TITLE : What is happening to the soul of higher education in today's transformation?

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ABSTRACT

Universities are pictured as some of the most stable institutions existing almost

unchanged throughout the ages. Yet, the processes currently transforming higher

education globally are also influencing the soul of higher education. It is imperative to

define the essence of higher education to be able to adjudicate the forces threatening the

survival of its soul. The three aspects of transformation discussed here are

corporatization, accountability and new technology. Scrutinizing analysis of these

transforming forces led to new perspectives on their menacing power. In all cases it

became apparent that they might enforce a rebirth of our soul, and restore our true

essence. The transformation of higher education through the ages is an evolutionary

process, in which we adapt our structure to fit into a socially and technologically altered

world. The soul of higher education revolves essentially around knowledge, and the

present transforming forces do not have the capacity to quench this spirit.

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INTRODUCTION

Quo Vadimus? The eternal question, 'Where are we going?' might also be asked as, 'Where are we coming from?'. And as Costi (2000) states in his book *Paradigms lost*, our inquiry might lead us to the deepest question of all speculative thought , 'What is the true nature of mankind?'.

This line of thought can directly be superimposed on much of the debate and speculation concerning higher education today , 'Where are we going with higher education? Where are we coming from and what is the true nature of higher education?' The words of Carly Fiorina, CEO of Hewlett Packard and commencement speaker of the recent Stanford graduation ceremony , directly apply to our situation when she tells graduates that her role is to make her company relevant in a new era, and therefore her job is to distill its original essence – every single day (hpNOW 2001). To make higher education relevant in the 21st century, we also have to distill its original meaning, search for its true nature, find its real soul.

The history of higher education pictures universities as some of the most stable institutions existing almost unchanged throughout the ages (Newman 2000). Yet, according to Cox (2000) the history of higher education tells us that new institutional forms have arisen repeatedly over the centuries. Furthermore, analysis of the paradigm shifts in history reveals a series of critical changes in higher education, attended with positive external forces for change (Johnston 1998). These changes led to the distinction

of four categories of scholarship, i.e. the scholarships of teaching (Middle Ages to 19th century), of discovery (19th century until 1960), of application (1960-1990) and of integration (1990 onwards) (Boyer 1990). Change has therefore always been part of higher education (Cox 2000). However, the rate of change increases exponentially, and is now so rapid that it must be considered as constant – the direction and outcomes having become unpredictable (Barnett 1997). It is therefore no wonder that there also seems to have been an exponential increase in publications on the transformation in higher education, the new paradigm, and the new forces shaping higher education in the 21st century.

It is interesting to note Johnston's (1998) observation that the forces for change were always external and pragmatic, while the forces resisting change were largely internal and self interested. According to Kennedy (1995) the inherent structure of universities implicitly resists change. On the other hand, Plater (1995) and Massy & Wilger (1995) reckon that academic staff resists the application of any movement of change, guarding their autonomy and independence for the sake of stability.

The current forces repeatedly quoted as being responsible for the transformation in higher education are globalization, increased access and demographic shifts, new technology and new modes of learning, productivity and accountability, market-driven decision-making, public skepticism, corporatization and new sponsorship of research (Lovett 1993, Newman 2000, Coaldrake 2000, Kennedy 1995, Plater 1995, Massey & Wilger 1995, Gilbert 1995, Miles 1994, Guskin 1994a & 1994b).

To investigate the possible influence of these forces on the traditional soul of higher education, it is imperative to identify this soul that is endangered.

IDENTIFYING THE SOUL OF HIGHER EDUCATION

The fundamental concepts that have characterized institutions of higher education through the ages are regarded by Newman (2000) to be :

(1) The assembly of skilled and scarce academic staff members.

(2) The assembly of selected students.

(3) The recognition of the library, with a collection of learning materials (mostly books), as the center of learning.

(4) The existence of a university campus as the place of education.

(5) Face-to-face instruction in the classroom.

