

Reflections on a Workshop on the Future of Higher Education for Knowledge Economy in Bangladesh

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COMSTECH Center for STI Policy Research and Training in collaboration with Institute of Educational Development, BRAC University, Bangladesh and Islamic Development Bank, Saudi Arabia offered a training course on “The Role of Higher Education in the Knowledge Economy” at BRAC University, Dhaka, Bangladesh, from September 21-25, 2014. The course was jointly sponsored by COMSTECH, Islamic Development Bank, Saudi Arabia and IED, BRAC University, Bangladesh. BRAC University offered local hospitality to all foreign resource persons and participants in BRAC inn. The training course was aimed to improve the capacity of policy planners, policy researchers, science and technology managers, entrepreneurs, foresight practitioners and all those professionals whose job is likely to affect the future of their universities, institutions or R&D organizations.

The course was mainly delivered by Dr. Sohail Inayatullah, Professor in Graduate Institute of Future Studies, Tamkang University, Taiwan and Dr. Jose Maria Ramos, Senior Consulting Editor of Journal of Future Studies, Tamkang University, Taiwan; and was complemented by lectures from Dr. STK Naim, Consultant, COMSTECH on Knowledge Economy and Sue Corbett, Executive Director, International Network for the Availability of Scientific Publications (INASP) with her lecture on digital libraries.

Course Proceedings

The course began with Prof. Inayatullah’s lectures on thinking about futures, case-study comparisons on the past, present and futures of various organizations, professions (evolving roles of doctors, teachers) and issues (changes in perceptions of gender, the youth bulge, demographic shifts, etc). Participants were introduced to different possible ways of imagining the future; various modes of cognition (zero, single and double loops, and sensitivity to change); research epistemologies (empirical or positivist, interpretative or constructionist, critical and action learning); and possible combinations of these methods and modes which could either foster or thwart thinking about the future. The

methodologies used and exercises conducted were framed by six fundamental pillars of future studies – mapping, anticipating, timing, deepening, creating (alternatives) and transforming the future, drawing from Inayatullah's (2008) "Six Pillars Methodology". Six Pillars is a systematic way of mapping futures, identify emerging issues and trends, distinguishing and anticipating the first and second order of these implications, deconstructing metaphors and narratives, creating alternative futures, designing the preferred future and strategies to achieve transformed futures.

After the initial salvo, the participants were asked to propose topics most relevant to their needs for future work and related to their own vision of futures. The following topics were proposed by participants and constituted the central themes around which the workshop discussion was centered:

1. What are new models of learning outside universities in a non-traditional environment?
2. What are the future strategies required in higher education so that research in universities can be transformed into actual solutions?
3. How do we make Higher Education accessible and affordable to everyone across class, gender, ethnicity by 2035?
4. What are the alternative futures of (Higher Education Institutes) HEIs in the context of globalized accreditation systems?

The history of the issue

The foresight exercise began by benchmarking the status of the issue-at-hand, by identifying the historical factors and patterns that helped in creating the present. Locating an issue in the current scheme of things is important so that we can identify patterns of change and how the present came to be. To accomplish this, the main trends and events that have led up to the present are charted. A historical time line is then constructed to the present. This opening tool creates a framework from which to move toward exploring the future. Dr. Inayatullah also introduced some foundational ideas from macrohistory (*Asabiya* of Ibn-Khaldun, Sorokin's Pendulum, S-curve emergence analysis) to the participants and they were asked to identify the timeframe for these trends that have impacted their organization. The following tools were found to be of significance to the participants.

i) *Ibn-e-Khaldun's theory of Asabiya*

Ibn Khaldun wrote during the decline of Islamic power and the different categories he discussed have great use in understanding the future of organizations and issues. For him, decline was natural as well as generational. Quoting extensively:

