Perception of Reality via Multi-media Communication in MBA Classrooms

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ABSTRACT

Using the mission goals of a business school in North America, and a series of multi-screen teaching experiments conducted on the campus of the school, this paper argues why reality perception can be an important feature in shaping decision making as well as for consumer appreciations in entertainment. The role of arts and humanity cannot be ignored in how our thinking paradigm will be shaped for the 21st century education.

Keywords: Reality Perception, Multi-Media Communication, MBA education

Introduction

Much attention has been paid to how classrooms have been reinvented to support new pedagogies for involving students in a deep learning process beyond a classroom environment. Active learning classrooms experiments have been conducted in numerous campus environments and have been targeted internationally as an OECD education initiative.[1] This paper illustrates how the perception of reality is important in MBA education and that multiple screen technology, if effectively utilized, can assist and equip MBA students towards being better communicators for the global business world in the 21st century. The mission goals and the activities experimented in the School of Management at the New York Institute of Technology will be used to describe how reality perception can be enhanced by the use of multi-screen video technology.

The paper will be divided into three sections. Section I argues why reality perception is important in understanding business and economic issues particularly after the financial crisis of 2008. Section II provides examples on how utilizing multi-screen techniques in collaborative work in business economics can fulfill the mission goals of a new curriculum designed for the 21st century. Section III reflects that the perception of reality might not be limited only to business and economic issues; and indeed possibly extending into the area of arts and humanity, reaffirming the needs for perception management as the key in all decision making processes. The burgeoning of multi-screen multi-media technology is a trend that all educators preparing education for the younger generations may want to embrace.

Section I
Considerable attention has been paid to the causes of the 2008 world financial crisis that many have blamed as resulting from a long history of deregulation in the financial world. Professor Ben Bernanke of Princeton University, current US Federal Reserve Chairman, recapped on what the US Federal Reserve has done to manage the crisis succinctly in his Lecture IV at George Washington University, March 2012. The main points he articulated can be briefly summarized to be: 1. Liaise with other agencies in US and foreign governments. 2. Stress tests for major banks. 3. Central banks should continue to be the lender of last resort—Liquidity appeared

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[1]Comprehensive development of such efforts can be found on the OECD, Centre for Effective Learning Environments (CELE) website, http://www.oecd.org/edu/country-studies/centreforeffectivelearningenvironmentscele/. Numerous authors have written on this mission, e.g. Oblinger, 2005; Fisher, 2010. Labelled as "Gen Y College students", magazine 360steelcase Fall 2010, Issue 60, also suggested many examples.

to be the key. 4. Monetary Policy –Quantitative Easing (which he emphasized as not the same as printing money). 5. Regulatory Change: Dodd-Frank Act, Consumer Protection Act—Financial Security Oversight Council (FSOC)—Orderly Liquidation Authority to be administered by FDIC.

Yet, there remains to be something deeply unsatisfying among intellectual community as well as the general public regarding the cause and the remedies for the crisis. Although on paper not closely unrelated, the close race during the US 2012 presidential election reflected to some extent a deep underlying concern about the proper course of merely following an official administrative opinion. The 2010 Oscar winning documentary, *Inside Job*, most vividly describes the root the problem as something almost irreparable, as it has to do with many years of behavior and perception ingrained in the minds of business practitioners, policy makers, as well as business school professors. The *Occupy Wall Street* movement that started September 17, 2011 epitomized a great frustration that, even though did not gather much steam to go forward, spread like wild fire over different cities across the globe.[2]

Formal and informal assault and negative comments to the economic/ business profession came from both within and outside the profession from all angles. J.P. Morgan Chairman, Jamie Dimon, in a US Senate Hearing on June 13, 2012, while facing the pressing inquiry of Senator Bob Corker as to whether Dodd-Frank has stabilized financial system of the world, responded in frustration with a "I don't know".[3] Warren Buffet has now bluntly labeled the use of derivatives is evolving to become a Weapon of Mass Destruction (WMD). The New York Times, on April 1, 2012, staged a forum debate among prominent professors, thinkers, and authors with a provocative title of "Rethinking How We Teach Economics". Contributors such as Menzie Chinn, Nassim Nicholas Taleb, etc. questioned the "reality" of prices and the inability of statistical techniques to monitor a changing economy.[4] Similarly, the Los Angeles Times, in an Op-Ed piece reporting on a conference organized by the Institute of New Economic Thinking, commented:

