

## Guest Editorial

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### **Nurturing Talent – Sustaining the Advantage**

The Guru and the Gurukul in India have long represented the essence of teaching, learning and sharing of knowledge. The Indian education system, since then, has grown rapidly with more than 10 million students and numerous universities, representing one of the largest education systems in the world. McKinsey (2007) estimated that India has 14 million young university graduates (those with seven years or less of work experience), with 2.5 million new graduates added to this pool annually.

However, doubts exist about the talent and competency levels of these individuals to the varying demands of the industry at large. While a number of industry-academia collaboration have taken place and the efforts made by the institutions at large in bridging this gap is commendable, there is much can still be done.

#### **What is talent?**

Let us reflect a bit about what exactly 'talent' means? The term has become quite subjective and complex to define, given the broader connotation it enjoys in the corporate world. Traditionally, 'talented' would refer to a person with expertise in a specific domain or functional area for his inordinate ability to solve problems in that domain or anticipate issues in that domain. In any case, it no longer refers to 'achievement of a pre-determined objective'. In today's context, these are taken for granted and one look for the ability to straddle different functional areas, businesses, cultures and geographic boundaries with the right attitude and aptitude – all in a seamless manner in a globally distributed work environment. We need to inculcate not only intellectual skills but also aspects such as emotional intelligence, values, creativity, and ability to work in teams, to think out of the box, entrepreneurial abilities and above all the willingness to continuously learn and share.

#### **Why talent has become the crucial area?**

Firstly, the supply – demand imbalance in the area of talent has become acute not only in India but also globally. There are host of new industries in India – IT, financial services, retail, telecom, media & entertainment – all vying for best people. The outstanding success of India's leading educational institutions has drawn the multinational corporations to take a pick at our best brains and capabilities. The apparent reasons are many – from underpaid and under-skilled educators to rampant demand-supply mismatch in the admission process, to the ultimate issue of really not investing in the foundation and framework necessary for these individuals to develop expertise in a particular domain and, most importantly, to learn to 'think on their feet'.

Today, entry level of a company's operations require skilled people, thanks to the globality of businesses complexity, different product lines, decentralised decision making needs and the need to be closer to customer and creating an empowered culture so that one can be agile in leveraging market opportunities. This entails the need to spot, incubate and groom talent at every level of the organization, because more people need to be taking high quality decisions.

So, what can be done about it? Transforming this situation would involve, in my opinion two things i.e. that of understanding the ability of multi-tasking in the current generation and secondly that of a curriculum that supports the concept of 'Learning with understanding', backed by technology.

#### **Multi-tasking Vs Uni-tasking**

Traditionally, we all are used to doing one thing at a time, we needed to be in a quiet place to focus, to concentrate, in order for us to understand and unwind our learning. We were always used to and told to doing things serially or do one thing at a time. However, the current generation of youngsters is quite at ease multi-tasking i.e. doing multiple things parallelly; they needed to have things happening around them so that they can concentrate and they are at ease to access different sources of information before forming their opinion and all of it they can accomplish it faster and better. In other words they are very much at ease in assimilating vast amounts of data, number crunch them and form different patterns or opinions. In my mind, I feel it is extremely important that our education system needs to recognize this aspect and leverage the same. The curriculum, teaching means and methods all need to scale up to meet this expectation or demand from the current generation, as the case may be so that they are not left bored.

#### **Learning with understanding**

The concept of 'Learning with understanding' makes one confident of applying the knowledge gained productively. 'Learning with understanding' is a term that encompasses critical thinking, and applying learning to real-life situations

and also know where to obtain more knowledge about the topic— all in a short span of time. An effort to improve the quality of education to the 'learning with understanding' level would need educators to define quality and its underlying parameters in a measurable manner, and validate these parameters from time to time, and evolve an assessment methodology that applies to all institutions in the country – either run by the government or privately.

Just as in many universities abroad, colleges in India should begin collaborating with each other more. For instance, by allowing the transfer of academic credits between institutions, global standards and best practices in education and quality are quickly ushered into the system. Furthermore, with global cooperation, institutes stand to benefit as they complement each other in their strengths and weaknesses, empowering students to reap the rewards of access to the 'best' from all worlds.

### **Conclusion**

While many of us in the academia and the industry at large are working at various aspects related to talent management and have their own perspectives on these, we are quite some distance away. Perhaps there are no definitive answers and perhaps they are different in each of the specific contexts. I think the key is in understanding the fact that talented people get bored and they need to be constantly challenged. We need to offer a very high quality of exposure in a networked world enabling them to increase their overall intrinsic worth

The government and leading educational bodies can lead this change by mentoring a few institutions in each region/state and training faculty in research and content development with industry collaboration to achieve that high quality of exposure for students and faculty alike.

Let us all be the catalyst of change and together we can!

**N. G. Subramaniam**

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### **From Chairman's Desk**



We have had several activities over the past couple of months. BITES received ISO certification from TUV at a function organized at the Microsoft Conference Room in Bangalore. IBM Research Fellow Dr C Mohan delivered the Second BITES – VTU Distinguished Lecture on *IBM Global Technology Outlook* at M S Ramaiah Institute of Technology on January 16. Prof Padmanabhan Krishnan of Bond University, Australia conducted a one-day Workshop on *Innovations in the Teaching of Computer Science* at PESIT on February 9.

