



## **INNOVATIONS IN EXPERIMENTAL LEARNING – A STUDY OF WORLD TOP BUSINESS SCHOOLS**

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### **Abstract:**

*Innovations in higher education include improvements in existing pedagogies and developing new pedagogies based on the subject to be taught. Depending on the age, gender, regional background, the effective teaching and learning methods may be different. Business schools are providing higher education to improve the necessary skills of the student either to start new business or to manage an existing business effectively by means of making effective decisions on a business problem by considering the business environments effectively. Experimental learning is a new pedagogy in business management learning method where students are exposed to real business problems and made them as part of decision making team. Such exposure in real world problems will improve the risk taking ability and the confidence of the students while becoming an entrepreneur after their graduation. Based on the success of experimental learning method introduced in many business schools, the method is becoming more and more popular and is finding place in the pedagogy of many top level Business schools in the world. In this paper, we have made an empirical study on adopting experimental learning scenario in some identified top business schools in the world. We have collected information from the website of top 25 Business schools based on recently announced B school ranking and studied their effort and results of such method adoption in curriculum.*

**Index Terms:** Innovations in Higher Education, Experimental Learning in Business Schools, National Institutional Ranking Framework & Factors Affecting Ranking Framework

### **1. Introduction:**

Learning science is complex phenomenon where -a student has to acquire new information at different times, understand them to convert as knowledge, reorganize existing knowledge and even discard cherished ideas. In addressing this issue, the analogy between individual learning and conceptual change in scientific disciplines has been fruitful in providing aspects of a suitable framework for analysing science learning. The process of systematic learning by a student is studied and explained by various learning models [1-2]. Usually learning models aim in investigating the conditions under which an individual holding a set of conceptions of natural phenomena, when confronted by new experiences will either keep his or her conceptions substantially unaltered in the process of incorporating these experiences, or have to replace them because of their inadequacy. The learning models should identify the importance of an individual's metaphysical commitments in influencing scientific learning.

Kolb's learning theory (1974) [1] consists of a set of four distinct learning styles, which are based on a four-stage learning cycle. Kolb explains that different people naturally prefer a certain single different learning style. Various factors like social environment, educational experiences, or the basic cognitive structure of the individual etc. influence a person's preferred style. Whatever influences the choice of style, the learning style preference itself is actually the product of two pairs of variables, or two separate 'choices' that we make, which Kolb presented as lines of axis, each with 'conflicting' modes at either end: A typical presentation of Kolb's two continuums is that the east-west axis is called the Processing Continuum (how we approach a task), and the

north-south axis is called the Perception Continuum (our emotional response, or how we think or feel about it). Kolb views learning as an integrated process with each stage being mutually supportive of and feeding into the next. It is possible to enter the cycle at any stage and follow it through its logical sequence [1]. However, effective learning only occurs when a learner is able to execute all four stages of the model. Therefore, no one stage of the cycle is as effective as a learning procedure on its own [3-4].

David Kolb [5] published a learning model in 1984 from which he developed his learning style inventory. Kolb's experiential learning theory works on two levels: a four stage cycle of learning and four separate learning styles. Much of Kolb's theory is concerned with the learner's internal cognitive processes. Kolb states that learning involves the acquisition of abstract concepts that can be applied flexibly in a range of situations. In Kolb's theory, the impetus for the development of new concepts is provided by new experiences. "Learning is the process whereby knowledge is created through the transformation of experience" [5-6].

The experimental method of learning involves manipulating one variable to determine if changes in one variable cause changes in another variable. This method relies on controlled methods, random assignment and the manipulation of variables to test a hypothesis. Experimental learning is a new pedagogy in business management learning method where students are exposed to real business problems and made them as part of decision making team. Such exposure in real world problems will improve the risk taking ability and the confidence of the students while becoming an entrepreneur after their graduation. Based on the success of experimental learning method introduced in many business schools, the method is becoming more and more popular and is finding place in the pedagogy of many top level Business schools in the world [7-8].

In this paper, we have introduced a new learning method in higher education teaching-learning methods. This new method called 'Experimental Learning Method' (ELM) is developed and discussed systematically by considering its elements, characteristics, types, and its usage in business schools in an attempt of providing 'Student centric learning methodology'. We have made an empirical study on the strategy of adopting experimental learning scenarios in some of identified top business schools in the world. We have collected information from the website of top 25 Business schools based on recently announced B school ranking and by studying their effort of providing Experimental Learning Method in their pedagogy and best ten Business Schools are identified based on the results of adopting such pedagogy in their curriculum.

