Drivers of Change in the Tertiary Education Sector in Mauritius

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ABSTRACT

The landscape of Higher Education in Mauritius is undergoing massive changes. Today, we are talking more and more about becoming a knowledge hub in the region. Hence, implementing change in the higher education sector has not only become a major challenge for the Mauritian government but also a valuable asset to the very existence of tertiary education institutions.

This paper explores some of the major issues with regards to the changing trends in teaching and learning in Higher Education in Mauritius. The various approaches towards learning and the way this is reflected in the Mauritian education sector have also been analysed. The paper examines how, within a context of rapid technological change, Distance Education is often seen as the ideal solution to provide increased educational opportunities without increasing budgets of educational institutions.

Recent trends in higher education have embraced innovative and reformative structural adjustment to cope with rapid global changes. This paper looks at Mauritius’ Higher Education capacity for change in preparation for the 21st Century. It attempts to capture some of the major features of globalisation and its impact on higher education worldwide and some of the major drivers of change in tertiary education sector in Mauritius. The knowledge market is becoming a highly competitive with the major innovations in the field of higher education and development of new technologies in the dissemination of knowledge.

This paper discusses the need for Mauritius to develop a personalised educational system, which will result in the creation of new paradigm in higher education. It finally highlights the new roles of government and other key partners in higher education as change agents, and examines how they contribute to meet up the challenges in the tertiary education sector in Mauritius.

Keywords: Tertiary Education Institutions (TEIs), Distance Education, Globalisation, Innovation, Knowledge Hub.
1 INTRODUCTION
In many Higher Education institutions, change is ever present. With the advent of new technologies and distance and online learning, the mission and vision are many universities have altered. Today, we are talking more and more about the creation of a knowledge hub in Mauritius and how to attract well reputed foreign universities to set up branches here, and thus implementing change in the educational structure has become a major challenge for existing universities. Change in higher education can be seen as a result of drastic alterations in the traditional boundaries of our universities. The knowledge market is becoming a highly competitive whereby traditional universities are giving way to more flexible, work-based approach towards acquisition of knowledge. Degree programs now meet professional, vocational, continuing education and accrediting needs of students. Campus missions have broadened to be more responsive to varied constituent demands and expectations.

The aim of this paper is to examine how, with the advent of worldwide communication via satellite and electronic media, we are gradually moving from traditional universities to a more flexible (DE), lifelong learning and work-based approach towards acquisition of knowledge. In the last few years, multimedia has been used mainly for knowledge exploration and to assist learners during tutorials, whereas today it is more concerned with developing emphasis on knowledge construction. More and more, new technologies are being used not only to render existing practices more efficient but to revolutionise our thinking process. There are no longer absolutes; values are debatable and indeed are debated. The aims, objectives, content, pedagogy, evaluation and direction of education are not fixed but fluid.

All this will inevitably lead to a changing set of values and culture within and/or among higher education institutions where greater focus is laid on the student experience, major technological innovations in design and delivery of courses, research and sustainability. This study explores how, in order to cope with globalisation, Tertiary Education Institutions (TEIs) in Mauritius are called upon to collaborate across organisational and national boundaries that capitalise on the pool of resources.
THE PARADIGM SHIFT: CHANGES IN THE MAURITIAN EDUCATIONAL SECTOR

The Mauritian society is undergoing enormous changes in the educational field with the advance of new technologies. The country has realised that a qualified labour force is a key element for a brilliant and successful economy. In this perspective, reforms are being made in the education sector and especially in the tertiary education sector to cater for the need of individuals who want to acquire knowledge and skills in a wide range of fields. The Mauritian government has realised the importance of higher education with the creation of a new Ministry in 2010, the „Ministry of Tertiary Education, Science, Research and Technology“. The objective is to transform Mauritius into a centre of excellence in higher education, and promote the development of a research culture in our TEIs so that they become more responsive to the needs of the country. The Ministry of Tertiary Education, Science, Research and Technology will provide research grants and Awards to young scientists to boost the research in scientific fields relevant to the local economy.