A great leader could create a new dynasty, however, over time, because of overspending, on luxury, and loss of the original intent, unity or Asabiya (the sinews that bind) would decline. The children or followers of a dynastic leader, generally, would lose legitimacy, until those outside of political power would challenge the system. They would be successful because they were "Bedouins" as they were outside the system, and thus saw the future with a different framework. According to Ibn khaldun, a dynasty goes through different stages and encounters

new conditions. The first stage is that of success, the overthrow of all opposition and the appropriation of royal authority from the preceding dynasty. The second stage is where a ruler gains complete control over his people, claims royal authority for himself... and prevents others from sharing in it. The third stage is one of leisure and tranquility in which the fruits of royal authority are enjoyed; the acquisition of property, creation of lasting monuments, and fame. The fourth stage is one of contentment and peacefulness. He adopts the tradition of his predecessors and follows closely in their footsteps. The fifth stage is one of waste and squandering; the ruler wastes on pleasures and amusements...acquires...low class followers. In this stage, the dynasty is seized by senility and the chronic disease from which it can hardly ever rid itself, for which it can find no cure, and, eventually, it is destroyed. ... (Khalidun in Galtung and Inayatullah, 1997, page 25-32).

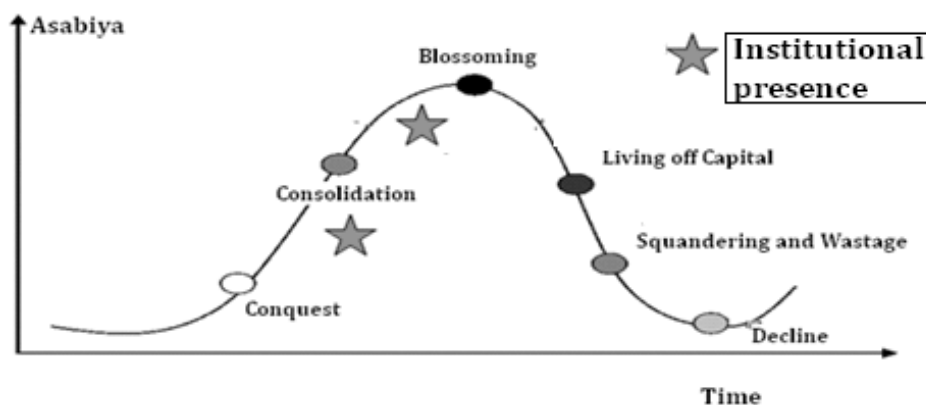


Figure 1. Locating IED in Ibn Khaldun's Theory of Asabiya

Ibn Khaldun's theory of change provided an interpretive framework within which participants could see their organization in a new light. In terms of Ibn Khaldun's theory of *Asabiya*, a group working in the Institute of Educational Development (IED), BRAC University, had two strands of thought, about their organization. One group felt that IED is located in "consolidation" and has yet to reap the fruits of a blossoming phase. It has successfully passed the initial stages of establishing a name for itself in the realm of the education sector and in the community of Bangladeshi stakeholders. It enjoys a credible position as a non partisan and independent government support organization. On the other hand, another group of people working on the same issue, thought that IED was located just above the conquest phase and has some way to go before it is more established and consolidated. There is nothing right or wrong about this difference in opinion; rather they enrich the discourse on social change and change strategies. Ibn Khaldun's theory of change is a counterbalance to complacency that can set in within organizations and helps decision makers to consider renewal.

ii) Milestones

When no macrohistory tool resonated with the topics, the participants were asked to come up with important historical milestones in terms of the evolution of

the topic.

For example for a group working on the research question “What are the future strategies required in higher education so that research in universities can be transformed into actual solutions?” the following historical milestone was created.

1986	2004-2005	2006	2008-2009	2010
First Research University	Scholarships to students	Research council (all universities together)	Govt. Department of Innovation	University has research office, Dean of Research quality.

For a group working on “Creating space for futures thinking at all levels, person-to-institutions 2025” the following historical milestone was created.