## **2. Experimental Learning Method:**

### **2.1 What is experimental learning? :**

Experimental learning is the process of learning through practice. By doing the work and involving in actual decision making along with executives students can learn things. Experimental learning is often used synonymously with practical or onsite learning.

### **2.2 Types of Experiments:**

There are a few different types of experiments that researchers might choose to use. The type of experiment chosen might depend on a variety of factors including the participants, the hypothesis and the resources available to the researchers [9-10].

- ✓ **Classroom Experiments:** Classroom experiments are activities where any number of students work in groups on carefully designed guided inquiry questions. Materials provide students with the means of collecting data through

interaction with typical laboratory materials, data simulation tools or a decision making environment, as well a series of questions that lead to discovery-based learning. During the experiment itself, collect data or observations. The instructor's role is to act as facilitator, asking leading questions and drawing attention to interesting results. A well-designed experiment targets common student misconception, focusing on major ideas that students will need to understand correctly in order to support deep learning. Classroom experiments differ from classroom demonstrations because the students are involved in collecting data or observations. However, just as in an interactive classroom demonstration, students involved in classroom experiments can be asked to make predictions and to reflect upon their observations. All experiments involve collecting observations or observing actions to try to answer a question or solve a problem. Classroom experiments do this as part of a class to help students learn more about the material they are studying. In this case the hypothesis to be tested will generally be derived from material contained in a textbook or other course material. Research experiments generally involve both control and treatment groups in order to facilitate comparison. In the classroom, an observational experiment where students "see what happens" can also be useful.

- ✓ **Lab Experiments:** Lab experiments are very common in psychology because they allow experimenters more control over the variables. These experiments can also be easier for other researchers to replicate. The problem, of course, is that what takes place in a lab is not always identical to what takes place in the real world.
- ✓ **Field Experiments:** Sometimes researchers might opt to conduct their experiments in the field. For example, let's imagine that a social psychologist is interested in researching prosocial behavior. The experimenter might have a person pretend to faint and observe to see how long it takes onlookers to respond. This type of experiment can be a great way to see behavior in action in realistic settings. However, it makes it more difficult for the researchers to control the variables and can introduce confounding variables that might influence the results.
- ✓ **Quasi-Experiments:** While lab and field experiments represent what are known as true experiments, researchers can also utilize a third type known as a quasi-experiment. These are often referred to as natural experiments because the researchers do not have true control over the independent variable. Instead, the treatment level is determined by the natural conditions of the situation. A researcher looking at personality differences and birth order, for example, is not able to manipulate the independent variable in the situation. Treatment levels cannot be randomly assigned because the participants naturally fall into pre-existing groups based on their birth order in their families. So why would a researcher choose to use a quasi-experiment. This is a good choice in situations where scientists are interested in studying phenomena in natural, real-world settings. It is also a good choice in situations where researchers cannot ethically manipulate the independent variable in question. Psychologists, like other scientists, utilize the scientific method when conducting an experiment. The scientific method is a set of procedures and principles that guide how scientists develop research questions, collect data and come to conclusions. The four basic steps of the process are: (i) Forming a Hypothesis, (ii) Designing a Study and Collecting Data, (iii) Analyzing the Data and Reaching Conclusions & (iv) Sharing

the Findings. Most psychology students will be expected to use the experimental method at some point. If you want to take a closer look at the process, be sure to check out this step-by-step breakdown of how to conduct a psychology experiment for more information.

- ✓ **In-Basket Exercises:** It is a kind of practical exercise in which skills and attitude of a student in a given task of responsibility can be tested by means of a demonstration on planning, prioritisation, decision making, management style, evaluation of situations, analysis of information, speed & accuracy, and effective use of time. By means of incorporating in-basket exercises in business schools, students become familiar with the type of question and learn how best to respond to the problems or issues raised in the items improving their marks and chances of success. This will help them to recognise which types of behaviours they most need to demonstrate in such an exercise to achieve success.

**Why to teach with Classroom Experiments:**

Experiments can be used either to introduce new ideas or to clarify puzzling aspects of topics with which students typically struggle. If the result of an experiment is surprising yet convincing, students are in the position to build ownership of the new idea and use it to scaffold learning. In addition to checking that the conceptual focus of the experiment has been understood correctly, assessments can push students to describe a follow-up experiment or to extend the concept to another application. Note that some classroom experiments, such as those that involve observing chemical behavior, require safety precautions and may need to take place in a laboratory.