Education for too long has been limited to the classroom, with a rigid system (largely based on the British system - a legacy of the island’s colonial occupation). The education system in Mauritius very much exam-oriented, where students evolve in a highly competitive environment, and promotes the development of memorisation and lower order thinking skills at the expense of creativity and higher order thinking. The curriculum lays more emphasis on the content areas than on sports or other extra-curricular activities or community work. Knowledge is more often “imposed” instead of inviting critical thinking and reasoning from the learners (peer learning and collaboration). Such a system favours the survival of the minority elite to the detriment of the mass. This extremely competitive and elitist system does not have its place in the Mauritian society today, especially in an age where we talk about liberalisation/democratisation of education, adult learning and distance/open/lifelong learning. In fact, education should provide the learners with appropriate experiences so that they may develop their potential or abilities/skills.

Hence, it is crucial that education, and especially higher education, should be accessible to each individual; it should contribute to make learners more independent in their learning while developing their knowledge, skills and character. It is in this respect that the tertiary education sector in Mauritius has witnessed a paradigm shift towards Distance Education (DE) and lifelong learning to cater for all sections of the population and make education available for all. DE is becoming an expanding sector where the teaching and learning
process are largely based on the constructivist theory of education, that is, students are the focal point of interest and are guided by teachers in a continuous process of building up knowledge.

2.1 TOWARDS A MORE CONSTRUCTIVIST APPROACH OF TEACHING AND LEARNING

Today, the methods of teaching and learning in higher education have evolved; lecturers/tutors are no longer the sole provider of information (knowledge), but instead they act more as a „guide“ and shift towards a more learner-centered type of education. The curriculum should be designed such that it is culturally meaningful to the context. The shift from an accumulation of information towards processing and analysis of information must provide the learners with greater responsibility (being „active“ learners) in their individual learning process; they should be encouraged to be involved in research work, to develop a critical mind and expose their findings, and engage in constructive debates, instead of being passive learners. Education therefore should not be limited only to the theoretical (conceptual) training but instead should include practical training adapted to the needs of individual students.

The constructivists (Piaget, 1979; Bertrand, 1995; Garrison, 1993) view learning as an active and evolving process, and this highlights a number of different teaching practices. They believed that there is not one meaning, but one“s own meaning: the ignorance of something does not entail its non-existence. In short, learning is active mental work, not passive reception of teaching. It usually means encouraging students to use active techniques (experiments, real-world problem solving) to create more knowledge and then to reflect on and talk about what they are doing and how their understanding is changing. The tutor has to make sure that he/she understands the learner’s pre-existing conceptions, and guides the activity to address them and then build on them. This is why the tutor has the responsibility on any learning situation not to provide the learners with all the information (content) but instead allow the learners to build in their own knowledge.

Kearsley (1999) cited Jerome Bruner who provides the following principles of constructivist learning:

- Instruction must be concerned with the experiences and contexts that make the student willing and able to learn (readiness).
• Instruction must be structured so that it can be easily grasped by the student (spiral organisation).
• Instruction should be designed to facilitate extrapolation and or fill in the gaps (going beyond the information given).

Advocates of a constructivist approach suggest that educators first consider the knowledge and experiences students bring with them to the learning task. The curriculum should then be built so that students can expand and develop this knowledge and experience by connecting them to new learning.

2.2 NEW TRENDS IN TEACHING & LEARNING

Problem-based Learning

Problem-based Learning (PBL) can be defined as “any learning environment in which the problem drives the learning.” In fact, before the learners acquire some knowledge, they are given a problem. The problem is posed in such a way that learners discover that “they need to learn some new knowledge before they can solve the problem.”

(http://chemeng.mcmaster.ca/pbl/pbl.htm).

Problem-based learning is also an authentic and constructivist approach to learning. It is an instructional method that challenges students to “learn to learn”, to be able to work cooperatively in groups and eventually to seek solutions to real world problems. These problems help to arouse learners” curiosity, creativity and initiation to learning. In this sense, PBL prepares students to think critically and analytically and how to use appropriate learning resources.

Action Learning

In the same line, another method of learning has developed, that is what we called Action Learning. With the knowledge age, a lot of emphasis is laid on emotional intelligence and creative thinking as well as action learning. Action learning was originated by Reg Evans (1998) as both a philosophy and a method of learning. It is mainly based on the notion that “learning is not about recognizing what we know, but what we do not know.” (Sallis & Jones, 2002). Revans (1998) found that traditional training techniques or bodies of knowledge did not solve the problems of the rapid change that takes place in organisations.
His approach was to develop action-learning teams, to ask questions and generate new knowledge since organisations that do not learn and make changes are doomed.