1920-30's	1950-60	1970	1990-2000	2010's-
Limited access to formal education	Post-colonial challenges	Generation gap Institutional investment	New media Idea sharing	Rethink youth engagement

Anticipating the Future

The participants were then asked to envision the future (10-15 years onwards) in terms of what they thought the future of the issues-at-hand would be like? Or what future are they afraid of? The following thoughts about higher education futures emerged during this exercise:

1. In 15 years time, home based education would be a dominant mode of higher level learning
2. Experiential virtual reality-based lesson delivery and learning, would be the dominant epistemology
3. Education through practical application; as a fear of the future this would challenge the traditional model of teacher-led education.
4. New legislation/policies to be formulated to guide new modalities
5. Freedom to learn anything that a student wants to learn without political/religious or cultural restrictions.

Questioning assumptions

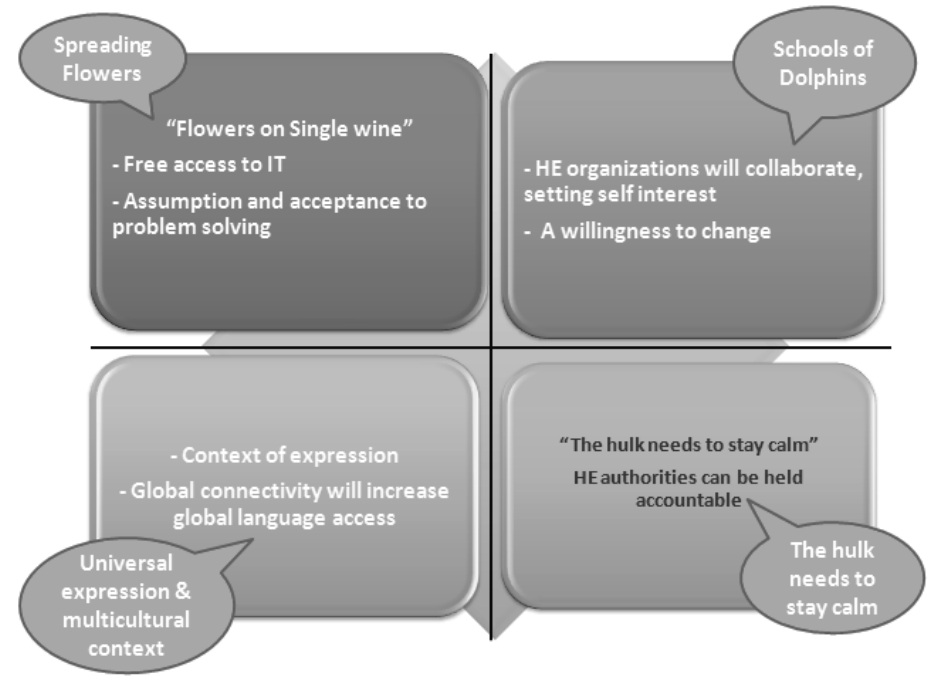
Participants were then asked to re-think and re-package their future thoughts by questioning the assumptions around which their statements about the future were built. For example, in the paragraph above, the group envisioned home based education as a dominant mode of higher education. The assumption is that various stakeholders of the system would accept this change and the shift in power from physical institutions/hierarchies to a home-based educational model like a Google University. When this assumption was challenged there was a reality check that the established hierarchy would be highly resistant of any challenge to its power and there would be tension among stakeholders in the system. The following thoughts emerged during this exercise:

i) Assumptions:

1. There is resistance at the level of policy making to include other

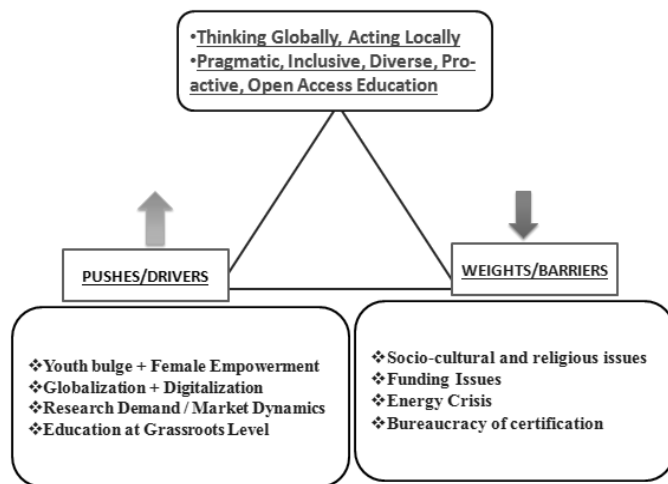
- stakeholders in formulating policies
2. Unequal distribution of wealth and resources resulting in barriers to access higher education
 3. Students are embedded in the old system and lack interest/motivation to cope with new ideas
 4. Free use of internet/technologies
 5. New and innovative ideas threaten to breakdown the traditional system of education
 6. Funding for higher education has been determined through personal liking
 7. Misuse of power or corruption threatens any innovation or any hint of change to the system