**2.3 Difference between Experimental Learning and Classroom Demonstrations:**

Classroom experiments differ from classroom demonstrations because the students are involved in collecting data or observations. However, just as in an interactive classroom demonstration, students involved in classroom experiments can be asked to make predictions and to reflect upon their observations.

**2.4 Difference between Experimental Learning and Experiential Learning:**

The experiential learning includes learning through life long experience. The experience gained by a student prior to joining a course is also included in experiential learning; where as the experimental learning during a course of study is the learning by hands on practice. The difference between experiential learning and experimental learning are discussed in table 1.

Table 1: Difference between experiential learning and experimental learning

S.No	Experiential Learning	Experimental Learning
1	Experiential learning is the process of learning through experience, and is more specifically defined as "learning through reflection on doing". Hands-on learning is a form of experiential learning but does not necessarily involve students reflecting on their product.	Experimental learning is the process of learning through practice. By doing the work and involving in actual decision making along with executives students can learn things.
2	Experiential learning is often used synonymously with the term "experiential education", but while experiential education is a broader philosophy of education, experiential learning considers the individual	Experimental learning is often used synonymously with practical or onsite learning.

	<p>learning process. As such, compared to experiential education, experiential learning is concerned with more concrete issues related to the learner and the learning context.</p>	
3	<p>Some of the Elements of experiential learning are: Experiential learning can exist without a teacher and relates solely to the meaning-making process of the individual's direct experience. However, though the gaining of knowledge is an inherent process that occurs naturally, a genuine learning experience requires certain elements. According to Kolb, knowledge is continuously gained through both personal and environmental experiences. Kolb states that in order to gain genuine knowledge from an experience, the learner must have four abilities:</p> <ul style="list-style-type: none"> <li>• The learner must be willing to be actively involved in the experience;</li> <li>• The learner must be able to reflect on the experience;</li> <li>• The learner must possess and use analytical skills to conceptualize the experience; and</li> <li>• The learner must possess decision making and problem solving skills in order to use the new ideas gained from the experience.</li> </ul>	<p style="text-align: center;">Some of the Elements of experimental learning are:                  It exists with teacher or mentor or guide to enhance individuals direct experience. Here, hands on training are important along with theoretical and conceptual knowledge.</p>

**2.5 Experiential Learning and Experimental Learning in Business Schools:  
 Experiential Learning in Business Schools:**

As higher education continues to adapt to new expectations from students, experiential learning in business and accounting programs has become more important. For example, Clark & White (2010) [11] point out that "a quality university business education program must include an experiential learning component".<sup>[25]</sup> With reference to this study, employers note that graduating students need to build skills in "professionalism" – which can be taught via experiential learning. Students also value this learning as much as industry.

Learning styles also impact business education in the classroom. Kolb transposes four learning styles, Diverger, Assimilator, Accommodator and Converger, using the Experiential Learning Model, using the four experiential learning stages to carve out "four quadrants", one for each learning style. An individual's dominant learning style can be identified by taking Kolb's Learning Style Inventory (LSI). Robert Loo (2002) [12] undertook a meta-analysis of 8 studies which revealed that Kolb's learning styles were not equally distributed among business majors in the sample. More specifically, results indicated that there appears to be a high proportion of assimilators and a lower proportion of accommodators than expected for business majors. Not surprisingly, within the accounting sub-sample there was a higher proportion of convergers and a lower proportion of accommodates. Similarly, in the finance sub-sample, a higher

proportion of assimilators and lower proportion of divergers was apparent. Within the marketing sub-sample there was an equal distribution of styles. This would provide some evidence to suggest that while it is useful for educators to be aware of common learning styles within business and accounting programs, they should be encouraging students to use all four learning styles appropriately and students should use a wide range of learning methods [12].

Professional education applications, also known as management training or organizational development, apply experiential learning techniques in training employees at all levels within the business and professional environment. Interactive, role-play based customer service training is often used in large retail chains [13]. Training board games simulating business and professional situations such as the Beer Distribution Game used to teach supply chain management, and the Friday Night at the ER game used to teach systems thinking, are used in business training efforts [14].

