## **Experiential Learning and its Efficacy in Management Education**

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#### **Abstract**

The application of experiential learning pedagogy has been on the rise in Business School curricula across the globe. Plenty of studies have been conducted to assess the efficacy of this pedagogy to generate greater understanding of the concepts of management. However, these studies are primarily focused on either the behavioral learning aspects or capture the concepts from specific course specializations, whether finance or marketing or operations or strategy. This paper attempts to conduct an exhaustive literature survey, beyond the functional silos in which management is taught, in order to examine the usage and utility of this pedagogy in a holistic perspective. The aim is to identify the utility of this pedagogy for delivering effective learning in the field of management.

*Design/Methodology/Approach:* This paper is based on an exhaustive literature review. Firstly, studies using David Kolb's experiential learning model are examined. This is followed by a review of the studies highlighting impact of Experiential Learning in different management disciplines. The paper ends with consolidation of the findings and suggestions for future work.

*Originality:* The paper intends to identify the efficacy of Experiential Learning methodology across different management disciplines (rather than being confined to one), thus providing a comprehensive understanding of its utility across the domain of management.

Paper Type: Literature Review

Keywords: Experiential Learning, Curriculum, Pedagogy, B-School

### Introduction

Over the last seventy years, the world has moved from being an industrial society to a knowledge society (Mathrani, 2018). No wonder, the role of Higher Education institutes in general and B-Schools in particular, has increased manifold over the years. At this stage a key question which deserves attention is regarding the role of B-Schools in the context of the current knowledge society.

Dean Donham (Bridgman, Cummings, 2016) while outlining his vision for Harvard Business School (HBS), stated that the aim of HBS is to ... give the student training in handling business problems. He further went on to elucidate that such an endeavor would require practice in (1) ascertaining facts; (2) appraising and sorting them; (3) stating business problems in a business way; (4) analyzing business problems; (5) reaching definite conclusions; (6) and presenting them both orally and in writing.



B-Schools are under increasing pressure (both from rating agencies and from corporate sector), to improve their efficiency and prepare their students more effectively. Their dissatisfaction stems from the fact that the extent of relevant transferable skills students bring to the workplace are inadequate to meet the job requirements. Casey (1993) further shares that while the understanding of theory may be important, it is merely a means to the end rather than an end in itself. No wonder, many researchers have advocated active learning techniques (Craciun and Corrigan, 2010; Karns, 2005) to enable students to develop the needed competencies.

The primarily goal of Business Education is to train future business leaders capable to take decisions based on the knowledge and skills which they imbibe and acquire in the course of their MBA education. This challenge is further compounded by the changing nature of jobs and skill-sets required-as indicated by the latest World Economic Forumreport (2019). There are a growing number of Business School critiques, some of whom reject the focus on leadership (Mintzberg, 2004). Some others point towards excessive focus on abstract, analytical models which don't prepare students for future work (Datar, Garvin et al 2010; Rubin, Dierdorff, 2009). Yet some other researchers blame business schools for churning out graduates who are ill-prepared to lead (Bennis and O'Toole, 2005). Bhandarker (2008) empirically brings out that although websites of many management schools declare that they are developing leaders, in practice B School education has little impact on the development of emotional competencies ( a core characteristic of good leaders) which are relevant to shaping effective leaders.

The "Future of Jobs" report by World Economic Forum report (2016) outlines that, "Most jobs are undergoing a fundamental transformation. While some jobs are threatened by redundancy and others

grow rapidly, existing jobs are also going through a change in the skill sets required to do them". The report further highlights, "This need for more talent in certain job categories is accompanied by high skills instability across all jobs categories. Combined together, net job growth and skills instability result in most businesses currently facing major recruitment challenges and talent shortages".

Business education cannot be restricted to Classroom learning as learning happens equally outside the classrooms as well and efforts need to be made to enable students to create off class room experiences to help them learn many skills. The dominant focus of Business Education is Decision Making, hence merely knowing the theoretical concepts is not going to be adequate to develop future leaders. Effective transformation of a student into a potential Business Leader, can happen only when there is scope to not only acquire knowledge, but also develop the needed skills and competencies (both in class and outside class) and apply the same for effective decision-making and problem solving.

The expectations of employers from management graduates further makes the task challenging for educators. In the highly competitive market where a large number of management graduates are being churned out (at least in India), the availability of trained managerial manpower which is 'Job ready 'is the challenge. This is because, in their eternal quest to cut costs, companies want to spend less and less on preparing new joinees for their new roles. It is well known that in the uncertain economic context, companies tend to reduce all training within companies and more so for newly hired college graduates (Kelley and Bridges, 2005). Indian companies tend to expect the graduates to be job ready and hit the ground running (Bhandarker 2008). In fact, many expect new recruits to learn on the job (Bhandarker 2008). Although it is debatable whether all requisite competencies can be imparted in management schools without close support of corporate sector, nevertheless, the expectation increases the responsibilities of educators to develop requisite skills among graduates.

Multiple models of teaching management skills have been empirically supported (Teach and Govahi, 1993). The NCHL report (2006) compiles an exhaustive list of the skills and competencies and divides them into 'Lower' and 'Higher' Learning and Teaching methods. These were presented thus as:

## 1) Lower Order Teaching and Learning Methods:

Readings, Lectures without Media, Lectures with Media, Guest Speakers, Online discussion, Class discussion, Web-based modules.

