Abstract
The trend towards globalization and the knowledge economy pose numerous challenges as well as opportunities for Asia-Pacific countries. Expanding trade and increasing mobility of goods and services pressure economies to restructure, retraining those made redundant in declining industries and to upgrade the skills of those employed in new industries. Also, the dynamic global flow of information creates a demand for higher-level cognitive skills and continuous learning, resulting in the phase-out of skills that the graduates currently acquire in Technical and Vocational Education and Training (TVET) system. More complex skills are needed to effectively cope with the accelerating technological change.

The emergent concern on climatic change and sustainable development emphasizes the vital role of TVET towards sustainability is becoming more evident. Specifically, it aims to prepare our next generation for accepting responsibility through Education for Sustainable Development (ESD). It cited that the resiliency of education and training systems, as well as the TVET teachers in meeting these challenges is beneficial for the region’s development for it will enable new opportunities for the TVET teachers in the new era. In this light, this paper deals with such changes in preparing teachers for learners of TVET system in the near future.

INTRODUCTION
In the past few years, the TVET in our region also has grown enormously, however TVET has encountered many challenges in recent years. A rapid development of new technologies requires engineers and technologist to face new situations in their working environment all the time. Today the product life cycle has also considerably reduced. It is the job of the TVET graduate to coordinate the development, design and manufacture of these products in the most efficient and economic ways, ensuring quality within shorter time frame. In order to meet these emerging needs, the technical institutions need to relentlessly modify and improve the quality of its instructions.

The International Labour Office (ILO) has identified a new ‘paradigm’ for TVET that has particular characteristics. Increasingly, TVET is demand-driven, emphasizes employability, competency standards, lifelong and learner-focused learning, integrated education and training, multi-skilling, flexibility (in terms of entry and exit points) and often involves participatory governance (ILO, 2002). This has had the consequence of diversifying the roles and work of many TVET practitioners, with their work being described as learning facilitator, workplace or industry trainer, workplace assessor, facilitator or consultant, and learning environment manager (Chappel and Johnston, 2003). Such diversified roles have required a new focus by TVET practitioners on reflecting on own professional practice and to acquire skills beyond the core teaching and learning competencies.

Another significant aspect is the impact of ICT and the new knowledge economy. It has influenced our educational environment, in turn, to changes in our approaches to teaching and learning. These changes are also influencing our teaching and learning paradigms. Moreover, climate change is also influencing the social and demographic pattern in the society. It is imperative that the TVET sector and its policy makers needs to act in response rapidly to the changing scenario. To be precise and concise, the new graduates from institutions of TVET have to be world class and the education quality has to be of global standards. This paper seeks to discuss the new perspectives for TVET educator and explore possible future learning paradigms and emerging roles in the light of the knowledge explosion in the knowledge era that is currently being entered for sustainable development.

KEY MAJOR EMERGING TRENDS IN TVET
In today’s world, we are witnessing new realities such as, globalization of economy world over, major impact of information technology on all spheres of work and life. This has created challenges for sustainable development with depletion of resources and at the same time challenging our workforce for quality to remain competitive through lifelong learning. The role of TVET is very vital and significant to boost the economic and social developments in the today’s world.

There are various emerging trends being witnessed in TVET such as;

i. Knowledge Based Economy
Overlaid on restructuring brought about by more open economies, the introduction of new information and communication technologies has had enormous impact in many industries, from computer-aided design and just-in-time management of inventories, as well as a range of new and enhanced telecommunication services that has required whole new skill sets to be acquired by workers. Globalization phenomena, which have influenced all the sectors especially in developing countries, it includes mobility of capital, mobility of goods (and, increasingly, services) and the mobility of workforce.
Each of these poses distinct challenges for TVET, in terms of adapting to:

a. Financial restructuring, as Asia-Pacific regional countries adjust to their areas of comparative advantage