Table 3. *A snapshot of the assumptions of a particular group are shown here*



Visualizing the future - Futures Triangle

The participants were asked to envisage a preferred future and to spell out drivers and weights for that future, using the Futures Triangle. Developed by Inayatullah (2008), the futures triangle is a tool for mapping the past, present and future to help explore the space of plausible futures. The fundamental thought is that there are three dimensions that shape plausible futures: the weight of the past (barriers); the push of the present (drivers); and the pull of the future. The tension and interaction between these three forces creates a possible future space. The most important conjunctions between elements in the Futures Triangle analysis are depicted here:



Deepening the future - Causal Layered Analysis

Causal Layered Analysis (CLA) provides a basis for critiquing the social construct of the 'real' and offers a layered approach with which to analyze the results and provide a framework for the discourse from the key focus areas of this research (Inayatullah, 2004). The CLA method assumes four levels of analysis: The **first level is the litany** representing quantitative trends and problems, which is the most visible and obvious level, requiring little analytic capabilities and the assumptions are rarely questioned. The **second level is the systemic view**, which looks behind the headlines and is concerned with social causes, including economic, cultural, political and historical factors. The **third deeper level** is concerned with structure and the **discourse/worldview** that supports and legitimates it. The task is to find deeper social, linguistic, cultural structures that are actor-invariant (not dependent on who are the actors). The **fourth layer of analysis** is at the level of **metaphor or myth**. These are the deep stories, the collective archetypes - the unconscious and often emotive dimensions of the problem or the paradox. These four levels are used to find the full panoply of stories, both from the conscious, unconscious and emotive perspectives on the issue (Inayatullah, 2004).

At the workshop, the inner story was approached in two ways. One by playing the CLA game and the other by inviting participants to think about the inner story in regards to their particular issue and how to change that inner story so that it could inform strategy.

i) The CLA game

The participants were divided into 4 groups, with each group representing litany, systemic view, world view and metaphor/myth. In the group representing the systemic view, there were representatives of various stakeholders like student unions, teachers association and parents groups. The CLA game was played out with each group playing its part on topics like commercialization of universities, selling IPOs and registering Dhaka University in the stock market. It emerged from the interplay that, while the systems and litanies were quite robust and responsive to a changing worldview, there was deep mistrust in the system to any intervention and

change. So the solution space was agreed on around bridging the divide in society and resolving mistrust, for any innovation in higher education to succeed.

ii) *Revisiting the Inner story*

The participants were invited to discover the inner story, myth or metaphor which expresses their narrative. The challenge was how to reinvent/change that inner story so that they could move towards a preferred future.

One group came up with the metaphor of the traditional English Garden, which only admitted selected elites. This was representative of the current status of higher education in Bangladesh, where entry for others outside the faculty and certification organizations is closed. For change to happen, the story needs to be changed to a public park, where there is access for all and everybody is free to contribute to the dialogue.



Another group related the inner story of current higher education with that of an arranged marriage. It is a facilitated marriage, without the consent of the couple, and has been forced upon two people, who do not know each other. This represents the current education paradigm where education systems are forced on students and faculty and students are forced to abide. This needs to be replaced by the image of a love-based marriage, where there is mutual acceptance and understanding of each other. This inner story then needs to filter out to the education system, where there is mutual respect of other worldviews and opinions of students and faculty. Finally, the system of higher education is currently vertical and managed from top-to- bottom, which participants felt needed to be changed towards a more horizontal and participatory system.