## 2) Higher Order Teaching and Learning Methods:

In-class presentations, Cases, Team activities, Simulation Exercises, External field experiences, Strategic/Consulting Projects, Reflective Learning.

Bloom's taxonomy (1956) outlined three forms of learning.

- Cognitive: Ranging from factual learning to complex skills like decision-making and evaluation.
- Affective: Improvement in feelings or emotional areas.
- · **Psychomotor:** Manual or physical skills.

Each of the teaching and learning methods have their own pros and cons. E.g. Lecturing (Miner et al, 1984) may be an effective tool to transfer information in a relatively shorter time span, but retention by the recipients is less in the long run (Van Eynde and Spencer, 1988). Besides, with the proliferation of information sources on the net and information being available on 'tap', this form of teaching is bound to become gradually redundant. In addition, the steep fall in span of attention among Gen Y and Gen Z (no doubt related to their symbiotic relationship with computers and mobile phones), teaching by lecturing, may not even register in the minds of the student. (Mathrani, 2018).

Critics have pointed to the limitations of even the 'higher' teaching and learning methods like Casestudy, wherein the students are expected to use a constructed scenario (and not their own experience) as the basis for drawing conclusions (Argyris, 1980). The quintessential participantcentered learning technique in the business school universe has been the case method, first developed to bridge traditional disciplinary knowledge with day-to-day managerial needs (Roethlisberger, 1977). One difficulty in participant-centered learning techniques in general and the case method in particular is that case studies usually are written with emphasis on a particular functional area, sector, or phenomenon in mind and therefore they may tend to focus on "one or few of the parts" as opposed to the "whole". McCarthy et al (2006) also emphasized the limitation of Case-studies as an effective pedagogical tool.

This is where Experiential Learning Exercises play a critical role in enhancing the opportunity for more holistic student learning experience. Primarily modeled around "Learning by Doing"-they demand rigorous engagement and involvement on the part of students and in turn facilitate decision making in a 'real life' simulated



environment. Using Experiential Learning activities also increases the critical thinking skills among students so that they can evaluate and appreciate opposing viewpoints and thereby develop decision making capabilities. Experiential Learning places students in a so called 'actual' environment (through simulation) and the students are engaged in the activity directly. No wonder, Experiential Learning has become a popular teaching mode(Bhattacharya and Sheth, 1996; Gaidis and Andrews, 1990; Morgan and McCabe, 2012; Titus and Petroshius, 1993). The major advantage of experiential learning lies in the fact that it takes students beyond conceptual learning and makes them learn by doing, and in turn also facilitates the shift from idea focus to action focus (Bhandarker, 2008).

As students become increasingly choosy about the job profile they would like to go for after graduation, ensuring the selection of the right Career path is also getting increasingly important. In this context, it would be relevant to remember the warning of Gelatt (1962) that inadequate career information in Career Decision-Making is likely to end with the decision not to decide. In recent times, many higher education institutions have integrated learning by doing experiential methods of teaching-learning into their curricula to enhance the learning outcome of their programs (Aldas et al, 2010). The Wharton Leadership Trek and their training program at the US Navy Seals compound for their Leadership courses, are an example in this regard.

Experiential learning techniques seem to be expanding, as exemplified by analogically situated experiential techniques that involve the immersion of participants in simulated environments that are designed with participant's work context in mind (Houde, 2007). The main objective of experiential learning is to provide students with the skills to ask the right questions: learning how to ask questions

effectively means having learned how to learn (Postman & Weingartner, 1969).

The pioneering work of Bandura in the field of Self-Efficacy (1977, 1986, 1991) forms a strong pillar of support and the paper further outlines the efficacy of Experiential Learning tools in present day Management Education. The belief of self-efficacy is the most central mechanism of human agency and thus regulates human functioning through cognitive, motivational, affective and decisional processes (Bandura, 1997), in turn facilitating learning process.

## Literature Review

We commence the literature review by focusing on the role of learning and organizational sustainability. There is no doubt that learning organizations are the ones which are most sustainable through the ups and downs caused by technological and social disruptions. Rapidly changing environments need flexible and adaptable organizations capable of absorbing the changes and making the requisite shifts themselves. In order to do this, organizations need to have the capacity to unlearn and relearn.

Learning organizations are characterized by the five disciplines of "Personal Mastery, Mental Models, Building shared Vision, Team Learning, and Systems Thinking" (Peter Senge, 1990). However, learning starts with individual learning and "a learning organization is focused on learning process of individuals in the organization" (Wang and Ahmed, 2003:9). Senge's learning disciplines are also linked to theories of adult learning as individuals.

Adult learning theories can be divided into two categories: Cognitivist and Constructivist. Cognitivism refers to learning as internal meaningmaking process, which depends on knowledge

structures of an adult (Fasokun et al 2005; Merriam & Caffarella, 1991). Constructivism, however refers to learning as more of a reflective process of personal interpretation of experience (Wertsch & Tulviste, 1996). Experiential Learning falls under the Constructivism theory and this paper tries to study more about it in coming sections.

The literature review and discussion is divided into two parts:

- 1) Part 1 deals with definition of Experiential Learning, relevance of Kolb's model of Experiential Learning, its criticism and application in effective learning.
- 2) Part 2 deals with the efficacy of Experiential Learning in various disciplines of Management (Strategy, Marketing, Finance, Operations and Leadership).