b. Competition in education and training markets as citizens seek the best educational opportunities, and foreign education providers enter the market

c. The access and exert it of skills embodied in people due to migration flows. Thus, the economic restructuring brought about by globalization means the nature of skills required for the knowledge economy is a moving target, and can only be predicted at a highly aggregated level for a few years ahead. The knowledge economy demand higher order thinking (HOT) skills. Higher order thinking involves the learning of complex judgmental skills such as critical thinking and problem solving. Higher order thinking is more difficult to learn or teach but also more valuable because such skills are more likely to be useable in novel situations (i.e., situations other than those in which the skill was learned) (wikipedia.com).

Since the late 1970s, others like Alvin Toffler (author of Future Shock), Daniel Bell and John Naisbitt have approached theories of postindustrial societies. They argue that the industrial era is ending, and services and information are succeeding industry and goods. These are expected situation as fallout of the postindustrial society. The rapid technology change demands for a new set of skills, which is commonly known as Generic skills. The generic skills includes such as work readiness and work habits, interpersonal skills, enterprise, innovation and creativity skills learning, thinking and adaptability skills. Therefore, it demands a new set of skills are necessary among TVET teachers for preparing the workforce as per the rising demands of work.

India's entry to the Washington Accord (1989) further opened many opportunities and would essentially assist mobility of TVET graduates and professionals at international levels. The graduates from NBA-accredited programmes would be automatically accepted for education and employment purposes in member countries. This essentially will demand TVET teachers to be more aware of the rising expectations to prepare the young workforce for the changing world of work.

Consequently, TVET in the region needs to be more focus on apt work force planning and human resource development, in favour of flexible labour market and a framework of nationally accredited skill formation, which promotes the mobility of recognized skills. Training providers and teachers are needs to be adequately equipped to deliver the same.

**ii. Climate Change & Sustainable Development**

The changing nature of the world of work, especially due to globalization and technological changes, demands how these changes impact upon the quality of social, economic and environmental conditions. TVET can play an instrumental role in developing a new generation of individuals who will face the challenge of achieving sustainable socio-economic development.

Education is an essential tool for achieving sustainability. People around the world recognize that current economic development trends are not sustainable and that public awareness, education, and training are imperative key to moving society toward sustainability. ESD carries with it the inherent idea of implementing programs that are locally relevant and culturally appropriate. All sustainable development programs including ESD must take into consideration the local environmental, economic, and societal conditions. As a result, ESD will take many forms around the world.

TVET being major resource consumer takes on a complex and distinctive character with regard to sustainable development. TVET so far constantly included elements of sustainability, especially in the way scarce training materials were conserved and waste materials were disposed. This historical commitment gives TVET a foundation upon which to build future commitments to sustainable practices. The manner in which production and consumption is managed can significantly contribute either to sustainability or to the current practices and conditions that are not sustainable. During education and training, the greater the exposure of TVET students to sustainable concepts, practices and examples, the more likely the desired workplace culture change will take place in the future. Moreover, the delivery of sustainable practices must be universal; that is, encompassing not only pre-service TVET, but also on-the-job learning and worker upgrading and retraining. Continuing TVET will continue to predominate in the future, in order to accommodate both technological and job change.

The Director-General of UNESCO, Koichiro Matsuura, (2004) also stated in an International Experts Meeting, "For TVET programs to be part of the solution and not part of the problem; they must be reoriented so that they contribute to sustainable development worldwide."

The Bonn declaration (2004) also states that since education is considered the key to effective development strategies, TVET must be the master key that can alleviate poverty, promote peace, conserve the environment, improve the quality of life for all and help to achieve sustainable development.