"..Students [today] are frustrated by a field that they believe could provide so much to society but instead is mired in outmoded thinking. Today's [textbook] economics is dominated by ideas, like the efficient market hypothesis, making such sweeping generalizations that they render human beings practically unrecognizable. Do people ever have "perfect information" or a complete understanding of their best interests? Of course not. They're humans."[5]

If there is one thing particularly significant that came out from the 2008 financial crisis, it is a challenge to our conventional thinking. Paradigm shifts are evident in academic conferences organized around the theme of *Capitalism 2.0, New Economic way of Thinking (INET), new curriculum/program development (CIGI),* etc..The current Euro crisis is another socio-political economy exercise waiting to be unfolded. Yet, Professor Benanke, in a presentation at the London School of Economics in March 2013,noted the 2008 crisis was merely "a classic financial panic--a system-wide run of "hot money" away from assets whose values suddenly became uncertain."[6] The use of the term "hot money" should be gladly viewed as an improvement in perception by the mainstream in that the term has seldom been used (or analyzed) in economics textbooks.

Business and economics issues and solutions of the 21st century are going to be driven by debates, with reality in essence determined by who will be winning the debates. Reality in business and economics can no longer be viewed with a single paradigm, with challenges coming from other disciplines. For example, David Stockman in the promotion of his recent book, has outright rejected a conventional view of the Central Bank popularized by Milton Freidman and some of his disciples, including many Keynesians. Similarly, esteemed political science professors such as Peter Katzenstein voiced his dissatisfaction about the views and the methodologies of mainstream economics.[7] Perhaps it is out of frustrations that many leading business schools of the world are

[2] There were occupy "walk-ins" as well as "walk-outs". The latter was noted on Nov.11, 2011 at Harvard University, with a roughly 70 students organized walkout of an introductory economics class taught by N. Gregory Mankiw.
[3] http://video.cnbc.com/gallery/?video=3000095973&play=1
[4] http://www.nytimes.com/roomfordebate/2012/04/01/how-to-teach-economics-after-the-financial-crisis/a-little-humility-among-economists-would-help
[5] http://articles.latimes.com/2012/apr/11/opinion/la-oe-weiner-youth-revolt-economics-20120411
[6] http://www.federalreserve.gov/newsevents/speech/bernanke20130325a.htm
[7] "Reading the Right Signals and Reading the Signals Right: IPE and the Financial Crisis of 2008",anApril 9 Seminar at Simon Fraser University in 2013, speaking on a Nelson and Katzenstein forthcoming article.

turning to alternative methodologies of teaching, notably starting with the grand daddy of all, the Harvard Business School.[8]

Section II

In this section, we describe how perception of reality can be improved in a business school in North America by adopting multi-screen technologies in some classroom activities of the school. The school has a set of programmable objectives established for all courses under its curriculum. They are[9]:

General Learning Goals:
(1G) Work collaboratively in groups;
(2G) Recognize socio-economic issues, and establish and defend a position supported by ethical reasoning;
(3G) Lead effectively, particularly in an uncertain global environment.
And, management Specific Learning Goals:
(1M) Utilize technology support systems to strengthen organizational decision processes;
(2M) Conduct industry, company specific, or environmental business analysis using appropriate data and informational resources to bridge the gap between abstract theory and practice;
(3M) Identify and analyze country/region-specific contemporary business issues; establish and effectively communicate and support recommendations.
In the summer of 2012, a series of activity experiments were conducted on the Vancouver campus entailing:
-Pairing of powerpoint with photo displays, animated flash, and internet current event reports
-Pairing of powerpoint with DVD (for providing a more vivid atmosphere, e.g. trading floor of Wall Street, life of J.P.Morgan, featured film relevant to a topic, played muted except for specific segment)
-Pairing of cross reference sources to re-enforce ideas
-Pairing of instructor's display and participants' (students') display
-Guest speakers through internet and collaboration of working documents
-Distant collaborations of class via desktops
-Distant collaborations involving multiple rooms
-Education Gaming/Competition via desktops with students in different rooms

