendations. Throughout the process, learning and task achievement go hand in hand.

Action learning is an approach pioneered by Revans. According to him, learning can be witnessed only through some form of noticeable change in behavior. Change is essentially a process involving learning and action. Without learning there can be no action; without action there can be no proof of learning.

Action learning is primarily a way of managing change through a learning process. Learning consists of programmed instruction and questioning insight ($L = P + Q$). Under conditions of stability and slow change, P is necessary and sufficient. Under conditions of rapid change, uncertainty renders the tradition of proven techniques necessary but insufficient. Q is the recognition of our ignorance.

The concept of action learning is actually a syndrome of four primary activities which, when performed effectively, enhance and expand each other to create a

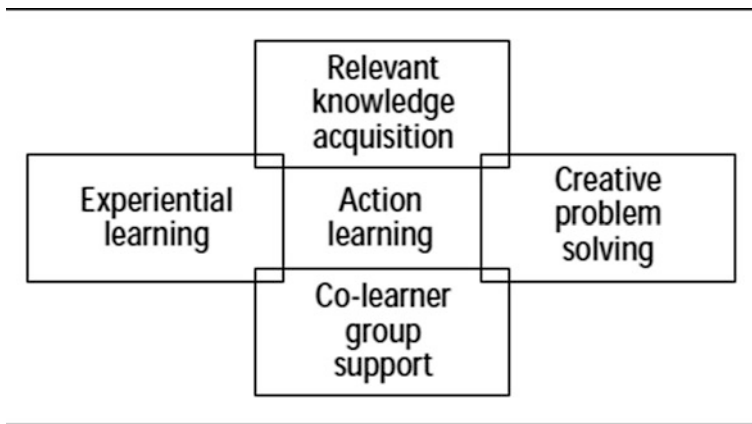


Fig. 2.3 The syndrome of action learning (*source* Action learning revisited)

context for creative decision making in uncertain situations. This results in the learner feeling more confident of an effective outcome (A syndrome may be thought of as meaning, “a number of things which flow together,” from ‘syn’ = together, and ‘drome’ = to run or flow). The activities comprising the syndrome of action learning (see Fig. 2.3) are

- Experiential learning;
- Creative problem-solving;
- Acquisition of relevant knowledge;
- Co-learner group support;
- Pegasus Facilitators facilitate the ‘Learning Syndrome’.

2.5 Outward-Bound Learning Methodology (OBL)

OBL is one of the oldest learning methodologies. OBL programs today have become a popular technique for training participants by directly involving them in the training process.

OBL programs offer training in a simulated and motivated environment. The framework of these programs create a series of intense, life-like experiences, and simulations that involve participants by enabling them to explore their mental and physical capacities, which have perhaps been eroded over the years. OBL programs are therefore known to bring out major turn-around in people’s lives.

Outward Bound programs are based on a “development-by-challenge” viewpoint as articulated by its founder, Dr. Kurt Hahn. He highlighted that Outward Bound was all about training the mind through the body. Hahn attempted to provide the youth with challenging experiences in a supportive educational set-up so that each individual would develop inner strength, character and determination. The

educational medium was often physical, but the desired effect was very much psychological and social.

Outward Bound, the first modern adventure education program, has attracted an interesting variety of philosophers, researchers, and innovative educators. This has led to considerable development of Outward Bound philosophy and theory. It has become the foundation in the field of adventure education and outdoor education. Outward Bound philosophy and theory has produced (and continues to produce) a wide variety of educational experiments. It remains an important pillar in the development of modern day outdoor education (James Neill 2004).

2.6 Living Labs

A living lab is a research concept. It is a user-centered ecosystem, often operating in a territorial context (e.g., city, agglomeration, and region), integrating concurrent research and innovation processes within a public–private–people partnership.

A living lab is a real-life test and experimentation environment where users and producers co-create innovations in a trusted open ecosystem that enables business innovations.

According to the literature (e.g., Mele et al. 2009), companies enter open innovation networks to create, acquire, and integrate diverse knowledge, resources, and skills required to innovate products, services, and technologies. One of the most recently emerged and rapidly growing open innovation networks is the living labs model.