Anticipating future possibilities using the Futures Wheel

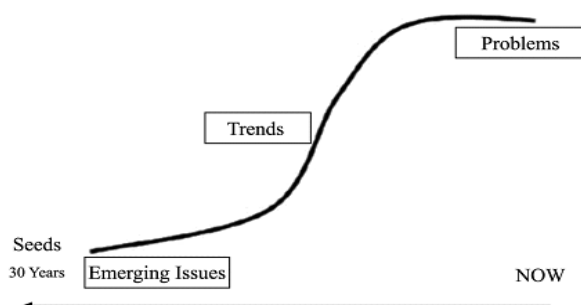
The futures wheel is a future-oriented technique, invented by Jerome C. Glenn in 1972. It is a structured brainstorming method used to investigate the direct and indirect consequences of a decision, event, or trend (Glenn, 1972). The futures wheel is widely used by futurists, planners and policymakers to identify potential problems and opportunities, new markets, products, and to explore alternative possibilities and strategies. It is one of those rare methods in which opposing views on an issue can find a place on the same page, thus making the process more robust and enriching of the futures discussion space. Also the brainstorming does not stop at primary consequences but also explores secondary impacts, providing new opportunities and identifying potential consequences. In terms of higher education,

the participants discussed the impacts of their respective topics. For example one group which was advocating for teachers becoming facilitators and knowledge brokers, realized that they would be facing tremendous odds and resistance from the people who are embedded within a system, administrators and even students. Also there was the question of whether the industry would accept the graduates from such an initiative.



Emerging Issues Analysis

The audience was then asked to quickly pick up some emerging issues about education in Bangladesh, which they thought are disruptive in nature and could be a source of contention later in the future.

