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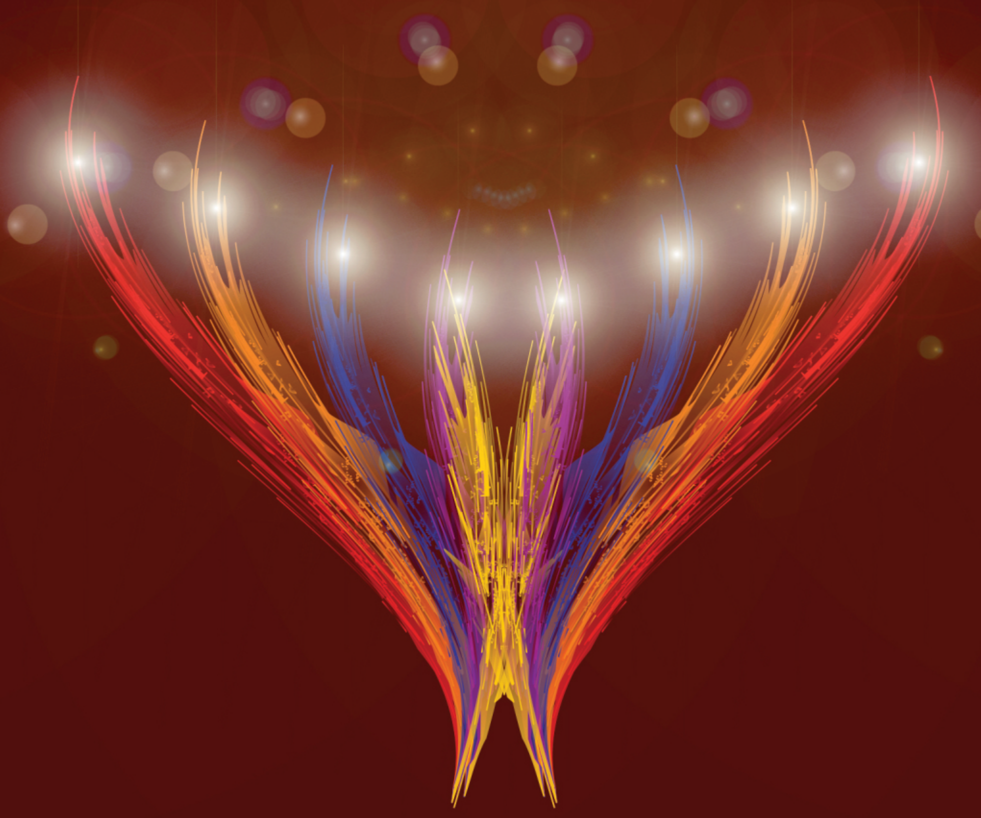

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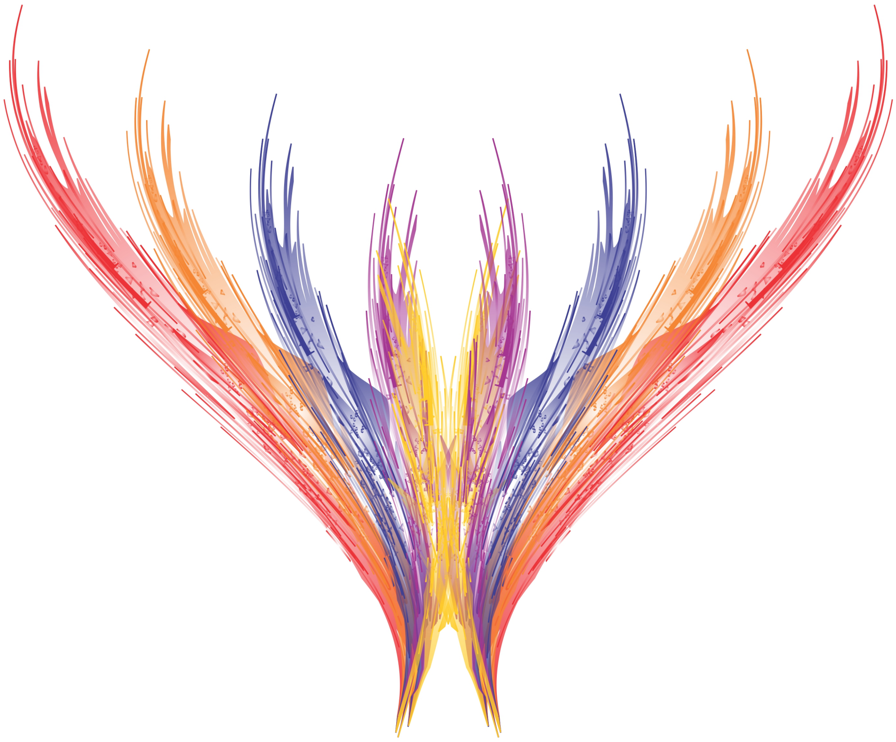

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Editorial

The theme of Srujan 2013, Journal of Sciences and the Humanities is 'Contemporary Debates in Theory, Research and Pedagogy'. We believe that as teachers we engage with emerging trends and issues in the academic world both in our classrooms as well as in our personal research. We try to implement many of such debates and issues within our classrooms as well as weave innovations into our pedagogy.

This issue of Srujan seeks to open debates on our efforts as teachers, researchers and intellectuals. The articles examine contemporary theoretical breakthroughs in the various disciplines of the sciences and the humanities as well as a discussion on latest published works, their critique and impact on the larger social field.

The issue carries articles that interrogate how research problems are formulated and the choice of methodology employed. The papers in this volume engage with ethical issues raised in research and locate reasons for the importance of doing research in undergraduate teaching.

Lastly we also engage with the various issues of pedagogy such as the new formulation of the credit-based-grading system: its advantages/ applicability, reforms in the examination system, the role of the teacher as an activist, value based teaching, sensitising students to human rights issues, gender as well as the underprivileged sections of Indian caste and class society.

This volume carries papers that engage introspectively into both research and pedagogical practices that we as teachers employ in our professions. Though largely experiential we believe, that our engagements need to be discussed and debated as these constitute a valuable resource base in teaching and research. The articles are based more on the process of knowledge formation and dissemination and not merely on techniques and skills imparted, grades obtained or achievements recorded as markers of knowledge gained.

— Dr. Hemlata Bagla

Foreword

It gives me great pleasure to see ‘Srujan’ become one of the respected academic journals of the University of Mumbai. ‘Srujan’ was begun by the Research wing of K.C College to bring together insightful research of its teachers. Each issue of Srujan has been centered on an innovative theme. This third issue of Srujan, once again, gives a critical insight on the topic, “Contemporary Debates in Theory, Research & Pedagogy”.

Pedagogy used to be defined as being the ‘art and science and probably the craft of teaching’. However, it has now been transformed to being a way of bringing ‘learning into life’ and to showing care and concern for the learners. Education is and should be of the Head, Hand and Heart.

Both the manner and matter of education has changed, over the years. With the new credit based grade point system being implemented, pedagogical issues have arisen across all streams that need to be addressed with great speed, understanding and wisdom.

I am happy to see teachers turn in holistic and comprehensive research papers dealing with this topical issue.

I extend my compliments to all teachers who have contributed to Srujan and hope that forthcoming issues will continue the commendable work.

My best wishes to the K.C Research Committee and the Srujan Editorial team. I wish them great success in their endeavour.

— Ms. Manju Nichani

Principal

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Pure Sciences, Social Sciences & Humanities

Complexities in Adaptation Theory and New Directions

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Abstract:
Since the advent of cinema, literature has been a popular and reliable source of inspiration for many directors. Adaptation studies has over the decades emerged as a vital discipline analyzing the interface between the two media and the strategies and negotiations involved in the move from text to film. With a large percentage of the new releases across the globe being adaptations of literary sources, questions of fidelity to the source invariably privilege the text or the written word .This paper proposes to present an overview of the major ideas and challenges that have brought Adaptation studies to the crossroads. With the rise of novelizations, blogs, fans and fan fiction as cultural agents, what implications does it have on fidelity as a mode of cultural engagement? Can reconfigurations such as these provide new approaches towards this discipline especially with the growth of new media interventions?

Keywords: *Adaptation studies, fidelity, literary sources, novelization, intertextuality.*

Mass media has changed the way we seek identities and engage with life. As Jean Baudrillard suggests "We live everywhere in an 'aesthetic ' hallucination of reality" and this is often reflected in our notions of entertainment and art. Since the ubiquitous popularity of photography from the 19th century, there has been a steady progress from a literary culture to what might be called visual or even a representational culture. This has translated into the importance and focus gained by the image and one of the important outcomes was the rise of a virtual culture. The transformation reflects the changing position of the reader or spectator who is no longer expected to interact with the work in a linear fashion at all but who can change perspective in interaction with the work in a manner that concerns that reader or viewer only.

Literature offers a vast area of communicative possibilities through which it could speak to the audience. The practice of comparing literature and film raises deeper issues about literacy, media intervention and purposes of art. It is clear that film as a form of narrative has borrowed extensively strategies from other forms. For instance while a novel may present character in the text through dialogue, description, interior monologue, authorial voice, a film shows us this through actions, gestures of the characters as well as through the atmosphere created by the mise-en-scene, cinematography ,sound and editing. While elements of setting, symbolism, plot, tone, point of view are common to both written and filmed fiction it is evident that they are developed quite differently within its discourse. Adaptations have been the mainstay of the movie industry. Apart from the aesthetic and literary credibility accorded to literary texts, filmmakers also bank on commercial returns on films based on books.

Critics like Umberto Eco, Wolfgang Iser and Stanley Fish have theorized that meanings could be seen as events that have occurred in the spatio-temporal world of the reader's imagination. Every literary work therefore presents a level of complexity to the reader in form of its open ended world. Adaptations invite the viewers to not only discuss the film but also their reading of the source text. Film adaptations therefore work on two levels. Firstly they extend the experience provided by the text. Secondly they disrupt the familiar and cherished world of the text. Therefore filmmakers can be perceived as readers and each adaptation a result of an individual reading process.

Fidelity to the source has always been a contested concept and a particularly critical one for adaptation studies. Most compilations on film studies often use this critical and theoretical issue of whether a media adaptation should be judged by its faithfulness to a literary original to jumpstart discussions about adaptations.

George Bluestone was the first to study in detail the whole idea of adaptation .According to Bluestone, the filmmaker is an independent artist "not a translator for an established author but a new author in his own right" (Bluestone 1957:62).What film adaptations achieve is kind of paraphrase of "characters and incidents that have detached themselves from language."(ibid: 63) Adaptation continues to be a focus of serious academic study and debate. Some of the significant contributors on the subject include *The Classic Novel from Page to Screen* by Robert Gidding and Erica Sheen which has close readings of films based on the tradition of New Criticism. James Griffith argues that a film is faithful by imitating a book's form and technique and not by copying the experience of its materials in *Adaptations as Imitations.* In *Film Adaptation* edited by James Naremore, critics Dudley Andrew and Robert Stam take a postmodern view claiming that every feature film is a kind of adaptation, translating into cinematic terms some other system of signs, regardless of its source. While Andrew examines the role of adaptation at different terms in history, Stam suggests 'a dialogics of adaptation' acknowledging the endless intertextuality of movies literature and other texts (Naremore 2000:66). The notion that a film or television adaptation should be judged exclusively on the basis of its fidelity to its source text is one which has been thoroughly problematized within adaptation studies. Robert Stam's much quoted critical account of the sentiments of fidelity in his essay *Beyond Fidelity* sums up the reasons for the continued support received for the fidelity approach.

When we say an adaptation has been unfaithful to the original, the term gives expression to the 'disappointment' we feel when a film adaptation fails to capture what we see as the fundamental narrative, thematic and aesthetic features of its literary source… Words such as infidelity and betrayal in this sense translate our feeling when we have loved a book, that an adaptation has not been worthy of that love. (Stam 2000:54).

The criterion of fidelity fails to acknowledge the interpretative and transformative quality of adaptation as a process. It also invariably projects and creates binaries of high culture v/s popular culture, the written word v/s the visual image and the 'original' v/s the copy. This position can be quite reductive as it diminishes the critic's role to one that is very deferential to the 'original' as the faithful adaptation and merely note or record the ways in which the film departs from or distorts the literary original. Linda Hutcheon who believes that an adaptation is a derivation that is not derivative – 'a work that is second without being secondary' (2006:9)

In other words while a quest for fidelity in adaptation may be responsible for a critical passivity, its renunciation opens up opportunities for wider critical and interpretative agency. In *"Adaptation Studies at a Crossroads,"* Thomas Leitch asserts that criticism based on fidelity and contextual concerns "are unlikely to play a leading role in advancing adaptation studies as it struggles to emerge from the disciplinary umbrella of film studies and the still more tenacious grip of literary studies" (Leitch 2008:68). With the overwhelming critical discourse in adaptation studies comes the problem of ensuring energized pedagogical practices. Critics posit that since the exact definition of adaptations continues to remain ambiguous, the much reviled notion of fidelity must be considered a productive mode of inquiry for students from a range of disciplinary backgrounds, who are just beginning to think about adaptation, its procedures and implications.

One of the major shortcomings with the notion of a direct page to screen process of adaptation is its tendency to privilege the literary source. Film adaptations have been critiqued for their ineffectual attempts at transposing the novel to screen thereby diminishing the quality of the text.

In a way every shot, scene or sequence is perceived to limit the abstract or open ended nature of the novel. In the process of 'showing' the story, the filmed version lacks the nuanced aspects of the source text. So a "good adaptation" is one that captures the "spirit" of the book. However it invariably raises the question as to who decides what the exact "spirit" of the book is. Therefore any assessment of films from the point of view of fidelity is limiting.

All adaptations express a desire to return to an original textual encounter entailing a cultural compulsion to repeat. However every "return" completely transforms the object as a film or television adaptation of a cultural text is in fact an interpretation of that text. Rachel Carroll terms this as textual infidelity that marks a key cultural practice that signifies important trends in postmodern culture. Robert Stam however looks at the shift of adaptation studies away from the questions of fidelity to "a less judgmental discourse of intertextuality". Adaptation is seen as interpretation a highly individualistic vision of a literary text even if it is fragmentary. It embeds the book in a network of creative activities and interpersonal communication. So while it escapes the pressures of capturing every nuance of the book it has to bring in a coherent and convincing meaning .James Naremore argues in relation to adaptation

The study of adaptation needs to be pinned with the study of recycling ,remaking and every other form of retelling in the age of mechanical reproduction and electronic communication .By this means adaptation will become part of a general theory of repetition and adaptation study will move from the margins of the centre of contemporary media studies (Naremore 2000:15) Erica Sheen defines adaptations as 'the transfer of an 'original' text from one context of production to an (audio-visual) other'(Sheen 2000:2).When both the source and reworked text occupy the same medium i.e. film then the resulting film is a remake .Here the 'literary' can imply a wide range of resources from pulp fiction to graphic novels. Verevis concurs by emphasizing that adaptation theory is concerned with the movement between different semiotic registers, most often between literature and film (Verevis 2006:82)

Adaptation locates the source text as original and adaptation as derivative thereby establishing a hierarchy of sorts. But James Naremore's assertion about adaptation has increasingly reconfigured approaches to film adaptations as series of intertexts and notions of intertextuality. It has expanded the scope of adaptations by placing the derivative text within its cultural moment and linking it to a web of other texts and influences. Intertextuality can arise from anywhere and through transmedia crossing and convergence, they are redefining those cultural works. Henry Jenkins highlights the fact that the practice of fan fiction defies "institutional authority and expertise ,the fans assert their own right to form interpretation, to offer evaluations and to construct cultural canons" (Jenkins1992:18)

The complexity brought in by fan fiction reflects the text's willingness to quote, displace and fold itself. In turn it also offers the study of adaptation a way in which it moves away from debates grounded in the question of fidelity. With increased accessibility of print and digital media texts are transforming in terms of transmedia storytelling, participatory culture and marketing.

The examination of cinema begins not with the structure of a single film but with conditions in which 'a film' exists as a separate entity in our current culture." John Ellis's statement provides a useful starting point for our discussion on Jane Austen and contemporary adaptations of her works as an illustration. It is important to recognize the power of media and hermeneutics of media texts, in this case film and TV adaptations of Austen's *Pride and Prejudice* and its interface with intermediality must be an integral pedagogical concern of a film and literature course. In the period leading to bicentennial year of the publication of Jane Austen's Pride and Prejudice, it is apparent that her works continue to command a phenomenal fan following across the globe. Her novels continue to be dramatized, televised and filmed which in turn have unleashed a huge fan following for Jane-ite fan fiction, spin offs and video mash ups.Some of notable spinoffs include *Mr. Darcy's Daughters* and *The Exploits and Adventures of Miss Alethea Darcy* by Elizabeth Aston; *Darcy's Story* (a best seller) and *Dialogue with Darcy* by Janet Aylmer; *Pemberley: Or Pride and Prejudice Continued* and *An Unequal Marriage*: *Or Pride and Prejudice Twenty Years Later* by Emma Tennant.

In March 2009 and 2010 Quirk Books released *Pride and Prejudice and Zombies* and *Pride and Prejudice and Zombies: Dawn of the Dreadfuls,* which takes Austen's actual, original work, and mashes it up with zombie hordes and Elizabeth Bennet as a zombie hunter! The most recent addition being P.D.James period detective piece *Death Comes To Pemberly*. The extraordinary range of Jane Austen's fan fic especially for *Pride and Prejudice* in print and on line explore the possibilities of intertextual interventions.