Thus ESD carries with it perspectives that are important for understanding global issues as well as local issues in a global context. Every issue has a history and a future. Looking at the roots of an issue and forecasting possible futures based on different scenarios are part of ESD, as is understanding that many global issues are interlinked. For example, over consumption of such consumer goods as paper leads to deforestation, which is thought to be related to global climate change.
ESD is more than a knowledge base related to environment, economy, and society. It also addresses learning skills, perspectives, and values that guide and motivate people to seek sustainable livelihoods, participate in a democratic society, and live in a sustainable manner. ESD also involves studying local and, when appropriate, global issues. Therefore, these five (i.e., knowledge, skills, perspectives, values, and issues) must all be addressed through TVET educators in a formal TVET curriculum that has been reoriented to address sustainability. Reorienting education to address sustainability is something that should occur throughout the formal TVET education system. As a result, a new set of skills are essential among TVET teachers for preparing next generation of TVET alumnae.

iii) Information Revolution

Another impact of globalization is in accelerating information and communication technological change, as an increase in the rate of technological progress in the recent past, which may suggest faster and more profound change in the future. Today, information and communication technologies (ICTs) are becoming increasingly very important in education and training. New developments in information technologies have opened up new prospective in teaching and learning. ICTs need to be harnessed, e.g. to provide more widespread access to TVET.

Currently, as over the past few decades, the majority of our teaching and learning is based upon a constructivist-learning paradigm. However, due to the impact of ICT on education, there are a number of issues to interrogate: How will ICT developments impact our educational practice? Will we experience a drastic change in teaching and learning strategies? Will we adopt a new learning paradigm in the next decade or two? These educational requirements for the workforce of the future are extremely important. In this regard, the quote of Charles Darwin is very relevant. It is not the strongest of the species who survive, not the most intelligent, but the ones most responsive to change”.

It is pertinent to examine the statement of David Warlick – Connect Learning blog, he states that;

- We are currently preparing students for jobs that don't yet exist …
- Using technologies that haven’t been invented …
- In order to solve problems we don't even know are problems yet.

However, as per UNESCO-UNEVOC in many parts of the world, the use of ICTs in TVET is yet very limited. Some of the issues that need to be addressed are capacity development, access and connectivity issues, and localization, customization and content development. Our educational practices needs continually subjected to renewal, due mainly to developments in ICT, the commercialization and globalization of education, social changes and the pursuit of quality and pursue for sustainable development.

NEW PERSPECTIVES FOR TVET EDUCATOR IN 21ST CENTURY

The New perspective for TVET educator in 21st Century presents a radically different economy and society with profound implication for TVET. Due to innovations in technology, a new set of skills will have to be developed and focused in developing TVET teachers so as to prepare the new workforce. The fact is that the 21st century skills are critical. The TVET system in Asia & the Pacific region needs adaption to Key features, which includes Globalization, ICT Revolution, Sustainable Development, Emergence of Knowledge Worker and Rapid Knowledge Obsolesces.

In short, “Twenty-first century skills combining technology literacy, critical thinking, creativity and mastery of core subject matter are the lifeblood of a productive workforce in today's global, knowledge-based economy.”

The broad 21st Century workforce requirement is summarized below;
- Capacity for lifelong learning,
- Adaptability, practical skills, and
- Awareness @ global issues,
- Communication and ability to work collaboratively etc.

In order to develop the workforce the TVET Teachers needs to be effective learners, collaborators and creators.

The emerging picture points out the fact that we need to develop TVET curriculum, which is driven by technology. We have to use technology as a tool keeping in mind the end requirements. Moreover, the developing rightful mindset is more significant over the skills set. These will be the deciding factors in the knowledge era.

KNOWLEDGE AND ITS RELEVANCE

Due to the occurrence of excessive pace of technological change is having profound effect on the relevance of knowledge over time. Because of rapid innovations in the science and technology e.g. in case of computer, 50% knowledge loses its relevance within a year’s time. This phenomenon is pertinent to many fields in TVET. This is very crucial concern in TVET needs to be considered while offering our programs. The graduates need to be appraised concerning the shelf life of knowledge and significance of generic skills for life-long learning to remain competitive in the today's world. Therefore, there are mainly two challenges before us;
- How do we prepare our workforce to be more competitive?
- How do we respond more effectively to business needs?