### **2.6 Advantages of Experimental Learning:**

Classroom Experiments help instructors achieve a variety of classroom goals related to:

- ✓ Student Learning Outcomes
- ✓ Instructor Satisfaction with Teaching
- ✓ Grades
- ✓ Attendance
- ✓ Student Retention in Course and Major
- ✓ Teaching Evaluation Scores

The pedagogy is built on research on learning that shows that most students do not respond best to pure "chalk and talk," but rather to "active learning" environments. Classroom Experiments keep learners engaged because they get a hands-on experience. Conducting a classroom experiment is easy to do. The first time you try one, it is probably a good idea to use an experiment that someone else has prepared. In a published experiment, there will typically be "instructor's notes" containing detailed instructions for conducting the experiment.

Classroom experiments are activities where any number of students work in groups on carefully designed guided inquiry questions. Materials provide students with the means of collecting data through interaction with typical laboratory materials, data simulation tools or a decision making environment, as well a series of questions that lead to discovery based learning. During the experiment itself the students and/or instructor collect data or observations. However, the most critical role for the instructor is to act as facilitator, asking leading questions and drawing attention to interesting results. A well-designed experiment targets common students misconception, focusing on major ideas that students will need to understand correctly in order to support deep learning.

All experiments involve collecting observations or observing actions to try to answer a question or solve a problem. However, there are differences between research and teaching experiments. Classroom experiments do this as part of a class to help students learn more about the material they are studying. In this case, the hypothesis to be tested will generally be derived from material contained in a textbook or other course material. Research experiments generally involve both control and treatment groups in order to facilitate comparison. In the classroom, an observational experiment where students "see what happens" can also be useful.

### **2.7 Experimental Learning in Different Subject Areas:**

While the nature of the goals for classroom experiments is the same, experiments themselves vary widely across disciplines due to the fundamental differences in the disciplines themselves. For example, solubility is an important concept in Chemistry. A classroom experiment might observe the behavior of a number of chemical substances and investigate the extent to which they are soluble. By contrast, market price is an important concept in Economics. A classroom experiment might observe the behavior of student traders and investigate the prices at which they trade an experimental good. Some other examples are:

- ✓ In marketing, students might examine how information about a food's health benefits affects consumer purchasing decisions.
- ✓ In mathematics, students might investigate sine waves using weights and springs.
- ✓ In physics, students might investigate properties of circuits.
- ✓ In political science, students might investigate voting behavior by participating in an election exercise.
- ✓ In sociology, students might look at inequality by making decisions in an environment where some students have an unearned advantage compared to others.

### **3. Innovations in Experimental Learning:**

Some possible goals of classroom experiments/labs are that students participate in include:

- ✓ Discovering existing scientific concepts
- ✓ Elicit misconceptions
- ✓ Formulating questions
- ✓ Involving students in the design of experiments
- ✓ Creating and revising models
- ✓ Understanding the relationship between empirical research and models
- ✓ Learning how scientific studies are conducted

Best practices in classroom experiments have evolved beyond traditional laboratories where students follow a series of steps with the goal of replicating existing scientific knowledge. Classroom experiments are not limited to small classes; however, involving a large class in a classroom experiment may require the use of teaching assistants, clickers or other technology.

#### **Some Related Teaching Pedagogies:**

Students participating in Cooperative Learning exercises might be doing an experiment, however there are a number of other possible tasks. Some Classroom Experiments are Cooperative Learning exercises wherein others students work independently during the experiment. Data Simulations use physical materials or computer generated data to give students a chance to make predictions and come up with rules that describe a phenomenon.

Guided Discovery Problems and Indoor Labs allow students to complete a series of assigned steps and learn a new concept as they go. When compared to Classroom Experiments Indoor Labs are most likely to take place outside of class. They are what one traditionally thinks of as a science lab. Interactive Demonstrations are similar to classroom experiments except the instructor describes the experiment and then carries it out in front of the class. For the most part, Classroom Experiments are a special case of Process Oriented Guided Inquiry Learning, which divides students into self-managed teams to participate in guided inquiry activities.

Classroom experiments have a different purpose and so are much easier to conduct. Experiments in the classroom seek to involve students in a decision making environment and allow them to explore the outcomes of their decisions. This means, for example, that it is more critical that instructions make certain students understand the experiment than to ensure that the experiment can be replicated. Classroom experiments can be edited to fit into a class period or stretched over more than one class period without concern about loss of control. Active discussion with student participants during and after the experiment is a major objective, so classroom experiments often have a set of discussion questions that are introduced as the experiment progresses.

