

Globalizing Higher Education: Global Needs

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The Relevance of the Global Context for Understanding the Current Paradigm

On the assumption that we are now only at the initial stages of the challenges of delivering a form of global higher education for many millions of students around the world, it is time to look at the scale, scope and nature of what the curriculum orientation should look like. Since I am a Trustee of the World Academy of Art & Science, I am directly influenced by the fundamental credo upon which the Academy is founded. That credo expresses an interest in all forms of knowledge as falling within the arena of interest of the fellows of the Academy, but that statement contains some ambiguity. Is the Academy interested in the curiosity that generates new knowledge and willing to support such initiatives? Or is the Academy interested in synthesizing and integrating the bewildering and exponential increase in knowledge generation. The credo adds two other elements to the interest and knowledge. It enjoins the Academy to consider the social implications of knowledge generation. That imposes a distinctive intellectual task of understanding the interdependence and inter-determination of knowledge and the social processes of humanity. This in itself is a major and distinctive intellectual task on its own. The third element in the Academy's credo is that it has to consider the social implications of knowledge in terms of questions of the policy responsibility for the uses or possible abuses of knowledge generation.

It will then be obvious that these are principles that will influence any educational initiative in which the Academy is an initiator or a participator. The sheer generality of these points mean that they can only be general guidelines in the context of specific educational considerations. The practicalities of constructing a form of guideline within which a coherent degree or diploma awarding program is developed has unfortunately a number of possible starting points, although it is by no means clear that these starting points contain all the answers to coherent curriculum development for online learning on a global basis.

We might start with the criteria that have emerged for the ranking of universities on a worldwide basis. These criteria have focused on certain subject matter and the evaluation of the strength or weakness of a university in the global pecking order is done according to how they believe the university performs in these specific areas. Arts & Humanities, Clinical, Pre-clinical & Health, Engineering & Technology, Life sciences, Physical sciences, Social sciences (<http://www.timeshighereducation.co.uk/world-university-rankings/>) . It is possible that we can add other subject areas, which may or may not be recognized as areas for which it is easy to assign valuations of academic excellence. However, these subject areas that evolve from universities within sovereign states. It may therefore be assumed that there will be some coincidence between course development and the national/cultural context within which the university functions. In short, for a global initiative we would have to read into any and all subject areas, the idea that these subjects are taught not from a national perspective, but a global perspective. Therefore, a central challenge to curriculum design for whatever level of global higher education that we seek to service would have to be formulated around the notions of global knowledge, global social consequences, and global policy implications.

To provide some guidelines for curriculum development from this perspective one approach could be that we start with the idea that there is a global society of human participators and these participators generate a form of complex, interdependent, and inter-determining global social processes. If we can get a reasonably precise description of the nature of the global social process, with useful mapping and marking, we could provide guidelines for course designs that make sense in the context of the world eco-social process. Fellows of the World Academy have explored the intellectual tools necessary for an adequate description of the global social process. An accurate description of this process would be useful to any future design of an educational curriculum designed to beneficently influence its evolution in terms that are constructive. The markers we use to guide description would be firstly the identification of all relevant participators in the global social process. These participators include sovereigns, political party, pressure groups, influence oriented groups, such as civil society, intergovernmental organizations, private sector associations, and ultimately, the myriad of small groups in human associations and ultimately, the individual and for our purposes, the individual student stakeholder. If we are to teach students it would be appropriate for us to know more about their position in the context of the other individual and associational stakeholders in the global community. The participators themselves generate problems about participation including participation in education initiatives and participation in post education opportunities. Some of these factors may generate problems of specificity and originality that could be placed in a curriculum.

The second marker that we underscore related to the perspectives of the participators. These perspectives will implicate perspectives of essential identity. They will implicate perspectives concerning value demands as well as perspectives of expectation. The challenge for a global education initiative will be to generate at interest in an education formed identity that is global and not parochial. Such an identity may also require changes in the way men and women perceive each other, the way confessional identities accept each other, the tolerance between nativistic identities, and those that are rooted in a secular scientific paradigm. The perspective of value demand initially requires that the student and the teacher be committed to the shaping and sharing of educational enlightenment. There may also be a tacit assumption that educational enlightenment is a base of power by which the individual may have better access to other important values of social coexistence. Finally, there is the perspective of expectation. The critical challenge is the challenge that the student's talent capacity be cultivated and enhanced according to established expectations of global educational credibility.