Living labs are distinct open innovation networks characterized as experimentation environments (Ballon et al. 2005) and co-creation ecosystems for human-centric research and innovation (Mensik and Katzy 2007). They are physical regions or virtual realities where stakeholders form public-private-people partnerships (4Ps) of firms, public agencies, universities, institutes, and users all collaborating for creation, prototyping, validating, and testing of new technologies, services, products, and systems in real-life contexts. The benefits of open innovation include improved user value (Almirall and Casadesus-Masanell 2010) and innovation performance (Chiaroni et al. 2011). In addition, user-driven innovation costs can be significantly lower than producer-driven innovation costs (Von Hippel 2007). Nevertheless, the literature is silent on how the benefits of open innovation development can be realized.

It is expensive, as well as difficult, for businesses to understand their customers. It is becoming a challenge to develop products that meet hyper-differentiated consumer demands. People today live in an ever-shifting world of networks, redefining their lifestyles and fragmenting culture (Arakji and Lang 2007). Many companies no longer attempt to grasp the details of consumer needs and use experiences. Instead, they reassign the design aspect of product development to external sources of ideas, such as their customers who can help with innovation and create new ideas and value (Edvarsson et al. 2010).

Codevelopment is essentially about co-opting customers' competence and bringing the customer into the innovation process and design shop (Edvarsson et al. 2010). It enables a company to understand customers' actual behavior, needs, and future trends in a better and cheaper manner.

Although the three terms – co-development, co-production and co-creation appear to be similar in their semantics, they bear conceptual differences. Co-development is a process, and co-creation can be seen as the end result of this process whereas co-production forms the action oriented leg of the process.

There are several ways to define living lab networks. We draw on the ARA-model (Håkansson and Snehota 2006) that distinguishes between actors (providers, users/customers, brokers, mediators, and specialized intermediaries), resources, and activities in networks.

Westerlund and Leminen (2011) take an actor perspective and argue that living labs are physical regions or virtual realities where stakeholders from public–private–people partnerships of firms, public agencies, universities, institutes, and users aiming at innovation co-creation.

Schuurman et al. (2011) use the activity perspective to explain that in living labs, new solutions are evaluated by users by experiencing and experimenting in a real-world context and within a familiar usage context. This allows for research into the usage context of the possible discovery of unexpected technology uses and new service opportunities, and the technical testing of the innovation in a realistic context.

Almirall and Wareham (2008) emphasize the resource perspective and identify living labs as a way to organize and structure user participation in real-life environments. They are seen as resources that enable an organized codevelopment.

The living labs model is driven by two principles

- (i) Involvement of users as co-creators on equal grounds with the rest of participants; and
- (ii) Experimentation in real-world settings (Almirall and Wareham 2008).

Users contribute to living labs by expressing their needs and usage experiences (Schuurman et al. 2011) and by shaping the innovation together with the producer and other participants.

Living labs can be categorized as (i) utilizer-driven, (ii) enabler-driven, (iii) provider-driven, and (iv) user-driven (Leminen and Westerlund 2008). They are different from each other in terms of activities, structure, and organization.

For organizations to succeed in innovation co-creation, strategic intention is essential. A high level of strategic plan challenges the participants to exceed their current limits. However, success in open innovation-based development work also requires passion, which guides the participants' actions and efforts. Passion for collaborating is somewhat analogous to team spirit in sports. In addition, open innovation work should employ a fair number of participants. While more participants enable a multitude of suggestions, ideas, and views, too many participants cause problems for organizing and coordinating the collaboration work. Improving

participants' knowledge and skills increase the possibility for success in innovation co-creation. However, the challenge is that increased knowledge and skills may increase the required strategic intention beyond many participants' competence levels. Again, this is analogous with sports: a top player in a team can challenge everyone in the team to reach or even exceed their limits, if they share the same strategic intention and passion. To ensure the success of innovation through living lab networks, the other resources that support the operation need to be sufficiently available.

The above learning methodologies are critical in the enhancement of the effectiveness of co-creation where the involved people have to learn in their own way, new methods, practices of thinking, articulating, and documenting their thoughts and ideas and creating new products and processes. The third and the final part of this book illustrates how an institute focused on learning methodologies created new approaches in learning. Each of these case studies highlights the concerns of both the parties and brings about some of the issues related to co-creation.



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Concepts and Cases

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