## Part 1: Experiential Learning

The Oxford Dictionary describes experience as-"The fact of being consciously the subject of a state or condition; of being consciously affected by an event; a state or condition viewed subjectively; an event by which one is affected; and, knowledge resulting from actual observation or from what one has undergone." (Beard and Wilson, 2006). The definitions provided in the Oxford Dictionary "connect both the action and the thinking or sensing about the action." (Beard and Wilson, 2005, Page No 15).

The simplest definition of Experiential Learning is "Experiential Learning is learning by doing" (Greene, 2011). The same essence is also captured in the often cited quotation of Confucious "I hear and I forget, I see and I remember, I do and I understand" which stresses on "hands-on experience" in the learning process. Gentry defines Experiential Learning strategy as "combining the

learning from the "real-world situation with the necessary condition of the application of concepts, ideas, and theories to the interactive setting" (1990, Page 9). Hawtrey (2007) also called Experiential Learning as situational learning.

Yeo and Gold in their 2011 study referred to the contribution of Russian philosopher Mikhail Mikhailovich Bakhtin as the starting point, where the latter talked about Experiential Learning as a continuous series of acts or events which create experience, the key theme across all works being "the values and meanings that most directly shape our lives emerge from the existential demands of daily living and our immediate interpersonal relationships". This perspective points towards learning as a process of tool acquisition which occurs in the dialogic dynamic linked to a response from others, ourselves, or "Otherness".

Dewey (1938) defined experience as an individual's interaction with his/ her external environment. Based on this and other pioneering works by Jean Piaget (1976), Kolb (1984) defined Experiential Learning as "the process whereby knowledge is created through the transformation of experience." Kolb & Kolb (2005) were of the view that having an experience per se, without doing anything about it is not sufficient for learning to occur. They then propagated the well-known four step process (Experiencing, Reflecting, Thinking and Acting) known as Experiential Learning Theory (ELT), which the learner must undergo in order to transform an experience into learning. Till date, ELT theory (Kolb, 1984) is considered the most relevanttheory and has received widespread acceptance in the Management Development literature (Kayes 2002; Kayes, et al, 2005a, b; Kolb & Kolb, 2005; Yamakazi and Kayes, 2004).

This part is divided into 3 sections:

A.1 Kolb's Experiential Learning Model,



A.2 Criticism of Kolb's Experiential Learning Model,

A.3 Adaptation and Application of Kolb's Experiential Learning Model.

## A.1 Kolb's Experiential Learning Model

The model of Experiential Learning by Kolb is based on three important aspects:

- Importance of Experience in Learning (Dewey 1938)
- Relevance of Active Participatory Learning (Lewin 1951)
- Conceptualizing Intelligence as result of individual interaction with the environment (Piaget 1970)

As per Sugarman (1985, p264) the heart of Kolb's Experiential Learning is "a simple description of how experience is translated into concepts which can be used to guide the choice of new experiences"

Kolb Experiential Learning Model describes the Experiential Learning as four interdependent processes namely

- 1. Concrete Experience (CE)
- 2. Observation and Reflection (RO)
- 3. Formation of Abstract Concepts (AC)
- 4. Generalization of Abstract Concepts and testing its application to new situations. (AE)

Kolb (1984) considers learning as a process whereby knowledge is created through transformation of experience, requiring interaction rather than one-way communication for learning to occur. This definition rests on six basic assumptions: Learning is a process, not an outcome; derives from experience; requires an individual to resolve dialectically opposite demands of grasping and transmitting experience; is holistic and integrative; requires interaction between person and his involvement; and results in knowledge creation (Kayes, 2002; Kolb, 1984). Kolb's Experiential Learning Model further suggests that people learn in primarily four ways: affectively, perceptually, symbolically, and behaviorally.

Table 1 given below summarizes the four processes, various abilities as well as skill development associated with each of the processes.

Table 1: Processes, Abilities and Skill Development associated with Kolb's Experiential Learning Model

Process	Expected Participant Behavior	Innate abilities required	Skill Development
Concrete Experience	Immersing in the immediacy of the environment	Intuitive and Affective Responses to the situation	Affective (Sensing-Feeling)
Reflection Observation	Tentative and Impartial Perspective towards Learning Situation	Willingness to patiently consider many possible alternatives	Perceptual (Observing)
Abstract Conceptualization	Remaining focused and avoiding distractions	Logical Thinking and Rational Evaluation	Symbolic (Thinking)
Active Experimentation	Willingness to experiment and thinking beyond the obvious	Action orientation and risk-taking behavior	Behavioral (Acting)



As table 1 indicates, the learning process begins with the participant first undergoing a concrete experience which becomes the basis for Observations and Reflections. These observations and reflections are mulled over, to arrive at a concept or theory, and then these concepts or theories can be further tested to generalize them and serve as the guides for creating new experiences, and the entire cycle starts afresh. In the last stage, the realization of a concept or subconscious theorization after being immersed in an experience, is the learning constructed by the person based on his or her concrete experiences. This is subsequently transferred and applied across situations.

## A.2 Criticism of Kolb's Experiential Learning Model:

Kolb's Experiential Learning Method has also come under criticism from various Research scholars. The criticism ranges from questioning the premise on which it was based, moving on to designing and acceptance of constructs and going on to question its Generalizability and effectiveness.