In order to address the challenges we have to bring necessary changes in TVET qualifications i.e. the program offering ought to have relevance, fit for purpose, flexible and adaptable, lifelong learning and needs to be futuristic in nature. As a corollary TVET is witnessing paradigm shift, which is outlined in the subsequent pages,
CURRENT SHIFTS IN TEACHING-LEARNING OF TVET
Some of the significant shifts that we are experiencing in Teaching-Learning of TVET system are indicated in the following table:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Old Perspective</th>
<th>New Perspective</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Teaching-centered</td>
<td>Learning facilitation centered</td>
</tr>
<tr>
<td>2.</td>
<td>Teacher-centered</td>
<td>Learner -centered</td>
</tr>
<tr>
<td>3.</td>
<td>Reproductive learning</td>
<td>Productive learning</td>
</tr>
<tr>
<td>4.</td>
<td>Behaviourism</td>
<td>Constructivism</td>
</tr>
<tr>
<td>5.</td>
<td>Time based</td>
<td>Outcomes-based</td>
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</tbody>
</table>

i. Behaviorism To Constructivism
Behaviorist view of learning, a learning result is indicated by a change in the behavior of a learner whereas constructivist views; the learner sees learning as the individualized construction of meanings. Constructivism is presently accepted as the more relevant.

ii. Reproductive Learning To Productive Learning
In the past Learners' achievements were measured against their ability to reproduce subject content. Now the focus is shifting. Achievement is measured against the productive contribution a learner can make, instead of what the learner can reproduce.

iii. Teacher Centred To Learner Centred
Teacher is the primary source of knowledge for learners. In a learner-centered environment, the focus is on the strong points, preferences and learning style(s) of the learner(s). The learning environment is designed according to the needs and capabilities of the particular learner group. The focus shifts towards the instructional design of conducive learning environment, in which effective learning can take place.

iv. Teaching Centred To Learning Facilitation Centred.
In the current paradigm, education activities are planned and executed from a learning perspective. The emphasis is now on the learning activity and learning process of the learner. Therefore, the focus is on how the learning, which should take place, can be optimized. In general, there must be a conversion from a teaching to a learning culture.

Now the selection of subject content is based on the relevance thereof to enable the learner to reach the learning outcomes. Further, learner's achievement is measured by the level and extent to which learning outcomes are mastered.

“Instructional staffs no longer are the fountainhead of information since the technology can provide students with access to an infinite amount of an array of data and information. The role of the instructor, therefore, changes to one of learning facilitator. The instructor assists students to access information, to synthesize and interpret it and to place it in a context–in short to transform information into knowledge.

EMERGING PARADIGM IN TVET
The new emerging paradigm of Teaching-Learning in TVET is shown in the following table and it is briefly outlined below:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Old Paradigm</th>
<th>Emerging Paradigm</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>Knowledge Management</td>
<td>Knowledge Navigation</td>
</tr>
<tr>
<td>2.</td>
<td>Knowledge Production</td>
<td>Knowledge Configuration</td>
</tr>
<tr>
<td>3.</td>
<td>Constructivism</td>
<td>Social Constructivism</td>
</tr>
</tbody>
</table>

i. Constructivism To Social Constructivism
Constructivism refers to learning as the construction of new meanings (knowledge) by the learner him/herself. Social constructivism refers to learning as the result of active participation in a "community" where new meanings are co-constructed by the learner and his/her "community" and knowledge is the result of consensus.

ii. Knowledge Production to Knowledge Configuration
Because of the development in the field of ICT, increasing amounts of information are available and accessible for many people in all parts of the world. Now the evaluation, storage and re-use of content will become more important.

iii. Knowledge Management to Knowledge Navigation
Finally to Sense Making
An emerging paradigm shift within management and information science suggests that the focus should in future shift from knowledge management to sense making. Describes sense making as: the way that humans choose between multiple possible explanations of sensory and other input as they seek to conform the phenomenological with the real in order to act in such a way as to determine or respond to the world around them. It is about ensuring cognitive effectiveness in information processing in order to gain a cognitive edge or advantage. This trend makes a lot of sense when we think about the difficulties we all experience in our daily work and life due to the abundance of information and interaction that requires us to apply new skills in order to manage our environments meaningfully.