These activities were spread out over four business and economics courses, Micro and Macro Economics, Business Enterprise Environment, and Business Policy and Strategy. The economics courses are condensed accelerated courses for MBA students coming into the MBA program without prior knowledge of economics. They are structured as undergraduate economics courses "on steroids". The Business Enterprise Environment course consists of studies of regulations and laws on old and new economies across country borders. Business Policy and Strategy is a course on strategy formulation and execution. Most MBA schools have courses that cover this knowledge with perhaps different course titles. Students who participated in the experiments were asked to express opinions in a survey. For the course on Business Policy and Strategy, students participated in a hypothetical exercise of formulating a strategy for a task force on video communication for an education institution that has a global vision at the corporate level.[10]Students were asked to formulate strategies on the business and functional levels that may enhance the corporate vision. They have also been asked to evaluate infrastructure vendors' platforms. The general purpose of the exercise was on the question on how to utilize multi-screen video communication to build a Distinctive Competence for a Global University for the 21st Century.[11]

In this paper, we describe the essence of the experiments acutely from the perspective of the six programmable learning goals of the school. The pictures chosen are for illustrative purpose and not those actually conducted during the experiments. They are used for the purpose of seeking funding for facilitating a collaborative learning

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room for the campus. In the remaining section, we shall elaborate how multi-screen multi-media communication can achieve each of the goals of the school.

1G: Work Collaboratively in Groups

Exhibit 1

The college of the program that adopts this mission believes and emphasizes students working in groups to learn. This collaborative process may entail hardware components, audio-visual devices, with different options of delivery. Multi-screen communication can provide a platform on which reiterative modification of the work of each member can effectively intertwine. The use of appropriate technology in a well-designed working space can stimulate innovation in the classroom and generate rethinking on how higher education spaces can be used effectively. Collaborative learning is particularly essential in situations where the perception of reality is diffused, as there is no uniform way to identify reality. The bringing in of information and perspective from each member of a team is therefore critical.

2G: Recognize Socio-Economic Issues

Exhibit 2

The multi-screen approach can facilitate discussion of socio-economic issues in the most vivid manner driven by current events. As shown in the pictures above, there can be active discussion going in class between professor and students on recent tragedy happened in the Boston Marathon. The city of Vancouver, interestingly, has its own marathon conducted a couple of weeks after the Boston Marathon. The city overwhelmingly supported the victims in the Boston Marathon by displaying the Boston color of blue and yellow. Although the happenings were in different cities, such ripple effects were similar and perhaps larger in magnitude to the *Occupy* movement, prompting philosophical debates on whether a tragic incident poses overall benefits or costs. The ethical basis of exercising violence, judgement in executing actions, and the heart of human dignity can all of a sudden brought up to the forefront for discussion. Of relevance to the discussion of this paper is whether multi-screens with enhanced technology will be more effective in bringing out that discussion, and the answer is a yes.

Students uniformly like visual examples, as they are easier to digest, and can motivate thoughts to bring out further questions and discussions. This is particularly important in certain disciplines, e.g. economics, which has delved with heavy mathematical rigor into many classrooms in the world. However, students of business do not walk out from a classroom satisfied by just listening to an eloquent proof of propositions that many considered to be simple intuitions. Students look for applications, thinking vehicles for them to reflect on real world happenings. Visual examples often serve those illustrations better than mathematical models. Nevertheless, this delivery method would require heavy preparations for the instructors, as conventional powerpoint summaries provided by textbook publishers lack emphasis on audio-visual elements; and for those that do, they are based on past examples. Current events have a flamboyant appeal in that, almost like fashion in clothing, displaying an understanding to them, and better still, providing opinions allowing others to reflect, can signal an educated experience similar to the premium one pays for brand name clothing and jewelry, except that it's done through the mind and not the body.