The third marker refers to the situations at a global level where the interaction happens. For our purposes, we are talking about educational interaction. In general, when we refer to situations we refer to situations relating to space, time, to institutions, and to crises. The situation of electronic higher education must work through the appropriate level of institutionalization recognizing that the technology it would seek to deploy will radically compress space and time. Additionally, because it is a form of created spatial temporal domain, the dynamics of responding to and working with a crisis in education at the individual level will remain a challenge. The issue of precisely what and how institutionalization will work on a global basis will require further clarification.

The fourth marker implicates bases of power a participator has to improve his access to the desired values such as education. Here the cost and accessibility to a form of higher education is an

important base of power for the development of human capital. In this sense, the curriculum itself must self-consciously work on the recognition that its effects on the stakeholder reflect both educational enhancement and the possibilities of improved human capital performance. The importance of widely distributing the benefits of higher education globally may also be seen as a tool that promotes evolutionary change and world peace.

The fifth marker deals with the strategies available to the actor in global society. Strategies may be either coercive or persuasive. In the educational context, it is possible that people can be educated in further reliance of coercion rather than persuasion. The strategies of the curriculum must therefore focus on the importance of ideas of non-violence, mutual understanding, global cooperation, conflict resolution and all strategies in human interaction that promote peace and constrain violence.

The final marker would underline what outcomes we might envision from a global higher education initiatives for the state of global public order. Here in terms of outcomes, we begin to examine the fresh opportunities for the study of some critical components of global society.

One of the most important outcomes of the global social process is the system of global power relations. Since power is largely exercised by human beings in the form of decision making according to power, the curriculum could draw attention to the role of education in shaping the decision-making capacities of individuals who gravitate to decisions of power in society. This means that the students may have to learn to understand the dynamics of global power and their orientation to this phenomenon. This entire area brings into sharp focus the problems of war, insurrection, terrorism, weapons of mass destruction, and human survival. Additionally, since power is exercised by decision, students may be introduced to the architecture of decision early in their studies and appreciate the importance of decision to all areas of knowledge in the curriculum.

One of the most important outcomes of the global processes of effective power is the collective effort to manage power, to tame power, and to establish via authority, stability in expectations about the exercise of power. This means that the student would have to be introduced to the role of authority in human institutions and human decision-making. Authority is not only confined to politics and law, it has a role in all other organized forms of knowledge. From the constituting of authority in society at the global level we look at the development of global institutions specialized to the most important values embedded in the global social process. Value clarification has been achieved in scholarship by clarifying the values behind the Universal Declaration of Human Rights. These values have in part, been derived from the observation of needs in simple societies. These needs have implicated the following values: power, wealth, respect, health and well-being, enlightenment, rectitude, affection, and aesthetics. These values have social importance when they are tied to the diverse institutional forms in global society that are in some degree specialized to secure them. Thus, power is institutionalized by government, wealth by business, respect by social class distinctions, health and well being, clinics and hospitals, or Shamanic healing, enlightenment, schools and universities, rectitude, churches, mosques, temples, affection, family and intimate institutional relations, aesthetics, and cultural heritage. We could then construct a global cross-cultural curriculum around the value institutional reality and diversity of the global social process.

The Challenge of a Global Needs Assessment

Such an assessment must have a grasp of the current paradigm of global conditions and its effect on higher education opportunity. Additionally, since the initiative of globalizing higher education requires a sense of an anticipated paradigm it would be appropriate that we have some sense of the important drivers educationally of a new anticipated paradigm. The deliberations within the World Academy have isolated six major themes that we hope will inform the curriculum, educational objectives, and educational methods of a global higher education initiative. These themes are not necessarily prioritized, they are largely interdependent. For example, one major theme is new economic theory. The challenges in this arena of learning implicate several other dominant themes such as global governance, human capital, peace and security, ecology, and individuality. Furthermore, these themes are significantly implicated in Serageldin's, *Seven Pillars of the Knowledge Revolution*. These include the ways in which knowledge historically has been produced and conserved. He describes this as parsing. He notes however, that the growth of technology has created a revolution in the storage and retrieving of knowledge revolutionizing the time involved in learning or teaching from such a knowledge base. Here he notes that knowledge and scholarship have become dynamic like a smooth fluid flowing river. He speculates that the emergence of a meta-web will generate even higher levels of knowledge and activity as well as human social connectivity. Here the possibility of a future connectivity of intelligence is a major paradigm shift that should impact the prospects of global higher education.

The second pillar of knowledge deals with the traditional body of knowledge that is largely separated by the text and image. Historically images were difficult to produce. The opposite is the case today. The integration of image and text had incredible implications for the role of the brain in learning. Images for example, of a holographic world, a world of virtual reality, changes the frontiers of what is known and what is knowable. These are all within the domain of the future of global higher education.