Stumpf and Freedman (1981) in their paper "Learning Style Inventory (LSI): Less than Meets the Eye" questioned the empirical evidence when they claimed that "empirical evidence supporting learning style theory and the LSI has come from a single piece of unpublished research." The paper went ahead to question the utility and reliability of Learning Style Inventory as also about the forcedchoice ranking format of the LSI. The same was rebutted point by point by Kolb (1981) in his Academy of Management Review article, wherein he however conceded the caution against mindless usage of psychological tests with participants. The subsequent article by Stumpf and Freedman (1981) titled "Learning Style Inventory (LSI): Still less than Meets the Eye" further talks about some questions which were left unanswered namely Generalizability of LSI as any Experiential Learning theory, and the low value of co-relation coefficients which were used to support the studies.

Kayes (2002) outlined the criticism of LSI and Kolb's work and proposes the movement forward in a fluid manner when he refers to both levels of criticism: empirical (Freedman & Stumpf, 1980) and theoretical reasons (Holman et al 1997; Vince, 1998). He further shares that there have been suitable replies to various critics as well (Holman et al, 1997; Van Maanen, 1995). He further outlines its implications for management education and advises to look at some of the other models in parallel. Some of the models proposed are K-Schema (Kayes, 2002)-a more precise conceptualization between Personal and Social knowledge, Experiential learning approaches to Org Behavior (Osland, Kolb et al, 2001), writing of life stories (Boyatzis et al, 1996), parts of speech model (Fisher, Rooke et al, 2000).

# **A.3 Adaptation and Application of Kolb's Experiential Learning Model**

Sugarman (1985) noted that the scope of Kolb's work is wide and its flexibility allows its usage in diverse fields, especially in situations where process is equally important as product. Kolb's theory of Experiential Learning has been adapted and applied as a process model in various streams and training assignments. What is also worth noting is the fact that the application has not been restricted to only Management domain but also in fields such as Accounts and Medicine. Atkinson and Murell (1988) applied Experiential Learning Theory to design a meta-model for Career Exploration. Abbey et al (1985) used Kolb's theory to understand and describe the process of counseling and supervision. Murell and Claxton (1987) also used the fundamentals of Kolb's theory



to design effective counselor courses. Devasagyam, Masten et al (2012) used the fundamentals of this theory to explore Pedagogical possibilities in Business Education. Gray et al (1977) used this theory to develop a systematic and contingency-based approach to management education. Cannice (2013) used Kolb's learning theory as the platform to explain the fundamentals of how the markets operate and strategic insights to keep oneself relevant there. Matuso (2012) used the theoretical foundation of Kolb's theory to understand the role of Sales belief in Japanese Sales People. Knotts (2011) used this model to design an effective Entrepreneurship development module. Myers (2010) has applied this theory to understand and explain the Consumer Behavior. Crossman (2010) used this theory to effectively develop International and Cultural Leadership. Greene (2011) has used Kolb's theory as the foundation to effectively design the freshmen Marketing Courses. McCarthy (2010) used this theory to design an effective pedagogical tool for accounting students. Ng et al. (2009) used this model to propose a process model to design learning outcomes critical for global leadership development. Armstrong and Mahmud (2008) used this model understand the acquisition of Managerial Tacit Knowledge. Kouji, et al (2010) used this theoretical framework to design an effective organizational learning method. Saunders (1997) adapted this theory to the field of Business Communication. McCarthy and McCarthy (2006) used this theory to design effective pedagogical tools for Business School curriculum. Hunt and Laverie (2004) used this model to emphasize upon importance of ethics in Marketing.

#### **B. BUSINESS EDUCATION**

Business Education comprises of functional domains, notable among them being Finance, Marketing, Strategy, Operations and Leadership. Experiential Learning methods have been used across these domains. This section of the paper presents the literature review of effectiveness of Experiential Learning on these management disciplines below. It examines the literature on the use of experiential learning tools in the following domains:

- B1. Strategy,
- B2. Marketing,
- B3. Finance,
- B4. Operations,
- B 5. Leadership.

## **B.1 STRATEGY:**

To be a successful manager and business leader, one must have great understanding of the Strategic Underpinnings of Business. On the one hand, one needs to assess the scope and rules of operating environment, on the other: he/she has to also work on the effective utilization of limited resources for optimal gain. The interim and final goals need to be set to give a definite direction to the organization, while anticipating and keeping an eye on the moves of the competitor. At the same time, the core competency of the organization needs to be protected at all the costs, while one needs to be ready to sacrifice resources to attain higher objectives. Environmental scanning has to be sharp, opportunities have to be sense and leveraged and first mover advantage needs to be encashed upon. As the world experiences disruptions and uncertainties because of environmental shifts and business uncertainty seems to be at its peak, training future leaders on handling such situations seems to be ever more important. Leadership and Strategic competency is therefore no more the domain of Senior Leadership alone, but an essential requirement from all levels of managers. While awareness regarding many Strategic Management concepts and theories can be providedthrough lecture methods, to ensure that Business students internalize and master these

principles, alternative pedagogical methods need to be used. In this context, Kolb's Experiential Learning method with its incorporation of Experience, Reflection and Conceptualization comes across as a strong tool.