With her cherished place in the imaginary of English and feminist histories, Austen in film/TV adaptations is a perfect example for a synthesis of several interlocking issues of gender, class and colonial ambitions in the recreation of the Regency era England. We need to examine how contemporary adaptations can break free from a tourist gaze of the landscape, mise-en-scene to one that highlights sexuality, desire and corporeality. Three film/TV adaptations are significant here, with regard to intertextuality informing the production of much-remade works and relevance for modern mass audiences. These are the BBC TV adaptation, *Pride and Prejudice* (1995), *Bridget Jones's Diary* (2001) and *Lost in Austen* (2008). While BBC TV adaptation conveys the sense of nostalgia for the glorious English traditions it also evokes the claustrophobic weight of history, oppressive patriarchal laws of inheritance, and the strict rules of social deportment that Austen problematizes and upholds in her novels. The iconic nostalgia of the English countryside which influences the 1990s costume drama aesthetic constantly evokes according to Andrew Higson the "spectacle of iconographic stability, providing an impression of an unchanging, traditional and always delightful and desirable England". This Austen adaptation maps out the limits of historical feminine middle class mobility and aspiration, while at the same time seeking to overcome them. Austen's female protagonists are delineated through the heightened feminist sensibility of the 1990s.It also highlights the precariousness of their heroines' situations through their exclusion from property ownership and marriage being inextricable from early 19th century property relations. Heroines yearn to assert their individuality, achieve social mobility, corporeal and sexual freedom, all denied to them by accident of being born female. The BBC adaptation becomes the iconic text and functions as a visual barometer for the subsequent film /television productions. In *Bridget Jones's Diary* and its sequel *Bridget Jones: The Edge of Reason* the figure of Darcy is revisited by the actor Colin Firth whose acting prowess made him the definitive Fitzwilliam Darcy in the BBC production.

But it is interesting to see how two films *Bridget Jones's Diary* (2001) and *Lost in Austen* (2008) take forward the appeal of adaptation through their mixture of repetition and difference, of familiarity and novelty. *Bridget Jones's Diary* and *Bridget Jones: The Edge of Reason* is a novelization by Helen Fielding's of Austen's *Pride and Prejudice.* This reinterpretation of Austen's work was largely based on Fielding's borrowing of Austen's plot devices and her appreciation of the 1995 BBC adaptation of *Pride and Prejudice.* According to Kelly Marsh the novels recall in contrast the world of Jane Austen's fiction, in which self-perfection is treated ironically. Bridget records with humor the many misadventures and factors that influence her to change. These include not only her mother and her rivals, but also the entire plethora of makeovers, self-help books, diets, and other imports from American popular culture. In her exuberant reliance on Austen, Helen Fielding does not validate traditional gender roles or even traditional narrative techniques; rather, she recalls a world free of the post-Austen myth of the perfected self.

ITV Network's *Lost in Austen* 2008 Amanda Price ruminates –

It is a truth generally acknowledged that we are all longing to escape. I always escape to my favourite book "Pride and Prejudice".....I love the manners and language and the courtesy. It's become a part of who I am and what I want. I'm saying that I have standards. (Episode 1 Season1).

Amanda is bored and frustrated with modern life. She craves romance and ballrooms like her favourite novel *Pride and Prejudice*. *Lost in Austen* evokes a 'strange postmodern moment' with the reader, fan intervening in the narrative. Technology has changed our relationship to Jane Austen, the historical figure as well as to her works. It reflects a certain anomie with the present and a desire to escape to a prettier and more genteel past. Amanda's yearning for a bygone era of good manners makes her an ardent fan of the world inhabited by Austen characters. As the book's familiar plot unfolds, Amanda triggers new romantic twists and turns within the Bennet family circle as she clumsily tries to help the sisters nab husbands and even captivates the tantalizing Mr. Darcy herself. The time traveling Amanda is the quasi author whose foreknowledge of the plot disrupts and then aids the movement towards the anticipated happy ending. The mimicking of the Lake Scene from BBC's *Pride and Prejudice* is in fact a product of extrapolations by screenplay writer which have found a way into subsequent reworkings. *Lost in Austen* succeeds in blurring the lines between a culture-clash and an authentic recreation of Pride and Prejudice. It does not lampoon Austen's world and creates new intrigue and drama by exploring, with much care and attention, the reaction of well-known characters to a modern-day viewer. As a triptych of film texts this can be used as a good example of study of intertextuality and intermedial devices for pedagogical applications to examine how literary texts can be used to generate a more critical intervention into adaptation studies. Austen film adaptations reconstruct a modern Austen who is writing contemporary romance fiction through the "old" characters such as Elizabeth and Darcy. We see not only the Author's death and the birth of the Reader, but a ghostly projection of a new "Author" in the reader's cultural context. By renouncing issues of fidelity and contextuality and veering towards intertextuality and intermediality we have a collapse of distinction between High culture and popular (mass) culture and a more nuanced reading of filmed adaptations.

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Challenges of Teaching Economics in Indian Colleges

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Abstract:

As an academic discipline economics provides useful insights into how the economic and social world operates. It trains the mind to think analytically. Inspite of being an extremely relevant discipline economics has very limited appeal to the general students. This paper tries to find answers behind this negative perception of economics among the students. The challenges that the subject is facing are from the multiple alternative professional courses, abstract theories, unrealistic assumptions, excessive use of quantitative methodologies and the teacher-centric lectures. The popularity of the subject depends largely upon the instructors and the innovative methods used to make the lectures learner-centric rather than teacher-centric. The curriculum should adapt to the latest research and developments in the field involving teachers, experts from the market and industry and last but not the least the primary beneficiaries – the students.

Key Words: *Economics, Assumptions, Learner-centric teaching, Adaptibility*

Introduction

Economics is a dynamic subject which affects the daily lives of each and every individual. Economic principles drive us to take decisions like what to buy, when to buy, how to buy, how much to buy etc. Irrespective of the profession an individual pursues, economics touches his/her life. As an academic discipline economics has two valuable strengths. First, it trains people to think analytically. Second, it provides a number of important insights into how the economic and social world actually operates. Thus if economics is such an important subject then why does it not appeal to our students as we expect it to be? As educators we realise the immense potential and relevance of the subject yet the perception of our students are misplaced. As educators we have to find an answer to this. The question 'how to teach economics' in under-graduate level has attracted the attention of economists for a long time. There has been an increased effort to understand the reasons behind negative student perceptions of economics and what might be done to improve this perception. This paper tries to identify the problems associated with teaching/learning economics in Indian colleges; both from the perspective of teachers as well as students. Broadly we try to find the answers to two questions

a) What are the challenges of teaching economics?
b) What are the ways to make teaching and learning economics more relevant for all of us?

The paper has been structured in the following manner. Section 2 gives a brief idea about the discipline of economics followed by its evolution in Section 3. Section 4 discusses the challenges of teaching economics and Section 5 offers solutions to face the various challenges. The concluding remarks are given in Section 6.

1. Economics as a Subject or What is Economics

Economics and economists are words that almost everyone has heard of and uses. But what exactly is economics? The term economics comes from the Greek for 'oikos' means house and 'nomos' means custom or law hence the term economics means 'rules or laws of household'. Very few people can give a good definition or description of this field of study. There are many definitions of economics which focus on some important aspect of the subject. One of the earliest definitions was given by Alfred Marshall in his influential textbook on economics 'Principles of Economics' in 1890. Marshall defined economics as "a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of wellbeing. Thus it is on one side a study of wealth; and on the other, and more important side, a part of the study of man." Most contemporary definitions of economics involve the notions of choice and scarcity. Lionell Robbins one of the earliest contemporaries in 1935 defined economics as "a science which studies human behavior as a relationship between ends and scarce means which have alternative uses." Modern economists like Professor Samuelson feel that scarce means should be further increased to satisfy more wants and attain good living. According to his growth-oriented definition of economics, "Economics is the study of how man and society choose, with or without the use of money to employ scarce productive resources, which could have alternative uses, to produce various commodities over time and distribute them for consumption now and in the future among various people and groups of society".

Economics is a dynamic subject that is current and ever changing. It is significantly related to the framing of economic policies of the nation and of the world as much it is related to decision making of every individual. Thus economics is a study about the world around us, touching our daily lives. In a world where there is a concern about scarcity of resources, an economic way of thinking helps us to allocate these resources most efficiently and thus make better choices. There are many branches of the subject. The two broad branches of economics are microeconomics and macroeconomics. Microeconomics is concerned with the behaviour of firms, consumers, producers etc whereas macroeconomics looks at broader issues like inflation, unemployment, industrial production, role of government etc. Over the years sub-branches like environmental and ecological economics, financial economics, labour and demographic economics, managerial economics, international economics, economic history, urban, rural and regional economics, mathematical and quantitative economics, industrial organisation, public economics, monetary economics and many more have evolved. The Journal of Economic Literature Classification System gives a standard list of the branches and sub-branches of economics.

Evolution of Economics

The earliest traces of the use of economics were found in the Mesopotamian civilisation in 5000 BC with their temples functioning as banks giving loans and credit. Similarly in Indus valley civilisation, beginning sometime around 2300 BC, traces of public granaries have been found at the Mohanjodaro site. These granaries might have been the economic equivalent of a modern bank. Apart from agriculture and hunting these civilisations also depended upon trading goods. Much later during the Mauryan rule (322 BC to 185 BC) for the first time in South Asia political unity and military security allowed for a common economic system and enhanced trade and commerce with increased agricultural productivity. The Mauryan economy was based on the principles laid down in the 'Arthashastra' which was a treatise on statecraft, economic policy and military strategy authored by Kautilya.

Traces of economics, as an academic discipline, were found from about 1240 A.D when Aristotle was rediscovered in Western Europe. Economics then formed a sub-ordinate part of a broader enquiry into ethics and politics. By 1700s economics was taught as a part of moral philosophy. Although the mercantilists had started operating from the fifteenth to the eighteenth centuries and their theory was a marked break from the ethical attitude and instructions of Aristotle, they believed in increasing their wealth through the use of government intervention. The mercantilists were the first ones not to consider economics as a moral science. However the mercantilist ideas did not percolate into the educational institutions yet.

In a paper on the state of economics in 1997, David Kreps draws on Paul Romer's hourglass analogy to explain the evolution of economics from Adam Smith to the present (Kreps, 1997). Diagram 1 shows the hourglass shape of economics.

Between the 1750s to the 1790s Adam Smith continued to teach economics (political economics as he called it) as a part of the moral philosophy which included natural theology, ethics, justice and political regulations. He considered economics as the science of wealth. Smith used moral framework to criticize the alienating work of the commercial economy. He was a moral philosopher as well as an economist. His 'Theory of Moral Sentiments' (1759) was concerned with the ordering of moral behaviour and the maximisation of virtue. This was followed by the 'Wealth of Nations' (1776) which was concerned with the ordering of economic behaviour and the maximisation of wealth as a means to a higher end. However both the ideas were consistent and compatible. Smith was followed by Reverend Thomas Malthus (major contributions between 1798 and 1834). He continued with the tradition of Smith. His political economy had an agrarian and trade protectionism bias. According to him increasing agricultural productivity was more important than that of manufacturing. He felt that liberalising agricultural trade leads to adverse moral consequences of economic growth.

Malthus was soon challenged by David Ricardo (main contributions from 1810 to 1823). Ricardo considered economics as a technical rather than a moral subject. He narrowed down the definition of political economy in his 'Principles of Political Economy and Taxation', in 1817. According to him the concern of the political economy is the distribution of a given output between rent, profit and wages. This sharper focus on political economy made it a strict science like mathematics. Ricardo was soon followed by John Stuart Mill (main contribution 1820s to 1873). Mill considered moral sciences to be backward compared to the physical sciences. Mill first used the concept of an "economic man", who is a wealth maximiser. With Mill the classical economics came to a close.

The transitionary phase between classical political economics to modern economics was dominated by William Stanley Jevons (main contributions between the 1870s and the early 1880s). Jevons saw an analogy between economic science and the physical sciences. His major work "The Theory of Political Economy" used a mechanical and mathematical approach. In 1879 in the second edition of his work he proposed that the discipline of political economics should be renamed economics or economic science. This was eventually universally accepted.

Jevons was supported by Alfred Marshall (main contributions from the mid 1880s to the mid 1920s), who defined economics as the science of human welfare rather than wealth. Marshall's major contribution was called 'Principles of Economics' rather than 'Principles of Political Economy' as his predecessors would have called it. However economics was not taught as an independent subject in the nineteenth century. Economics or better still political economics was regarded as a subject which could be studied in conjunction with a study of important policy issues which occupied public minds. People were not interested in theories as such but in the use to which they could be put in settling policy issues. Marshall argued for the independence of economics from the Moral Sciences Tripos and History Tripos (Tripos are similar to what we know as majors) at the University of Cambridge. Eventually in 1903, Marshall achieved this aim with the establishment of a separate School and Tripos in economics and associated branches of Political Science. Thus by the early twentieth century Britain moved over from political economy to economics as an independent subject. The narrowing of economics as an independent subject further accelerated after the World War II with more and more advances in mathematical techniques. By the late 1980's Adam Smith's method of inquiry in 1776 was replaced by models of generalised competitive equilibrium and technical growth models. The hourglass was at its narrowest.

The late 1980s and the early 1990s saw a transformation in the discipline. Communism collapsed and the problems of underdevelopment became stark and lingering. Economists realised the need to bring into the subject questions of institutional environment (e.g law and politics) and even cultural factors (e.g idealogy, beliefs, social pressure etc). Economists like Acemoglu, Johnson, Robinson, Shleifer brought in history, legal elements of political economy into economics (Boettke et al, 2008). This was a crucial movement towards the widening of the hourglass.

By the turn of the twenty-first century the technical discipline of economics was once again transformed into political economy. More and more empirically oriented projects examining the institutional features of the world that underlie the rules governing social, political and economic interactions are gaining ground. Freakonomics (named after the important work of Steven Levitt and Stephen Dubner) type of work is gaining popularity as this has demonstrated the applicability of economic reasoning to interesting and unusual problems (Boettke, 2008) (for eg: the relation between abortion and crime, cheating among Japanese sumo wrestlers, impact of children's names on their future earning etc.). All the above developments signal a return to an empirically oriented natural language-based analysis of economics with a touch of history, politics, sociology and philosophy too.

In India economics departments were organised at the post-graduate levels by the second and third decades of the twentieth century. Economics then offered very limited degree of specialisation as it was taught in conjunction with political philosophy and /or history. All this greatly changed since the sixties and seventies in the twentieth century. Economics was acknowledged as a sovereign discipline which needed mathematics as a language, statistics as a mode of verification and history for illustration. At the undergraduate level economics is studied under the heading of micro and macroeconomics which constitute the basic contents of the papers on theory. Apart from these students are offered courses in international trade, public finance, basic econometrics, mathematical techniques and statistics, economic history of India/ Britain/, history of economic thought, Indian economics to name a few.

Challenges of Teaching Economics

a. Availability of multiple alternative professional courses:

Over the last decade as an educator we have noticed a marked decline in the demand for the traditional courses over the multitude of professional courses offered by various universities. Apart from the traditional professional courses like medicine and engineering other professional courses like chartered accountancy, costing, hotel management, designing, business management, law, animation and many more are becoming popular. As a result of the umpteen choices available to the students they are shying away from the traditional undergraduate degree which is increasingly becoming a cause for concern. Students prefer to choose a professional course with economics as an allied subject rather than major only in economics in the traditional way.

b. Loss of Interest in the subject:

Economics has been included as a course for programmes such as business management, engineering, law, nursing, culinary arts, journalism etc just to name a few. This requirement has drawn a large number of students into studying economics. Such students would not have studied the subject otherwise. These students turn critical of the subject when they encounter difficulties in the learning process. In most of these courses multiple topics are packed in the syllabus to be finished within a very short span of time. This neither does justice to the subject nor do the students learn anything meaningful. More and more economics courses are often structured around formal mathematical and statistical methods. This feature of the subject is very different from the expectations of the students of what they would generally find in a social science course (Colander, 2000). This is further compounded by a student's perception that to learn economics one must be capable of abstract thinking (Ongeri, 2009). Most of the students cannot relate the use of diagrams, graphs or statistics to what they see around. These students feel that they would be expected to express complex abstractions logically without necessarily being shown how to go about this. This intimidates the students and they end up feeling economics to be a difficult discipline. A large section of students, of course, approach their studies merely with the aim of passing an examination and acquiring a feather in their caps to pursue a chosen professional career. Thus it is not the subject that draws them but the degree that they want to achieve.

c. Dogmatic Methods of Teaching:

Teaching of economics has become too dogmatic. Students are expected to absorb a settled body of knowledge. However, the subject should be continuously evolving along with the changing economic environment. Economics teaching should be adaptable to the research findings or developments in economic conditions. This is because teaching is seen as an extension of research activities where subject content should be capable of reflecting recent development at the frontier of the discipline. Thus economics should be taught instead as more of a way of thinking about the world which can be of help in understanding a wide range of business, economic and social issues. For example a formula that is taught is that producers set price so that it equals marginal cost. However numerous surveys over the decades have shown conclusively that this is not how businesses actually set prices. The formula may make sense under very special conditions, in a static world full of identical products and ruled by diminishing returns. But the situation could be very different if firms operate not under diminishing but under increasing returns. In other words, the cost of producing an additional unit of output falls rather than rises. In such a case, setting price equal to marginal cost is a guaranteed recipe for bankruptcy. Firms could never recover their costs by following this pricing strategy.

d. Unrealistic Assumptions:

Economic theories are based on a wide range of unrealistic assumptions like rationality, perfect information, absence of transport costs etc. An assumption is an initial condition or statement of a model or theory that sets the stage for an analysis by abstracting from the real world. Assumptions are important to economic analysis. Some assumptions are used to simplify a complex analysis into more easily manageable parts. Other assumptions are used as control conditions that are subsequently changed to evaluate the consequences. These assumptions are often difficult to comprehend for the young students. Few curious minds raise obvious questions relating to the assumptions, others accept them silently. One of the most used assumptions is that of rational optimisers (consumers or producers). This assumption of rationality sounds unrealistic because 1) people are limited by their existing skills, habits and reflexes 2) they are limited by their existing values and goals 3) they are limited by the extent of available knowledge and information. Thus the assumption of rational optimisers is difficult to visualise for the students.

e. Excessive use of quantitative techniques:

With the development of econometrics and mathematical techniques, economics as a subject increasingly claimed to be a mathematical and natural science. Friedman even stated that a "positive economics is or can be an objective science, in precisely the same sense as any of the physical sciences". (Friedman 1953). The Jevonian view has become dominant with the use of maths becoming the engine of inquiry. The mathematical science of economics has emerged as the logical alternative to a moral science of economics. However, the original goal of the discipline was to serve a moral end. For example Adam Smith in his 'Wealth of Nations' attacked the restrictive mercantilist system and promoted free trade. He advocated for freedom of trade domestically and internationally but keeping in mind the interests of others too. He describes natural liberty as "every man, as long as he does not violate the laws of justice is left perfectly to pursue his own interest in his own way" (Smith, 1976). This points to the moral dimension to Smith's economics. Although Alfred Marshall considered economics to be more exact than any other branch of social science and thus training in mathematics he considered helpful for the economist" (Marshall, 1920), he had significant doubts later about the use of too much of scientific machinery in economics. In fact he considered economics as a science in the formal sense with a restricted scope of mathematics in the discipline. For him economics was a mathematical as well as a moral science.