Unlike research experiments, classroom experiments do not require that students be paid in order for the experiment to be successful. Often the desire to "do well" in class is sufficient motivation for students. Sometimes instructors use performance in the experiment as part of the grade for the exercise or introduce other incentives to increase student interest

**Goals of the Fieldwork Project:**

The goal of the program is to provide students with a real world learning experience while providing exceptional value to client companies. Students gain the invaluable insight into client management, the ability to manage an international project with a diverse team of stakeholders, and other skills associated with future success in consulting.

**Fieldwork Project Examples:**

- ✓ How to help Company W transform into an online leader?
- ✓ What is the potential market for product X in China?
- ✓ How to organize innovation in Company Y?
- ✓ What should Company Z's strategic plan be for 2016-2018?
- ✓ How to develop the digital strategy for a luxury brand?

**4. Survey on World Top Business Schools for Experimental Learning:**

**4.1 World Top Business Schools:**

Table 2 contains the list of World Top 25 business schools [30], their country and their website address. Based on our preliminary study on their pedagogy adopted in various post graduate programmes, ten world top Business Schools imparting experimental learning model/method are identified and listed in Table 3.

Table 2: List of 25 World Top Business Schools during 2015 Survey [30]

<b>Rank</b>	<b>Name of Business School</b>	<b>Country</b>	<b>Website Address</b>
1	Wharton Business School University of Pennsylvania	Philadelphia, USA	<a href="http://www.wharton.upenn.edu/">www.wharton.upenn.edu/</a>
2	Harvard Business School Harvard University Boston, Massachusetts	Massachusetts, USA	<a href="http://www.hbs.edu/">www.hbs.edu/</a>
3	London Business School, London	London, UK	<a href="http://www.london.edu">www.london.edu</a>
4	Stanford Graduate School of Business, Stanford University,	California, USA	<a href="http://www.gsb.stanford.edu/">www.gsb.stanford.edu/</a>
5	INSEAD Business School Fontainebleau	France	<a href="http://www.insead.edu/">www.insead.edu/</a>
6	Columbia Business School,	New York, USA	<a href="http://www8.gsb.columbia.edu/">www8.gsb.columbia.edu/</a>

	Columbia University, New York City		
7	IESE Business School, University of Navarra, Barcelona	Spain	<a href="http://www.iese.edu/en/">www.iese.edu/en/</a>
8	Sloan School of Management, MIT, Cambridge	Massachusetts, USA	<a href="http://www.mitsloan.mit.edu/">www.mitsloan.mit.edu/</a>
9	Booth Business School Chicago University	Chicago, USA	<a href="http://www.chicagobooth.edu/">www.chicagobooth.edu/</a>
10	Haas Business School, University of California at Berkeley	California USA	<a href="http://www.haas.berkeley.edu/">www.haas.berkeley.edu/</a>
11	China Europe International Business School (CEIBS), Shanghai	China	<a href="http://www.en.ceibs.edu/">www.en.ceibs.edu/</a>
12	IE Business School, IE University, Madrid	Spain	<a href="http://www.ie.edu/business-school/">www.ie.edu/business-school/</a>
13	Judge Business School, University of Cambridge	Cambridge, UK	<a href="http://www.jbs.cam.ac.uk/">www.jbs.cam.ac.uk/</a>
14	HKUST Business School, Hong Kong	Hong Kong China	<a href="http://www.bm.ust.hk/">www.bm.ust.hk/</a>
15	Kellogg School of Business, Northwestern University, Illinois	Illinois, USA	<a href="http://www.kellogg.northwestern.edu/">www.kellogg.northwestern.edu/</a>
16	HEC, Paris	France	<a href="http://www.hec.edu/">www.hec.edu/</a>
17	Yale School of Management, Yale University, New Haven	Connecticut, USA	<a href="http://www.som.yale.edu/">www.som.yale.edu/</a>
18	Stem School of Business New York University	New York USA	<a href="http://www.stern.nyu.edu/">www.stern.nyu.edu/</a>
19	Esade Business School, University in Barcelona	Spain	<a href="http://www.esade.edu/">www.esade.edu/</a>
20	IMD Business School, Lausanne, Switzerland	Switzerland	<a href="http://www.imd.org/">www.imd.org/</a>
21	FUKUA School of Business, Duke University, Durham	North Carolina USA	<a href="http://www.fuqua.duke.edu/">www.fuqua.duke.edu/</a>
22	Oxford Said Business School Oxford University	Oxford, UK	<a href="http://www.sbs.ox.ac.uk/">www.sbs.ox.ac.uk/</a>
23	Tuck School of Business at Dartmouth College, Hanover	New Hampshire USA	<a href="http://www.tuck.dartmouth.edu/">www.tuck.dartmouth.edu/</a>
24	Ross Business School, University of Michigan, Ann Arbor,	Michigan USA	<a href="http://www.michiganross.umich.edu/">www.michiganross.umich.edu/</a>
25	UCLA: Anderson School of Management, University of	California, USA	<a href="http://www.anderson.ucla.edu/">www.anderson.ucla.edu/</a>