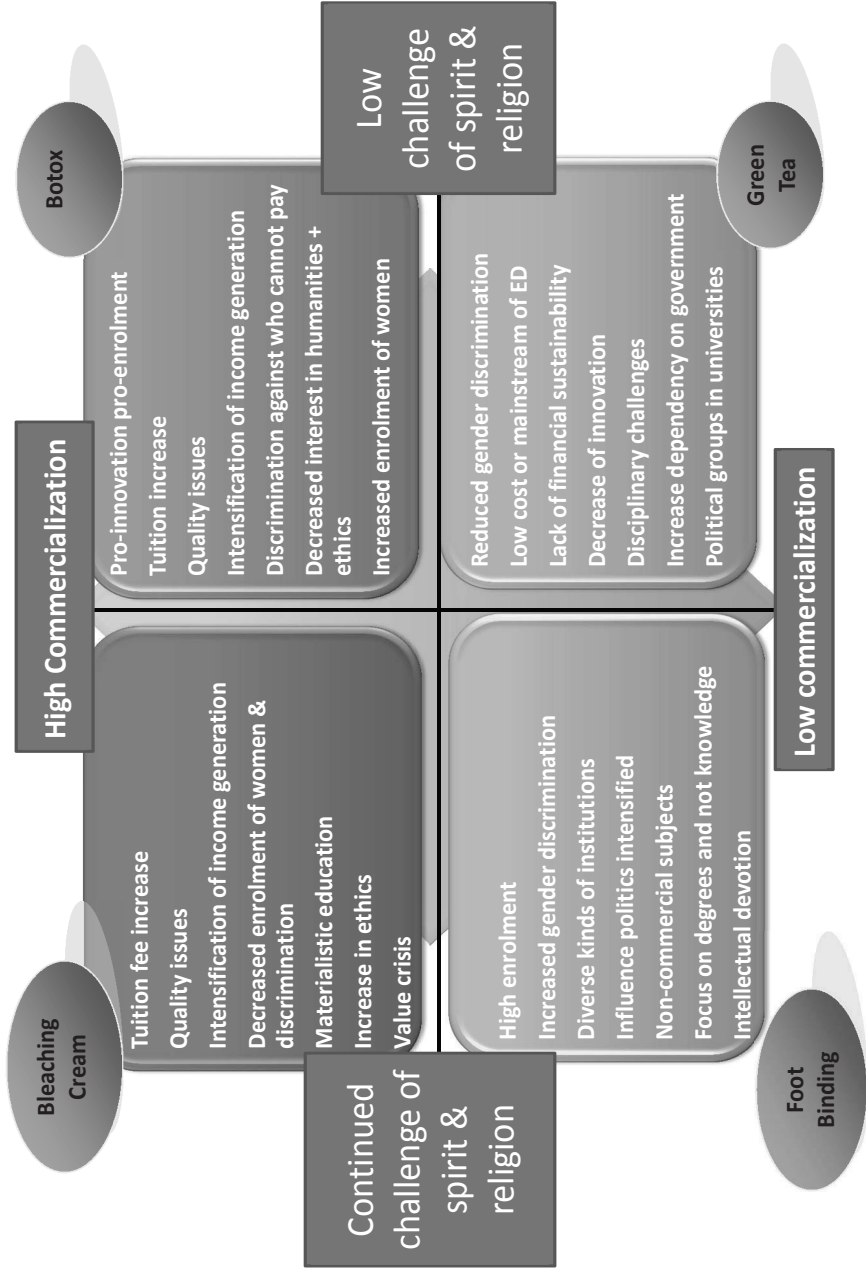


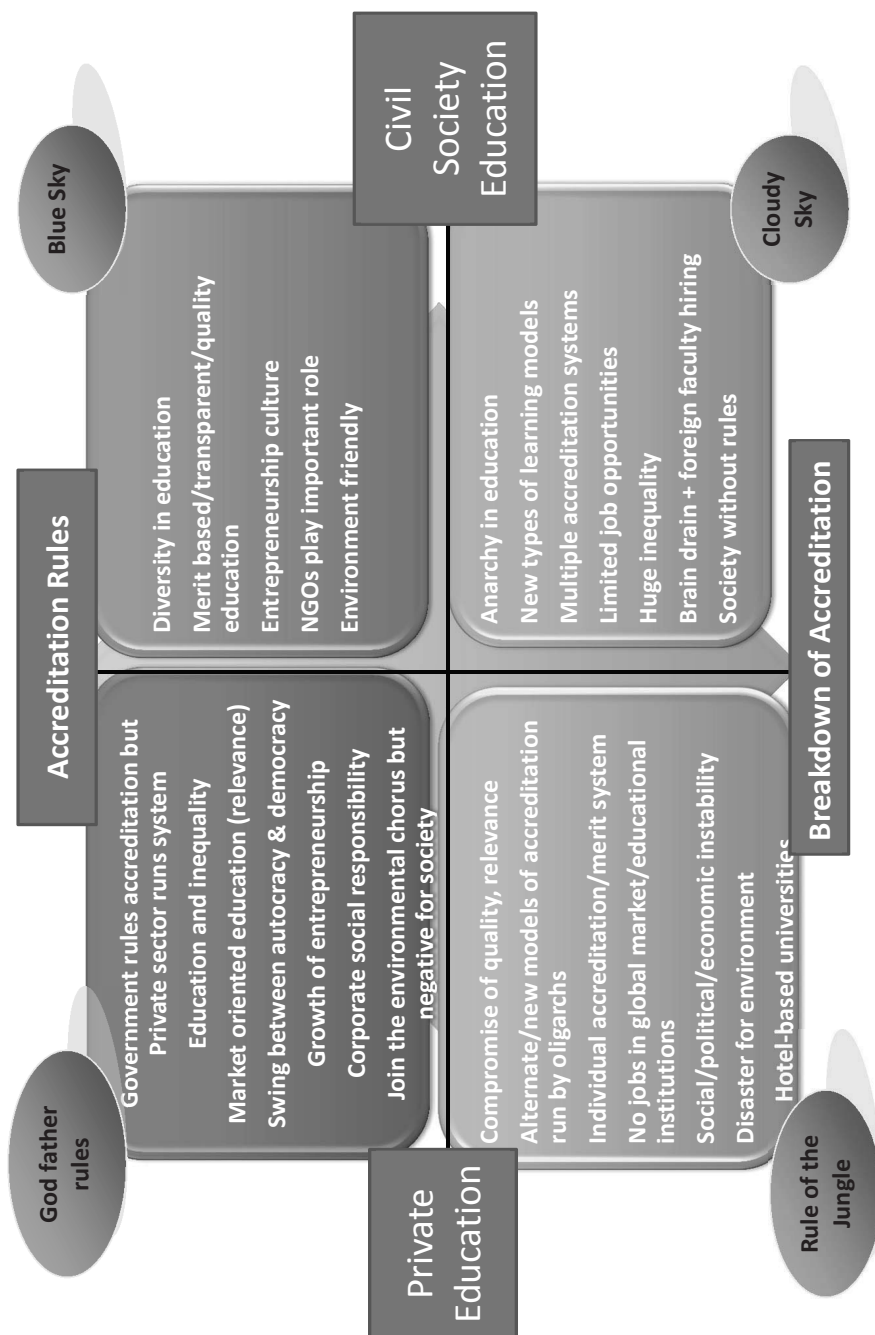
The following **disruptors** were identified by the participants