However, it is interesting to discover that these concepts are not unique to institutions of higher education, and when regarded separately, not a single one can on its own capture the essence of a university. For instance, (1) skilled and scarce staff members are also assembled in many of the big corporations and even small businesses. (2) Selected members join associations quite often, and selected customers are nothing new to the business and corporate world. (3) A collection of books does not constitute a university – this would imply the existence of a university in most towns, and even many homes! (4) Many companies, especially in Silicon Valley, like to call their premises a campus, consisting of a collection of buildings on a delimited area. (5) Face-to-face instruction also occurs in military training, in factories, and even in prison!

It thus seems that the soul of the university cannot be captured by the institution's fundamental characteristics. The subdivided entities do not add up to the same whole experience.

It may be possible that the word 'experience' provides us with a clue – will the soul of higher educations be conceptualized in its role in people's life experience? The Futures Project at Brown University has identified three attributes essential to the traditional role of the university (Newman 2000):

(1) The socialization of students, and creation of various skills and attitudes necessary to become a contributing citizen.

(2) The provision of social mobility, thereby claiming access especially to the less advantaged.

(3) The upholding of the university as a home for open and unfettered discussion of critical issues.

A critical analysis of these practical attributes again reveals that they are not unique to university life, and do not represent the soul of higher education, although they are characteristic of our universities. What is worse, is that some of them may even have gross negative consequences: (1) An assembly of young people in a restaurant, bar or hostel, which is where students mostly socialize, is in no way necessary to become a contributing citizen. (2) Social mobility through a university education is only guaranteed for academically oriented people and careers. (3) 'Critical issues' are mostly the last thing discussed by students. They are either too overburdened by curriculum work and

assignments, or they are simply regarding this as the last 'hakuna matata' ('no worries, no responsibilities') time of their life.

Regarding mobility in a scientific career it is interesting to find that before the scientific revolution of the seventeenth century the self-educated man was at no disadvantage as compared to his colleague who attended a formal institute of learning, to pursue a scientific career (Hall 1964). During the various scientific revolutions occurring through the ages the role of the university is preeminent, inviting discussion at historical level (Kearney 1964). The reason for this lies sometimes in (1) tradition: Cambridge and Gottingen e.g. have always come to the fore, (2) government sponsorship: even before Napoleon's day France sponsored science, while England had little direct government aid for scientific research, (3) the emphasis on big business and material wealth: in the United States this have weakened scientific research until the 1800s, (4) the regard for manifestations of Western culture: in Russia e.g. the Slavophiles were opposed to science for this reason, and (5) even in religion: Catholic versus Protestant, e.g. the scientific views of Galileo, Kepler, Newton etc. evoked the wrath of the church. All these factors influencing the character and soul of scientific education have varied in different times and countries, sometimes probably inhibiting the true character of higher education, and taking it through turmoil, but never extinguishing its flame.

It is therefore apparent that the soul of the university is like mercury slipping through your fingers as soon as you try to grasp it. Evidently, 'the whole is more than the sum of its parts', and what that undefinable 'something' is that constitutes the true essence of higher education, may only become evident after distillation of the forces considered as threatening to our survival.

Encouraging is the observation that if the soul of the university is not captured by either its fundamental characteristics, or the experiences it provides, then the new institutions of higher education that do not exhibit these concepts and roles (Newman 2000) will not be able to destroy the soul of higher education.

FORCES THREATENING OUR SURVIVAL

After a scrutinizing inquiry into the forces threatening the original soul of the university we have identified the following three aspects of the transformation in higher education as being considered as most menacing to our survival:

(1) corporatization

(2) new technology

(3) accountability.

Naturally these three factors are not mutually exclusive, and influence one another in many ways. For convenience sake and to serve the purpose of this paper they will be discussed separately.

1. Corporatization

In the integration of world economy universities form a powerful part of a nation's wealth (Gray 1999). The industrialization of the university and adoption of corporate norms are visible on several levels, and terms like 'marketing', 'productivity enhancement' and 'quality management' are more and more frequently heard in meetings on campus (Kennedy 1995). Much of this is good, and in certain domains (like personnel and benefits policy and programs) one can only wonder why it took higher education so long to reach out for the best in corporate practices!