	California, Los Angeles		
26	Indian Institute of Management, Ahmedabad	India	www.iimahd.ernet.in/
27	SDA Bocconi School of Management, Bocconi University	Italy	www.sdabocconi.it/
28	Johnson Graduate School of Management, Cornell University	USA	www.johnson.cornell.edu/
29	School of Business, University of Hong Kong,	Hong Kong, China	www.business.hku.hk/
30	CUHK Business School, The Chinese University of Hong Kong	Hong Kong China	www.bschool.cuhk.edu.hk/

Table 3: List of World Top Business Schools adopted experimental learning method

S. No	Name of the Business School	Education Courses	Type of Experimental Learning adopted
1	Wharton Business School University of Pennsylvania, USA	BS, MBA Ex MBA	Case studies, International exposure
2	Harvard Business School	MBA, M.S.,	Learning in Practice Case Study Method Participant Centred Learning Field Method
3	London Business School, London	Masters Degree, Executive Programmes	Practical Learning Beyond the classroom Make London your classroom
4	Stanford Graduate School of Business	Masters Degree Executive Programmes	Personalized Curriculum Global Projects Global Study Trips Social Innovation Study Trips Design your path
5	INSEAD Business School	MBA Executive Programmes Other Masters Programmes	Multiple Teaching methods Lively Exchange Classrooms Campus Exchange
6	Columbia Business School,	MBA Executive Programmes Other Masters Programmes	Case study method, Class lectures, Projects
7	IESE Business School,	MBA Executive Programmes	Active learning methodology
8	Sloan School of	Undergraduate,	Explore by Interest

	Management, MIT, Cambridge	Post Graduate, and Executive Programmes	Case Studies and Simulations Action learning Learning Edge
9	Booth Business School	MBA Ex-MBA	Research & learning centers for experimental learning Flexible curriculum Experiential Learning
10	Haas Business School	Undergraduate MBA Ex-MBA	Hass@work Innovation focus
11	China Europe International Business School	MBA Ex-MBA	Case Studies, Simulations Seminars
12	IE Business School	Masters Ex-Masters	Consulting Projects Business Impact Lab
13	Judge Business School	MBA Ex-MBA	Practical learning through four practical projects, Tailored Learning
14	HKUST Business School	UG, and P,G.,	No PE
15	Kellogg School of Business	MBA EX-MBA	Solving real world problems
16	HEC, Paris	MBA Ex-MBA M.Sc.	Field work projects
17	Yale School of Management	MBA Ex-MBA M.Sc.	Raw Case Approach
18	Stem School of Business	UG, and P,G. programmes	Experiential Learning
19	Esade Business School	UG, and P,G. programmes	Hands on Learning through Action learning consultancy projects
20	IMD Business School	MBA and Ex-MBA	Entrepreneurship projects, International consulting projects, Discovery expedition, Company engagement projects etc.
21	FUKUA School of Business	MBA MMB Ex-MBA	Engaging Cases Strategic Games Simulations
22	Oxford Said Business School	MBA Ex-MBA M.Sc.	Applied Learning Through three real world projects Finance Lab Experiments
23	Tuck School of Business	MBA	Learn by Doing Experiential Learning