Action Learning has principally been developed as an alternative to more traditional forms of teaching and learning in the classroom or other training institutes, where learning is often isolated from real-life problems and situations. On the contrary, action learning is centered more on practice, that is, students will „learn by doing“. As Sallis and Jones (2002) mentions, learners will be more creative and reflect upon the consequences of acting in more practical ways and decide what works and what does not. Learning is done in real-life situations, by trying to solve real problems; the most crucial point being that the work done is seen as a learning opportunity. This is a means of developing practical „know-how“ or tacit knowledge.

**Evaluation**

Regarding the type of evaluation, instead of having the traditional written examinations, which are more often a verification of acquired knowledge (in class or books), it is important that teachers or administrative bodies of TEIs should seek alternative solutions. The most common form of evaluation in the Mauritian educational system is summative evaluation, but with the changing methods of teaching and learning, formative evaluation (including problem solving activities in class, continuous assessment or class presentations) will be better suited for an education system where focus is on the learner’s development. The learner, therefore, is given the opportunity to develop his/her mental and physical skills, thinking skills, communication abilities (interacting with peers and teacher during question time) and social and aesthetic aptitudes, that is, an all-round development of his/her personality. In other words, it should not be limited exclusively to a verification of academic knowledge.

### 3 CHANGES AFFECTING HIGHER EDUCATION IN MAURITIUS

The Tertiary Education sector in Mauritius is undergoing substantial transformation. At present, we talk a lot about globalisation, global economies, virtual classrooms, distance learning, *e-learning*, among others. Thus, the strategic planning of TEIs should rests upon analysis of the points of interaction between the University and the external environments in which it functions. As such, an understanding of environmental conditions provides a realistic context for the formulation of internal goals and strategies of tertiary educational organisations.
Some of the key changes affecting higher education in Mauritius are:

3.1 CHANGE IN PERCEPTION
Higher education is often viewed as the engine of economic development. A change in perception is best achieved if each higher education institution in Mauritius establishes a comprehensive system of performance assessment measurements (performance appraisal) and fully integrates the system within the operations of the institution. The focus will thus be on the learning and outcome measures. Annual reports on accountability measures should be made public so as to increase people’s confidence in the TEI sector.

3.2 CHANGING DEMANDS
The demands for higher education in Mauritius are rapidly increasing due to advances in technology and focus on lifelong learning. Such changes entail a great need for constant training and re-training, as well as job upgrading in the workplace. For higher education to be fully responsive to these changes in demand, it is imperative that some programmes of studies are scheduled in non-traditional time frames (usually after office hours or during weekends). Institutions must subscribe to the concept of lifelong learning, and courses should be offered at locations accessible to the public. This is in line with the government policy of increasing access to higher education by removing geographical barriers. Subsequently, the Government is building University campuses in different parts of the island, namely at Montagne-Blanche, Highlands, Pamplemousses, Piton and Rose-Belle.

3.3 CHANGES IN PROVIDERS OF HIGHER EDUCATION
The increased importance of a knowledge-based society nowadays is motivating new providers to enter the academic marketplace. Changes in demand have led to an increase the number of private providers of higher education institutions. These profit-making institutions are providing tailored-made programmes to accommodate part-timers and working adults where learners are more autonomous. Consequently, public universities should make a must to provide similar programmes, with more focus on distance education and online learning to meet the needs of all types of learners.

During his numerous visits abroad, Dr R Jeetah, The Minister of Tertiary Education, targets well established higher education institutions and invites them to set up a branch in Mauritius. The government wants to create optimum conditions both in Mauritius and abroad
thought various ways and incentives in order to assist students to pursue their studies at a higher level.

It is good to point out that The Tertiary Education Commission (TEC), as the apex body in the higher education sector in Mauritius, acts mostly as a facilitator in the process of widening access to higher education. It has the duty to check on each educational institution or training institute offering post secondary courses before they are registered and eventually their courses receive the accreditation seal of approval.

3.4 TECHNOLOGICAL CHANGES

New and innovative technologies and a better understanding of learning have led to considerable improvements in higher education in Mauritius. Many TEIs are using technology to improve learning in the delivery of the programmes of studies. As technologies become more complex, that is, with interactive television, computer-based instruction and teleconferencing, the need to be more accountable and effective when selecting and utilising instructional delivery systems becomes increasingly more important.