However, in other aspects too much corporatization fit uncomfortably into the university environment. According to Kennedy (1995) traditions of the academy favour individuality, creativity, freedom of action, independence and even heterodoxy. New corporate values that emphasize hierarchy, team loyalty and discipline may not be especially important for the scholarship of teaching, and sometimes create bewilderment or even hostility. Kennedy (1995) reckons that the borrowing of trendy ideas from today's corporate sector won't get the necessary results, as the ideas do not fit, and will therefore not have much staying power.

It is interesting to see that in the six to seven years since Kennedy's observations were published, many of the corporate values and ideas have established themselves very successfully in higher education. In South Africa we had the situation that the transformation went (and is still going) hand in hand with a political transformation. People expect change in every aspect of their lives, and the corporatization of the universities seems to be accepted as a political rather than as an international manifestation. Furthermore not all corporate values had the expected negative influence on academics' individuality, creativity and independence. One feels elated to see staff members working collaboratively in the same department, and even interdisciplinary. This applies to both research and undergraduate teaching. Even the aspect of evaluation and improvement of quality, which is part of the corporate process, have in most cases been applied as a positive experience. In this regard Crosby (Ivancevich *et al.* 1994) can be quoted, saying after 42 years of management experience, 'I know that an organization's quality (meaning ability to do what it agreed to do) is a direct reflection of the leader's personal integrity and intensity about getting things done properly. The

output of a business looks exactly like the attitude of the management'. I have seen this process of peer evaluation handled with utmost sensitivity by senior staff members, making it a valuable experience for all.

It is with annoyance that one reads about the 'fossilization' of universities, implying the resistance to change experienced through the ages (Hall 1964). However, Gray (1999) feels positive that in order to help universities rediscover themselves we need to find new means of managing them (even with senior management being extremely sensitive to outside criticism). We are in the business of developing intellectual capital, and as quality, productivity and management are part of big businesses, universities should apply the same advisors and consultants for productivity and quality enhancement, and ultimately streamlining of the institution. Universities will always have an edge on most organizations in the breadth and depth of their intellectual capital, and still they seem unwilling to take responsibility for themselves even in an age of economic growth. It is true that universities are not as well understood as many people – including academics – think (Ferlie *et al.* 1996). Universities are virtually ignored in the literature of management and organization theory even though most writers on management work in universities. Although education is one of the great genres of organization it is also the most isolated and overlooked (Gray 1999).

We can therefore not directly apply the same business criteria as a corporation for running an institution of higher education. But we can learn a lot about managing education from the practices of big businesses. In the business of higher education we are the managers. We must also learn how to pay closer attention to our human

resources, i.e. our students – and develop and guard our intellectual capital which is our greatest asset.

And will this application of business criteria to the management of education quench the soul of higher education? The words of Crosby (Ivancevich 1994), 'I've also learned that causing quality is a matter of understanding the philosophy behind it', seem very close to the quest we have for quality in higher education, and for maintaining the soul of our university at the same time.

We need not fear this new approach to higher education, for 'quality cannot be made to happen by applying some assigned set of rules and regulations' (Crosby 1994). It is therefore imperative that we go forth with valour and apply with discretion those corporate regulations applicable to our circumstances.

It might just save our soul.

2. New technology

No one has been able to forecast the exact influence of past technological changes on higher education – but few doubt that the power of the Information Age will radically revise how we do our work (Kennedy 1995). According to the Institute for Research on Higher Education at the University of Pennsylvania (1995) the electronic information highway has since 1990 continuously been changing perceptions on the distribution of information and images. Technology has forever changed our perception of time and space.