Increasingly mathematics, statistics and econometrics became an integral part of economics. It is interesting to know that a number of economists have also been awarded the Nobel Prize for their application of mathematics to economics including the first one awarded in 1969 to Ragnar Frisch and JanTinbergen. Leonid Kantorovich won a Nobel Prize in 1975 in economics and he was a mathematician. According to Frisch 1981

"*The English mathematician and economist Stanley Jevons (1835-1882) dreamed of the day when he would be able to quantify at least some of the laws and regularities of economics. Today– since the break-through of econometrics–this is not a dream but a reality*."

Economics as a discipline narrowed down due to the lack of interdisciplinary education of economists. Sub-branches based on mathematics, econometrics, game theory etc over-powered economic history, history of economic thought etc. Sub-branches like the two latter ones could provide a lot of scope where the idea of moral science could be discussed.

f. Topics not related to the economic environment:

Economics teaching in India is done using books that are authored by economists in developed countries. Therefore the models, theories and ideas that are taught refer to the developed economies. Students in India are taught about a market economy whereas they find a more mixed economy around them. This makes the students difficult to relate the theory with the economic milieu around them.

g. Textbook as the main resource of learning:

In most economic courses a standard textbook is used as the main resource for students' learning. An over-reliance on textbooks restricts the educators to be innovative and hinders the potential for creative discourse among them. There are various other sources of soliciting ideas such as internet, magazines movies, research articles etc. But the educators feel obliged to follow the textbook contents as if it were a curriculum for the course. This too makes the subject boring for the students. (Smith 2002)

Facing the Challenges

i) The onus lies on the instructors. The most important attributes required of teachers are good content, organisation and clarity of material. Presentation skills, the ability to motivate students, approaches to setting assignments and grading etc are increasingly becoming important to keep the subject alive among the students. A teacher who loves the subject can generate the same love for the subject in the students. The latest advancements in economic thinking can then easily translate into an interesting discussion in the class. Given the limited time available to the teacher, it is not possible to teach everything. However, fundamental interest can be generated by picking up a few pertinent and relevant topics to be discussed in the class. Adapting an overly demanding stance towards students may create an expectation that they are likely to fail may create a negative impact on the students.

ii) We often assume that good teaching will ensure good learning and therefore focus on improving teaching skills and ignore learning skills. A paradigm shift from a teacher-centric teacher to a learner-centric teacher can put life into the education system. Learner-centric teaching focuses on how the student is learning rather than effective delivery of the teacher. Teaching economics should be changed from the usual trend of the teacher giving lectures and the students at the receiving end to an active teacher student interaction where student involvement is of upmost importance. This can be done on a regular basis by first introducing the subject by using interactive activities. The students can be asked to share their ideas on a particular topic. This will help the teacher to gauge the amount of knowledge students have on that topic. This can be followed by an organised detailed expert knowledge on the subject. The next step is to apply what they have learnt through class discussions. To create interest in the topic students should be encouraged to apply economic principles to current national and local issues. Say for example while teaching the topic of elasticity they can be asked to find out the impact of a petrol price hike on a family's budget. Field trips, report writing, problem solving, case studies, games and simulations etc will help them to discover more on the topic. Movies or documentaries in edited versions can be used to visually explain various Indian economic issues. Topics on agriculture, environment, co-operatives, microfinance etc can be discussed in this manner. Problem solving-based lectures can also clarify the basic concepts making the students themselves come out with solutions to a problem and thus construct their own knowledge. Sometimes game-oriented classes can be organised to break the monotony of the subject. Ideas to such games are abundantly available on the internet. Students in this manner will notice that economics is not simply about diagrams or graphs or equations but a way of thinking. Such learning centred classrooms will help develop self regulated learners who learn a variety of learning skills and know how and when to use them. Further the instructor must also discuss the ways in which these ideas or concepts are used in modern economic lives. For example the concept of Learning curve was first given by Hermann Ebbinghaus in 1885 while conducting a psychology test. But this concept saw its use in many other fields like manufacturing, service operations, health care, government operations, music, sports, education etc to aid in the continuous improvement in quality and efficiency of a process or activity within an organisation. In manufacturing for instance it helps to calculate cost of producing an extra unit, to set standards for labour, to set realistic production budgets or to quote a contact price. The students can then be given assignments to find out such examples of practical uses of a learning curve in modern economies. These exercises will help them to relate academics with its practical application.

Thus the alternative learning strategies will make the learners more engaged rather than be disinterested in the process of learning. Learning will become more effective with increased participation and interaction. Case studies, games etc will help in realising the joy of learning through discovery (Gulati, 2010). Activity related learning will help in increasing the retention of the content too. Problem solving will help to refine the existing knowledge based on their experiences. Thus there are various innovative ways in which learning economics can be made interesting. The instructors of similar subjects can get together and discuss the various ways in which a particular topic can be made more interesting by adopting a learner-centric approach. However, the instructor must not forget that at the end of the day content of the lecture should be the focus (Colander, 2004).

iii) Most of the times the syllabus is overburdened which kills the creativity and the available time of the teachers to make the subject more interesting. A large voluminous syllabus may not improve the quality of student learning economics. Teaching and learning both will become meaningful if the content of the syllabus is well structured within the experience and abstraction of the students. As mentioned above that economics is taught in courses like engineering, nursing and many other professional courses. The subject matter can be made more interesting and relevant by including more of current and relevant economic issues. Teaching of hard core theories in these professional courses will make students wary of the subject and therefore serve no purpose.

iv) As economics instructors while teaching micro and macroeconomic theories in the undergraduate level we are losing touch with economic history. The best way to learn economics would be to read about the history of economics and economic theories. One can start with older and simpler concepts and develop them into more modern ideas. This would make the study of economic theories more interesting; as they can be put into context and can be justified how better are they in their present form than what they were earlier. It would seem like a steady progression of ideas motivated by constantly emerging problems which could not be addressed by the simpler and older theories. A bit of history woven into economic theories would help the students to search for answers for the present from the lessons learnt from the past. This would also help in generating an interest in the subject in the first two years of under-graduation. Most students opt out of the subject in the third year as they feel the subject to be boring and difficult. Instructors can make an effort to make the subject interesting and contextual by bringing in economic history or history of economic thought or the recent economic incidents in the first two years while introducing the economic theories during the lectures. For instance liquidity trap is a phenomenon when an increased money supply fails to lower the interest rate and thus fails to stimulate the economy. The neoclassical economists opposed that saying that under liquidity trap an expansionary monetary policy could still stimulate the economy via the direct effects of increased stock on aggregate demand. In relation to these ideas two incidents could be cited. In the 1990s the Bank of Japan embarked upon quantitative easing, which was again followed by the US and European economies in the wake of the recent global financial crisis in 2008. The short term policy rates in these economies had touched near zero levels and multiplying the monetary base failed to revive the economy. Thus in modern macroeconomics liquidity trap refers to a situation in which nominal interest rate is zero or near zero. This liquidity trap is also known as the zero lower bound problem. Case histories, events, anecdotes etc such as above will make the students realise that economics is just not an abstract science rather the economic theories and ideas have evolved for a reason.

v) As discussed previously text book economic theories are based on a number of assumptions which mostly consider certain variables to remain constant. The role of such assumptions is to simplify the complications and the constantly changing factors of the real world in order to build up the specifics of a theory or an idea. But this often makes the model far away from the ground reality. Therefore, the instructor needs to discuss relevant events from the newspaper that are happening across the world with various factors changing. Most of the times such discussion may not fit the textbook models but gradually the students will grasp many recent terminologies and institutional knowledge. For e.g. the instructor can discuss the newspaper articles of the Reserve Bank of India’s credit policy measure to contain inflation and promote economic growth. This can also be discussed in the context of the IS-LM model which is based on various assumptions (fixed price, short run, savings only in interest bearing bonds, closed economy etc).

vi) The adaptability of any subject determines its popularity and success. Adaptibility is the ease with which the latest research findings and economic developments are incorporated in the academic course content. A subject will be relevant if it reflects the present times and the thoughts of the policy maker, business people etc. Therefore during the process of updating the curriculum not only the instructors of the university should be a part, but economists, experts from the industry and last but not the least the students should also be included. We propose the representation of the students in the curriculum committee because they are the primary beneficiaries and their views on the course content will be very useful.

Concluding Remarks

Economics as a subject has evolved over a period of 800 years. Increasingly academicians are realizing that the subject is getting distanced from ethics due to over-emphasis of positivism and quantitative techniques. No one can deny the relevance and importance of the subject in every sphere of our lives. However as an academic discipline students have negative perceptions about economics. The responsibility lies on the teachers and experts on the subject to revert such negative perceptions. The curriculum framing process has to involve not only the teachers and experts from the industry but also the students who are the primary beneficiaries. While framing the curriculum latest developments in research as well as in economies world-wide should be taken into consideration. Classrooms should be learner-centric rather than teacher-centric in order to keep the interests of the students alive. There are various innovative ways in which an instructor can make economics learning an enjoyable as well as an enriching experience. However, one must also remember that only innovative techniques and use of technology will not serve the purpose. The teacher also should be able to maintain the richness and adaptability of the content. After all it is the content which is most important in the field of education.

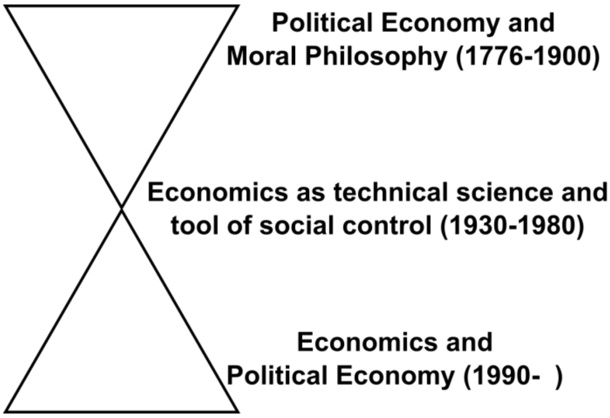

Diagram 1: The Hourglass Shape of Economics

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Research or 're-search'? - At the undergraduate level under the credit based grading system

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Abstract:

A preview of research conducted by undergraduates under the credit based grading system indicates that majority of researchers follow the 're-search' or a method popularly called the 'cut-copy-paste' method thereby undermining the objectives for introducing research at the undergraduate level. College is an incubation period where innovative ideas are encouraged, leading to pure & applied research in both the core subjects & application oriented knowledge domains. This will eventually lead to preparedness for industry participation, entrepreneurship & creating linkages between colleges & global partners both in the realm of education & research & development which is the need for the 21st century. Though the objectives are well formulated the basic problem is implementation which overburdens students with six projects per semester, lacks a module on research methodology, imposes time constraints on completion of research along with the herculean task of mentoring hundreds of students by a single teacher. An effective solution can be reduction in the number of research projects, proper mentoring along with a quality control cell, re- framing of research topics which encourage innovative ideas rather than established ideas with downloadable material, research methodology modules and every day time slots for research. To facilitate placements in the final year, those agencies could be contacted that are concerned with ongoing research that can aid effective utilization of untapped human resources. This would lead to the acquisition of application based knowledge which in turn opens new career options. The committee framing the current system of education also advocates the gain of this knowledge by students and believes this is required for economic development of both the individual & the country.

Key words: *research methodology, undergraduate level, credit based system, implementation, innovative ideas, skills*

If you steal from one author its Plagiarism
If you steal from many it is Research

- Wilson Mizner

This quote highlights the status of research at the undergraduate level under the credit based grading system which has introduced one research project per semester for each of the subjects. Hence students have to work on six projects per semester or twelve projects in the duration of one year; though introducing research work at the undergraduate level is required the feasibility of conducting a large number of projects within a short duration is questionable. For this one first needs to understand the objectives of the framing committee set up for implementing research projects at the undergraduate level. This committee views college as an incubation period where via the medium of research, innovative ideas are developed & practiced. This would help in preparing an environment for industry participation, encouraging entrepreneurship, exploring new streams for financial resources & helping in creating linkages with global partners in education & research & development. The objectives seem to be in line with the Constructivism theory based on the work of Jean Piaget (1983) and Jerome Bruner, (1973) which emphasizes the importance of active involvement of learners in constructing knowledge for themselves and building new ideas or concepts based upon current knowledge and past experiences either by active learning, discovery learning, or knowledge building. All of these promote a student's free exploration within a given framework or structure aided by the teacher who acts as a facilitator to encourage students to discover principles for themselves and to construct knowledge by working to solve realistic problems.

Thus based on the objectives formulated by the committee the author of the present paper deciphers the main objectives of implementing research projects at the undergraduate level as follows---

- Testing inherent skills & analytical abilities of students on the basis of their innovative ideas which cannot be substituted by a written exam.
- Developing & optimising the full potential of individual competencies by active participation, formulating innovative ideas in a congenial environment created by the teachers who play the role of mentors.
- Turning the focus of innovative ideas to current problems plaguing the country & coming out with innovative solutions.
- Adapting a pragmatic & positive attitude to realizing higher levels of excellence in all related fields of learning.
- Generating a research mind set in Indian students so as to make them at par with the students of foreign universities. This would encourage global partnership in education & research & development.
- Looking at college as a building block for future financial independence of students.

However unfortunately the objectives seem to be applicable only on paper as they fail at the implementation stage. This is because a research project is defined as a sequence of tasks planned from the beginning to the end bound by time, resources & given required results. However, according to the present system a student will have to plan out six projects within six months and by the time he or she understands the subject ,decides on the topic which is usually based on the availability of easy data and not with the intention of contributing anything extra to the research area, a lot of time has elapsed, hence students indulge in the cut –copy-paste method where they scan the internet for readymade & organized information or take the help of previous projects conducted by their friends, thereby undermining the measurement of innovative ideas, writing skills, analytical abilities or inherent skills. An effective research is undertaken with the intention of establishing or confirming facts, reaffirming the results of previous work, solving new or existing problems, supporting theorems or developing new theories or may be with an intention of expanding or validation of past work (OECD, 2002). Unfortunately only a minuscule percentage of projects at the undergraduate level satisfy these criteria whereas majority seem to be a compilation of previous research in the topic with no further analysis thereby defeating the entire purpose of research.

Moreover research projects if correctly implemented are helpful in improving pedagogy as teachers are regarded as mentors & guides and by this definition a teacher has to take a personal interest in the mentoring relationship, providing guidance & constructive feedback (Roth, J, 1997) which is not possible in a class of hundred or more students. In addition to this, a particular teacher handles two or more subjects therefore have to guide two hundred odd students within six months which is not humanly possible. This also hampers the ethicality of research because in the absence of a proper crosscheck by the mentors, the undergraduates are unaware of the impact of their questions, observations or comments on the researched population.

At the same time most of the students have a negative attitude towards research projects. They are not viewed as a learning experience but more as a burden or obligation or criteria which needs to be fulfilled as a part of course work therefore sometimes students complete and submit project after only working overnight , placing more emphasis on the presentation in terms of glossy papers, pictures etc rather than the content. The present system also views project work negatively by attributing inflated scores to lenient markings by teachers thereby discouraging students to undertake quality work though the framing committee talks about making the system more reliable & accountable.

The research at the undergraduate level also aims to put Indian students at par with students of foreign universities in order to enhance the partnership between global educational & research & development agencies. Though the thought is progressive, there is a vast difference in the implementation of research at the undergraduate level in India & elsewhere. The Universities abroad allocate around three to five hours of research work every day and around two and a half hours to lectures. The project work is also undertaken during the summer & winter breaks and students are given placements so as to undertake research & accordingly credits are conferred on them. (American University, Curriculum)

In lieu of the above findings and the committee's openness about midcourse corrections the author wishes to make the following suggestions---

- Since research requires proper planning, steps and ethics, the first semester should introduce students to modules on research methodology with emphasis on probable areas of research in the subjects.. Attention could be focused on the existence of a lacuna in an area of research, recurrent problems in real life situations where subject knowledge can be fruitfully applied, the methodology aspects & methods of literature review and references.
- The teacher should challenge, question, instigate the students at the problem formulation stage itself thereby helping in the generation of innovative ideas rather than accepting general areas of research. The teachers should also encourage adapting those areas of research which are being currently discussed & tackled by organizations, thereby building a career path for the students. E.g.: Steps to tackle the crises facing Uttrakhands flood ravaged areas, Solutions to curb rising rates of Depression etc.
- Since research is an ongoing process & not to be conducted overnight a system needs to be formulated whereby the teacher can keep a check on the research progress of the student and accordingly allot credits for the same.
- In order that the projects are innovative & original, a quality control cell should be set up within the colleges to scan the projects & give suggestions for improvements.
- The present system also views the project work negatively by attributing inflated scores to lenient markings by teachers. A proper standardised marking scheme should be in place to avoid these discrepancies
- Another very essential aspect is the placement of students in organizations which are concerned with research & data gathering. This will help in utilizing the untapped resources of undergraduates who have ample time and energy left after completing their day in college. This will not only help in gathering vast amount of data in promoting a research culture in India and training the youth at an early age in the techniques of research, it will also inculcate investigative & analytical abilities within them & pave the way for building knowledge based skills required for industry placements & financial security in the long run E.g.: Placement in NGOs, Conducting market research, Assistantship under a counsellor.

Therefore to conclude introducing research at the undergraduate level is an excellent idea but the basic problem lies in its implementation which needs to be debated upon by academicians, parents, students, organizations & the government to formulate a conducive & effective plan of implementation. This will pave the way for a smooth transition from college to Industry thereby ensuring economic security both for the population and the country.