Change in the organisational processes of higher education institutions may also result from technological innovation and a restructuring of the organisational vision and goals, to meet the demands of learners/lifelong learners. Each major transition in communication media, from speech to print, video and other electronic forms has resulted in changes in our means of manipulating information, that is, the way we create, record, store, distribute, access and retrieve information. Higher education institutions, especial those providing DE must take advantage of Information Technology (IT) developments to improve course delivery and reduce costs. From text-based learning, we are now able to create multi-sensory learning environments, and tutors and learners alike have an opportunity to explore and communicate using the medium that works for them, regardless of the time and location of one. However, such increase in computer-based learning would result in fewer lectures, whilst the remaining lectures could be enhanced by IT. This will inevitably lead to greater cost effectiveness by comparison to conventional teaching and learning.

3.5 CHANGE IN ORGANISATIONAL STRUCTURES & ROLES OF ACADEMIC STAFF

A large number of TEIs, both public funded and private ones, are implementing new and flatter structures to empower employees, increase flexibility, and ensure full participation in the development of policies and operations. New structures are necessary for moving from traditional top-down to bottom-up team-building organisations. In recent years, TEIs have
found that in order to effectively invoke changes to the culture of an organisation, all the stakeholders must be involved in the process and they must take ownership in the decisions. The collegial culture includes elements such as peer review, a faculty-oriented mechanism of identifying good research; tenure, seen as a passport to the community of scholars; shared governance; and an emphasis on merit. The managerial culture, on the other hand, which is derived from the corporate sector, uses a different language that emphasises worth. It focuses on the bottom line, accountability, efficiency, and productivity. Today’s TEIs are often caught between these two cultures and the key element to achieve educational goals is for TEIs to have an effective management system. In fact, we have to strike a balance between these two cultures and come up with a more collaborative culture.

The future trends in University organisational structures should include more emphasis on the ability to learn and take on board new ideas and methods. Universities should eventually invest more in improving individuals and teams. Empowerment is an important feature whenever there is a re-engineering of the workforce. Empowerment means that individual efforts can contribute directly to organisational success, that is, employees are held accountable for the success of the organisation. As re-engineered jobs are organised around outcomes, employees perform all steps in a process rather than just a list of tasks. Consequently, the organisation will have to provide training for its staff; training will no longer be a separate activity but an integral part of the teams in the organisation.

In higher education, innovative learning technologies will become more cross-functional and transparent. The increasing access to the information highway will make information more easily available to a wider audience. This will lead to an increased efficiency of the workforce, characterised by teams of multi-skilled flexible individuals, empowered by technological innovation. Barriers to learning, such as lack of information and the availability of material will be reduced. Learning organisation will harness this form of information and use it to their advantage. Hence, in future, organisation will be based more on knowledge and not just physical assets such as land or products; the greatest asset being the knowledge employee, who will be judged on his/her ability to learn and adapt his/her skills to changes.

However, a university is a highly complex organisation where the mission is quite complicated by a tradition of academic freedom. Many academics are likely to develop a kind of management style that tends towards a more administrative rather than proactive leadership. When drastic changes occur in higher education institutions, it tend to restrict
academic freedom, and thus radical changes are not likely to be welcomed. Some staff may feel threatened at the loss of „academic freedom” and this may eventually create an atmosphere of that is not conducive to innovation and improved performance. With greater focus on DE and an increasing use of IT in course delivery, some academics may view such changes as a threat to their professional status since their role may change to that of managing and building learning resources. Hence, the need for consensus could be one of the major barriers in achieving change across a higher education institution, particularly if the aim is to achieve radical change.

4 THE IMPACT GLOBALISATION ON HIGHER EDUCATION IN MAURITIUS

Changes in higher education sector are inextricably linked with the rapid process of globalisation that the modern world is witnessing. „Globalisation” as a theory has developed during the 1980”s and used to replace terms like „internationalisation” and „transnationalisation”. As Hoogvelt (1997, p.114) pointed out, globalisation is “a more suitable concept for describing the ever intensifying networks of cross border human interaction.” The concept covers a great variety of “social, economic and political changes”. (Hoogvelt, 1997, p.114). Marginson (1999, p.19) referred to globalisation as “the formation of world systems, as distinct from internationalization which presupposes nations as the essential unit.” It includes “finance and trade, communications and information technologies; migration and tourism; global societies; linguistic, cultural and ideological convergence; and world systems of signs and images.” (Marginson, 1999, p. 19).