			Consulting Projects Field works
24	Ross Business School	UG, P,G., and Ph.D.	Hands on Projects International experience
25	UCLA: Anderson School of Management	MBA Ex-MBA MFE	Practical Learning through Case competitions Industry conferences Pitch competitions Business Creation option Applied Management Resaerch (Field study) Internships
26	Indian Institute of Management, Ahmedabad	MBA Ex-MBA Ph.D.	Case Method Group Work Independent Project Comprehensive Project
27	SDA Boccioni School of Management	MBA Ex-MBA	Case studies, practical exercises, business games, simulations, first-hand business experiences, individual projects, group work, workshops and seminars.
28	Johnson Graduate School of Management	MBA Ex-MBA	Immersion model for performance learning which include practical experience through factory tours and Kaizen projects
29	School of Business, University of Hong Kong	BBA, MBA Ex-MBA	Case method
30	CUHK Business School	BBA, MBA Ex-MBA	Business case competition, Business field study, and Exchange programs, Summer internship.

#### **4.2 Experimental Learning in World Top Business Schools:**

(1) Wharton's 20 interdisciplinary research centers and initiatives bring together professors, executives, and students to focus on crucial business subjects, including entrepreneurship, social impact management, business ethics, health-care economics, real estate, retailing, sports business, and leadership and change management. The centers conduct cutting-edge research for faculty and in support of global industry initiatives, present high-level conferences, and generate academic programs for students. Students have opportunities for experiential learning and to collaborate with professors outside the classroom, taking risks and trying out new ideas with the support of experienced mentors. Going beyond case studies, faculty use lectures and hands-on learning. With students from many industries and countries in the classroom, expect lively challenging discussions about real business issues. s the

first B-School, innovation is in our DNA. Wharton faculty led the recent new curriculum changes and are continually focused on enhancing learning. Recent initiatives include: The newly launched Global Modular Courses, which provide an immersive experience on a designated topic by travelling to a destination where experts engage with that topic in relevant and exciting new ways, Twenty web-enabled simulations that challenge students to think strategically across multiple business functions, A new initiative with CISCO that creates the learning experience of the future, connecting our Philadelphia and San Francisco campuses. The immersive classroom blends life-size visual communication via telepresence with collaboration technologies that significantly enhance the way faculty, students and alumni interact and learn. Some highlights include:

**Wharton Research Data Services:** Developed with Wharton faculty input, Wharton Research Data Services (WRDS) has transformed the way business research is conducted. Using WRDS, researchers at more than 250 business schools and financial institutions worldwide access a wealth of data through a consistent web-based interface. **Wharton High Performance Computing Platform:** Wharton's high performance computing platform enables faculty members to complete large-scale, complex analytical studies in a fraction of the time once required.

**Behavioral Research Lab:** Wharton's experimental laboratory for behavioral research equipped with the latest in computing and video technology [15].

(2) In Harvard B School, the theory, practice, experience, and talent all come to one sharp point—a decision that shapes a definitive course of action. When it's no longer an issue of what can be done, but of what student will do. As a complement to the case method, the field method enhances the institute's capacity to educate leaders who make a difference in the world. The idea behind these complementary methods - case and field is to provide a cycle of learning that involves learning by thinking, doing, and reflecting. **Field Immersion Experiences for Leadership Development (FIELD)** - a year-long, three-part course gives first-year students meaningful and numerous opportunities to act like leaders, translating their ideas into practice. **FIELD Foundations** engages small teams in interactive workshops held in flexible classrooms called "hives" that reshape how students think, act, and see themselves. Through team feedback and self-reflection, participants deepen their emotional intelligence and develop a growing awareness of their own leadership styles. **FIELD 2** immerses student teams in emerging markets, requiring them to develop a new product or service concept for global partner organizations around the world. **FIELD 3** brings the entire first-year experience together by challenging students to synthesize the knowledge, skills, and tools acquired in a real micro-business they must design and launch themselves [16].

(3) **London Business School** is adopted **Practical Learning Beyond the classroom**. They put academic theory into practice. Through business immersion visits, real-world case studies, team-building exercises, field trips and role-playing work, student develop a wealth of vital business skills beyond the classroom. Global business perspectives sit at the heart of student learning. The school encourage its students to step outside their comfort zone and immerse them in a different culture or business. Whether visiting a different country, or learning about one from multicultural peer group, the college guide and help to build a global network, so that student can confidently conduct business anywhere in the world. At LBS, London is more than simply an address. It is your bustling, busy and cosmopolitan classroom, offering a wealth of cultural, social and educational opportunities [17].