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Teaching Economics: Issues and Challenges

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Abstract:

Teachers often enjoy a discussion on how the arcane subject of Economics should be taught. The article highlights the ways in which interest in the subject can be kindled and sustained. It also looks into the challenges posed by the Credit Based Grading System introduced by the University of Mumbai recently.

"The one exclusive sign of thorough knowledge is the power of teaching"

- Aristotle.

Teaching Economics is both a science and an art. This is mainly because the subject possesses both characteristics. To some, Economics is a set of confusing lines and graphs, to many it is a nebulous subject best left to itself. Teaching the subject is another story. How does one make the students understand that a 'market' is not a marketplace but a collection of buyers and sellers? How does a student visualise perfect and imperfect competition in an imperfect world? How does one appreciate the intricacies of factor pricing and derived demand? All this and more complicate the teaching of Economics, more so, at the undergraduate level. However it can never be impossible. If teaching Economics were so difficult, we would not have so many economists and a few of them being Nobel Prize winners. What is really needed to appreciate the nuances of a subject is an undying passion for the subject. That passion, in addition to the students' interest in the subject has to be created by the teacher. There are several **techniques** that one can think of.

Making **connections to students' lives** can enhance students' participation and understanding. When teachers connect the content of learning to their lives it increases the relevance of the learning and encourages students to find parallels between new learning and their own experiences. One can, for example, use local current events or issues to illustrate and analyse economic concepts. To explain "scarcity", one can use students' spending patterns and also derive a demand curve.

Aligning experiences to important outcomes can lead to valued learning. The teacher can identify what the student already knows by testing their knowledge on the subject before teaching it. For instance, the teacher can ask the students to fit a demand curve with a set of variables. While discussing the variables the exceptions to the Demand Curve can also be brought out.

The teacher should also build and **nurture a learning community**. This can be done by group work where the strong lead the weak. The teacher can facilitate an expert group activity where students learn about a particular factor that influences supply and then teach their peers about that factor. It also helps students to recognise that economic decisions by a government have effects that may be perceived differently by different groups.

Designing **experiences** that interest students is another method to sustain student interest. The teacher can encourage students to work with a local business to research productivity, profitability and performance. One can design jigsaw, model making or include role play activities to teach the Circular Flow Diagram. Real life stories can be shared to stimulate interest in a topic such as opportunity cost.

Another method is the use of **case studies**. Teaching through the case method allows educators to address specific pedagogical issues and to develop higher-order skills in students (Velenchik,1995). There are two fundamental principles underpinning the case method. First, the best-learned lessons are the ones that students teach themselves, through their own struggles. Second, many of the most useful kinds of understanding and judgement cannot be taught but must be learned through practical experience. When instructors assign problems or papers in a course, they are motivated by a similar concern: by working through the problem set on their own or writing the paper, students reach a deeper understanding of the concepts and ideas than they would have if they only read the text or listened passively to lectures. Case method teaching extends this principle to make preparing for class and the class session itself an active learning experience for students. By using complex real-world problems as the focus, it challenges students to learn skills that will be appropriate to deal with the practical problems that they will face as economists, civil servants or private managers.

The **International Economics Convention** of the HSNC Board is a fine example of how the case study method is used to hone the analytical skills of students. Different topics around a chosen theme are given to the various colleges. A team of 8 students from each college work on the given topic and present a written report as well as a Power point presentation at the end of it. This exercise makes the students look at every aspect carefully and also makes them think of suggestions to solve problems. For example, without visiting Mexico, they are in a position to discuss the state of affairs in that country, its problems and strengths.

Field visits are also another interesting way of teaching especially the working of Institutions. When the student visits NSE, SEBI or RBI, he is able to see the working of the institution under study. Seeing is believing is true here too. It may also encourage students to think of careers in these institutions. On a recent visit to SEBI with students, the common question from students was on the job opportunities in that institution.

Talks by experts ensures hearing from the 'Horse's mouth'. We often get experts from RBI and SBI to address the students on topics of interest like 'Falling Rupee', Financial Crisis in Greece etc. Besides inspiring the students, this gives them a wider canvas to dwell into topics which may not be a part of the syllabus but are definitely of economic interest.

The role of **projects** involving both primary and secondary research too cannot be overlooked. Microeconomic studies involving small amounts of primary data obtained through surveys and questionnaires, that need to be collected, recorded, tested and interpreted are exceedingly useful in reinforcing classroom concepts, while at the same time allowing students to think on their feet and see how economics works in the real world. It also promotes the use of quantitative techniques, like regression, and qualitative analysis, like the Chi square test and thus inculcates mathematical and statistical knowledge in students as well. This will help them apply theory to context and solve real world problems, as they throw light on not only the applications, but the limitations of theory as well.

Debates, Elocution competitions, essay writing competitions, poster painting, skits, street plays and intercollegiate Economics festivals are all powerful ways of driving home a point .**Interdisciplinary** programs help students understand economics from say a sociological or political point of view. An example would be the study of **Behavioural Economics**. Behavioural economics is an emerging field of study which examines the effects of social, cognitive and emotional factors on the economic decisions of thinkers and institutions and the consequences on market prices, returns and resource allocation. The focus is on the rationale of economic agents and hence, Behavioural Economics integrates psychology with neo-classical economic theory. This definitely requires an interdisciplinary approach. Interdisciplinary study is crucial to the proper application of economic theory to context as it is useless to simply regurgitate what you have learnt from a single text without obtaining a holistic perspective by applying it across several disciplines.

While there is no dearth of methods to make Economics interesting to students, the point to be discussed is how many of these are feasible in a country like India?

Challenges

First and foremost, the **Credit based system** with its attendant tests, assignments and semester exams leaves very little time for doing anything differently. One test gives way to another and before one can say 'Jack Robinson' the term is over. The teachers too are busy compiling attendance records, mark sheets etc. **Paucity of time** does not permit one to eschew the beauty of the subject.

Moreover, in a place like Mumbai, with people jostling for space, **dedicated room**s for such activities are hard to find. One has to plan the calendar very carefully in advance to ensure rooms are available when needed.

The **attitude** of the students too is more centred on getting good marks or clearing the paper without an ATKT, that one finds there are very few students with love for the subject. Unless the student has a passion for the subject it becomes difficult to make much headway in innovative teaching. Hence, instilling interest and passion for economics becomes an imperative need.

The average **class size** in commerce classes is 120 students and with such numbers, it becomes difficult to monitor and guide students individually.

The **workload** (20 per week) for each teacher also gives very little time for innovative teaching. Moreover, research which is essential to keep abreast of recent events which have a bearing on economic theory becomes nearly impossible.

When there are problems, there are solutions too. It may take time to streamline the regular administrative chores and make teaching more enjoyable for students and teachers. The students are more malleable and can adapt to newer teaching methods. The onus is on teachers to adapt to demanding times and evolve an interesting teaching methodology. This, one can be sure will be achieved.

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The Teaching of English Literature at the Undergraduate Level: Challenges & Concerns

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Abstract:

English is the global language today and a second language for most of the students in India. Teaching of English language and literature has always had its own challenges. However, in today's high technology age, the challenges and the concerns faced by the English teacher, teaching at the undergraduate level, are manifold. Interestingly, the tools of globalization like the audio-visual media and a widespread exposure to popular culture can provide teachers with strategies to overcome those challenges. This paper looks at both the challenges as well as the remedies that can be applied, provided teachers are able to battle the exigencies of the present day educational system.

English language has been the lingua franca of India since more than a century now. R Narayanan, in his study on English language teaching in India (2009), says that, "…….***Because of the great ethnic and linguistic diversity found within our nation, English acts as an indispensable 'link' language. English symbolizes in Indians' minds, better education, better culture and higher intellect***".

However, English still mostly remains a second language. It is a language that has to be taught and learnt unlike the mother tongue which is assimilated naturally. India already has a rich wealth of many regional languages and students from different regions of the country grow up learning the basics of reading and writing in English as a second language.

It is ironical that the more advanced we become in the use of technology in today's modern world; the more dismal are our standards of English becoming. At the school level, we are failing to impart a clear understanding of the language amongst students. English literature is the tool not only to gaining insight into human nature but also to understanding the English language. Unfortunately the texts taught are not interesting enough for students nor can they relate to it at a daily level. This is compounded by the mostly unimaginative and laidback manner in which teachers teach. The result is that our so called English medium schools are churning out huge numbers of students who cannot spell or write correctly, whose vocabulary is sparse and for whom English is just a functional language.

When this group of unmotivated students reach undergraduate level, it is very difficult for them to grapple with literature in all its different genres and forms. They now have to deal with entire papers in American literature, British Literature, Indian writing in English, Grammar and Art of Writing, Linguistics, Culture studies, Literary theories and so on.

Students across small towns of India take up English literature thinking that enrolling in this degree course would help them learn speaking skills in English. When faced with Chaucer and Shakespeare, they are baffled and mystified. They then read from the euphemistically named 'guide books' which give them a translation of the original text into their regional language. So across all of India, we find English literature texts translated into Punjabi, Hindi, Bengali, Oriya etc so that students can earn a degree in English Literature. There is a thriving business of publishers producing such 'guide books' in several languages for undergraduate and post graduate students.

The English teacher is faced with many problems when teaching English literature to such students. The present technology savvy generation has lost the habit of reading. Reading still is the mainstay of an English Literature student. When teaching texts in class, it's discovered that students have not read even the well-known books available everywhere today. The youth of today are an audio-visual generation and learn little through only reading. When teaching Jane Austen's,' Pride and Prejudice' to a class of first year Bachelor of Arts students, this researcher found that many students found the novel quite boring and that they lacked the sensibility to view the text in its proper context.

The problem was even more severe when it came to teaching poetry and literary theories. Both these topics were viewed by students as difficult. While students enjoyed the cadence and flow of reciting poetry, they exhibited poor analytical skills when it came to understanding symbolism and drawing inferences. Literary theories were very daunting to them and concepts were ill understood. Studying English Literature was more of a prestige issue with them, even though most of them had poor communication skills.

This country has many school boards and the quality of English learning and teaching varies immensely across all the boards. There are some boards which inculcate a sensibility towards English Literature by introducing time-honoured texts by Shakespeare, Milton and so on; however, there were also boards which had dry, technical passages downloaded from the Internet as their course content. No effort had been made by the Syllabus committees to engage the students' interest.

In India, English teaching and learning still remains teacher centric. It is the teacher who has to take various corrective measures to arouse the student's interest, to maintain it and to translate that into learning. Audio visual aids could be one way in which teachers could supplement the text. It was found that when this researcher showed students the BBC series of 'Pride and Prejudice', the students enjoyed the experience and it also helped them visualize the age, dress, manners and so on. Similarly when BBC series of Shakespeare's plays were shown, students grasped the nuances of the language and intricacies of the characters better.

However, this cannot become the norm for all texts. When teaching texts from Indian Writing in English, it was found by this researcher, that students sometimes, responded better to the text itself than to the visual adaptations of the text. The novel, "Pather Panchali" was understood, enjoyed and analysed succinctly during the reading and discussion sessions. However, when the acclaimed film by Satyajit Ray was shown to the students, the slow, lyrical pace of the narrative hampered the students' enjoyment. In such a case, it was better to show interesting clips of the film than to show the entire film. The reverse held true for certain other texts like Anita Desai's 'In Custody' or Girish Karnad's, 'Fire and the Rain" where students found viewing the visual adaptations more appealing than reading the texts.

There should not be too much dependence on the visual medium by English teachers since it limits students' imagination. Secondly, since today's generation is highly visual friendly, the recall impact for films is more for them than for texts. This can often confuse them and they do not see where, so often, films differ from the written word. The auditory medium has been less explored by the teachers but can prove to be very beneficial to students. Audio renditions of plays and poems inculcate better understanding and also have a retention value. This writer once found a high school student travelling on the local train, all the while listening to the audio DVD of Shakespeare's play, 'Julius Caesar', which was prescribed for his English Literature course. On questioning the student, it was found that he could recite lines from the play, could appreciate the finer nuances of the play and hence understood the greatness of the play and the playwright. Many such audio renditions are freely available on the internet now.

There are many challenges that the English teacher faces while teaching English in India. One such challenge is getting students to build their communication skills i.e. build their listening, reading, writing and speaking abilities. English literature has been and can be used effectively as a tool to improve English language. Nissani and Lohari (1996) have rightly said, ***"The best road to language proficiency lies in its literature; nothing is so emotionally gripping so that it is remembered for a long time".***

Interesting texts chosen from all kinds of world literature provide a diverse exposure to students. The idea then is to teach these texts in a holistic manner and not in a dry manner by talking only about literal meaning, grammar, sentence construction and vocabulary. Entire passages read by students under teacher's guidance, can build their pronunciation skills and enhance their expressive abilities. Drawing the students to give their own interpretations of the text also helps in building their analytical skills. An interactive method of teaching and learning is always more fruitful than the teacher-talk and student-listen one. The problem, however, lies when teachers themselves lack good speaking skills. Our regional schools suffer immensely because teachers speak English that is heavily overlaid by their regional accents. As a result students too pick up faulty pronunciations which are very difficult to get rid off. Hence a rural or semi-rural child from the North of the country may always pronounce the syllable 'sh' as 's' while the rural or semi-rural child from the South of the country may always pronounce 'm' as 'yum'. It has been found that language laboratories are very useful in correcting pronunciations. Today, there are very good language laboratories that can cater to quite a few students at one time and hence educational institutions should consider setting them up.

One of the major problems in our universities and colleges has been the selection of the syllabus. Syllabus committees are notorious for sticking always to the tried and the tested. There is very little effort to address the needs of the students and to have texts which will excite their interest. Today's generation is highly influenced by popular culture. Facebook, twitter, chatting, texting and so on keep them connected to the web world at all times. Movies, music, television soap operas and fashion dominate their world. Technology aids them in their passion for these fields and metropolitan or urban Indian students carrying blackberries and I pads is getting to be more and more widespread. The main point here is that popular culture is ever present in students' lives. English as a language is accessible and acceptable to them in the form of pop music, movies and popular fiction. It is time that this popular culture was used as a resource by the English teacher to address the teaching of English Language and Literature.

Several popular writers and authors have through their works brought our students back to reading. Popular texts from the west as well as those written by Indian writers have been very well received by our young adults. These works, which were once looked down upon by the English academia, could prove to be very helpful in teaching English, since students would relate better to them. The academia is also realizing that popular culture can no longer be treated as an invader of hallowed literary space but has to be given due importance. As the saying goes, 'Teach me the way I learn, if I do not learn the way you teach.' Not just texts, but popular music, computer games and movies could build an interface between subject knowledge and student's interests.

As Manmeet Sodhi says in his paper, 'Popular culture as a Resource in English language Teaching' (2011):

According to Cheung (1998), there are two types of prior knowledge: subject knowledge, and encountered knowledge. The first is the students' previous knowledge of the subject, as learnt in school. Encountered knowledge is what students have learnt through their interactions with the

world (e.g. from popular culture). However, teachers often neglect this second kind of knowledge. If they introduce new materials by drawing upon students' subject knowledge and encountered knowledge, the students will find it easier to make sense of their learning, and will be more willing to learn. Since students' encountered knowledge frequently comes from popular culture, it can be a useful aid for teachers to set the condition for learning.

Hence it is time that English Syllabus Revision Committees introduced some good selections of texts from popular culture. Greek mythology is easily understood from The Percy Jackson series by Rick Riordan. Celtic mythology pervades the Harry Potter series. Indian mythological fiction like 'Immortals of Meluha' not only contemporizes mythological figures, but also delineates the concept of conflict and perceptions, besides also rendering life philosophies in an easy manner.

English teachers today, for that matter, any teacher today, has to consider the students' psychology while teaching. Until an understanding of the subject is engendered in the student, no teacher can consider herself successful. Teachers have to adopt effective teaching methodologies. No two students learn the same way, hence a variety of means have to be adopted to facilitate learning. A teacher today cannot hope to teach in the same manner that she has learnt. There is a vast difference between today's generation and the previous one. Hence teachers need to innovate at all times. When symbols of popular culture are introduced in the lessons, it's found that students' recognition of the topic and interest in the subject, both get stimulated.

It is essential that learner centric methods be used in the classroom. As Dr Navneet Kaur says in her paper," Diagnosing Ailments in the Prevailing English Teaching Programmes" (2011),

Teachers should concentrate on how to make the learners learn, rather than what they should learn. Gone are the days when teacher dominated informative mode of teaching was practiced, providing no scope for any meaningful learning to take place. Now is the time for learner centred mode. In schools and colleges we are still following the stereotyped methods, rushing to the completion of curriculum, which only encourages spoon feeding, killing the initiation, originality and thinking. Using the language, here, becomes an uphill task. The teacher should kindle the kinesthetic stimulation of students and involve them in games, competitions, dramatization, group activities, storytelling, recitation etc. He should try to make his learners independent and self-sufficient and let them get free from his apron strings, as it goes –'give a man fish and you feed him for a day; teach him how to fish and you feed him for life.'

However, it has to be acknowledged that all of this is easier said than done. An English teacher's task is quite daunting today with the introduction of the credit based grade point average system. Teachers find themselves short of time and are rushing to complete the curriculum. They are overburdened with assignments and projects and their imaginative faculties are challenged by the amount of clerical documenting work being shoved upon them. Elaine Showalter in her work, Teaching Literature, too speaks of the exigencies of the 'ticking tenure clock' and 'the skeptical roomful of students' that English teachers have to battle with every morning.

A teacher of English deals in the world of criticism and imagination, however, now she finds herself busy all the time preparing question papers, conducting exams and evaluating answer books. In this scenario, facilitating learning the innovative way is the biggest challenge being faced by all teachers today. Especially, since our students are still caught in the age old trap of rote learning and spoon feeding. Their originality and creativity has already taken a nosedive and our cumbersome education process gives short shrift to developing real knowledge through an enjoyable and creative journey.

However, teachers cannot allow themselves to be defeated and can fight the system only by joining it, so that they may be able to devise insightful, interesting and informative syllabi that motivates, excites and educates the students and also provides for teachers to use innovative teaching methodologies.