Cannice (2013) illustrated the explanation of above mentioned Strategic Management principles using Kolb's Experiential Method. Over here, the entire gamut of concepts was experienced, reflected and conceptualized using chess as an activity. For a feedback survey conducted among his students for this exercise, he got a score of 4.37 and 4.29 (out of 5) respectively for undergraduate and MBA students respectively for the statement "The Simulation helped me learn about some Strategic Management Issues" and 4.14 and 4.0 (out of 5) respectively for undergraduate and MBA students respectively for the statement "The Simulation helped me gain a deeper understanding of Strategic Management Issues I was already aware of".

The other Strategic Management challenge is the blurring of international boundaries, with organizations having presence across the globe. What this also brings with it is the diverse working environment. Misra and McMohan (2006, page 43) were referring to this phenomenon when they stated, "In order to prepare the Business Students for the workplace of tomorrow, it is essential for the entire student body to be exposed to a diversity of ideas and people." This is another area where Kolb's Experiential Learning model can play a significant role, as experiential approaches build on long standing concepts of student-centered learning, seeking to provide learning through experience and engaging students far better than traditional lectures (Frontczak, 2000; Gremler et al, 2000; Karns, 2005).

**B. 2 Marketing:** Gone are the days of Henry Ford, when he *claimed "The customer can have a car* 

painted any color that he wants, so long as it is black". The early 1950s saw the rise of Marketing as a domain, which is a marked departure from earlier Production or product concepts. meant that the product or services now need to be designed as per the customer expectations and feedback and merely developing a product in large quantities is no longer a guarantee to its success. This also indicates the increased importance of continuous information exchange between the firms and the consumers. To understand the dynamics of the applications of Marketing Concepts in real life, class-room teaching alone can't suffice, and hence here also, Experiential Learning plays an important role. What makes the interactive pedagogical methods further relevant is the impact of culture and sub-culture in consumer decision making, which is best understood when experienced while interacting with others.

Titus and Petroshius (1993) carried out a landmark study assessing the learning outcomes of an Undergraduate Consumer Behavior course with an experiential project wherein the learning expectations of the students from the course included developing analytical skills as well as relating marketing concepts to real-world application. Geringer et al (2009) after using a similar pedagogy state that Service Project Learning outcomes showed enhancements in the students' knowledge, skills and attitudes.

Myers (2010) emphasizes the limitations of instructor paradigm of lecture-based instruction for Consumer Behavior course especially when talking about Consumer Decision-Making methods. The paper further shares an Experiential Learning activity intended to illustrate the five-stage model of Decision Making starting from Information Search and culminating with Post Purchase evaluation (developed around Babin and Harris text, 2008). The paper further shares that the response from the students was overwhelmingly



positive, as it transformed "Just another set of steps to memorize" into "Something relevant to daily life". The paper concludes by sharing that Business Education is, at its root, vocational education, and as such the instructors should prepare students for the challenges they will face in their future roles and emphasizes the role played by Experiential Learning methods in actually forcing the students to think.

Laura Serviere-Munoz (2010) also conducted an Experiential Learning exercise wherein the focus was on exposing the students to real-world scenarios and asking them to take decisions as they would in real Business situations. This also intended to cover the reality which the business students face- "Graduating with a mind-set of Business-Ready professionals". The paper talks about the feeling of empowerment among the students towards the end of the exercise, and how they appreciate the opportunity provided to them to apply marketing concepts in real-life.

Greene (2011) conducted "Great Cookie Challenge" activity for first semester freshmen students to help them understand the basic concepts of Business with a special emphasis on marketing concepts like 4P's, SWOT Analysis, STP and SWOT. The paper emphasizes how the entire activity kept students involved and made them try many innovative ideas, and how in the end, the participants considered it to be a success calling it a great educational, memorable and relevant experience.

Ashley, Collins and Thornton (2011) discuss about an Experiential Learning Experiment for Business students to understand the working and performance of their experiment. The guiding principle for them seems to be the words of Ackerman, Gross and Perner (2003) wherein the latter talk about preparing the marketing students for "a business world requiring flexibility in the

face of challenges and opportunities". The verbal and written feedback from the students revealed that while 96.2% of them agreed or strongly agreed that the project gave them the opportunity to apply their understanding of retail strategy, 92.3% agreed or strongly agreed that it allowed them to apply their understanding of Visual Merchandizing.

Hunt and Laverie (2008) have captured the importance of ethics in marketing and the same can be explained by Personal Moral Codes (PMCs). They further go on to explain that Experiential Learning method is the best one to help students learn the same and also explains Hunt-Vittel theory of Ethics (1986) effectively.

**B.3 FINANCE:** Out of eleven companies covered in Jim Collin's "GOOD TO GREAT", only six companies remained in business in 2008-09. The other five were out because of bankruptcy and financial mismanagement. Looking at the FORTUNE 500 list, it is worth noting that only 14% of the companies from the 1957 list made into top 500 in 2010-11. The acquisition of Arcelor by Mittal, JLR by Tata and Novelis by Hindalco also defied the normal financial acumen. With companies having interests in various countries and investing in various financial instruments, there is a continuous interaction happening between an organization and its environment. With financial stakes higher than ever before, organizations can ill-afford even a small slip up. So, the right decision making at the right time is expected from even the entry level finance managers. What is also expected from them is the ability to analyze various possible scenarios keeping in mind the flux of the situation.