BITES was involved in the organization of the 3-day Workshop on *Bringing Industry to Institutions* organized in Hassan by Malnad College of Engineering during February 19 – 21. BITES is collaborating with OSRDG in launching E-Project Portal to help Students in choosing meaningful Projects. BITES assisted the Indian National Academy of Engineering in organizing a one – day Seminar on *Agenda for reforms in Engineering Education* on February 23 at ISRO Satellite Center.

The INAE Seminar addresses several contemporary issues in Engineering education. There have been significant changes in the practice of Engineering as a profession in the new millennium, such as, for example:

- Constraints imposed by environmental considerations
- Customization demanded by diverse customers

- The quality and quantity of the several inputs to the system
- The nature and scope of the outputs and outcomes from the system
- The environment in which the Teaching – Learning – R&D processes take place
- The impact of globalization
- Implications of Globalization, such as , for example, Innovation as the basis of Competitiveness

There is a need therefore to re-think, redesign and re-engineer the several aspects of Engineering Education. This Seminar strives to take stock of the current status, identify major issues of concern and some possible solutions, and chart out a roadmap for the future – both short-term and long-term.

**Prof. R. Natarajan**

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### Up-coming Events of BITES

Sl. No.	Date	Program	Host
1	March 14	BITES-VTU Distinguished Lecture on Building Employable Skills through Education  Speaker: Dr. Ganesh Natarajan Chairman, NASSCOM	BMSCE, Bangalore
2	March 21	Faculty Development Workshop on Multi-core Programming  Technical Resource: Intel Corporation	PESIT, Bangalore
3	April 18	Faculty Development Workshop on Wireless Networks  Technical Resource: Wipro Technologies	GAT, Bangalore

## BITES – VTU Distinguished Lecture Series – 2

### Global Technology Outlook 2008

**Venue:** MSR Institute of Technology  
**Date:** 16<sup>th</sup> January, 2009  
**Sponsor:** BITES  
**Host:** MSR Institute of Technology



Dr. Mohan gave an overview of **The Global Technology Outlook (GTO) 2008** which is IBM Research's vision of the future for information technology (IT) and its impact on industries that use IT. It highlights emerging software, hardware, and services technology trends that are expected to significantly impact the IT sector in the next 3-7 years. In particular, the GTO identifies technologies that may be disruptive to an existing business, have the potential to create new opportunity, and can provide new business value to customers. A number of architectural changes are occurring – all of which are expected to evolve into a new enterprise environment with new ways to deploy information technology. The 2008 GTO focuses on five topics: **Core Computer Architectures, Internet Scale Data Centres, Community Web Platforms, Real World Aware and Enterprise Mobile**. In his talk, Dr. Mohan took the audience through an exciting journey of how IBM has been transforming IT and gave insights about IBM's research in futuristic technologies which can significantly impact IT and business through IT. Following are the summaries of the five GTO 2008 themes which is on top of IBM's research agenda.

**Reinventing the way computer systems are built** - **Core Computer Architectures** examined the convergence of technology, hardware and software that will be needed to maintain peak computing performance and respond to the changing needs of today's – and tomorrow's – business environments. Dr. Mohan pointed out that a significant evolution of systems and software across several market segments, cost and power optimized systems, high-end servers and specialized domains will have to occur to take full advantage of these new computer architectures.

**Answering business needs with a "cloud"** The engine rooms of information – The data centres – are wildly distributed, siloed and sub-optimized around the world. **New Internet Scale Data Centres** are emerging to address this issue. These large data centres can expand and grow rapidly. They will be more efficient and more interconnected – inside and outside their companies – because they will have the ability to access applications from common infrastructures, often referred to as cloud computing. This will provide a tremendous increase in flexibility for large companies because they now will be able to quickly and easily take advantage of IT tools like web delivery, business analytics, and business process services to help grow their business and better serve their customers.

**Social – and data – networking for the enterprise** - **Community Web Platforms** have introduced new forms of content contribution, leading to more users – because it's easier to share information through these new tools – and more data – because users are finding more value in the collaborative nature of these platforms. As these new business models evolve, additional new capabilities will emerge to help sustain and grow the features and functionality that companies will require to take advantage of these new technologies.

**Real time information processing and analysis** - **Real World Aware** is all about a new class of applications that will move business beyond traditional analytics to a place where all data – past and present, from inside and outside a company – can be streamed, processed and analyzed in real time. New systems are emerging to support this trend, and business applications will need to be extended so companies can use these new technologies.

**Doing business anywhere, anytime** - Business requirements and technology advances are driving tremendous change across the **Enterprise Mobile space**. In many regions, mobile devices are becoming an increasingly viable alternative to PCs. With the rapid rise of mobile business, companies will be able to do more than just give their employees the option to access email remotely. They will be able to give them access to critical data and applications – anywhere, anytime – because the infrastructure and security features will be there to support them.