- Private schools taking over public schools
- Continued challenge of social as well as religious resistance to change

- Huge number of depressed educated youth
- The clash of cultures under the influence of globalization
- Rise of technology addiction
- Deterioration of quality of education in public schools ultimately making quality education inaccessible to even upper middle class

The interplay of the disruptors with the most impact and highest uncertainty resulted in the following scenario sets.





Futures Landscape

The audience was then introduced by Dr. Jose Ramos to the concept of Futures Landscape (Inayatullah, 2008) and thinking strategically about organizations and their capabilities. This tool helps audit where an organization's strengths

and weaknesses are in respect to future readiness. First is the jungle, depicting a competitive world, where survival is the goal. The second level is represented by the chess set, where strategy helps in improving effectiveness – the goal is to achieve success by being clear about organizational goals and creating more responsive organizations. The third are the mountain tops representing the bigger picture and the aerial view - the broader contest in which our organization is involved. The final step is in regards to the vision – the star. Is day-to-day survival the modus operandi of your organization or is it strategically moving forward? Has it developed any sense of alternative futures of how the world might be? Has the organization developed a vision?

As an example, Dr. STK Naim and Umar Sheraz performed a Futures Landscape for COMSTECH Secretariat. Their analysis was that

At the level of vision (STAR), COMSTECH is currently in a soul searching mode. There is currently a quest for meaning and purpose.

At the level of aerial view and intelligence (Mountain Top), COMSTECH is in the process of gathering collective wisdom of eminent OIC scientists to propose a 10 year S&T vision and strategy for 10 years plan of action for OIC.

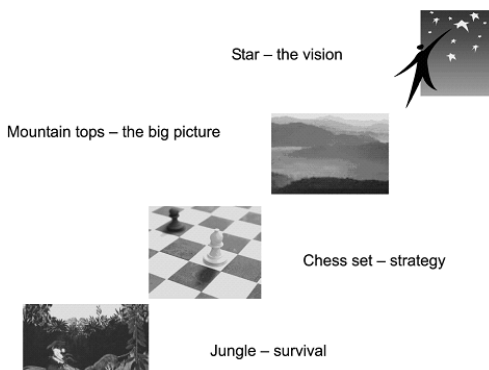
At the level of strategy (chess set), COMSTECH is well equipped to plan and strategize. It has provided consultancy services to some member states for STI strategy.

At the level of survival and implementation (jungle), COMSTECH is well adapted at implementation and survival. It has done well in creating training facilities through organizations of workshops/seminars and offer of scholarships to young researchers in OIC states for relevant research. It has provided a platform for OIC scientists for collective learning and sharing of experiences.