In the financial domain, the Take-aways from Experiential Learning exercises operate at two levels. At one level, the game creates an awareness of the processes involved in modern business operations. The second level of learning relates to understanding of the complexity of the interactions needed to deliver effectively in the present business situation.

In accounting field, according to Kolb and Kolb (2005), twenty two studies have been carried out in Experiential Learning Theory methods, out of which seven were conducted between 1971 and 1984 and fifteen between 1985 and 1999. Mary McCarthy (2010) refers to the studies conducted to determine the preferred learning styles of Accounting students. Clarke et al (1977) found that accountants tend to prefer converging learning styles. Similar studies were done by Brown and Burke (1987), Baker et al (1987), Collins and Milliron (1987), Jenkins and Holley (1991) and Stout and Ruble (1991). However, the study by Baldwin and Reckers (1984) showed that accounting majors have different learning style preferences than other business majors and hence they need to be studied separately.

In order to be successful, a finance manager needs to have not only Cognitive knowledge but also tacit knowledge. Building on Polanyi's (1966) distinction between tacit knowledge and explicit knowledge, it has been argued that this may be a key differentiator between a successful manager and an unsuccessful one (Wargner & Sternberg, 1987). Tacit knowledge has been defined as a product of learning from real-life experience that affects performance in real-world settings (Nonaka & Takeuchi, 1995). Wagner and Sternberg's study (1985) of tacit knowledge in groups of business managers showed that there were significant variations in the level and content of tacit knowledge within the groups. These variations were attributed to the difference in contexts and timings of experiences undergone by various individuals. Further, Armstrong and Mahmud (2008) share that tacit learning can be best described by Experiential Learning Theory.

Lowe and Skitmore (1994) investigated Experiential Learning Theory and perception of experiential factors in the accuracy of pre-tender cost prediction. The paper considers the nature of experience and its acquisition and the relevance of learning theories and Experiential Learning. Finally, the paper also proposes a mechanism to improve the accuracy of pre-tender estimates linking it to Experiential Learning.

**B.4 Operations:** The blurring boundaries of today's world have thrown up new challenges for Operations Managers. What appeared to be a simple exercise of just procuring the raw material and ensuring the dispatch of finished goods has acquired new dimensions. Hub and Spoke Models, requirement of effective sourcing from across the world, meeting JUST IN TIME (JIT) requirements, and continuously working to attain price efficiency with high quality controls have further compounded the task. Political and regional uncertainties across the world have also necessitated developing multiple vendor relationships.

A look at the present business space points to this increasing complexity. In 2008, China ordered many of its companies to close down because of Olympics being held in Beijing. The repercussions were felt world-wide in the paint industry, as some of the essential chemicals were manufactured at most in competitive prices in that industrial area, and companies which had not developed alternate supply chains had to face serious repercussions on the bottom lines. Iconic companies like Apple have 80% of their components manufactured by other partner organizations, which further points towards the need for robust supply chain management. The same holds true for Quality Management aspects as well.

To help business students understand the dynamic nature of Operations, Experiential Learning



methods play an important role. Operations Management is another domain where, there are large number of experiential learning exercises and activities available (Ashenbaum, 2008; Dhumal et al, 2008).

Niall Piercy (2010) explained Production Game, an Experiential Learning Exercise, wherein students can relate practical action to academic operational issues. This activity helps to understand the Key Operations Management issues such as process design, layout, quality, Inventory Management and how they actually operate in practice. This exercise is further more valuable for students lacking business experience to help them understand key operations theory. The author used Questionnaire survey on participants to know the perceived importance they place on experience, and it came out that this activity provided a stimulus to know more about the subject of Operations Management, illustrated the theoretical concepts in practice and encouraged students to spend more time in learning overall.

B.5 Leadership: Wharton in its communiqué for leadership programs talks about "Leadership from everywhere", which further emphasizes the need for leadership attributes for even entry level and middle managers and describes leadership as something which is no more concentrated with the top leadership only. The Leadership domainis well-researched by scholars across the decades, but its increasing importance for passing out Business students also demands a look at the effectiveness of various pedagogical methods used to impart leadership education. Leadership effectiveness is also judged by how a person behaves in certain situations. Another question being asked is the very existence of leadership without followership. The growing of businesses across borders has brought in the complexity of Cross-cultural and multinational sensitivities. Leadership has never been about following a set of rules but evaluating and weighing various options and deciding for the most effective one. Thus regardless of the presence or absence of followers, business graduates have to be developed as leaders who can think differently, work confidently and do the right thing. This makes it imperative for educators that Business students undergo actual experiences to complete the learning cycle for leadership concepts. Experiential Learning techniques play this very vital role as they provide "Laboratory" illustrations of conceptual topics, and provide "Learning by Doing" experience enhancing both the systemic knowledge as well as tacit knowledge.

Rashford and Figueiredo (2010) explained the effectiveness of learning Leadership Skills through Experiential Learning wherein a CEO brings to a class-room the strategic issue which he/she is facing and the same is to be addressed jointly with a team of students in real-time.

Crossman (2010) explained the need for individuals to lead, solve problems, innovate and collaborate in culturally diverse contexts. This qualitative study conducted with 45 participants and three stake-holder groups argues the need for development of international and cultural leadership skills and how Experiential Learning plays an important role there.