3G: How to Lead in an Uncertain World
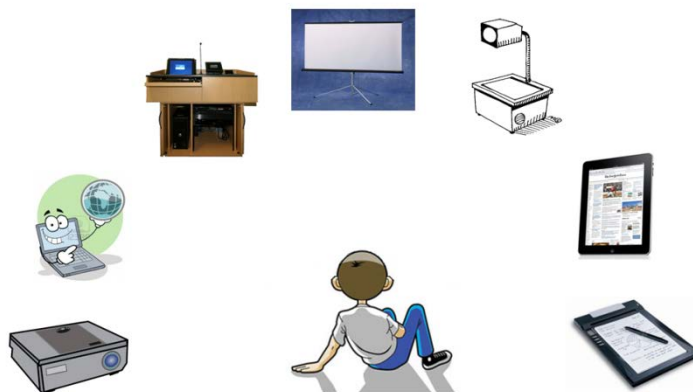**"Collaborative Classroom"**

Exhibit 3

Uncertainties relate to how we are going to perceive the world and our surroundings. As Professor Katzenstein argued in a recent lecture, there is a huge difference between reading the right signals versus reading the signals right. In today's world, our perception of knowledge cannot rely on a single source and a single paradigm. The ability to digest and to synthesize different points of view can be a necessary though not sufficient condition to lead in an uncertain environment. Here, technology plays an important part in that reality is often shaped by opinions. A leader cannot ignore what others are telling him/her even though others could be "wrong" to some extent. Students engage in team work exercise most likely have experienced some type of disagreements among members of the team. This is almost like handling disagreement in subjective interpretation of facts when confronting with real world evidence. Utilizing multiple channels and multiple devices will test the multi-tasking ability of a person; and can be a way to develop a mind-set to handle uncertainty, particularly if the internet providing such connectivity can often be unstable and insecure. In this sense, a collaborative classroom concept is a development of mental attitude in handling uncertainties.

1M: Utilize technology to help organizational decision making process

Exhibit 4

This particular management-specific goal requires the use of technology; it's similar to the set up in (3G), but it emphasizes how technology can help organizational decision-making. Nowadays, many organizations operate using a stakeholder approach rather than a purely profit-maximizing approach. Organization members also are distributed physically in different parts of the world, doing different things in transit with extensive traveling. Remote connectivity provides active participation of attending participants without requiring all in one physical location. This shows how the people around different parts of the world can share a single platform and communicate with each other. One can see in the picture that NYIT's New York campus on the East Coast and its Vancouver campus on the West Coast of North America, separated by different transit situations, can nevertheless integrate and communicate with each other in real time. The picture shows that whether the person is in his car or in hotel or anywhere, he or she can connect via a single platform, and can attend a meeting from anywhere around the world. It is our campus objective to achieve that type of an ideal, starting with the concept of a collaborative classroom.

2M: Conduct Industry Analysis

Exhibit 5

Perceiving reality in many MBA programs of the world is conducted via case studies. These are useful exercises that take students out from theoretical models to a setting (historical or hypothetical) requiring them to be involved in a decision making process, as a MBA is all about creating future managers and CEOs. Case studies can familiarize students with the many facets in an industry scenario. A multi-screen video communication approach can add tremendous richness to a case study by inviting guest speakers working in the company of the case or individuals affiliated with the industry. Introducing these guest speakers through a real time classroom experience can add impact to the experiential learning of a case. The above picture is taken from a video conferencing event that happened between "Export Venture Group" and NYIT Vancouver students. This gave the students a brief idea about what the company is and how that company is performing in the market.