Globalisation can be used to describe the process of transforming the world into a single world market dominated by the interests of big multinationals. Dale (1999, p.3) stated that the absolutely basic features of globalisation are that “it has economic, political and cultural strands.” He further added that “the impact of globalization can occur at different levels of national societies, such as the regime, sectoral (e.g. the education system) and organzational (e.g. schools or educational bureaucracies) levels...” (Dale, 1999). This joins the idea of Green (1997, p.130), who pointed out the increasing significance of the global market forces and transnational corporations over national economies, the globalisation of labour markets and a new order of international division of labour. Ohmae (1990) laid emphasis on the
emergence of the „borderless“ world where national cultures are transformed by global communications and cultural hybridisation.

Globalisation has become a key social-scientific concept of the 1990s. It makes a variety of contested claims: that, as the world shrinks, territory and distance have become less important; that there are no longer separate national economies; and that all humanity is now exposed to similar technological, economic, social, and cultural pressures. The implications of all these factors in the education sector, especially in former colonised countries are immense. Green (1997, p.130) drew attention to the tendencies of National governments who would “cease to control their education systems, which would gradually converge towards some regional or global norm, divested of any specific national characteristics.”

Green (1997, p.152) argued that globalisation “have major implications for the forms and function of the state education.” According to Pieterse, quoted in Green (1997, p.155), “the most common interpretation of globalization are the ideas that the world is becoming more uniform and standardized, through technological, commercial and cultural synchronization emanating from the West, and that globalisation is tied up with modernity.” Hence, globalisation has precipitated substantial influences on higher education. As Levin (2001, p.239) pointed out, “with emphasis upon international competitiveness, economic globalization is viewed as moving postsecondary institutions into a business-like orientation, with its attendant behaviors of efficiency and productivity”.

Higher education institutions are closely related to the marketplace, especially in the field of technology, engineering and science. With respect to the worldwide proliferation of neo-liberal policies, higher education institutions have played a significant role not merely in maintaining and revolutionising nation state and national systems but also in national marketplaces (Marginson and Rhodes, 2002). In light of the structural changes that have transformed the global economy, higher education has also required structural adjustment and reform strategies. One such structural change has been to create entrepreneurial universities.

In order to enhance international competitiveness in the world marketplace as well as to adjust new modes of knowledge production in a global society, Levin (2001) argued that universities should adopt entrepreneurial structure, strategy, and culture. In this vein, many countries worldwide demand a restructuring or reengineering of higher education in order to reach international standards and to improve the academic quality.
5 MAJOR DRIVERS OF CHANGE IN TERTIARY EDUCATION

Historically, universities have always provided an opportunity to transcend certain theoretical problems occurring in their immediate environments by generating and transmitting knowledge. Universities worldwide are facing a major transition generated largely by societal changes and they fully live up to their roles as players in the ensuing dialogue in this change process facing the society around them. In Mauritius, we presently talk a lot about having a knowledge-based society, with a new focus on learning that will enable learners to be proactive in their learning experience. In some way, we are going through a pedagogical revolution that is driven by research and more emphasis on collaborative learning, active learning, and problem-based learning. All these will place additional demands on TEIs to meet up the challenges of the higher education sector. The set of forces that is driving change in the higher education sector in Mauritius are:

5.1 AN INCREASE IN DEMAND FOR POST-SECONDARY EDUCATION

As we have seen earlier, the demand for post-secondary education in Mauritius continues to rise due to a growing population or rather a growing awareness of the population of the importance of higher qualifications and also government policies and vision of having a graduate per family and changes on skilled jobs and careers profile.

The environment in which tertiary education has evolved during the last decade has tremendously changed. At present, we have a total of 61 post secondary institutions in operation in Mauritius, including 11 public funded institutions and 50 private ones. The publicly-funded tertiary sector comprise of seven institutions which operates under the purview of the Tertiary Education Commission TEC). In 2009/10, some 650 programmes were run locally, out of which about 40% was offered on a full-time basis, compared to 560 in 2008/09. The Public Funded Institutions offered approximately 380 programmes while Private TEIs and other Distance Education providers some 270 programmes. For instance, only at the UoM, the students’ population has reached 11,020 in 2010, with a total of 198 programmes of study and 22 new ones.

The tertiary student population in 2009/2010 was approximately 42,260 as compared to 38,623 in 2008/09, which represents an increase of 9.5% in tertiary enrolment. A total of 30,267 students (72%) were pursuing their higher studies locally; 19,867 (47%) in publicly-funded institutions and 10,400 (25%) were studying in a private institution or by DE mode with overseas institutions. Approximately 12,000 (28%) students were studying abroad. The
Gross Tertiary Enrolment Rate, which measures the total tertiary enrolment as a percentage of the population aged 20 to 24 years, has increased from 41.4% in 2008/09 to 45% in 2009/10.