Ng et al. (2009) integrated research on Experiential Learning and Cultural Intelligence to propose a process model for Global Leadership development. The study positioned Cultural Intelligence as a moderating variable for effective transformation from four stages of Experiential Learning to global leadership self-efficacy.

DeGeest and Brown (2011) discussed goalorientation theory and its relevance in leadership development. The study further proposes a model which explains how individual and situational characteristics interact and influence managers' learning outcomes and proposes altering of situations to increase managers' learning from work experiences. The paper further shares how Experiential Learning methods can help improve the efficiency of Leadership Development programs.

## **Findings**

a) The various themes for which Kolb's Model and its Learning theory has been applied by various researchers is shown in Table 2 below:

Table 2: Themes covered by Application of Kolb's Model

Theme	Author	
Developing Managerial Tacit Knowledge	Armstrong and Mahmud (2008)	
accountants' tendency to prefer converging learning styles	Clarke et al (1977)	
Understanding International and Cultural Leadership	Crossman (2010)	
To lead, solve problems, innovate and collaborate in culturally diverse contexts	Crossman (2010)	
How individual and situational characteristics interact and influence managers' learning outcomes	DeGeest and Brown (2011)	
Improve the efficiency of Leadership Development programs	DeGeest and Brown (2011)	
Exploring Pedagogical Possibilities in Business Education	Devasagyam, Masten et al (2012)	
Covering Service Project Learning outcomes	Geringer et al (2009)	
Outlining Systematic and Contingency-based approach to Business Education	Gray et al (1977)	
Trying many innovative ideas	Greene (2011)	
Delivering Freshmen Marketing Courses	Greene (2011)	
Understanding importance of ethics in Marketing	Hunt and Laverie (2004)	
Entrepreneurship Development	Knotts (2011)	
Designing Effective organizational learning method	Kouji et al (2010)	
Exposing the students to real-world scenarios and asking them to take decisions as they would in real Business situations	Laura Serviere-Munoz (2010)	
Designing mechanism to improve the accuracy of pre-tender estimates linking it to Experiential Learning.	Lowe and Skitmore (1994)	
Understanding Market Operation and gaining strategic insights	Cannice (2013)	
Strategic Management issues	Cannice (2013)	
Role of Sales Belief	Matuso (2012)	
Pedagogical tool for accounting students	McCarthy (2010)	
Designing effective pedagogical tools for Business School curriculum	McCarthy and McCarthy (2006)	



Theme	Author
Exposure to diversity of ideas and people due to blurring of international boundaries	Misra and McMohan (2006, page 43)
Understanding and Explaining Consumer Behavior	Myers (2010)
Understanding the Key Operations Management issues such as process design, layout, quality, Inventory Management and how they actually operate in practice	Niall Piercy (2010)
Developing Business Communication	Saunders (1997)
Decision Making starting from Information Search and culminating with Post Purchase evaluation	Myers (2010)
Developing analytical skills as well as relating marketing concepts to real-world application.	Titus and Petroshius (1993)
Designing learning outcomes critical for global leadership development	Ng, Van Dyne and Ang (2009)

Table 2 outlines the various themes for which Kolb's theory and Experiential Learning themes have been studied by various researchers. It clearly indicates that the Researchers have applied Kolb's model for teaching specific themes across functions as well as for designing effective pedagogical mix. Further, the model has been applied on a range of participants, ranging from

Accountants to Medical practitioners as well as Business School students to Working Executives.

a) The table below (Table 3) summarizes the various studies across disciplines and the degree of efficacy of Experiential Learning in that study.

Table 3: Discipline of Studies and Degree of Efficacy of Experiential Learning in that study

S.No.	Management Discipline	Study Conducted by	Efficacy of Experiential Learning (As outlined by study)	Sample details	Theoretical Model	Stage of the Learning Cycle
1	Finance	Kolb and Kolb (2005)	High	Learning Style Inventory (n=6977)	Kolb's Model	AC Continuum, AR Continuum
2	Finance Finance	Mary McCarthy (2010)	High	Literature Review	Kolb's Model	AC Continuum, AR Continuum
3	Finance	Baldwin and Reckers (1984)	High	Accounting Students (n=359)	Kolb's Model	AC Continuum, AR Continuum
4	Finance	Wargner & Sternberg (1987)	Low	Literature Review	Tacit Knowledge Model	AC Continuum