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Teaching of Commerce: Reflections on Pedagogical Practices

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Abstract:

The research paper presents the pedagogical practices which are used in the teaching of commerce. Commerce is an area which gets immensely associated to the changes taking place in the outer world. The latest amendment in the Companies Act, 1956, has been introduced through a bill known as Companies Act, 2012, which makes it compulsory for every company to have at least one female director in their respective board of directors, which necessitates the need to sensitize the students about the gender awareness and gender development. It also focuses on the impact it will have on the personal as well as the professional development of women, because the corporate world will be forced to provide higher positions to women in their respective areas. The pedagogy in commerce teaching also imbibes the practical learning approach, which also provides them a platform for experiential learning. The concept of learning by doing will help students in attaining the desired skills for the corporate world. It has become the need of the hour that the students should be provided not only with a theoretical approach, but also the desired skills which will help them in their overall development and will prepare them for the constantly changing working environment.

Keywords: *Experiential learning, Industrial and Social Collaborations, Entrepreneurship.*

Introduction

The dynamic industrial world presents new challenges as well as opportunities for the surrounding environment, consequently demanding continuous changes in the overall environment. The education environment has to keep itself abreast of these developments and therefore, the big task which remains ahead of the teaching community is to continuously adapt to and adopt these changes in the commerce pedagogical practices. The teaching of commerce strives to achieve the goal of equipping students with the desired theoretical as well as practical skills.

The main objective of teaching methodologies is to train and equip students for the work environment. The goals also include imbibing and inculcating the right skills among the students so as to prepare them to be good entrepreneurs as well as good managers. Students are motivated and encouraged to become entrepreneurs through various programs wherein they use their innovative and creative skills.

The teaching aspect includes a range of innovative practices that seek to provide a wide experiential approach to students. The brain-storming method not only provides them an opportunity to share their ideas but also helps in the utilization of their skills. It also provides them an equalized learning approach, where learning is more participative and enriching for the learner as well as the facilitator.

Objectives of the study

The research paper aims:

- To equip the students with the required vocational skills through the commerce teaching.
- To help imbibe and inculcate management skills among students through various initiatives.

- To analyze the emerging need for changing pedagogical practices for the overall personality development of students.
- To develop entrepreneurial skills among students and to develop the concept of lifelong learning.

The need and use of Pedagogical practices:
The teaching of Commerce involves a wide variety of pedagogical practices providing an experiential learning. The learning methodologies should allow for the overall participation of students.

The recent studies conducted show that one out of three graduates lack vocational skills which are required by the corporate world. The corporate world earlier used to spend so much time, effort and money on training graduates for the skills required for work. However, now even the corporate community does not seem to be interested in investing in the initial training programs. They expect graduates to be prepared and skilled in the required vocational skills.

Therefore, it is becoming the need of the hour that at the undergraduate level the pedagogical practices should be revised so as to equip students with the required skills. The teaching and learning methods should accommodate the recent changes which could be adapted as a part of the syllabus.

Within the boundaries of the syllabus different types of approaches could be employed which will not only provide a better learning platform but also will lead to learning which will be full of enjoyment and satisfaction.

Industrial Collaborations

The experiential learning platform will involve industrial visits which will help the students in the overall development of their personalities.

Industrial visits not only provide an overall knowledge focusing on the information about the functioning of the industry, but also help imbibe a range of management skills among the students such as team building, planning, organizing, coordinating etc.

The student should be equipped with the processes and the procedures involved in the functioning of the industries.

The corporate world can look forward to collaborations with the education industry to provide hands-on training in educational institutions, which will reduce their work and the cost involved in it. The whole activity will not only be time saving but also cost effective.

The induction training programs conducted by the industry could be shortened. More of internship programs could be arranged which will help in serving the stakeholders, the industry as well as the students.

The pedagogical practices in the teaching of Commerce in future will be more and more practical and innovative as well as close to the functioning of the industrial world, therefore aiming to provide a workforce which is fully trained and well equipped.

Social Collaborations

Social Collaborations includes the collaborations with the society such as NGOs. The students work in collaboration with the NGO for stipulated hours in the making of diyas, candles etc. and at the end of the training, they exhibit their products, the proceeds of which are remitted to the NGO itself.

Experiential Learning

The teaching of Commerce also includes trade fairs and exhibitions. Trade fairs and exhibitions provide a wide opportunity to the students to utilize their skills and to develop entrepreneurship skills. It also leads to a cultural environment where students can interact in a wider group in an informal environment.

Programs such as “best out of waste” will not only sensitize them towards the environmental issues, but will also help them improvise using their creativity. Building of team spirit and leadership qualities will help in enhancing their overall personality.

The pedagogical practices in the Commerce subject also include the correlation between environmental studies and environmental development. It also includes the impact of the two on each other. The learning practices include the impact of natural factors on the anthropogenic factors.

Innovative and Creative platform

The subject of Environmental Studies can be taught through the poster making competitions model making competitions, and most importantly making short documentaries based on environmental issues, causes and concerns. The models made could consist of representation of volcano eruptions, hydroelectricity generation, slums, pollution etc. The students can also be asked to make documentaries wherein issues like littering, noise pollution etc are covered.

Teaching practices also include developing the confidence level as well as the presentation skills of the students. Power point presentation competitions will not only boost their confidence but also develop their communication skills while delivering presentations.

Gender Sensitization

Teaching of Commerce involves sensitizing the students about gender awareness and gender equality. The entrepreneurship module covers the case studies on women entrepreneurs comprising of different strata of society for example Tupperware initiated by a woman entrepreneur. The students are also motivated to take research topics focusing on Tiffin services initiated by women, small scale industries, handicraft, handlooms and a large number of household enterprises. Many of these small scale enterprises operate within the vicinity of their residential areas.

The study of Human Resource Management focuses on the equality of work, pay package and the other benefits. The different theories of HRM and latest amendment to Companies Act, 1956 i.e. Companies Bill 2012, comprises of gender equality.

The importance of an equal representation in the board of directors has made it compulsory for the companies to have one woman director in the board of directors.

Gender sensitization and gender awareness will develop a sense of gender equality and gender development. It will also propagate respect among each other. It will create a world where all are treated as human beings living dignified lives.

Need for Inclusion

There exists a dire need for inclusion of issues and concerns of gender awareness in the Teaching of Commerce. The values should be imbibed in the future generations so that they develop the same skills which could be carried to the corporate world. Corporate life needs to accommodate and equip employees with the concept of gender development. They should also create an environment which will provide a platform for equalized development and growth.

There are large criticisms against the corporate community for being biased with respect to gender issues. There are some companies which hesitate to employ women as they fear that the employment of women would affect the corporate culture.

Some companies also fear that once women are employed they will increase the problem of absenteeism for issues like marriage, pregnancy, child rearing and so on.

The male population in the corporate world tries to dominate and discourage women from taking up the top most positions in the company. Consequently not many women in the corporate community reach the top positions. The males in the corporates do not want to work with females due to different reasons. They are not willing to accept the idea of having a female leader in the team or a female boss.

The inclusion of module on gender sensitization will imbibe the right values among the future generations which will help in changing their approach towards different gender. Gender awareness workshops, seminars, discussions and debates etc. should be organized.

Conclusion

The initiatives will help all the stake holders. The first stakeholders and the primary benefitting community i.e. the students will develop all the desired skills which will support and prepare them for the corporate culture as well as will equip them with entrepreneurship skills. The innovative pedagogical practices will enrich the teaching community and will also update the methodologies adopted. Above all, the new innovative practices will provide an added advantage to the corporate world, with an access to a workforce which is well equipped, trained and well informed.

In the future, projects and assignments should focus more on the practical approach comprising of research, case studies, field visits, presentations, study tours, simulation techniques, internships, collaborations etc providing an experience which will be enriching and enlightening.

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Media Learning and Media Unlearning

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Abstract:

Information available on the internet has made students and teachers both extremely savvy. Technology has been instrumental in changing the Teaching learning methodologies in institutions of higher learning. The faculty or the professors are also the people who have transformed themselves according to their students needs and to be a student or teacher of mass media it requires a few additional skills. Studying for a media course is about knowing and learning about every stream of media. For a media student, pursuing knowledge of one discipline is not enough. The possibility of a media graduate becoming a newsreader is higher but not everyone is cut out for that. And it's time students realize this and choose their profession wisely. Assignments and projects have to be challenging and innovative for them to get real world experience whether of making ads, portfolios, films, magazines or newspapers. In addition one needs to hone their presentation skills and be confident when they have to pitch to the real clients. Teaching and learning methods have to be constantly upgraded and have to keep with the times. Faculty requires rigorous training and need to keep themselves abreast with the latest happenings in the world of media.

Key words: *Media, Mass Media Courses, Media Students and Media teachers.*

Introduction

Information available on the internet has made students and teachers both extremely savvy. Looking for material online is now almost de rigor – not only is it fast it is also an extremely easy way to source information. Online content is extensive, ready to be explored and used at one's convenience. Given this ground reality how do we teachers keep up & teach in a classroom environment?

Technology has been instrumental in changing the Teaching learning methodologies in institutions of higher learning. The faculty or the professors are also the people who have transformed themselves according to their students needs and to be a student or teacher of mass media requires a few additional skills. As a teacher of communication one cannot but keep oneself abreast with the changes almost on a daily basis. What one prepared as a session last year may be totally irrelevant for the current year. One has to constantly evolve. A teacher can make a lot of difference in the classroom by bringing information which is well researched and tailored to the needs of a media class. The experience and exposure of a faculty transcends into the learning environment of the class too. But even before that is considered there is a big question one needs to answer and that is who should be studying a media course?

Media students come up with several reasons as to why they enroll for any media course. A survey of UG and PG was conducted to find the reasons why they enrolled for these courses. The result of this survey has helped the researcher to understand the expectations of the stakeholders.

Why do some students register for the course?

Studying for a media course is about knowing and learning about every stream of media. For a media student, pursuing knowledge of one discipline is not enough. One has to be a student of psychology, history, political science, management, marketing and films as much as of, photography. Opportunities are ample but one needs to be equipped to face the real world. The aspirants have several misconceptions about the courses when they start. They have no clue of the options when they enroll. Some of the answers one hears repeatedly from aspirants when asked about why they want to do this course are:

1. **I am creative**
2. **I want to be like Barkha Dutt**
3. **I want to act in films**
4. **I want to be a model**

No harm in being ambitious of course, but students need to realise that there is a stark difference between acting schools and media schools. What they don't understand is that these programs are intense and are integrated. They expose students to the production of media in its several forms like:

- Journalism
- Advertising
- Public relations
- Photography
- Video editing
- New Media
- Film appreciation ... the list goes on.

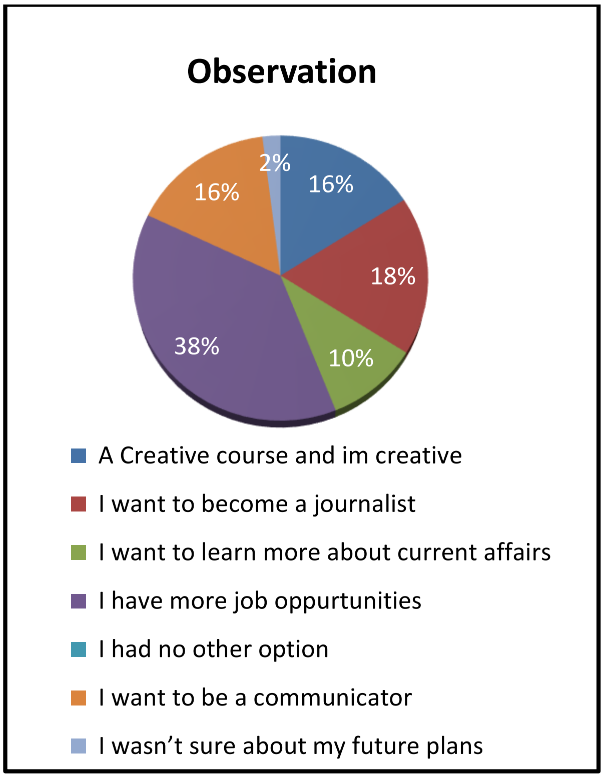
Then there are niche areas like media planning and buying and media research that the course acquaints the students with. We all have something special about us and each one of us needs to identify the passion within. One can't be deluding oneself by believing that a degree from a mass media course makes them equipped to face the camera.

The possibility of a media graduate becoming a newsreader is higher but not everyone is cut out for that. And it's time students realise this and choose their profession wisely, because otherwise they'll only lag behind. All the advance tools of learning are used in the classroom to keep the class interactive and interesting. Every paper they learn has power point presentations, short film making, tests, debates, discussions, Book reviews, newspaper making, magazine making and photography. They also create Integrated Marketing Communication plan and learn to conduct media research as part of their projects.

The group usually is a combination of students who are good at writing, designing and speaking. As professors, we identify their skills and encourage them to choose a profession for which they have the right aptitude. The course has thirty six papers at the undergraduate level and twelve papers at the PG level. Three year under graduate programme BMM (Bachelor's of Mass Media) has two semesters each year with six papers in each semester. The two years' post graduate programme MACJ (Master of Arts in Communication and Journalism) has three semesters of four papers each and the forth semester is intensive research of six months . A four-week compulsory internship in media houses is a turning point in their lives. They work for a newspaper, ad agency, PR firm, production house and nowadays even for social media for four to six weeks either to like or dislike the nature of work involved. Completion of the internship usually clears the cobwebs and acquaints them with the real world of media. They know what they will be getting into.

Assignments and projects have to be challenging and innovative for them to get real world experience whether of making ads, portfolios, films, magazines or newspapers. In addition one needs to hone their presentation skills and be confident when they have to pitch to the real clients. Instilling confidence and values is an essential ingredient of any learning process. As faculty we take pride in their achievements as we see them develop into full-blown professionals.

Methodology – Primary research was conducted on students of a south Mumbai college studying the UG & PG courses. A random sample of 50 students of under graduate and post graduate levels was taken. The exercise was more to understand the reason for them to have registered for a media course. These fifty were chosen as they are currently pursuing their degrees in media. The result of the survey was taken with the help of computer software is as follows:



Observations

Looking at the analysis it is very evident that the reasons for enrolling for a media course were different for different students. The majority of them have chosen the media course for several job opportunities (38%) that it provides. Some of them have preferred this program over the other available options as it will help them to know more about what is happening in the world around them (10%) in a more structured form. Few others have expressed their desire to graduate as good communicators (16%) through this course.

As it is very clearly seen from the chart above that a few have registered for the course because they wanted to become journalists (18%), whether they prefer to be journalists for print like for magazine and newspapers or they want to opt for broadcast journalism is what they are unclear about it at this stage.

There were some respondents who felt that they were creative (16%) so they are in the right course. A small number also admitted to being unclear about their future plans (2%).

Conclusion

Media students had varied reasons to have enrolled for a UG or PG course of their choice. The study clearly explains the fact that the institution also plays a pivotal role in the shaping of these young minds. Media schools also need to keep updating their curriculum from time to time. Teaching and learning methods have to be constantly upgraded and have to keep with the times. Faculty requires rigorous training and need to keep themselves abreast with the latest happenings in the world of media.

Today's generation is far more exposed to technology and hence keeping them interested in class can be a very challenging task. Then why not call ourselves facilitators instead of teachers.

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A socio-economic analysis of street vending in Mumbai

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Abstract:
Informal economic activity, as a livelihood source, has been part of urban cultures everywhere. The informal sector absorbs anybody and everybody as there are no formal rules at the entry level, no skill and training required and low capital investment. Many of the poor from rural areas flock to urban areas to escape caste discrimination, migrating with a hope of employment and a better life. Mumbai is like a magnet, a city that welcomes all those willing to work hard. They seek work in the informal sector- hawking, street vending, working in sweatshops, construction sites etc. The focus of the paper is to take up the case of the migrants to Mumbai and consider some issues that call our attention as we seek to modernize the city.

Key words: *Livelihood, Migrants, Urbanization, Vendors, Inclusive, Encroachment*

Introduction

Keith Hart (1971) coined the term ‘Informal Sector’ to capture the livelihood avenues that lie beyond the ambit of official regulations. It is the work space of the economically vulnerable who eke out a living under extremely harsh job conditions, in a variety of activities and are paid a pittance. In spite of its ‘sweat shop’ status, the informal sector is an integral part of urban spaces across the non-developed world. In India, apart from being the major source of employment, the informal sector has also served as a vital handmaiden of the formal sector. It is estimated that 93 % of the Indian work force is engaged in the informal sector (Sengupta, 2006).

This paper attempts to understand the dynamics behind the generation and perpetuation of the informal sector. By interacting with the trials, tribulations and triumphs of the vendors of perishables (vegetables, fruits and flowers) on the Mumbai streets, this paper builds up its data to realize the following objectives:

1. Analyze the quantitative and qualitative aspects of contribution of the informal sector to the urban economy in particular and the nation in general.
2. Examine the inadequacy of policies in ameliorating the plight of the informal sector workers.
3. Expound the complementing and contesting relationships between different urban sections and the informal sector.
4. Suggest measures to bring about a meaningful and dignified integration of the informal sector with the mainstream economy.
5. Validate the following hypotheses:
   a. The poor socio-economic conditions entrenches people in the informal sector.
   b. The social capital benefits accruing to those engaged in the informal sector are not commensurate with the economic capital that they contribute.

Methodology

The methodology adopted in this study includes the accessing of primary and secondary sources. For the primary information, a quick survey was carried out on vendors of perishables like vegetables, fruits and flowers. About 30 respondents were administered the questionnaire across Mumbai. This paper, after these initial introductory remarks, expounds the evolution and entrenchment of the informal sector. The socio-economic profile of the informal sector workers forms the subject matter of the subsequent section. A discussion on the reciprocal contributive aspects of the informal and formal sectors is undertaken in the next two sections. The paper winds up by positing a few attitudinal and policy suggestions to further enhance the contribution of the informal sector's symbiotic association with the urban space.