A survey conducted by the above-mentioned Institute in 1995 revealed that the most important issue discussed on university campuses is the effective use of technology. Having contemplatively observed academics' reactions towards, and concerns about new technology, one comes to the conclusion that the transforming force of information technology might be considered as most threatening to the survival of the soul of higher education! The name "Information Technology" rightfully reflects the reason for this concern. It penetrates into the heart of higher education, i.e. the manipulation of knowledge. It makes us vulnerable by invading our domain of expertise, and making us powerless if we do not adapt to its format, and execute its commands. For in this we do not have a choice. We shall have to master its power, and use it as a dynamic tool to serve our purposes. It is the only way to prevent us from being pushed off the throne by 'access denied'.

According to Plater (1995) technology is such a powerful transforming factor that it can be regarded as a 'paradigm shift in the offing'. It will forever change the way we learn, as well as the way we teach. It provides us with increasingly sophisticated and user-friendly software, integrating sound and video, graphics and computation, thereby reformulating concepts of learning and interaction. There is no longer a single or standard way to learn, and the synchronous, time-linked interaction that has made teaching and learning complementary and interdependent has been changed forever. This so-called 'time shift' brought about by information technology will influence the traditionally accepted norms on years needed for graduation, hours required for class interaction, and fulfillment of degree requirements. Furthermore, the most basic and fundamental unit of academic life - the sanctity of the classroom and the authority of the teacher within it – is about to be

turned inside out. The centuries-old model of teacher-student-classroom will not disappear, but may no longer dominate.

Is this a threat to the survival of our soul? By all means, 'No!'. Technology may provide the tools to solve problems concerning teaching for large classes. It may be the tool needed for making lectures interesting and stimulating, and practical sessions intelligible and workable. Textbooks are already supplemented with CD-ROMs, class notes are replaced by electronic information on websites, or CD-ROMs which the lecturers develop, lectures are enhanced by Dynamic HTML, digital cameras and computer animations, and famous lectures can be attended electronically. By the end of this year the first books available as digital tablets will be released by major computer companies. At the University of California (Monterey Campus) all lectures are available on a video server allowing students wireless access to the 1,7 terrabyte database 24 hours a day.

Technology may still provide us with the necessary hardware and software to change to the Learning Paradigm. It can also free us and our time, which is the most valued aspect of the academic life. Technology also gives us direct access to the source of knowledge. The internet, worldwide web, electronic mail and electronic conferencing provide us with much-needed eyes and ears at the site of knowledge-production. We live in a time where the production of information has been explosive, and the only way to deal with it, is by electronic manipulation. Daily we see students sitting at their computers, discussing with their fellow-students the information they get from websites, by electronic mail and by accessing library sources directly. This closely resembles the originally defined task of traditional universities – 'the introduction of the student to sophisticated intellectual

concepts, and the open and unfettered discussion of critical issues' (Newman 2000). Technology thereby actually takes us closer to the heart of higher education!

The approaching generation is very different from our own. According to Plater (1995) the adaptation of young people to 'hyperlearning' (i.e. the use of software and integrated media) will exceed that of most staff members for many years. Students will also have extremely high expectations for production quality, and low tolerance for instructional deficiencies.

Yet we have no choice but to adapt. The intellectual depth of academics is normally such that this adaptation needs not be a problem. Technology may have the power to change education into a 'gee whizz' business and we have to be brave. Using the words of Goethe, 'Boldness has genius, power and magic in it' (Orr 1995). We are committed to be the best we can be, and technology can take us there and even restore our true essence.

Since the 1990s management of technology has been incorporated into MBA courses globally. We foresee that this will also happen in education, science, commerce and other disciplines. It is our responsibility to take cognizance of advances in technology, and selectively and strategically implement them into existing frameworks and concepts, thereby maximizing its benefits. We should abstain from perceiving technology as a menace to our soul. It has the power to take us even closer to the heart of higher education.

3. Accountability

In the past public opinion of a university professor was of someone who had ultimate freedom to do as he pleases, was totally independent, frequently erratic in behavior and mostly eccentric in character. A typical example is someone like Kary Mullis, 1993 Nobel Prize winner for chemistry, who for this reason was described as someone with 'a creative non-conformity that verges on the lunatic' (Mullis 2000). This changed in the last few years, when public scepticism suddenly became an issue that even has transforming force (Kennedy 1995, Plater 1995). People want to know what academics do with their time, mainly because taxpayers' money is also involved! This implies that employees of institutes of higher education have now also become accountable to their stakeholders – and often feel threatened by the idea.