3M: Regional Specific-Contemporary issues

Exhibit 6

The discussion of region-specific issues in the context of global issues has often been captured in terms of a slogan: "Think Global, Act Local". Many business decisions carried out at the local level has a broad global context to it. Multi-screen communication allows a linkage between broad based global issues to local regional issues. This linkage can be brought up easier if our scope of perception is stretched widely. The picture describes how students working in a collaborative room can discuss how a global issue can be brought down to the level of a region- specific contemporary business issue. On the left screen in the room, the banking crisis of Cyprus is shown together with the birth of a new digital money called bitcoins. On the right screen in the room, the provincial premier of British Columbia in Canada, Christy Clark, is shown participating in Vaisakhi Parade 2013, one of the biggest annual East Indian events of Vancouver. The event, while helpful to the economy by gathering people from all around the world and making the city more diverse, also can be used to motivate our students to think about the economy in India in relationship to the global monetary events of the world. The Cyprus/bitcoin phenomenon questions the wisdom of a rush to alternative money, e.g. gold, which is commonly bought during festivals and marriages as part of the bridal trousseau, as gift exchanges, and as a store of wealth among many Indians. Indeed, gold import to India accounts for more than 2/3 of the country's trade deficit, which amounted to $32.6 billion in the last quarter of 2012. India is the world's largest bullion buyer. It is deep in their culture that gold is a store of wealth. Therefore, the 17.4 percent plunge in price in 2013 can generate tremendous discussion among our students, many of whom are originally from India. Again, placing visuals side by side can be a more effective way to generate discussion and analysis to link a global event to a regional discussion.

Above descriptions are only examples. The activities and the content of information conveyed only see imagination to be the limit. Through the engagement exercise conducted in the summer of 2012, participating students and the faculty were able to hammer out a vision and a mission statement for a collaborative classroom concept:

Vision: To be at the forefront of global citizenry through education.

Mission: To recommend a strategy at the business and functional level of operation, entailing social networking, thereby fulfilling the global vision of NYIT.

Section III

The implications discussed in the last section may not be limited to business and economic perception only. Technological advances in the last decade were not only in terms of bandwidth, but in new software and hardware. The latter have emerged increased by leaps and bounds in both areas of document sharing platforms as well as in audio-visual products. The experiments mentioned in the last section addresses only to audio-visual products, as they are the frontier of technology on how the younger generation will perceive the reality. Reality can be an approximated real time (in the moment) and/or virtual (graphic, imaginary, documentary) experience. Virtual reality opens up new dimensions for us to communicate and perceive knowledge. Undoubtedly sacrificing in terms of conventional method of acquiring knowledge, i.e. *reading,* 21st century communication moves towards getting ideas quickly and effectively, e.g. new vocabulary such as "lol". Technology in communication has developed faster than how we can effectively utilize it.

Among many emerging technologies, videoconferencing has becoming definitely an important tool of communication generally. According to Cisco's 2012 VNI Forecast, "desktop videoconferencing is projected to be the fastest-growing service, with 36.4 million users in 2011, increasing to 218.9 million users in 2016". (Cisco, 2012). A Parks Associates webcast in June 2012 proclaimed that "multi screen video services have become widely available in several global markets. Operators, broadcasters, OTT service providers, CE manufacturers, and others have all joined in the battle for their share…"[12]

There are reasons to believe that technology and economic environment have progressed to a stage where our perception of reality can be altered. Firstly, as already pointed out in Section I, events in the world are challenging the instructor/student thinking paradigm in rather unpredictable ways. What may constitute *good* business skills (reasons for studying for an MBA) can change as business practices themselves are changing.

Secondly, bandwidth costs are falling substantially while the macro forces are changing our society in a rapid way: Our society moving from an industrial to a knowledge economy, emphasizing scale economies in logistics management, increasing globalization, thus, building a learning community rather than learning in isolation could very well be a more suitable knowledge delivery method rather than a conventional classroom method.

Thirdly, there is an on-going landscape change in lifestyle affecting the way students perceive knowledge in the 21st century, emphasizing mobility, social and gamification. Stories addressing how professors confront with such distractions in conventional classroom are abundant. However, if curbing measures are ineffective, the best strategy may be to embrace the change and to develop distinctive features for a competitive winning of students' attentions.

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[12] "Multiscreen Video: Growth and Challenges" Webcast by Brett Sappington, Director, Research, Parks Associates, June 21, 2012.