(Source: http://tec.intnet.mu).

5.2 COST OF EDUCATION AND FINANCIAL SUPPORT
One of the major challenges for tertiary education is affordability. The cost of higher education has risen not only due to the increasing demand but also due to new infrastructures, human resources and service costs. Such costs passed to students and their parents in the form of tuition fees, books, etc. To make higher education at the reach of qualified students, the government of Mauritius and several commercial banks are working in close collaboration with providers of tertiary education to design appropriate study loan schemes, for instance, the Employees Welfare Funds loan scheme and the MCB Campus, among others.

5.3 ALLIANCES AMONG TEIS
Many universities are establishing strategic alliances to gain access to expertise, degrees, and international experiences. The Minister of Tertiary Education recently announced the creation a School of Medicine in Mauritius, with the collaboration of the University of Geneva, as well as opportunities to do Pharmaceutical Studies and training school for becoming pilot (air and sea), and the creation of a Faculty of Art.

The University of Mauritius (UoM) has signed a series of Memorandum of Understanding with foreign universities in various fields of studies to ensure that both academic staff and students can be transferred from one institution to another. There are also several projects in the pipeline or underway. The University of Mauritius will very shortly start its LLM (Masters of Laws) in partnership with the University of Central Lancaster, and also planning to offer a Master Degree in Public Health, with the collaboration of Imperial College (London). The Mahatma Gandhi Institute will most probably be converted into a University to widen its scope of offering graduate and post graduate courses. These kinds of exchanges certainly provide new arenas for more fruitful collaboration among TEIs either locally or overseas.

5.4 EMERGING MARKET IN HIGHER EDUCATION
The market structure of higher education is also ever changing. More focus is laid on core competencies of colleges and universities in order to create a „brand” name. To remain
competitive in the market place it is vital that higher education institutions have to search for ways to improve their service delivery. Higher Education must therefore respond both to the demands society projects, and to their own customers in order to transform itself into an all-inclusive entity that provides superior services and learning to learners and, in turn, future employers. Consequently, the expectations of Higher Education are ever changing. For instance:-

- Interdisciplinary learning is becoming more widespread and essential.
- Distance Learning is now used as a means of increasing access and revenue streams with at times transition to wired classrooms with the use multimedia learning tools.
- Experiential education is also a means to supplement traditional classroom learning.
- There are more public partnerships, for example, greater availability of grants and scholarships.
- An increase in Public and Private partnerships with TEIs in order to form a mutual benefit to the university, agency, and community.

Some of the Changes in the Learning Environment are:

- An increased emphasis on continuous assessment and learning outcomes.
- Quality assurance that will rest on:
  - Accredited institutional capacity.
  - Educational and organisational effectiveness.
  - Demonstrated results in the form of better learning.
- Conceptions of quality will not be founded on tradition, but more on evidence-based/results-oriented standards.
- Standards for quality will build up from learning outcomes for every student and around the institution’s capacity and effectiveness to add value to a learner’s life through education.

With the increasing demands for higher education, universities worldwide are under great pressure to expand services, competing in an increasingly diverse higher education system. Competing for student enrolment requires more emphasis on providing student amenities. When parents and potential students visit colleges, they ask about the accommodation and recreation facilities, campus safety, social life and access to computers and the Internet. In order to attract students, university administrators in Mauritius are investing in these
amenities and improving the appearance of the grounds and facilities. These functions may not be directly related to the delivery of education, but they are claiming a larger slice of revenue. In addition, public funded universities are spending more on institutionally provided student aid and student marketing.

5.5 NEW ROLES FOR EDUCATIONAL MANAGERS
For change to be successful, the key element in any organisation is the leader. For Argyris (1998), leadership means “creating the conditions that enable people to produce valid knowledge and to do so in a way that encourages personal responsibility.” The leader is therefore the most effective communicator who plans and manages organisational change, thus serving as change agents. The top management usually develops and articulates a vision for the organisation. However, to implement effectively that vision, managers and/or leaders must plan and manage that process of change. This will draw on the importance of the change(s) throughout the organisation and facilitates the congruence between vision and the change process.