When considering how Boyer's four areas of scholarship have been prioritized differently in different eras (Johnston 1998), often struggling to replace each other, it is imperative that even in the past academics must have been held accountable for their time, work, money and efforts. Especially with the emergence of the scholarship of application, accountability was implicitly accepted.

Accountability is therefore not new to higher education and should not pose a threat to our survival. Academic freedom means a great deal, but it should not mean freedom from responsibility to students (Kennedy 1995). According to Coaldrake (2000), the right of access to large amounts of public money should bring the responsibility of accountability when there are many other demands on government budgets. To his opinion the university sector is still seen as protected and privileged by many people in the wider community. However, according to Plater (1995) few people really care about how much

time a faculty member spends on a particular task – whether it is teaching, preparing, advising or research. Faculty are recognized for their hard work, but criticized for spending their time on the wrong things. He regards student achievement as the best measure of our effectiveness, and concludes that we need to be accountable not only for *how* we spend our time, but also for the *results* of our time on task in terms of our institution's mission. And while our mission is to generate and transmit knowledge, our institutional mission should determine productive behavior (Massy & Wilger 1995). We do need a repositioning of higher education which can show genuine engagement with the outside world, and which does not insist on purely internal measures of quality and good practice.

According to Alexander (2000) societies throughout the world are driven by a new economic dynamic, requiring an ever-changing combination of highly skilled workers and knowledge that only education can provide. The stakes have become far too great for nations to leave their higher education systems to their own devices, and in this utilitarian environment it is inevitable that governments will seek greater accountability and performance. However, according to Alexander (2000) Bender states that there should be a degree of friction between the university and society, deriving from the critical spirit central to academic intellect. Higher education does not have to be completely comfortable with this externally mandated performance-based accountability, but develop effective performance measurement systems that truly assess educational quality and productivity.

A benefit resulting from this newly required analysis of our time and efforts, is that in the past faculty members themselves were not always sure what happened to all the hours

they thought they had. Making them accountable for how they spend their time also made them aware of what scholarship actually involved. And where previously postgraduate students were only trained in their specialized research disciplines, now is a good time to start training them for the various aspects involved in the academic life. Much has been written about the so-called tripartite mission of teaching, research and professional service of academic staff members (Brand 2000). According to Milem *et al.* (2000), who regard 'advising' as the third role of scholarship, observers of higher education have become increasingly concerned about the factors affecting the way individual members, departments and institutions divide the various responsibilities associated with this tripartite role. According to Massy and Wilger (1995) the research-teaching combination is what scholars *do* – the one enhances the other, and the joint product goes to the very heart of the faculty's self-image.

One of the best-known and most influential studies of how academic staff members spend their time is the work of Massy and Zemsky (1994), who confirm that the time and energy spent on research and publication had been increasing at the expense of time spent on teaching and meeting with students. They concluded that faculty *satisfice* their teaching, while they *maximize* their research. However, the results of a study conducted by Milem *et al.* (2000) indicate that in recent years staff members have spent more time engaged in research, *as well as* more time teaching and preparing for teaching – at the cost of service-related activities, advising and counseling students, and interacting with students in more informal settings. Time is not a limitless commodity, and as the restructuring of higher education results in increased expectations for faculty work, we also have to manage and protect our most valuable asset, our time (Plater 1995).

Some of the best-known scientists were also professors, but very poor teachers : Galileo

and Newton are the most notable (Hall 1964). But then you also find the inspiration of a

true genius like Richard Feynman, who treasured the Oersted Medal for Teaching

awarded to him in 1972 more than his Nobel Prize in Physics (Feynman 1998). His is not

a lone case, as the study by Massy and Wilger (1995) revealed: ' While recognition,

prestige, power and money are not unimportant to faculty, the sheer joy of discovering

and communicating knowledge emerged again and again as a powerful motivator'.