S.No.	Management Discipline	Study Conducted by	Efficacy of Experiential Learning (As outlined by study)	Sample details	Theoretical Model	Stage of the Learning Cycle
5	Finance	Lowe and Skitmore (1994)	High	Quantity Surveyors (n=203)	Kolb's Model	AC Continuum, AR Continuum
6	Finance	Brown and Burke (1987)	High High	Undergraduate Business students and Accounting Graduates (n=729)	Kolb's Model Kolb's Model	AC Continuum, AR Continuum
7	Finance	Baker et al (1987)	Low Moderate	Introductory Accounting Students(n=207)	Kolb's Model	AC Continuum, AR Continuum
8	Leadership	Stout and Ruble (1991)	High	Undergraduate Business students with Accounting Major (n=644)	Live-Case Methodology	AC Continuum, AR Continuum
9	Leadership	Rashford and Figueiredo (2010)	High	Executive MBA students	Gilbert's Behavior Engineering Model	AR Continuum
10	Leadership	Crossman (2010)	High	Volunteer Firefighters (n=600)	Kolb's Model	AC Continuum
11	Leadership	Ng, Van Dyne and Ang (2009)	High High	Literature Review Literature Review	Kolb's Model	AC Continuum, AR Continuum
12	Marketing	DeGeest and Brown (2011)	High	Learning Style Inventory (n=6977)	Field Study Model	AC Continuum
13	Marketing	Kolb and Kolb (2005)	High	Consumer Behavior Students	Service Learning Model	AC Continuum, AR Continuum
14	Marketing	Titus and Petroshius (1993)	High	Marketing Students (n=2310)		AR Continuum
15	Marketing	Geringer, Stratemeyer and Canton (2009)	High	Literature Review	Kolb's Model	AR Continuum
16	Marketing	Myers (2010)	High	Literature Review	Second Life Model	AR Continuum
17	Marketing	Laura Serviere- Munoz (2010)	High	University Freshmen Retail Management Students(n=30)	Kolb's Model	AR Continuum



S.No.	Management Discipline	Study Conducted by	Efficacy of Experiential Learning (As outlined by study)	Sample details	Theoretical Model	Stage of the Learning Cycle
18	Marketing	Greene (2011)	High	Marketing Management Students	Kolb's Model	AR Continuum
19	Marketing	Ashley et al (2011)	High	Undergraduate Business students and Accounting Graduates (n=729)	Learner-Centered Model	AR Continuum
20	Marketing	Hunt and Laverie (2008)	High	Literature Review	Production Game	AC Continuum, AR Continuum
21	Marketing	Brown and Burke (1987)	High	Management Students (n=1000)	Cola-Game	AC Continuum, AR Continuum
22	Operations	Gremler et al(2000)	High High	MBA Operation students (n=180)	Global-Sourcing & Logistics Exercise	AC Continuum, AR Continuum
23	Operations	Niall Piercy (2010)	Strong	Undergraduate Business Majors	Kolb's Model	AR Continuum
24	Operations	Dhumal et al (2008)	Moderate	Learning Style Inventory (n=6977)	Kolb's Model	AR Continuum
25	Strategy	Ashenbaum, 2008	Low	Undergraduate and MBA students (130)	Business Resource Center (BRC)	AR Continuum
26	Strategy	Kolb and Kolb (2005)		Literature Review	Karn's Model	AC Continuum, AR Continuum
27	Strategy	Cannice (2013)		University Students (n=227)		AR Continuum
28	Strategy	Misra and McMohan (2006, page 43)				AR Continuum
29		Karns, 2005				AC Continuum, AR Continuum

AC: Abstract Concrete, AR: Active-Reflective



Perusal of table 3 helps us understand that almost 50% of the studies have used Kolb's model as the theoretical framework. The remaining studies have referred to stand-alone models like BRC Model, Karn's Model, Service-learning model, Second life model etc. This points towards the centrality of Kolb's theory in Experiential Learning for research in teaching pedagogy. Barring a couple of studies, all other studies have pointed towards the high efficacy of Experiential Learning as a pedagogy. Further, the studies cover the entire spectrum of Management Education, and hence it would be safe to conclude that Experiential Learning can be used across different functions (and is not restricted to one or two specific functions). The studies have dominantly found the Active-Reflective mode as the core outcome of Experiential Learning (very few studies point only at AC Continuum). Last but definitely not the least, most of the studies miss out on the various competencies which Experiential Learning impacts (with the sole exception of the study by Dhumal et al 2008).

### **Conclusion**

In conclusion, it can be said that experiential learning is a must use technique for management education. The changing landscape of Global economy has also changed the expectations of Corporate from the Business Students. They expect the business students to be job-ready and able to look at various situations and options and then take an appropriate decision. Leadership and decision-making are no longer the sole domain of top leadership alone, and is expected from all managers at different levels in an organization. It is also significant that Corporate recruiters now scout for future Leaders rather than only managers (Bhandarker 2008). To meet these expectations, the onus is with Business Educators to effectively prepare their students. Theoretical lectures are alone not going to be sufficient, as the students also need to experience things personally - through simulations- in order to ensure that knowledge is transformed into learning which can be applied in

practice when they take up jobs. The limitations of Case-study as a teaching method has further brought to the forefront the important role which Experiential Learning tools can play. In this field, the Experiential Learning Theory of David Kolb is considered one of the most pioneering works, and this model can be effectively used to design the tools required for grooming future leaders.

## Scope for further studies

The paper covers the literature review of Experiential Learning and its efficacy in various disciplines of Management Education. However, it doesn't include impact of demographic factors of learners (Gender, Country, Education background, Work-Experience etc) on learning efficacy through experiential learning. Further empirical studies may also be conducted on the moderating effect of efficiency of faculty in determining the efficacy of Experiential learning. Engaging students through experiential learning requires a sea change in the attitude and style of faculty and probably requires training to shift their mindsets. Another extremely important area of further research is about the exact set of competencies which Experiential Learning as a pedagogy impacts and helps to develop. Further, with technology being a great enabler, it may be worthwhile to examine the impact of computer-based simulations on learning and whether there is any notable efficacy difference.

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