WHAT IS IT'S IMPACT FOR LEARNING IN 21st CENTURY?
The future impact for learning paradigm in 21st century emitting in the knowledge era encompasses the PC centeredness to ambient intelligence; developing of dynamic mentoring systems; courseware to performance ware; LR's to be digital & adaptable to individual needs and finally ICT to become more personalized

It is apprehensive to observe and difficult to accept that we, as teachers and educationists, are continuing to work within our "content-driven" paradigms, providing our learners with preselected and carefully designed and developed content. We are heading for a disaster if we are not willing to take the leap out of this fatal paradigm.
It is observed that navigationism might be the new learning paradigm that lies beyond constructivism. In a navigationist-learning paradigm, learners should be able to find, identify, manipulate and evaluate information and knowledge, to integrate this knowledge in their world of work and life, to solve problems and to communicate this knowledge to others.

Thus, the capacity of TVET teachers is to be enhanced so as to make them aware of the potential of ICT in education and training the next generation students. The teachers will have to learn how to use ICT for teaching & learning. There are varieties of ICT tools are available and being used for getting integrated into the TVET curriculum such as e-learning, blended learning, m-learning, web-based learning. The TVET teachers need to develop new ways of approaching teaching and learning situation with specialized ICT tools to be used to explore a variety of real-world problems through innovative practices incorporating quality, flexibility, accessibility and convenience. The development of TVET educator’s competence in manipulating and using technology is very decisive.

**PROMOTING SUSTAINABLE DEVELOPMENT IN TVET**

The increasing importance about sustainable development has led present day policy makers, administrators, teachers and managers to call for a more holistic and integrated educational approach for sustainable development touching upon environment, social, technological and economic priorities. These priority concerns and issues are posing as need-based focus of future informative initiatives.

In the Mid-Term draft review report on Decade of Education for Sustainable Development, 10 critical areas of concerns have been identified as priority if efforts have to be fast tracked. These areas include;

a) Awareness, meaning and scope of ESD
b) Re-orienting curricula, teaching and learning
c) Capacity-building
d) ESD-related research, monitoring and evaluation
e) ESD synergy with other ‘adjectival’ educations
f) ESD resources and materials
g) International and regional cooperation
h) National networking
i) Coordination
j) Financing

Based on the above critical priority areas recommended in the mid-term review of DESD, re-orienting curricula, teaching and learning become practical in the extent of priorities that need to be acted upon urgently. Various concerns have now rise the need from multi-sectoral stakeholders to pay attention to these key priorities to equip future generations with the right skills, knowledge and attitude that shape understanding and decisions for sustainable future.

As per Rupert (2008), TVET takes on a complex and distinctive character with regard to sustainable development. This is because - both directly and indirectly - TVET produces and consumes resources, as well as affects attitudes towards sustainability held by future workers. The manner in which production and consumption are managed can contribute either to sustainability or to practices and conditions that are not sustainable. During education and training, the greater the exposure of trainees to sustainable concepts, practices and examples, the more likely it is that the desired workplace culture change will take place in the future.

As a result, TVET needs to focus on the three dimensions of sustainability - economic, social and environment. These dimensions can be put in concrete terms in teaching TVET subjects and courses in terms of skilling the workforce to tap them to contribute to the economy, to prepare for gainful and decent employment and to minimize greenhouse emissions, e.g. representing a balanced approach to workforce development.