Fourthly, our perception of reality may go beyond numerical capturing of statistics and analytics. Indeed, there may be a need as well as arguably a more effective way for describing reality via a multi-dimensional audio-visual interpretation. Aside from the wide success of various reality shows on TV, added complexities in audio-visual extension in 3D, special effects, ala Cirque du Soleilstyle (e.g. Las Vegas show embellishing Beatle's "Love") and the London 2012 Summer Olympic opening ceremony kind of presentations, all point to the same conclusion: People are willing to pay for a better enrichment of audio visual experience.

The perception of reality via quantum mysticism (quantum physics) has a history of development. Reality can shape what we believe, and what we believe can in turn shape reality, opening our senses and facilitating rational dialogue using technology advances in multi-screen, multi-media could very well be an irreversible trend in consumer perception generally. The question is how we can prepare ourselves for this changing perception. The problem can be almost like a science fiction when an astronaut prepares for a trip to another planet. There will be a change in perception, and if the astronaut is not prepared for that, he/she will find himself/herself being *out of touch with reality* very soon.

Thus, the education endeavor we are proposing to experiment in MBA courses has a general applicability. We can see that there is a role for technology to play, particularly on the social, mobility, and gaming front. Yet, while technology is going faster than what human brains can adjust to accept, the value added for embracing various new perspectives can only be realized if users perceive the benefits to be higher than the costs of adoption. Instructors/Organizers of a reality perception exercise no doubt have to incur additional time to prepare for an audience for a fruitful engagement. Engagement can easily run into frustrations if not managed well.

It is important to note that perception management has a large soft component, and not something that can be easily managed by IT specialists. Activities of regular classroom and public presentations in higher learning institutions are often facilitated (and arguably best managed) by specialized personnel with IT knowledge. As technology has not reached maturity with stability, we expect specialists to help content providers with on-site technical issues, allowing participants to concentrate on content delivery. However, there is an economic calculus to this. The necessities of having specialized IT assistance may be solely driven by audience scale. This is not necessary the suitable reality perception exercise that this paper advocates for deep learning. IT personnel who manage multi-screens and video broadcast without reality perception consideration are simply experts in a technological conquest of limited space—methods of managing a one-way large scale broadcast. Participants (students/public) in large scale broadcast expect a near perfection audio-visual experience with zero or minimum learning and preparation costs. This, however, is a very narrow vision of how multi-screen video communication technology ought to be used, and it is not the essence of the experiments described in Section II of this paper. The insights we hope to convey via our exercise in Section II are that education of the 21st century must be increasingly move towards a participants (students) driven emphasis, allowing simultaneous varying interpretations of a common body of knowledge. This evolvement is particularly pronounced in the field of business and economics, as Section I in this paper has argued—the stock of knowledge in the field of business and economics often is merely a particular point of view. The underlying phenomena being studied could be going through shifting changes, sometimes incapable of being interpreted by an existing unifying theory. Collaborative learning under uncertainty not only is important, but arguably essential. The activities chosen for a project for collaborative experiments do require an attitude of creative thinking, and not likely to be accepted by participants who want to absorb information passively without active participation. Audience of this type is still best served in a conventional classroom environment. On the other hand, if participants are motivated enough with the presumption that reality is an unknown waiting to be conquered, even if they experience frustrations from technical glitches, as long as they recognize the potential benefits of having extended platforms of communication, they will be willing to be part of a technological quest for excellence.

Conclusion

Although we are quite aware that cautions and negativism on extending conventional teaching platform to multi-dimensional levels can be raised at various levels, (Green, 2010, Green & Wagner, 2011, Edmundson, 2012), this paper articulates how the mission goals of a business school can be achieved by encouraging communication on a multi-screen platform. It further suggests that higher education institutions generally should provide resources for encouraging reflective learning in the form of collaborative classrooms. A student-centred paradigm is necessary for embracing how the reality of the 21st century can be perceived. It is when a pragmatic approach is

used, i.e. when we try perceiving real-world problems as human problems, and through an artistic expression of such, that innovative solutions can hopefully evolve. In this way, we can go beyond the limit and the parameters predetermined by mere computer simulations.

Acknowledgement

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