The third pillar is the impact of the dramatic technological advances in technological machines implicated in learning. Today it is virtually unthinkable that research can be done and knowledge be retrieved without the aid of the machine. Serageldin uses the world digital library, which allows the user to link video, image, text, and commentary and mapping into a seamless hole and to simultaneously search different approaches to the same thing or problem. The digital library concept is by itself a revolutionary vehicle in the domain of higher education. One can only imagine what may proceed from it.

The fourth pillar recognizes that the revolutions in science and technology have in fact created a world of dramatic complexity with possibly chaotic components. Everything is more complex - ecology, politics, economics, biology and more. All of this would seem to require new ways of thinking and education would have to be leading in the cultivation of new paradigms of thinking that can digest complexity and chaos in the existential world.

The fifth pillar deals with the way in which the machine exercises control over significant quanta of computation and research. There is a recognition that the concepts inherent in computational science will influence the very fabric of what science is and what scientific practice should be.

The sixth pillar suggests that the disparate domains of knowledge are converging and these convergences generate completely new fields, new sciences, new insights and vastly expanded domains and possibilities for the future of higher education. For example, from chemistry and biology we now have biochemistry. Additionally, the convergence of disparate fields has produced BINT: Bio/Info/Nano/Technology. The unpacking and understanding of DNA has generated such fields as Gnomics, Protechnomics, and Metabolomics. These developments may be projected as expanding dramatically and exponentially.

The seventh pillar in Seragelden's view is the focus that the future of higher education must be explicitly interdisciplinary (he used the term pluri-disciplinarity) and be focused on the policy process. It would be a significant challenge to the development of a paradigm changing sensitive curriculum for global higher education that it shift from the current model within nation states and universities in which disciplines are developed with hyper specialization and grow in some isolation from related fields that may complement or significantly inform the standards within our discipline. Moving out of the disciplinary matrix to a pluri or interdisciplinary focus and orientation is a matter that is easily espoused but reluctantly embraced.

Is the global higher education initiative a matter that in effect may unconsciously stumble into the challenges of re-inventing a new paradigm for higher education or is it an initiative that we can consciously prepare for? Here there are several challenges beginning with the content of the teaching itself. Content itself, which is dynamic and changing, should be an important inspiration for curiosity in the student and an incentive to perhaps engage in self-learning. Curiosity and self-learning will be critical components of distance education modules. Teaching modules would have to cover a wide variety of subject matters necessary for educational advancement. The future would seem to suggest that subjects may well be combined in novel and unusual ways. This kind of novelty in mixing and matching modules may well be in search of the outlines of a newer and more realistic paradigm of thinking. This implies that there would need to be a philosophical module as well as modules that partake of the natural sciences, mathematics, social sciences, humanities, and the arts.

The student stakeholders will have to play a larger role in their own self-motivation and development. It is not clear whether electronic communities of inter-student communication can sufficiently compensate for the face-to-face dynamics of a traditional university. In any event, higher education globally will have to be sensitive to the needs of emotional development of the person.

One of the great challenges of global distance education is going to be implicated in the methods and inventiveness of modern technologies of communication. Already revolutionary advances have been made but it would appear that so far we have only scratched the surface of the possibilities of new and novel modalities of communication. The global university will also present an important contribution and opportunity for the economics of higher education. To a large extent, the financial position of the student is still an indicator of whether that student will have access to higher education. The potentialities of making higher education accessible at a radically discounted economic rate will prove to be a measure that could have global possibilities in its transformation potentials.

Another important component of the global education initiative will have to be a concern with the importance of values that are cross culturally congruent and consistent with the fundamental values that the international community has identified in its human rights and humanitarian initiatives. These values taken together add up to a promotion and a defense of human dignity. It would seem to me that the role of education in the production and enhancement of universalizable dignity is a matter of the utmost importance in the sense that higher education must not be value free. In short, the inquiry into human values, and their implications in the vast modules of subject matters that may be developed are themselves critical tools for advancing the Socratic principle: know thyself. Additionally, values can be tied to a deeper understanding of problems and why problems are problems. Moreover, many teaching modules will have to give some attention to the issue of problem solving. Problem solving ultimately involves human choice and human decision. Indeed, human choice and decision must ultimately derive decision-making guidance in problem solving from the values that are implicated in the problem. The value approach may also be used to develop modules that enhance the student's ethical sensibility and moral understanding. Thus, the approach might serve as a tool to complement the emotional development of the student.

We might as well imagine a challenge that would have to reinvent higher education and we would have to think of new and novel ways by which this landscape evolves optimally. These at least are some of the threshold issues about the needs aspect of this global initiative.