The traditional classroom setting may be changed by technology, and transformation

may alter the time and manner of teaching, but the role of the academic as teacher will

never be made obsolete. Much has recently been written on changes in faculty roles

(Scott & Awbrey 1993, Brand 2000, Drago & Williams 2000, Edgerton 1993 and Lovett

1993). The faculty member may have to fulfill an altered role, adapt to far reaching

changes and manage sources presently unknown. Yet the truly inspired teacher, the one

who really introduces his students to the life of the mind, pursues intellectual enjoyment,

and reflects this passion to his students, will always be treasured. After all, the life of the

mind does not consist of passing courses and earning degrees, rather it is about thinking

and struggling about ideas and concepts, about learning to articulate thought, and

opening one's self to constructive challenge and debate. Making us accountable for such

a life may cause the outside world to deem us even more valuable, and treasure our

devotion more.

Also in this case the call for accountability necessitated reflection on our role, our mission

and our commitment. It induced justification and defense of not only what we do, but also

of what we are. It made us look into our own soul.

TRANSFORMATION IN HIGHER EDUCATION : REVOLUTION OR EVOLUTION?

When taking a closer look at the transformation in higher education globally, one gets the impression of a dynamic force, shaping and reshaping norms, forms and processes. It conceptualizes higher education as having a life and shape of its own, and adapting this structure to fit into a socially and technologically altered world. It acts like an organism evolving to survive in a changing environment.

Analysis of the way in which universities have been transformed through the ages confirms this resemblance to the process of evolution. According to Ridley (1997) Eldredge and Gould's recognition of a 'punctuated pattern' of evolution proposes that evolution has a high rate at times of speciation, alternating with times of a low or zero rate. This directly applies to the changes in higher education through the ages, with the present exponentially increasing rate of change implying extreme adaptation to perform functions eminently useful for survival.

Simpson (1997) holds the view that adaptation is the orienting factor in evolution, and the changes involved should be useful to the organism. This usefulness may be in better fitness for the way of life already followed by the organism, or may enable it to cope with imposed changes in that way of life, or may permit or accompany a shift to some other way of life. Application of these characteristics to the transformation in higher education verifies my opinion that the changes we are experiencing are useful adaptations, enabling the university to cope with a transformation in society.

The famous bacteriologist Lynn Margulis wrote with her son Dorion Sagan (1987), 'The view of evolution as chronic bloody competition among individuals and species, a popular

distortion of Darwin's notion of "survival of the fittest", dissolves before a new view of continual cooperation, strong interaction, and mutual dependence among life forms. Life did not take over the globe by combat, but by networking. Life forms multiplied and complexified by co-opting others, not just by killing them'. The survival of the soul of higher education might depend upon such cooperation, interaction and dependence among various components of modern society. We shall have to trust and co-opt business, technology and the general public, forming with them a network that can stretch over the globe.

CONCLUSIONS

What then is this sanctity of higher education that is guarded with so much fervour? What is this indefinable soul of the university that inspires the minds of men and women alike and lifts them to great intellectual heights?

To us the heart and soul of the university revolves around knowledge. Be it the transfer or the production, the integration or the application, the manipulation or the management thereof: every aspect of the academic life, and all the forces reshaping this life, imply some influence on knowledge. And it is exactly in this aspect that the soul of the university will never be lost. Assaulted, tried or changed perhaps, but never quenched. If the life of the mind survived the devastating middle ages, revolutions and wars, always reshaping itself and often surviving in a more advanced form, there is no way in which the present transformation, how powerful it may be, might steal the soul of knowledge – the soul of higher education.

As in the biological world we must learn to adapt, to live in symbiosis with the world in all its social complexity. There is much to learn from the new world of globalization, internationalization and corporatization – and new technology could indeed prove to be the most-needed instrument for streamlining the production and dissemination of information and knowledge in higher education.