Sallis & Jones (1988, p. 42-43) claimed that “educational organizations need to recognize the value of their intellectual capital and importance of the knowledge that their staff have. Appraisal and other feedback systems need to provide clarity about what is expected of staff, and to concentrate on staff contributions to knowledge creation.” They see staff as the intellectual capital of the organisation. If staff’s creativity and intellect are properly harnessed and they are motivated, they can be one of the major assets of the educational organisation.

6 CHANGING PARADIGM IN HIGHER EDUCATION
With globalisation and the rapid changes in the world economy, there is a need for many countries to develop a personalised educational system, which will inevitably result in the creation of new paradigm in schools and eventually universities. There are many positive changes that are needed or we can say already occurring in the many areas within the higher education system in Mauritius.

6.1 ADOPTING A STUDENT-CENTRED APPROACH
Higher education systems have traditionally been an instructor-centred place. It is important that Tertiary Education Institutions (TEIs) in Mauritius begin to integrate the idea of multiple intelligences and brain-based learning in the way many schools already operate. That means
not only building more flexibility into core curriculum, but also offering many different ways in which students can earn college credit. For example, the requirement to attend lectures may be dropped in favour of a system where students are offered online guidance both from instructors and peers.

Research about learning process can be carried out whereby factors that influenced the design of this facility include the belief that learning occurs all the time, that direct experience decisively shapes individual learning, whereby individuals learn by establishing and reworking patterns, relationships and connections and that change in the environment is stimulating.

In many higher education institutions, there is a tendency to have more individualised hands-on program where various media are used both to deliver instruction and measure learning. The proliferation of such innovative learning strategies will provide an impetus for universities to move away from test-based assessments and towards more a portfolio-based system. At the same time, the focus will begin to shift from what students know to what they can do. Of course, all these changes will have dramatic impacts on the way the campus itself is organised and this is why colleges will move slowly towards this idea of true customisation of the learning experience for all students.

6.2 BECOMING MORE MARKET DRIVEN

The concept of „educating the whole person” is good in theory, but it does not really work when curriculum are made compulsory and imposed on learners. In contrast, in the private sector, learning alternatives are market driven, that is, they offer only what is needed to gain a particular skill that has current value in the world of work. For instance, the certification from company like Microsoft is very much valued in the computer industry above a generic computer science degree from good universities.

Today, education is a lifelong endeavour, which does not end with solely the awarding of a degree. Many TEIs now develop programmes of studies that are tailor-made to meet the needs of the labour market and more directed towards making the learners acquiring certain skills and competencies that the work industry demands.
6.3 THE DEVELOPMENT OF ‘CENTRES OF EXCELLENCE’
Many Tertiary Education Institutions have realised that one way of getting around the problem of anonymity of large, unstructured organisations is the idea of creating smaller and more specialised “schools-within-schools” or, what they usually call „Centre of Excellence” so as to maintain or create distinction in certain programmes. Many universities have realised that they can no longer be all things to all people and still retain their competitive edge. Hence, the concept of providing „signature” programs is gaining strength within higher education institutions, while taking into account factors like historical mission, strengths and unique opportunities.

6.4 USING BUSINESS MODELS IN HIGHER EDUCATION SECTOR
There has always been some traditional antipathy between education and business/industry. The business community always make accusations against of falling standards, of failure to prepare learners for the demands of work, producing illiterate, innumerate and work-shy employees. On the other hand, the educational community mainly the tertiary education institutions has always accused the world of work as being the graveyard of aspirations, creativity, flexibility, adaptability, breadth and problem-solving capabilities that universities have taken painstaking care to develop in their students.

Education is not a commodity to be bought, sold and haggled over like a car or any item, and schools and universities do not turn out single, sole product. Competition is not an attribute that universities wish to encourage, and so on. Moreover the educational community has been suspicious of introducing industrial models of management into education, seeing them as furthering the narrow, line-management, coercive mentality that sits comfortably with universities as person-centred institutions, arguing that schools and universities are not production lines and that students are not passive objects to be moulded. Morrison (1998) argues that the view that business and educational practice are in various areas compatible entails a shift of perception. This may lead educators to remove the prejudice whereby they used to view business as being merely exploitative.