Futures Action Model

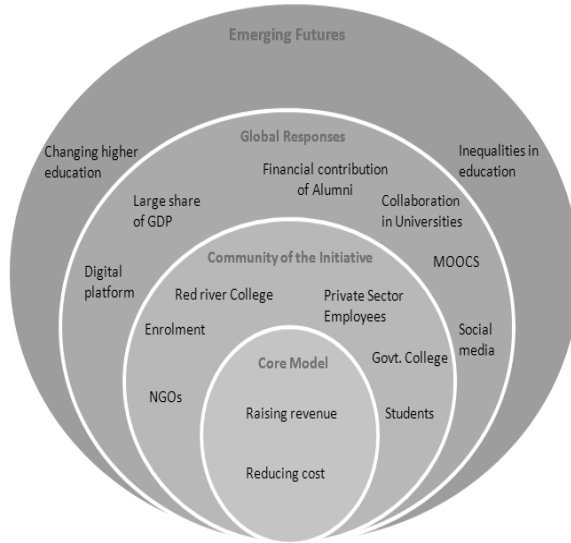
Dr. Ramos introduced the participants to the Futures Action Model (FAM) (Ramos, 2013). The FAM approach uses four levels of inquiry in the design process: emerging futures, global responses, the community (of the initiative), and the core model, which for initiative modeling is the ‘guts’ of the initiative. To quote Ramos:

“Global responses entails looking at the various ways in which people around the world are responding to the particular challenge, problem or issue of concern to the group.. Many of these people, organizations, agencies and companies responding to a particular challenge or issue are already collaborating and connecting with each other (Ramos, 2010). The concept of a ‘community of the initiative’ lies in the service of creating a value exchange system between stakeholders, allowing stakeholders to exchange value in new and dynamic ways (Ramos, 2013). Inquiry into the community of the initiative entails looking at who might be the potential stakeholders for a new initiative. Finally, at the core model of the initiative, the inquiry focuses on the ‘vehicle’, the specific structure and organs



the initiative takes to provide value for the community of the initiative.”
(Ramos, 2013)

An example for one particular group working on inequalities is given below,



1. The **Emerging issue** was identified as **Inequality in education**
2. The participants were then asked to come up with **global responses to tackle this issue**. The following global practices were identified by the participants:
 - Open access to digital knowledge base- Sweden, UK, Denmark and many other countries
 - Including ‘social impact’ as the indicator impact of Higher Education- UK
 - Spending a large share of GDP in education- Malaysia
 - Financial contribution to University by the alumni association- Malaysia
 - Digital platform for students – khanacademy.org
 - Social media for academia – ratemyprofessor.org
 - Collaboration among universities (eg.Redriver college-BRAC University, Manchester university- BRAC University, etc)
3. The participants were then asked to identify the **Community of initiative in Bangladesh, who would be potential stakeholders for the initiative**. The following stakeholders were identified:
 - NGOs
 - Government
 - Student Bodies
 - Private Sector/ Corporate Social Responsibility
4. Finally the **Core model of the initiative was discussed**:
 - The group discussed the need for a vehicle that would leverage emerging technologies and technology partners, create a bridge between existing

education providers, government, NGOs and the end user. This led to a robust initiative against inequality in education and for educational access.

- Particular consideration was given to the need to raise revenue to fund and maintain the initiative and reducing cost so that the initiative can proceed in a sustainable manner.

Conclusion

The use of futures methodologies for the training workshop enabled participants to unlock their thinking, and rise up above business-as-usual towards a preferable future and to see the bigger picture. From participant feedback it was revealed that participants were instilled with the belief that through foresight methods and strategic planning, the future could be shaped toward the desired. But there was also concern that the weight of history was too great and would require a Herculean effort to move forward. On a more positive note, participants from two “camps” not only worked together to derive one shared future, but through tools such as macrohistory, Causal Layered Analysis and the Futures Action Model came to understand each other’s perspectives and recognize that the chasm between them was bridgeable. To quote from the Futures Landscape, the workshop raised the thinking process from the reality-based jungle to the vantage point of the stars, where the preferred future could be visualized with clarity. Given the positive feedback and popularity among participants, it is expected that such venues for futures thinking would be continued in the future.

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