Emergence and perpetuation of the Informal Economy

In India, post-independence, the processes of industrialization and urbanization led to the phenomenon of migration for new survival opportunities as well as to escape caste discrimination and nature's fury. Singh (1994) maintains that due to the low rate of industrialization and the capitalistic nature of industrialization, all the migrant labourers cannot be absorbed by the industrial sector. Left to fend for itself, this surplus labour is compelled to depend on informal ways to earn a livelihood. This labour segment is in contrast with the capitalistic orientations of the urban economy, thereby emphasizing the dualistic tendencies (in the form of the organized and unorganized sectors). The informal sector, in many ways, not only supports but also supplants the formal sector, thus allowing the latter to diversify. There is this oft-cited example of the leather products from Dharavi being sold at departmental stores and boutiques of various high-fashion brands. So, a tanner from the informal sector (producing these goods where he lives) has his goods sold by a salesperson who perhaps has had some basic amount of education (and probably travels from the suburbs to work) in a shop owned by an MBA holder who is quite wealthy.

The past few decades, particularly after 1970's, have witnessed changes in the employment situation in Mumbai. There has been a decline in employment in the organized sector while the unorganized sector has seen a rapid increase in the same. In a study based on the 1961 census data, Heather and Vijay Joshi (1976) found that 65% of the city's workforce was engaged in the organized sector while 35% were employed in the unorganised sector. Later studies have revealed that this trend has changed drastically after the 1980's. Jobs in the formal sector have been shrinking with the closure of textile mills in the late 80's which resulted in a lot of surplus labour. These unemployed sections looked to jobs in the informal economy, their wives too swelling the ranks as vegetable vendors, flower sellers and domestic workers`. Interestingly, the National Sample Survey Organisation (NSSO), 64th round reveals that nearly 70% of the migrants to Mumbai come from rural or urban areas within the state of Maharashtra itself. So for every one migrant coming from other states (Bihar, UP, Orissa), there are three coming from within the state.

The Mumbai Metropolitan Regional Authority indicates that the share of the two sectors reversed by 1991 with 65% employed in the informal sector and 35% engaged in the organized sector. The 2011 census provisional data shows that Mumbai's population of the city is around 1.6 crores as compared to 1.2 crores in 2001. The 65th Round of the National Sample Survey reveals that the total employment in Mumbai was 52,93,940 of which 42,94,940 were in the unorganized / informal sector. The data further shows that around 37% were self-employed and of these 12% constitute street vendors (Bhowmik, 2010)

Street Vending in Mumbai

According to John Cross (2000), street vending was typically thought of as a pre-modern traditional economic order that survives only on the fringes of modern society. But this phenomenon has become widespread over the years. A large section of the migrants work as vendors as this activity absorbs anybody and everybody as specialized skill, training or education and large seed and operational capital are not required. Street vending and hawking are the most viable options open to the poor as a pathway to lead them out of poverty. The range of work activities in street vending, apart from hawking, includes purchasing the goods for sale, finding and securing a site for sale, greasing the palms of various officials and ensuring that at least a working rapport is built up with the consumers. Earnings are low and earning discrepancies abound. Mumbai, the largest metropolis in the country, has the largest number of street vendors across the country. The National Policy for Urban Street Vendors (2006) states that around 2% of the total population of a city (about 2.5 lakh) is engaged in street vending. According to Bhowmik (2010), this section of the urban poor, unable to get regular employment, tries to solve its problem with its own meagre resources and live a life of dignity and self-respect through hard-work and limited capital and Mumbai is the magnet that attracts most of them.

Socio-Economic Realities of Vendors

Since these migrant-vendors' general conditions have deteriorated as they grapple with the realities of survival, this paper considers it imperative to highlight their socio-economic plight. For this, the paper depends on the exploratory survey that it conducted. Most of the vendors live in slums, one room tenements, rented places or even on the roadside. Just one or two from the sample actually owned a home. Vendoring involves a lot of hard physical work. Most of them are up early in the morning around 4 am and visit the main market in Dadar to collect their goods and then go to their operating areas. Most of the vending happens along transit routes along the roadside and *nakas*, outside railway stations and around main markets.

Vendors work for almost 10-12 hours a day and earn on an average around Rs. 350 per day. From this they have to spend for their various domestic purposes (with some having large families to support), pay the local officials and rotate cash for the next day's operations. Thus, the vendors are left with very meagre savings and therefore have to depend on money lenders to bail them out. They struggle to get medical aid because of their low earnings and ignorance. It was also found that most of the respondents do not have a bank account nor a PAN card. They do not trust the government and since most of them have a low level of education, they are generally unaware about any governmental programmes / schemes created for them.

When asked what they would like to recommend in terms of change, they alluded to a stable structure to their current employment. They expressed a desire to be rid of middlemen who take advantage of their vulnerability. Finally, they wanted the government to issue licenses easily, regularize their activity and are even willing to pay a nominal affordable fee for this.

The City's Response to the Vendors

Along with the socio-economic hardships that they face, their travails are further aggravated in course of their interactions with politicians, consumers, real-estate agents, shop-keepers, vehicle owners and residents. The urban vendors both men and women, reach goods and services to all classes of people, symbolising the interdependence of the rich, the middle class and the poor. They represent the link between the slums and the flats, the residences and the commercial centres, between the rural and the urban.

Jhabvala (2000) points out that urban areas have always provided an arena for interaction between different classes, communities and interest groups; each trying to get a foothold in the city. In the early weeks of 2013 there was a drive to evict hawkers from Mumbai suburbs. However, in the Mumbai suburb of Vile Parle, the middle class populace came out in support of the vendors. But, the elite view the presence of vendors in a different light. In a hurry to modernize the city, they would like to get rid of the vendors who they perceive as the polluters of the landscape by spilling on to already congested streets, creating traffic problems, adding to the chaos; they are seen as a source of filth, disease and crime, as squatters on valuable commercial and residential space, both public and private, violating ones' sense of order. As regards their interaction with locals, vendors say that while people do come to them to purchase products, there are some who view them with suspicion, many are indifferent towards them and some also discriminate against them and label them "*bhaiyyas*". Sanjog Yadav a respondent in anguish said, "*Hum bhaiyya hain, lekin hum yahan humarey parivar ki arthik sthiti sudharney aaye hain. Humey hameshaa galat kyun samjha jata hai*?"

Activities of the vendors are often perceived to be illegal, as they are conducted on encroached public land (a space they don't own or rent). In most cases, the government gives them a license to operate or right to sell on civic land but without providing appropriate trading infrastructure. According to John Cross (ibid), the problem lies not in the phenomenon occurring in their streets but in the preconceived notions of the government and of policy makers regarding that which constitutes the "appropriate" use of public space. Street vendors get in the way of traffic precisely because city planners have left them with no other option. Little wonder that demands for city planning result in drives against hawkers and vendors by the powers that be.

Highlights of street vending

From the exploratory survey conducted and the socio-economic conditions noted, it was evident that most of the vendors had only substituted rural poverty for urban misery. The following are some of the highlights of street vending

1. This sector generates its own employment and earns their living with minimal support from the government.
2. Given the limited socio-economic resources they have at their disposal, this is a viable option for vendors to sustain themselves.
3. They provide important services to consumers at convenient places and affordable prices.
4. Furthermore, they contribute to economic growth. Due to the large number of vendors, their trade does constitute a substantial percentage of the city's economy.
5. Jhabavala (2000) opines that street vendors are a part of culture and tradition of the region – of its public culture. To replace them with supermarkets would destroy part of our own being, thereby stinting the growth of our collective psyche and self-definition.

Conclusion

This paper makes a case for inclusive policy formulation and implementation to integrate them into the urban economy. It is important to recognize that these natural unorganized markets take a life of their own and therefore, their activities need to be regularized. Any temporary measure (like evictions) to solve the problem of street vending is not sustainable.

This paper advocates reforms for vendors along the following lines:

1. The National Association of Street Vendors of India (NASVI) successfully campaigned for a national policy on street vending, first passed in 2004 and revised in 2009. The Supreme Court of India subsequently issued a ruling requiring the government to pass a law on street vending no later than June 2011.
2. Policy should recognize street vending as an integral part of the urban retail trade and distribution system, The National Policy aims at giving street vendors a legal status by devising a registration system, where the vendor will be given an identity card with a code no and a category. This is to be supervised by the Town Vending Committee (TVC) headed by the respective police commissioner.
3. The Policy also recommends a range of civic services to be provided. These include storage facilities, solid waste disposal, water, public toilets, electricity. Other ambitious initiatives include providing access to credit, skill development, housing, health care benefits and even pension schemes for street vendors.
4. The National Policy 2009, also introduces three zonal categories: Restriction Free Vending Zones, Restricted Vending Zones, No Vending Zones. This aspect is problematic as zoning may be a good idea in smaller places but in a large metropolis like Mumbai, access and commute to these zones will pose a problem for the consumer.
5. One of the significant omissions in the policy is with regard to giving protection to street vendors from the repressive municipal laws.

The policy also does not offer any guidelines to the State to handle the surplus labour of this sector. In the absence of a clearly specified law safeguarding the vendors, the implementation of spatial restrictions and registration mechanisms there is a possibility that powerful lobbies may be favoured.

The paper has established the important role that street vendors play in weaving socio-economic fabric of society. Activities like vending that were once denigrated as marginal / black market can be seen as entrepreneurial in their own right and thus a potential for development. 'Policy makers should create ways in which the 'formal' and 'informal' sector can exist side-to-side, continue to support the 'modern' formal system but also allow spaces for micro-business incubators, in which those overlooked by the formal sector can develop their own solutions to the poverty in which they live' (Cross, 2000).

All the concerned stakeholders should remember that no progress can be achieved without a meaningful dialogue between the civic authorities, shop keepers, residents' associations on the one hand and vendors on the other. Negotiations and policies should aim at consolidating an inverse correlation between modernisation and marginalization. If the suggested recommendations are put into action, society, polity and the economy would be able to ensure that the social capital benefits that accrue to those engaged in the informal sector are indeed commensurate with the economic capital that they contribute.

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Multimedia as a multi-sensory tool for Mathematics instruction

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Abstract:

The teaching and learning of Mathematics is a complex activity and many factors determine the success of this activity. The nature and quality of instructional material, the presentation of content, the pedagogic skills of the teacher, the learning environment, the motivation of the students are all important and must be kept in view in any effort to ensure quality in teaching-learning of Mathematics. The present paper traces the importance of Multimedia based multi-sensory instruction in teaching and learning of Mathematics.

Keywords: *Multimedia, Multi-sensory instruction*

Instruction is helping people learn and develop in a structured manner. Learning can certainly occur without instruction. Humans are continuously encountering and interpreting their environment and the events in it. Learning is a natural process that leads to changes in what humans know, can do and how they behave. An important function of an educational system is to facilitate intentional learning, in order to accomplish goals that would take much longer without proper instruction.

Instruction is defined as a set of events embedded in purposeful activities that facilitate learning.[1] These events can be external to the learner. Instruction is directing students to appropriate learning activities; guiding to appropriate knowledge; helping them rehearse, encode and process information; monitoring student performance and providing feedback as to the appropriateness of the student's learning activities and practice performance.

Teaching is different from instruction. Teaching is only one part of instruction. The word “teach” infers that a person is lecturing or demonstrating something to the learner. However, the teacher or trainer’s role includes many different tasks, such as selecting materials, gauging student readiness to learn, managing class time, monitoring instructional activities and finally serving as a content resource and a learning facilitator. “Instruction” puts emphasis on a whole range of activities the teacher uses to engage the students.

Though Mathematics is an important subject occupying a central position since the Ancient times, it has failed to captivate the interest of the student community at large. There are gaps found between student aspiration and achievement in the subject of mathematics. Mathematics is highly abstract. It is concerned with ideas rather than objects; with the manipulation of symbols rather than the manipulation of objects. It is a closely knit structure in which ideas are interrelated. Mathematical concepts are hierarchical and interconnected, much like a house of cards. Unless basic concepts are mastered, higher level concepts cannot be understood.

In the traditional undergraduate Mathematics instruction, importance is given to only speech and texts, to the book and to the teacher. Undergraduate students face lot of difficulties while learning Mathematics on account of the abstract language it employs. To add to this visualization is seldom used in a traditional undergraduate mathematics class. One of the greatest difficulties in teaching and learning undergraduate Mathematics does not stem only in its complexity but also in the fact that its cognitive aspects cannot be generated purely by mathematical ideas.[2] Thus traditional undergraduate mathematics teaching tends to ignore the cognitive stages of development. On the contrary mathematics instruction should use teaching methods, strategies and pedagogic resources that are much more fruitful in gaining adequate responses from the students. Students learn best when they are active rather than passive learners.

Mathematics instruction must lay more focus on the higher level of objectives, like critical thinking, analytical thinking, logical reasoning, decision-making, problem-solving. Such objectives are difficult to be achieved only through verbal and mechanical instructional methods that are usually used in a traditional undergraduate mathematics class.

R. Ramanujam (2012)[3], in his overview of Mathematics education in India mentions, “Mathematics was seen to be an essential part of any curriculum however the perspectives differed.

The Zakir Husain committee in 1937 saw it in relation to work. The National Policy on Education in 1986 saw it as a “vehicle to train a child to think, reason, analyze and to articulate logically.” However, the shape of mathematics education has remained largely the same over the last 50 years.”
The National Curriculum Framework 2005[4] guided the development of new curricula and textbooks based on how children actively construct knowledge, rooted in social and cultural practices emphasized the need for processes such as “formal problem solving, use of heuristics, estimation and approximation, optimization, use of patterns, visualization, representation, reasoning and proof, making connections and mathematical communication”.

In the new millennium, Mathematics Education research is experiencing the new methods emerging and a widespread implementation of several information technology advancements. In the last thirty years, a noticeable and extensive research in many areas has contributed to major shifts in fundamental views of how learning occurs as well as developing rich knowledge basis for effective instruction.

Everyone is capable of learning, but may learn in different ways. Therefore, teaching must be presented in a variety of ways. Teachers should use appropriate methods, models, strategies and tools for facilitating learning. Multi-sensory learning and active involvement with self-pacing may result in better understanding and application of the subject.

Multi-sensory learning, as the name implies, is the process of learning new subject matter through the use of two or more senses. It is learning that involves the processing of stimuli through two or more senses. The five sense organs are the input channels and therefore known as the gateways for learning. Learners take information in through these five sense organs which is in visual, auditory, tactile, nasal and taste form. When the information from all these inputs is combined, it is stored in the brain in multiple places.

Albert Einstein said, “Learning is experiencing. Everything else is just information.” His insight suggests that we must experience our learning by using our complex sensory systems. Humans experience the world in constant multisensory stimulation. Therefore, it is likely that the human brain has evolved to develop, learn and operate optimally in multisensory environments. Instructional strategies that employ only single sensory stimulus regimes, therefore, might not be optimal for learning. Multisensory instructional strategies better approximate natural settings and are more effective.

Multimedia as an instructional tool aids learners to understand difficult mathematics concepts through the multi-sensory approach. Multimedia instruction is the integration of more than one medium in a presentation or module of instruction. Multimedia presents interconnectivity to information in a variety of possible combinations, sequences and mixture of resources which develops higher-order thinking in students. Students learn to sift the relevant from the irrelevant information and can relate new information to real world situations. With technology, the process of learning generates interactive and active responses; students demonstrate both cognitive and emotional intelligences in accordance to the multimedia stimuli. Multimedia capable features such as the embellishment of graphics, orchestrated sounds, animated / moving pictures and present videos are innovations which can enliven the learning experience.[5]

The flexibility of multimedia to replace traditional textual instructions allows a wider range of stimuli, both in the verbal and visual, thus increases the state of student's engagement in learning. Multimedia is capable to transmit information through its capacity to make it alive, thus helping students to make real-world visualisations otherwise unseen. Interactive multimedia learning cultivates interaction between the learner and the learning content making it student-centred. Interactivity makes the learning process responsive and active, governing a learning of participation and doing, not passive watching or merely listening.[6]

To conclude, the power of multimedia based instruction in teaching and learning of Mathematics lies in the fact that it is multi-sensory, stimulating the many senses of the audience. It is also interactive, enabling the end-users of the application to control the content and flow of information (Vaughan, 1998)[7]

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The challenges of the Credit based system

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Abstract:

The Credit Based Grading System has been in place for a number of years in most Universities abroad. It is universally used for grading of the learners intellectual and scholastics ability. There are proven positive aspects inherent in the system. But its implementation in Mumbai University maybe mainly due to the great number of students in hundreds of colleges spread over a vast area. A small group through discussions and intensive deliberations produced a short comprehensive view of existing knowledge in the area and future direction of the credit based system of evaluation.

Keywords: *credit based evaluation, technology, learning potential.*

Background

The most important aspect of learning is developing a capacity for abstract thinking and reflection. Students learn through a variety of experiences like reading, experimenting, listening, thinking, reflecting, writing and speaking, etc. Thus, conceptual understanding can be developed by engaging students actively in the learning process. Active involvement involves exploration, enquiry, questioning, discussion, reflection leading to creation of ideas. Hence, the challenge before the teacher is to initiate this process of active involvement and learning various concepts.

Education in India has undergone various phases and stages of development starting from the Gurukul system of Vedic age to post-independence period which has been largely influenced by the British educational system started by Lord Macaulay. At all stages of development there has been a concern about bringing in quality education that reflects the practical aspects of education. The great Indian thinkers also emphasized developing the inner potentials of individual by strengthening the unique capabilities of the individual. Getting educated was solely dependent upon the interest of the individual, teacher role as a facilitator and generating an environment for learning.

Education is a continuous process and reforms in education have to be continuous in keeping with the changing needs of society and development of technology.

The recent National Curriculum Framework–2005 focuses on the following issues:

- Connecting knowledge to life outside.
- Shift from rote learning to constructing knowledge.
- Providing wide range experiences for overall development of a child.
- Bringing flexibility in the examinations.

Role of the teacher: The development in technology has changed the world outside the classroom; it is more eye-catching and interesting for a student than the classroom setting. As a result students find classroom instructions dull and devoid of life and these do not interest them in learning. The information technology has made the learner WWW afflicted. The question arises that in the age of computers and the internet where all the information is available online at all times at the touch of a button- what is the role of the University and the Teacher? The teacher has a tough time arranging different kinds of learning experiences that will catch the attention of students, will maintain their motivational levels and will energize them to work in new situations even with limited resources. The teacher thus has the difficult task of channelizing the information available into knowledge.