(4) Stanford Business School focus on Personalized Experience with the slogan - Design Your Path, Their intimate class sizes supports close peer-to-peer interaction, small-group collaboration, and one-to-one coaching. Students can shape their academic experience to suit their interests. Students can pursue coursework and experiential learning opportunities in specific areas such as leadership, communication, social innovation, and entrepreneurship [18].

(5) INSEAD has different slogan as - Lively Exchange Classrooms where INSEAD professors aim to bring out the best in each students, so that they learn from each other's experiences as well as from their own cutting-edge research. Their objective is to examine different perspectives in order to orchestrate a multi-faceted debate and challenge everyone's assumptions. MULTIPLE TEACHING METHODS - There is no single preferred teaching method at INSEAD. The faculty is free to choose the method they believe fits best with the content of the session. The students, therefore, experience a wide variety of teaching styles and techniques, including case studies, computer simulations, role-plays, project work and study tours. What matters to INSEAD is not the method chosen but the result: the effectiveness of your learning experience. Campus Exchange - Learning to lead across different cultures and geographies is critical to success in this global world [19].

(6) IESE Business School adopted active learning methodology – simulations and the case method – which will help the students to see the big picture, to explore new approaches and perspectives to real-life business problems from all over the world. Whether the students want to succeed in their own enterprise or adopt an entrepreneurial mindset within an organization, they will find a breadth of resources, practical projects and on-going support to help to reach their goals [20].

(7) In Sloan School of Management, the curriculum is focused on action learning, which requires that students apply concepts learned in the classroom to real-world business settings. Courses are taught using the case method, lectures, team projects, and hands-on Action Learning Labs. The academic level of coursework is considered extremely demanding by business school standards, with a greater emphasis on analytical reasoning and quantitative analysis than most programs. MIT Sloan has long been a pioneer among business schools when it comes to action learning—creating real-world applications of classroom knowledge. Management flight simulations are the latest such application. These innovative and interactive games create a virtual world in which students explore and participate in the critical management issues facing a range of industries and organizations. Management simulation games bring an experiential aspect to learning about complex systems. This type of action learning has more impact on students than simply listening to a lecture or engaging in a case study discussion. Students who participate in a simulation can see the immediate consequences of their decisions and learn what it's truly like to juggle competing priorities amidst a constant influx of information. Each management simulation offers video user guides and online instructions for students. Registered educators from academic institutions can access video teaching notes and slides that introduce and debrief all aspects of the simulation. The teaching business case studies available on Learning Edge, which fall under the headings of entrepreneurship, leadership/ethics, operations management, strategy, sustainability, and system dynamics, are narratives that facilitate class discussion about a particular business or management issue. Teaching cases are meant to spur debate among students rather than promote a particular point of view or steer students in a specific direction. Some of the case studies featured on Learning Edge highlight the decision-making process in a business or management setting. Other cases are

descriptive or demonstrative in nature, showcasing something that has happened or is happening in a particular business or management environment. Whether decision based or demonstrative, case studies give students the chance to be in the shoes of a protagonist. With the help of context and detailed data, students can analyze what they would and would not do in a particular situation, why, and how [21].

(8) In Indian Institute of Ahmedabad, the PG programme provides opportunities for project courses and courses of independent study during the second year. At the end of first year students undertake summer training with Institute's corporate partners for a period of eight to nine weeks. The Summer Internship is a powerful source of practical managerial insights, validation of management concepts, and valuable market knowledge. The programme attempts to equip students with the required conceptual and interpersonal skills and sense of social purpose for managerial decision-making, develop leadership capabilities to act as change agents and be a source of motivation in the organizations they work in, nurture the desire to excel in performance without compromising integrity, honesty and fairness. The cornerstone of the pedagogy used is case discussions and Group work. In case method of learning, case discussions are supplemented with guest lectures, seminars, games, role-plays, industrial visits and group exercises. The case method is used to develop problem solving and decision making skills by facilitating the application of theoretical concepts to real-life situations. Group work is another major component of most courses. The groups are formed in a manner such that students get to work with people from different educational, professional and cultural backgrounds. Feedback from alumni has confirmed that the greater part of one's learning at the Institute happens in group activities that range from preparing for case presentations to working on live industry projects [22].

#### **5. Conclusion:**

In this paper, we have made an empirical study on adopting experimental learning scenario in some identified top business schools in the world. We have collected information from the website of top 25 Business schools based on recently announced B school ranking and studied their effort and results of such method adoption in curriculum.

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