Some of the challenges for addressing sustainable development are as follows:
- Understanding the Meaning and Scope of ESD
- Defining Sustainable Development Skills in terms of KSA
- Applying functional models for integrating SD in TVET Curriculum
- Relating Generic to Specific Learning Outcomes in SD
- Integrating Sustainable Development in Subject Domain
- Imparting ESD with innovative pedagogy

Unlike other conventional courses, ESD cannot be delivered in the same way. However, there are specific ways to impart ESD for creating greater learning outcome. To do this, it is necessary to understand that the most important part in Education for Sustainable Development is the teaching methodology. Thus, Environmental Education, as an example, must focus more on learning than on teaching, so that it will have the ability to emphasize active, participatory techniques rather than passive one-way instruction from the teacher.

The TVET professionals need to be called upon to reorient the TVET curriculum towards sustainability while maintaining the principles of 6R that is Reduce, Reuse, Renew, Recycle, Repair and Rethink perspectives. Therefore, TVET system needs to be aware of the concept and challenges of SD for applying in the work place urgently. The curriculum in TVET has to reflect these changes and necessities to provide knowledge, skills and values that will help TVET graduates/students to cope up with and adapt to these changes. The focus of this course will have to revolve around how TVET will respond to the demands for change so as to incorporate societal issues and introduce and integrate related environmental concepts into the curriculum of TVET programs. It is therefore the task of the TVET professionals to
envisage new ways in which the concepts of SUSTAINABLE DEVELOPMENT can be infused into the TVET curriculum. The following procedure may be adopted in developing the core of sustainable education which is widely applicable and which can be built into the technical and vocational education program curriculum.

Choosing the Content

The chosen content should take into account Discussion of the aims of SD as identified nationally and internationally;

- The essential learning for SD
- The need to build on a student's previous learning and awareness from their school curriculum or elsewhere
- The views of practicing teachers of technical and vocational education who have already included environmental issues in their programs
- The key dimensions such as management of resources and use of energy, pollution, legislation, health, safety of people and other species, etc.
- Global perspectives, justice and equity, cultural awareness, information and communication skills, group working, planning, executing and evaluation

The TVET teachers will have to take greater responsibility and commitment for shaping the next generation for sustainable future. They have to set high standards and share ethics of professional practice, for a creative, innovative, interdisciplinary, integrative and holistic approach to ESD. Developing learning and teaching materials, methods and enlarging capacity in ESD is equally paramount of importance. A synergic networking and cooperation at national and international level to exchange and share knowledge and good practice to promote sustainable development is presently as crucial.

FUTURE ROADMAP FOR DEVELOPING TVET TEACHERS

The new technological, economic, political, social and educational developments that have taken place in the past few years and their impact on technical and vocational education; TVET Teachers, teacher-trainers, and policy-makers need to look for the best and most-relevant teaching/learning methods, techniques and practices in TVET for their effective adoption, adaptation and appropriate integration in the TVET classrooms.

The reflection upon these issues confronts one with the extensive changes that have occurred in the contexts of technical and vocational education and the challenges these present to the establishing and maintaining of effective technical and vocational teacher education programs.

With respect to changes in the world of work, not only has technology impacted extensively upon the knowledge and skills needed for employment, but, even more significantly, the precarious nature of employment, these have profound effects on the type of technical and vocational education programs that need to be offered, and the teaching/learning strategies that need to be employed. Increasingly, the implications of changes in the world of work for technical and vocational education point in the direction of life-long learning and continuing and recurrent technical and vocational education. Such a direction requires the continuing professional development of teachers and trainers.

New training technologies have emerged. For example, distance education is being seen around the world as a valuable means of extending the availability of technical and vocational education. Again, the increasing power and flexibility of computers hold out considerable hope for individualizing learning and for extending the reach of available expertise. The need for the constant revision of technical and vocational education curricula, for more efficient ways of profiling occupational skills, for providing bridging and remedial courses for career development, and many other such needs, constitute challenges to the educational processes that are employed by technical and vocational education and, thus, to the preparation of teachers to meet those challenges.