Role of the University: The University's role is to devise a curriculum that enables students to find their voices, nurture their curiosity – to do things, to ask questions and to pursue investigations, sharing and integrating their experiences with knowledge rather than their ability to produce textual knowledge to inculcate critical thinking among students making them active learners. This can be made possible by taking advantage of ICT and working on multiple intelligence models.

The University should be a place for learning, largely connected with the rest of the world, helping students to think cohesively, coherently, imaginatively and creatively so as to then contribute back to the society by helping everybody to reap the benefits. University should also help people to think critically about issues that concern them. So university's prime purpose must be to develop social imagination in all its constituents, i.e. teachers and its students. University education should develop analytical skill to delve into truth beyond apparent, and to dream of things which seem impossible right now. University, the soul of the society, should be a place for a lot of self-critical growth and not just a technocratic managerial model of trying to mould people into fit this into a group that delivers the goods. Liberation of mind is the goal of the university.

The IIM model of pedagogy

- The content should be transformed into cases and case studies to make the subject application-oriented.
- Recommended reading material as well as pre-planned case studies and handouts/ brief synopsis.
- Students should be recommended books at the end of every topic.
- The teacher is responsible for developing the reading material if it is not available for any topic, chapter, paper or subject.
- Teacher should also teach what is not available in the textbook.
- Students have to be motivated
- There should be more and more tutorials to ensure more interaction with teachers and the overall development of the students.
- Curricula needed to be revised and updated at regular intervals. University should help to provide opportunities to both students and teachers to enrich their knowledge by learning from global experiences.
- Along with the lecture method there should be presentations, discussions, and interactions.
- There should be more classroom discussions rather than chalk and board method.
- The new topics should be linked with the traditional topics.
- Some guest lecturers from abroad should be invited and students must be given opportunity to interact with them.
- Interactive and case method of teaching and learning should be adopted.

Application aspect of learning should be given more importance to make the students practical and to help them compete in the outside job market. There should be long hours of reading, a greater time devoted to campus activities and leaflets and handouts should be given to the students. Students should be motivated to read journals and e-journals. Curiosity and inquisitiveness of students should be reinforced.

Research is the most important function of the University. Research must contribute to the growth and development of individual and body and knowledge. It is believed that complete autonomy is required to generate knowledge and research work. Universities generally emphasize fundamental research, applied and action research. Some longitudinal studies solving institutional problems need our attention.

The challenges of the Credit based system

It was felt by some teachers that semester system of examination would be good and a continuous evaluation system should be followed. Some questioned the objectivity of this system. Another area where the conflict in the views of the teachers came forward was that some preferred objective types of questions in the examination but others were of the opinion that true knowledge can be judged only through subjective questions.

The 150 year old Mumbai University felt the need to change the existing teaching and evaluative pattern followed over the decades. The new Credit based semester grading system(CBGS) was introduced in the year 2011-2012. The system put forth clear objectives based on successful programmes abroad. It was suitably altered to cater to about 6 lakhs students associated with over 650 colleges and institutes.

Objectives

1. The choice based credit system is in tune with the global trends in education.
2. Sound grading system for reflecting learner performance.
3. Degrees are granted on the basis of completion of a requisite number of credits from different courses.
4. Flexibility to complete the programme over an extended period of time.
5. Flexibility to offer Inter departmental or Inter Institutional transfer to the student/ stake holder
6. Continuous evaluation of the learner
7. To offer the learner a chance to get credits across different streams
8. The concept of credits is good as it shows that the learner has the knowledge

For example: A student gets credits for Psychology/ Sociology/ Political science/ Music/Arts driven by his choice of subjects

Merits

1. Continuous evaluation of the learner over the course duration gives a more accurate picture of the students ability than the current method of examination based evaluation where the focus was only on the final examination that happened at the end of 3 years of study.
2. The learner is motivated to attend classes and is an active participant of the teaching learning process. The learner is now an active member of the classroom activities that include discussion, debates, presentation etc.
3. The learner has to obtain 40% marks and needs to individually pass in all the components of the internal evaluation. This raises the bar
4. The learner gets a chance to improve his performance over the semesters
5. The system of additional examinations helps a student to improve performance and gain credit
6. The learner more often than not uses his creative skills in assignments, presents case studies, research paper based evidence in internal assignments

The shortfalls of the credit based evaluation system as faced by several teachers:

1. The effect of the system has not been felt by both the teachers and students as it is new and it will take time to get accustomed.
2. The students have not yet understood the importance of the system.
3. The system aims to be directed to improve overall pass percentage as a student is given a number of chances to get credits.
4. There seems to be no advantage to offer to the above average student. E.g. 70 marks-A Grade & 95 marks-A Grade
5. It makes it difficult to differentiate between mediocre and above average students.
6. There is grade anomaly in the system Eg. Student with 65 marks gets A Grade while a student with lesser than 85 marks in 5 courses and greater than 70 in 1 course gets A Grade
7. The teachers face the limitation of time to give in depth/ detailed knowledge of the topics.
8. The continuous evaluation for a large number of students in a class makes it difficult to complete the syllabus.
9. The stake holders develop a complacent attitude towards the external/ end term examination as they have now several

opportunities to appear for the same in the form of re-examination.

10. The pressure to maintain records of internal marks that include, overall performance, attendance, class participation, co-curricular activities etc. all fall upon the teacher.
11. The provision for additional exams provides the stake holders a loophole in the system to escape commitment.
12. The objective of introducing choice based credit system wherein a student can opt for credits in different courses cannot be implemented due to high numbers of the student fraternity opting for subjects and infrastructure constraints of the affiliated colleges.

Conclusion

The CBGS has been in place for a number of years in most Universities abroad. It is universally used for grading of the learners intellectual and scholastics ability. There are proven positive aspects inherent in the system. But its implementation in Mumbai University may be hindered mainly due to the great number of students in hundreds of colleges spread over a vast area. The CBGS system may need to be adapted to the large student numbers in the University and evolve as a fruitful measure of the true academic potential of the student population at large.

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The Science of Shampoo: Herbal vs. Synthetic

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Abstract:

Hair care has started very early in human civilization around 4000 BC using animal fats and plant oil, however shampoo was introduced only in late nineteenth century and has become very popular product globally since then. In India herbs were used for hair care even in early 19th century, however, it was during mid 20th century that these herbal extracts were mixed with shampoo to obtain Herbal shampoo which was not very popular that time. In last few decades use and popularity of herbal shampoo has increased remarkably. Present study provides the basic information by conducting survey suggesting that there will be an acceptance of scientifically designed herbal shampoo in the market. Preparation of herbal shampoo is a potential small scale business venture that generates employment as well as social awareness.

Key words: *Herbal Shampoo, Business venture, Social awareness*

Good looks and expressing unique individual styles have invariably been an important part of human nature throughout all ages. Hair which happens to be worn the whole day has perhaps been the greatest opportunity for self expression. No matter what their type of hair, blond or black, straight or curly, short or long, humans have always strived to have healthy looking, beautiful, and shiny hair (Mitchell 2005).

History of hair care products

The earliest reference to hair care practices could in fact be traced back in time to around 4000 BC among the Egyptians who used crafted combs produced from dried fish bones (canadiansmallbusinessandinfo.mht). By 2000 BC ancient Egyptians were using hair shampoo made from a blend of citrus juice and water. During this time hair conditioning was done using animal fats and plant oils. During 1300's European ladies used hair conditioners derived from a mixture of dead lizards boiled in hot olive oil.

The earliest hair care products used in the world was the brush and comb, to keep the hair tidy. It is said that the inventor was Lydia O Newman, who created the first hairbrush in 1865. The range of hair care products has been expanding since the invention of the brush and comb. At the turn of the century, when hair care was still a deeply troublesome practice, the industry was poised for a breakthrough. In 1898, the Berlin chemist Hans Schwarzkopf focused his efforts on developing new products for hair. According to the current company's Web site, "Hans disliked the expensive oils and harsh soaps used to wash hair, and were inspired to create a better solution." What Schwarzkopf developed was a water-soluble powder shampoo. It's ease of use made the product so popular that by the next year Schwarzkopf began to supply his powder shampoo to virtually every drugstore in Berlin, however, it was leaving the hair dull (The History of shampoo 2008).

History of shampoo

The word *shampoo* in English is derived from Hindustani *chāmpo*, and dates to 1762 (Douglas 2007). The shampoo itself originated in the eastern regions of the Mughal Empire particularly in the Nawab of Bengal where it was introduced as a head massage, usually consisting of alkali, natural oils and fragrances. Shampoo was first introduced in Britain by a Bihari entrepreneur named Sake Dean Mahomed, he first familiarized the shampoo in Basil Cochrane's vapour baths while working there in the early 19th century.

In the 1860s, the meaning of the word shifted from the sense of massage to that of applying soap to the hair (Mahomet and Herbert 1997). Earlier, ordinary soap had been used for washing hair (Gray 2013). However, the dull film which soap left on the hair made it uncomfortable, irritating, and unhealthy looking. During the early stages of shampoo, English hair stylists boiled shaved soap in water and added herbs to give the hair shine and fragrance.

Oils, dirt, skin particles, dandruff, environmental pollutants and other contaminant particles that gradually builds up in hair is removed by hair care product like Shampoo. The goal is to control the unwanted build-up without stripping out so much sebum as to make hair unmanageable (www.wikipedia.com).

Kasey Hebert was the first known maker of shampoo, and the origin is currently attributed to him. Commercially made shampoo was available from the turn of the 20th century. Originally, soap and shampoo were very similar products; both containing the same naturally derived surfactants, a type of detergent. Modern shampoo as it is known today was first introduced in the 1930s with *Drene*, the first shampoo with synthetic surfactants (The Original 2007).

Traditional and prehistoric use

Indonesia

Early shampoos used in Indonesia were made from the husk and straw (*merang*) of rice. The husks and straws were burned into ash, and the ashes (which have alkaline properties) are mixed with water to form lather. The ashes and lather were scrubbed into the hair and rinsed out, leaving the hair clean, but very dry. Afterwards, coconut oil was applied to the hair in order to moisturize it (Agar RAMBUT 2004).

India

In India, a variety of herbs and their extracts are used as shampoos. A very effective shampoo is made by boiling soap nuts with dried Indian goose berry (aamla) and a few other herbs, using the strained extract. This leaves the hair soft, shiny and manageable. Other products used for hair cleansing are shikakai (*Acacia concinna*), soap nuts (*Sapindus sp.*), hibiscus flowers and arappu (*Albizzia amara*, The Hindu 2002).

North America

Certain Native American tribes used extracts from North American plants as hair shampoo; for example the Costanoans of present day coastal California used extracts from the coastal woodfern, *Dryopteris expansa*, for a shampoo Michael 2008).

Progress in modern era

As people became increasingly aware about personal care, need of the shampoo has increased in the society, which leads to lots of research regarding ingredients and preparation of the shampoo. As Majority of the people has started using shampoo its demand has increased steadily, therefore many companies have launched their products with different brand names e.g., Clinic plus, Dove, Pentene etc. However, all these products were made using more or less similar chemical ingredients.

General Composition of shampoo

Other ingredients are added to achieve

- Pleasing foam
- Easy rinsing
- Minimal skin/eye irritation
- Feels thick and/or creamy
- Pleasant fragrance
- Low toxicity
- Good biodegradability
- Slightly acidic (pH less than 7)
- No damage to hair
- Repairs damage already done to hair

Many shampoos are pearlescent. This effect is achieved by addition of tiny flakes of suitable materials, e.g. glycol distearate, chemically derived from stearic acid, which may have either animal or vegetable origins. Glycol distearate is a wax. Many shampoos also include silicone to provide conditioning benefits.

Commercial products

Shampoos available in the market are broadly classified in to three categories

1. **Synthetic** : mainly uses chemicals as ingredients viz., Clinic plus, Head and shoulders, Dove, Pantene
2. **Herbal**: Will have herbal products as active ingredients along with basic chemical components viz., Nyle, Ayur, Himalaya, Arnica
3. **Medicated**: Used for treatment of specific hair problem viz., Sebamed, Nizoral, Lycil etc. Specialized shampoos have special ingredients (Figure on the next page).

In the USA, the Food and Drug Administration (FDA) mandates that shampoo containers accurately list ingredients. The government further regulates what shampoo manufacturers can and cannot claim as any associated benefit. Shampoo producers often use these regulations to challenge marketing claims made by competitors, helping to enforce these regulations. While the claims may be substantiated however, the testing methods and details of such claims are not as straightforward. The North American Hair Research Society has a program to certify functional claims based on third party testing.

Health risks

Methylisothiazolinone, or MIT is an ingredient used in many commercial shampoos. MIT and its closely related analog, chloromethyl-isothiazolinone or CMIT, affect the ability of young or developing neurons to grow processes (axons and dendrites) in tissue culture (Huang 2006). Some studies have shown MIT to be allergenic and cytotoxic, and this has led to some concern over its use (De Groot and Herxheimer 1989; Schnuch et al. 1998). The CFTA (Cosmetic, Toiletry, and Fragrance Association) and the European Scientific Committee on Cosmetic Products and Non-Food Products Intended for Consumers (SCCNFP) both released reports stating that methylisothiazolinone poses no health risks to humans at the low concentrations (0.01%) used in finished cosmetic products (SCCNFP).

Role of media

Popularity of shampoo as hair care product is increasing steadily since its invention in early 20th century. There are number of shampoo manufacturers entering the market with number of variants and specialized purposes. The competition amongst the manufacturers is increasing gradually; therefore, they are coming out with attractive packaging and impressive advertizing. In the present era, information is easily available to the consumers, however, survey conducted by Syed et al. (2012) suggest that majority of people are unaware about the formulations of the shampoo they use and rather they are influenced by advertising or packaging. All the commercially available shampoos have different active ingredients, hence, not always suitable for everybody. Rampant use of synthetic shampoo often results in hair problems like hair loss, dry and dull hair, premature graying and dandruff.

Though there has always been a conflict between the use of chemical and herbal personal care products, people are increasingly becoming aware of advantages of herbs. There are many variants of herbal shampoos available in the market; however, it is very difficult to get a commercial shampoo with all the desired characteristics.

Hair Care Industry at present

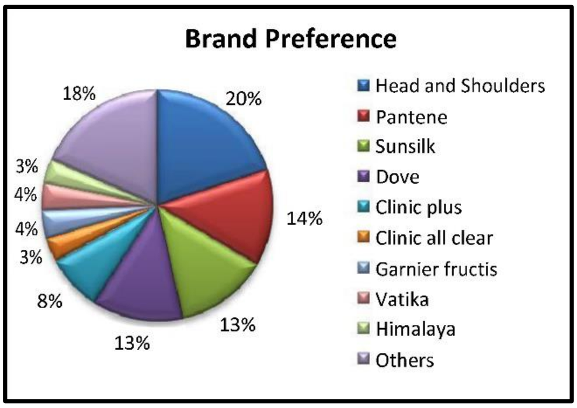
Currently, there are lots of innovations and developments in the hair care industry providing an ideal combination of science and nature. The present trend depends upon products produced from pure botanical extracts using modern hair care technology to supply a variety of shampoos, conditioners, and sprays. One should use hair care products without potential harmful ingredients and leaves hair healthy and naturally manageable (canadiansmallbusinessandinfo.mht)

In our laboratory, a market survey was carried out to understand brand preference of consumers and compared different brands of shampoos with respect to their physical, chemical and Biological properties (Syed et al. 2012, Vaidya et al. 2012)

Some of the expected qualities of a shampoo as mentioned by respondents are:

- Should have natural ingredients
- should be gentle with conditioning ability
- Should help increase luster
- Should repair damage
- Should remove oily matter from scalp's surface
- Should be able to maintain natural moisture balance of hair
- Should prevent roughness and dandruff
- Should support hair growth

A variety of shampoos from different brands are available in the market. The market survey showed that Head and Shoulders, Pantene, Sunsilk, Dove, Clinic plus are some of the most preferred ones by consumers.

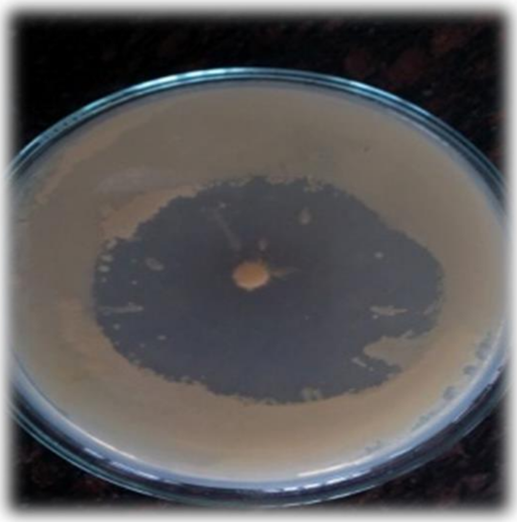


There is an ongoing debate regarding the use and efficacy of herbal and synthetic shampoos. Herbal shampoos are believed to be less effective as compared to their counterparts, especially with respect to conditioning ability. However, many people have experienced side effects after prolong use of synthetic shampoos.

Out of the respondents 99% were using shampoo regularly, however, ~81% of people are using synthetic shampoo whereas only about 19% of people use herbal shampoo.

There are many variants of herbal shampoos available in the market; however 64% of people have never tried any herbal shampoos. It is very difficult to get a commercial shampoo with all the desired characteristics. Therefore, when we asked respondents about trying a new scientifically prepared herbal shampoo; ~62% were keen to try such a product.

Vaidya et al. (2012) had suggested that herbal shampoos are equally effective as synthetic ones not only with respect to cleaning ability but also with respect to their ability to control dandruff.