6.5 THE EMERGENCE OF CORPORATE UNIVERSITIES: A NOVEL APPROACH
Higher Education is not only limited to traditional universities or distance/on-line learning. A novel approach in higher education sector is the emergence of Corporate Universities, within organisations. Corporate University has taken the concept of learning organisation a stage further and formalised it. Sallis & Jones (2002, p. 92) described a corporate university as “an
in-house education and training facility, which addresses the particular learning needs if an organization.” Unlike the traditional universities which award both undergraduate and postgraduate degrees, while conducting original scientific research, a corporate university basically limits scope to providing job-specific or company-specific training for the managerial personnel of the parent corporation. Corporate universities are most commonly found in the United States. An example of a corporate university is the Hamburger University, operated by McDonald’s Corporation in Chicago, designed to instruct the personnel employed by McDonald's in the various aspects of the business.

(Source: http://en.wikipedia.org/wiki/Corporate_university)

Many companies have realised that they will gain a much competitive advantage from developing a wide range of organisational learning and developing innovative learning tools, with the idea that “training is no cost but an investment”. Corporate Universities will differ from traditional training departments for the reasons:

- They fulfil a far wider strategic role;
- They usually have a role in training employees from supply-chain and customer companies as well as staff from the parent organisation;
- They have generally developed a strong range of training in core competences;
- They are major vehicles for transmitting organisational values and culture;
- They often have links with traditional universities, who may accredit aspects of their programmes.


Meister (1998) described the shift that is taking place from education and training to the 21st century paradigm of learning. She goes on showing how companies are using the shift to design their own in-house corporate universities. This shift has opened up the debate on the increasing importance of lifelong learning and laid much emphasis on employee training and development. Having an in-house corporate university is a real competitive advantage for companies since they will attract the most competent, creative and motivated jobseekers. In corporate university, Meister (1998) believed that workers are encouraged to change their thinking and improve their skills so as to meet the new global market place.
Sallis and Jones (2002) provided the example of the United States where a number of corporate universities will soon exceed the number of traditional university. They are taking over as primary institutions of lifelong learning and some are already going head-to-head with traditional universities by offering courses not only to their own staff but also to the general public. Hence, learners have a wider choice and higher education becomes “an increasingly competitive marketplace” (Sallis and Jones, 2002). Sallis and Jones (2002) added that “while corporate universities can be a threat, they can also present opportunities for higher education.” As a matter of fact, many traditional universities are working in collaboration with corporate universities, sharing the library facilities and laboratories, engaging in research and validating customised degree programmes.

7 CONCLUSION

The global market for higher education is expanding with the increasing demands for post secondary education, fuelled by ambitious international goals for education. In Mauritius, educational providers in the tertiary education sector are on the increase, and such expansion becomes a real challenge especially with the decrease in financial aid from the Government to public funded TEIs and the rising costs of post secondary education. Some public funded TEIs feel that due to lack of funds from the government, they cannot implement the changes required for the future. With the emergence of the knowledge hub in Mauritius, which is slowly but surely becoming a reality, choices on funding, quality and management are some of the major concerns of TEIs. Not only existing higher education institutions are expanding so as to meet rising demands but we have the setting up of more and more foreign universities like Middlesex University, which are opening branch campuses in our country. Universities across the world are struggling to employ the best academics and they now need to build stronger links with the business and economy.

From this study, it is clear that, in order to meet the long-term challenges, TEIs in Mauritius need to maintain and improve high standards, expand and widen access, strengthen links with business, and compete globally. Several measures are being taken by the government of Mauritius and TEIs to enable more people to pursue higher education in order to meet the country’s need for higher-level skilled labour. For instance, the government, together with some organisations from the private sector, provide financial support to those students from disadvantaged backgrounds in public funded TEIs by giving scholarships and grants. As a matter of fact, TEIs play a vital role in expanding opportunity and promoting social justice.
It is indubitable that an effective higher education system is a great asset, both for individuals and the country’s economy. Through higher education, skills, creativity and research are developed, leading to jobs creation and prosperity of a nation. The expansion of Higher Education has lead to a changing student profile, from full-time students to part-time (DE) and adult learners. We have seen in this paper how the whole approach towards teaching and learning has evolved from traditional lectures into more flexible, learner-oriented teaching; physical constraints are being addressed by open and online education with the development of new technologies in the dissemination of knowledge. All these factors seem to be driving TEIs in Mauritius to seek appropriate pedagogical and managerial tools to change their internal structures and implement decisions so as to maintain their effectiveness under new circumstances. Hence, improvement in administrative, research, teaching and learning activities are seen as fundamental for TEIs to develop new ways of governance for more efficiency in the running of the institutions in the new knowledge society.
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