As far as the Asia -pacific region the existing TVET can categorized in three groups; fully industrialized nations, developing nations and emerging nations. These varying growth and development in TVET have significant impact on the quality, product & services, price and meeting customer demand and their availability. In addition, there is regional diversity in terms of program offering and qualification of TVET teachers. The emerging TVET teachers qualification standards expected to include;

- Planning, Conducting and Evaluating Teaching Lessons and Instruction
- Providing Occupation-related Learning Environment, Materials and Media
- Assessment
- TVET Institution/School Management
- Curriculum Development and Evaluation
- Guidance and Placement of Students
- Public Relations
- Research
- Professional Development

In view of the above, following innovative initiative are proposed it includes;

i. Capacity Building Programs for TVET Teachers

Learning for transformation through TVET requires a shift towards a system that better addresses the emerging needs of world of work. A transformation of e.g. mindsets, educational approaches, structures, technical systems and innovative teaching and learning methods is needed. TVET teachers can
play decisive role in this transformation and in the sustainable society if sustainable development becomes a framework for a redesign of the structure and goal of organizations and of pedagogical, research and cooperation approaches and methods. It is essential to build capacity of TVET teachers for the required transformation. Some of the focal areas include:

- Curriculum based faculty training
- ICT Technology skills enhancement program
- Pedagogical training
- Sequential summer program

ii. Establishment of Worldwide TVET Academy Linking Regional Organizations

The proposed TVET Academy shall serve as a nodal agency for quality improvement of TVET Teachers in various the fields of science, technology, management, architecture, pharmacy and other applied areas of TVET. The academy is expected to provide flexible credit based courses to all registered participants using modern technology. The modern technology will involve (i) Video courses (ii) Web-based learning material and (iii) live lectures using satellite and Internet based technologies.

The aim of proposing the TVET academy is to serve as an agency of quality improvement to a large section of TVET Teachers serving in various institute/schools of TVET in the region.

The beneficiaries of these programs include high school graduates, qualified Trainer, TVET specialist, bachelor, Master and highly qualified persons from trade and business.

Thus, the future training system for TVET teachers needs to be:

a) Very flexible
b) Highly differentiated
c) Cost effective.

Finally, to meet the demands and responsibilities of the 21st century the TVET Teachers also needs to change and re-equip themselves on a continuing basis with broad based and flexible technical competencies, attitudes, and values as required in a global marketplace.

CONCLUDING REMARKS

Learning processes and learning paradigms are still very much founded in a content-driven and knowledge production paradigm. The rapid developments in information and communication technologies already have and will continue to have a profound impact on information processing, knowledge production and learning paradigms. One needs to acknowledge the increasing role and impact of technology on education and training. One has already experienced enormous challenges in coping with the current overflow of available information. It is difficult to imagine what it will be like when the knowledge economy is in its prime.

Knowledge economy demands global standards of quality and ethical values. In order to meet these needs, the engineering institutions need to continuously modify and improve the quality of its education based on the paradigm shift-taking place to enhance the benefits to the technical passouts.

Although there is a growing recognition of the importance of promoting sustainable development in education, and especially TVET, however to promote and implement sustainable development concepts and practices depends on the physical, financial and human resources to readily integrated into the TVET systems. We need to adopt multi-pronged approach to implement the spirit of sustainable development.

Finally, an era of rising expectations for today's TVET experience is for helping students to become intentional learners able to succeed in the 21st century global community

REFERENCES

We are pleased to announce that

Prof. P. V. Khadikar,
Eminent Scientist and Topologist
has accepted our request to become
Honorary Editor of our institute's
Journal of Engineering, Science and
Management Education

Articles meant for publication can be sent
directly to him on the
following e–mail
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Editor