The old ways were not all necessarily the best ways. We must not lose perspective and regard all change as a threat to survival. Careful pruning is necessary for growth, and getting rid of the dead wood of unmotivated practices may be the process needed to obtain future excellence.

It is necessary to keep in mind that the youth of today, who will be the students of the next decade, have expectations of life differing in many ways from that of a generation or even a decade ago. They grow up in a world of technological innovation, fit-for-purpose development, for-profit adaptations and little regard for imperfection. Their concept of time and distance has been changed unrefutably by technology. And they have been brought up in an ever-changing school system where criticism of your values and traditions has been part of your daily *modus operandi*. They have the same regard for knowledge that we have. They are just better equipped to some of the demands of the new millennium.

They will also have to carry on our quest : to keep the flame of knowledge burning. But it is still up to us to adapt, to learn, to evolve. And if we have fear, let that fear motivate rather than inhibit us. We are still shaping the young people's minds, and we still hold the keys to their future in higher education – their future in life.

Never before has transformation been so constant and at such a fast pace – and never before has there been so much reason for optimism.

The soul of higher education lives in the hearts of inspired men and women who let knowledge come to life. Using the words of David Jordan, the founding president of Stanford University, 'There is nothing more practical than knowledge, nothing more unpractical than ignorance' (Cox 2000).

The well-known words of Benjamin Disraeli, 'A university should be a place of light, of liberty and of learning' closely reflect the essence of higher education. And not a single transformative force has the capacity to diminish any aspect of this spirit.

The future can be better than the past we are leaving behind. During the next few years higher education will still be further restructured, and we have a unique opportunity to remake the university into a more collegial, stimulating and varied place than it has become. Universities exist partly to preserve the past and moderate excesses of change (Plater 1995) – but this time incremental change will not work. The key to our success lies in our willingness to act together as a community with shared values and commitments. We can take the best practices of business, use advanced technology, integrate, manage and apply – and take part in the rebirth of higher education's soul.

We hold its soul in our hearts and in our minds.

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We hereby declare that this manuscript has been properly edited for language usage by

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Date :

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The world today is facing the biggest public health risk which is leading to one of the largest and the quickest reorganization of the world order. Â The speed of the spread of the epidemic, the closure of higher education institutions and the transition to online teaching was so swift that it hardly gave any time to plan and to reflect on the potential risks or the potential opportunities that such a sudden change could bring. Â 4 positive changes in education due to Covid-19. Any change that is so disruptive is also likely to bring with it some new opportunities that will transform the higher education system worldwide and especially in a country like India which is planning to bring about a planned reform in this sector. Some of the key areas of opportunity are the following What will education be like in 100 years? The simple answer is as follows: education will be the driver of a new knowledge-based economy and society. This type of education will promote values that are shaped by society and include academic freedom; student self-government; the establishment of self-governing research teams composed of professors and students; a dynamism in constantly generating and mastering new knowledge and competencies; and the ability to concentrate intellectual and financial resources on key topics of interest. Â What are the key issues in the future? Challenges include navigating and accessing expanding resources, developing optimal strategies, mastering educational courses, and creating search engines for identifying solutions. Osaka University 193 Transformative Learning Theory and its Application in Higher Education Settings: A Review Paper Ariunaa ENKHTUR Beverley Anne YAMAMOTO Contents 1. Introduction 2. Main Conceptualizations of Transformative Learning 3. Transformative Learning in the Higher Education Context 4. Discussion 5. Conclusion å¤§é˜ªå¤§å¦å¤§å¦é™¢äººé–“ç§‘å¦ ”ç©¶ç§‘ç´€è¦ 43ï¼›193-214ï¼ˆ2017ï¼‰ 195.Â Indeed, the roots of TL are generally traced back to the late Paulo Freireâ€™s critical pedagogy outlined in his seminal work Pedagogy of the Oppressed (1968, 1970). Freire called for a new relationship between teacher and learner where both could engage actively in a manner that created space for learning on both sides.