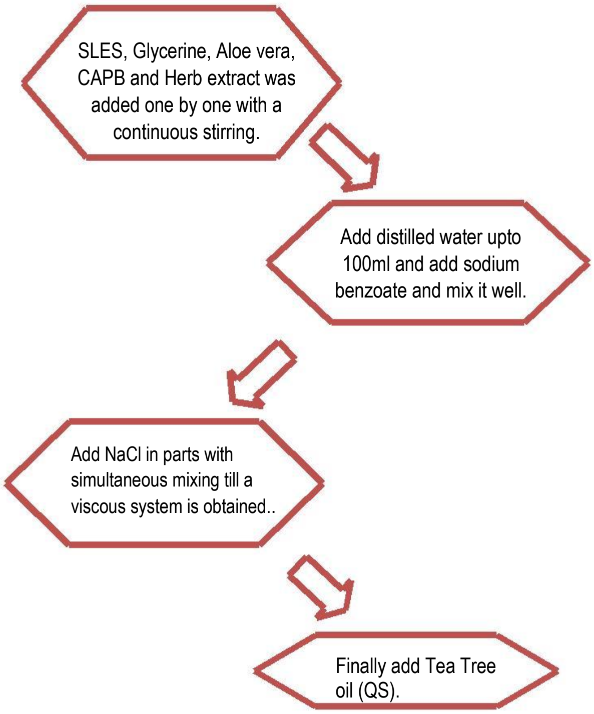


Keeping this in mind, in the present study, an herbal antidandruff shampoo was prepared using heena, amla and shikakai along with following ingredients.

Formulation of the Shampoo

No.	Components	Quantity/100ml
1	Sodium Laureth Sulphate	30 ml
2	Glycerine	18 ml
3	*Aloe vera*	12 ml
4	Cocamidopropyl betain	6 ml
5	Herb extract (Heena + Amla + Shikakai)	10 ml
6	NaCl	1.5 gm

7	Sodium Benzoate	0.5 gm
8	Distilled water	Upto 100 ml
9	Tea Tree Oil	Quantity Sufficient



The prepared product was analyzed and compared with respect to their chemical, physical and antidandruff properties with other commercial shampoos. It was noted to be comparable with respect to chemical and physical properties, whereas showed better antidandruff activity than other commercial variants.

Impact of the study on Society at large

Formulation of herbal shampoo is very simple procedure and can be carried out with minimum facility. Such small scale projects can be a potential business venture for the students and the students if wish, can become a "***Job provider***" rather than "***Job seeker***".

India being a highly populated country is in real need of people who could be entrepreneurs with potential to generate employment for younger generations and people from lower economic strata. Small scale business venture like the one mentioned here, will be able to employ at least 40-50 workers.

This study will provide an insight to the people – the consumers, to understand significance of our ancient herbal remedy for various purposes against the chemical products.

This kind of work will help in generating awareness in consumers for commonly used products such as shampoo. If students are provided with an opportunity to perform such research work, they will understand the basic science in day to day life and can have satisfaction of being a mediator for generating social awareness.

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Awareness of HIV/AIDS Among The Educated Youth In Mumbai

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Abstract:

Today's youth has exposure to the knowledge of the world at a mouse-click away. One would expect them to be ready with information with respect to upcoming threats to their health; one of them is spread of HIV/AIDS. This is an attempt made to understand the level of awareness among the youth between the age group of 21 to 50 years. Keeping in mind urgent need of controlling HIV spread among the youth, basic information about HIV/AIDS was expected to be known to them. A hypothesis was proposed; that being part of fast advancing world and having educational background should be well aware about the HIV/AIDS infection, its spread and consequences. A questionnaire was formed. The sample size for the survey was 700. The targeted corporate sample population belonged to the educated working class of the society, having non-science background such as banking, insurance agencies, call centers or other sectors. The collected forms were then categorized on the basis of different aspects and were graded according to an individual's awareness about HIV/AIDS as reflected by the information given by them. Other aspects of the survey included analysis and classification of the sample on the basis of certain basic and factual questions from the questionnaire such as full form of HIV/AIDS, its modes of transmission, measures to prevent contracting it and also some questions which demanded a personal opinion. Only 24% of the total population was well aware about the measures to avoid contracting AIDS, 11% was moderately aware but had some misconceptions while 65% was completely unaware. Overall it can be said that the results obtained after the entire survey, its analysis and statistics, were contrary to our hypothesis.

Keywords*: HIV, AIDS, awareness, youth*

Introduction

Due to the vast socio-economic diversity in India, it becomes difficult to control, monitor and prevent the vulnerable disease like HIV/AIDS. As youth are a precious resource for the future of a country, it is imperative that they be equipped with ample amount of information so as to protect themselves and their counterparts from falling prey to this still-an-incurable killer disease. Thus, by knowing the information or awareness of AIDS/HIV among people the common myths gathered by them over the years can be removed effectively by educating the people with the use of various awareness programs. Hence, exploring the understanding of HIV/AIDS among college students and educated working population is the first step towards educating them.

HIV is an abbreviation for Human Immunodeficiency Virus, the virus that causes AIDS. Previously HIV was known by a variety of names such as LAV (Lymphadenopathy Associated Virus) and HTLV III (Human T-Lymphotropic Virus III) (1,5,6). AIDS is the abbreviated form of Acquired Immune Deficiency Syndrome or Acquired Immunodeficiency Syndrome. The first AIDS case in India was detected in 1986 and since then, HIV infection have been reported in all states and union territories. The highest HIV prevalence rates are found in Andhra Pradesh, Maharashtra, Tamil Nadu, and Karnataka in the south. National AIDS Control Organisation (NACO) is a division of the ministry of Health and Family Welfare that provides leadership of HIV/AIDS control program in India through 35 HIV/AIDS Prevention and Control Societies (2). The Indian epidemic continues to be concentrated in populations with high risk behavior characterized by unprotected paid sex, anal sex, and injecting drug use with contaminated injecting equipment and other modes of transmission. According to NACO, the bulk of HIV infections in India occur during unprotected heterosexual intercourse.

The distinction between the number of cases and the level of infection causes a great deal of confusion and could be the reason why, even now, many people deny that there is a problem. Formal education is often assumed to have significant influence on how people make informed decisions about their health - including very important areas such as sexual behaviour. With estimates of 11.8 million young people aged 15 to 24 living with HIV/AIDS, it is now vital to understand better how educators are, and should be, responding to the challenges posed by the epidemic. Increases in unintended teenage pregnancies, the spread of reproductive tract infections and sexually transmitted diseases (STDs) has increased the imminent threat of an HIV epidemic in recent years. It is important to educated young population from the age of 19 to 45 and spread awareness to prevent future infections. The increasing rate of occurrence of HIV/AIDS among the college students and the young working class of corporate sector especially, in the urban areas has enabled us to conduct the survey among this class (2). Many of them still not aware about antiretroviral treatments are available which though don't cure the disease but can prolong the life of the patient (5,7,8).

The aim of this study was to find the level of awareness among the educated working class of age group 25-45 years. The attempt is to understand the level of awareness of HIV/AIDS in educated youth of the city population and then decide the strategy to spread the awareness through booklets, seminars etc (4). Also it is very important that the youth is well aware about some of the common misconceptions and myths regarding the spread of HIV/AIDS (3).

Methodology

For data collection a formal permission from concerned authority was taken by submitting an official letter from college to allow us to conduct the survey. Further the questionnaires were distributed and the respondents were explained the purpose of study. The filled forms were collected.

Each form was analyzed and scored. The hypothesis was put forth as 'the survey population being educated group, they should be well aware about the disease its spread, the measurements to avoid contraction, STDs and medicines.'

Followed by this, the data obtained was categorized by two major aspects:

A) Overall- In this type, the classification was on the basis of Age, Gender and Qualification

B) Selected Questions- For this, few selected questions were the basis of classification. E.g.: Full form of HIV, modes of transmission, etc.

Results and Discussions

Following are the results obtained on the basis of overall awareness: All the forms are graded to score their levels of awareness. For better understanding the scored forms were divided into from low score to high score as unaware, less aware, moderately aware, fairly aware and well aware.

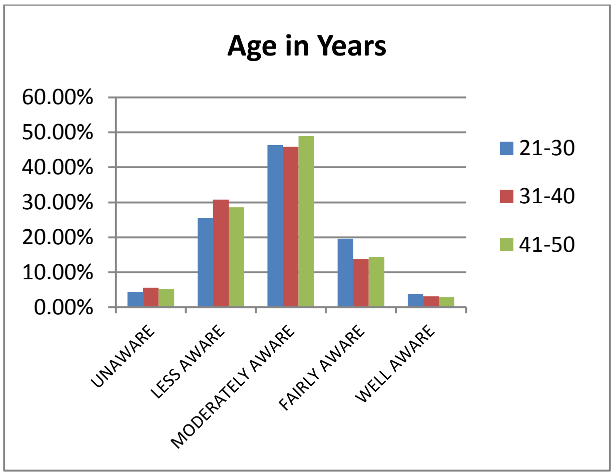

Figure 1

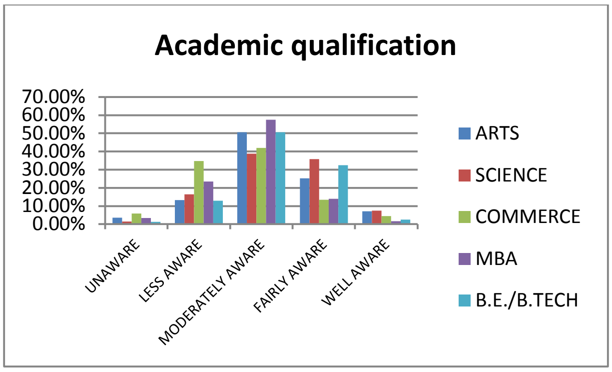

Figure 2

On classifying these graded for into males and females, not much of a difference was observed between the two groups (data not shown). Overall also, there is a slight difference but again it goes in favor of males being more aware than females. One of the reasons for this could be males being more open towards this topic and might be having a better chance of discussing these issues with their peers and colleagues, whereas females are more involved in other activities and to an extent, it becomes difficult for females to discuss this topic so openly because of the narrow-mindedness and ignorance of the society.

Figure 1 represents the graph obtained on classifying the graded forms on the basis of the respondents' age group. The awareness is greater amongst the youth (age group: 21-30 years), followed by the eldest age group i.e. 41 to 50 years & above and finally, the one between 31-40 years. The reason behind this could be the revolution in the youth's thoughts and temperament. In today's world, the youth is more active and open about such issues and also aware about the spread of this dreadful disease. The reason for the eldest age group being more aware could be the greater experience of life that they have as well as they are more matured than the other younger age groups.

On analyzing the awareness on the basis of their qualification as shown in **Figure 2**, it is clear that the people belonging to the science background, although very few, had comparatively better awareness than the others with the percentage increasing gradually from unaware to well aware. The awareness amongst the commerce background respondents seemed to be low.

Thus, it is very relevant from the above information that in spite of being educated, these individuals are unaware about such an important and a critical issue which is really appalling and that too in a country where this disease is spreading like fire.

The graphs below represent the results obtained on the basis of a few selected questions:

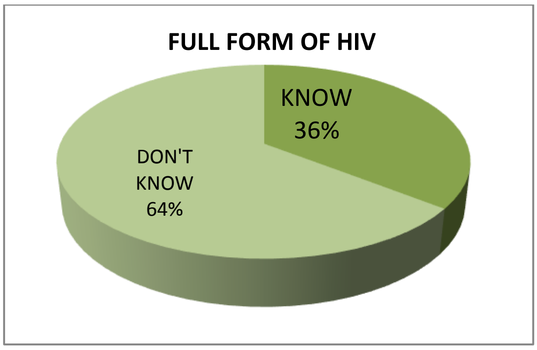

Figure 3

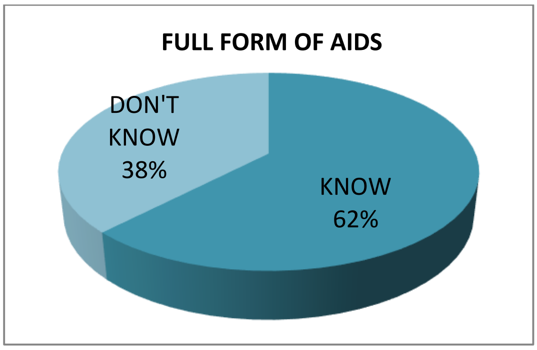

Figure 4

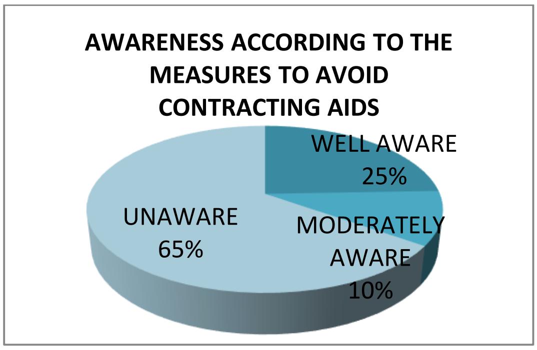

Figure 5

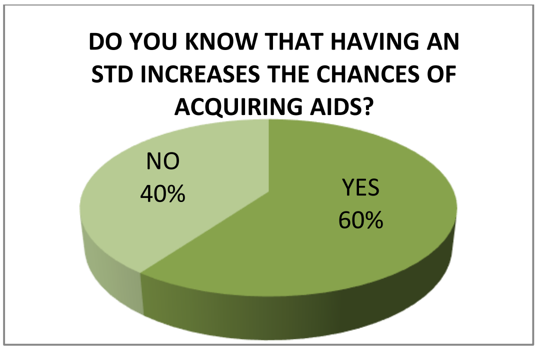

Figure 6

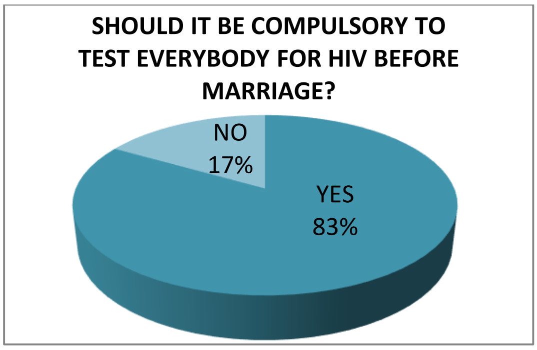

Figure 7

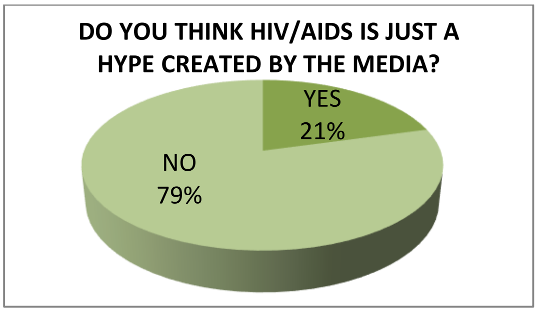

Figure 8

Out of the total targeted population only 36% were aware about the full form Of HIV. Most of the people are unaware about the full form of the causative agent of AIDS which is HIV i.e. Human Immunodeficiency Virus. This may be due to the unfamiliarity of the term HIV than AIDS **(Figure 3)**.

Contrary to the result obtained for the full form of HIV, 62% of the total population was aware about the full form of AIDS. Since AIDS is a widely used term in any information media like newspapers, reference books etc. most of the respondents were aware about the full form of AIDS **(Figure 4)**.

Only 24% of the total population was well aware about the measures to avoid contracting AIDS, 11% was moderately aware but had some misconceptions while 65% was completely unaware. The above result is due to lack of information about the measures to avoid contracting AIDS. This is, in turn, due to the ignorance in the spread of awareness about the same. It is often seen that the menacing nature of AIDS is displayed but only few measures to avoid the contraction of AIDS are focused upon. Although few people were aware about the measures, most didn't answer correctly **(Figure 5)**. Of the total, 60% population was aware that having an STD increases the chances of acquiring AIDS, while out of the remaining 40%, majority were unaware about STDs. The fact that STD increases the chances of acquiring AIDS was not known to around half of the respondents due to several factors like lack of knowledge about STD, unawareness about the fact that AIDS itself is an STD, etc **(Figure 6)**.

Of the total, 83% respondents had a view that a test for HIV must be made compulsory for everybody before marriage while the rest said no. Most of the people said YES to prevent the further rise of the rapidly spreading disease of which sexual route is the most common one (**Figure 7)**.

As per the data, 21% of the people feel that HIV/AIDS is just a hype created by media while the rest don't. Majority of the population knew about the dreadful nature of the syndrome and that it is not just a hype created by media. The rest of the population thought the other way may be because of the lack of overall knowledge about AIDS **(Figure 8)**.

Conclusions

After the entire survey was carried out amongst the 700 educated working people, its analysis and statistics led us to a completely different picture of the educated youth of corporate sector. The results were absolutely against our hypothesis wherein we had assumed the respondents to be well aware about HIV/AIDS as also about its seriousness in the current society. But the results showed that the people still had a notion of disbelief and thus, it can be quoted that HIV/AIDS is still not well accepted by our society, although people claim that we have progressed in all walks of life.

There were people who thought of mosquito bites and shaking hands or hugging to be the reason for the spread of this disease. If such myths continue to prevail, the society acceptability for the people infected with HIV/AIDS will not change and this is, in fact, a matter of serious concern for the Indian society, because it is a well-known fact that most individuals infected with HIV/AIDS die of depression.

Hardly a small number of respondents were aware about Anti-retroviral treatments (ART)[4] which is the only way through which an infected person's life can be prolonged. People should be made aware about this fact or else the number of people dying of HIV/AIDS will go on increasing day-by-day.

But, one good thing that was observed after the analysis was that most of the people were at least alert while taking an injection or visiting a saloon if the syringes or razors & blades were unused and disposable.

It was very disgraceful to see that people were not even aware about the measures they can take to avoid contracting AIDS, although most of them knew that prevention was the only cure. A few people, somehow, had certain misconceptions that staying fit and healthy or exercising regularly was one of the measures to avoid contracting AIDS or to combat it.

All these results lead us to one conclusion that overall awareness should be increased amongst all the strata of society. There is no use of education without there being awareness and knowledge about such crucial common social issues. Awareness should be created through media and telecommunication which is the strongest mode of spreading information in today's world. Seminars should be conducted in all offices and working institutes in collaboration with their training programs. Youth should be made aware about antiretrovirals which can improve quality of patients life.

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