Innovations and applications of Information Technologies (IT) for teaching and learning have brought amazing transformation in education and the society. IT is now one of the major enabling forces for mobilizing the people and creating greater awareness for education amongst them by enhancing the learning opportunities. It achieves this by unfolding new ways and techniques of delivering educational programs and introducing a variety of learning tools and methods, both asynchronous and synchronous. “Thanks to technology, we are learning how to educate in new ways, but with our “eyes on the prize”, the effective preparation of the next generations of intellectuals and problem solvers, the business elites, professors and teachers alike, and the world’s growing population who understand more fully with each passing day the vital importance of education to them and their families” (Betz, 2010, p. xiv).

More and more institutions are adopting technological advancements for improving the teaching and learning environment. New and improved methodologies are being introduced at each and every stage of teaching and learning process. Technology helps in developing new programs where a large number of institutions forge collaborations both at national as well as transnational level. They share valuable resources so as to provide advanced need based programs to the learners. IT is the much needed “bridge”. The collection of papers in this special issue further reinforce this belief.

The first paper in this issue by Gilbert Ahamer and Josef Strobl advocates the use of IT in order to “socialise” across diverse “geographies of understanding”. They provide an illustrative account of case studies that use IT (especially Geographic Information Sciences) in distance learning, for government activities and in developing countries. According to the authors, the underlying conceptual model of a network society combined with empirical research on long-term civilizational and economic evolution allows to generally understand Information Technologies as facilitators of a multi-perspectivist and multi-disciplinary construction of world views. With the help of case studies, they also focus on the strategic role of information technologies in facilitating consensus building and constructing common world views that can socially converge (“socialise”) isolated cultures of understanding.
In the next paper, Deryn Graham, Ian Benest and Peter Nicholl provide an interesting account of research conducted recently in interaction design for inclusive learning and the development of ideas that will pave the way for future research with the objective of building an environment that facilitates inclusive multi-modal learning for all. The paper highlights the findings of the original case study on improving interaction design for teaching visually impaired students. It also describes the work on evaluating presently available assistive technology products.

Kenneth David Strang in the third paper of this issue uses balanced scorecard approach from management science to assess the effectiveness of an online distance education course in an accredited business degree program at an Australian public university. The dimensions in the scorecard were used to measure the student performance, satisfaction, content and delivery effectiveness. The author also compares and contrasts the education balance scorecard of Australia and the USA and finally gives best practice recommendations to educationists.

In the following innovative case study involving the use of advancements in IT for education, Kimberly Mann Bruch, Hans-Werner Braun and Susan Teel share their experiences of working with Native American education communities on a series of Internet-enabled activities such as the Live Interactive Virtual Explorations (LIVE) pilot project. In the paper, the authors discuss the advantages and disadvantages of utilizing the LIVE concept for real-time distance education programs at rural Native American communities.

Demonstrating the use of IT for social inclusion, Karin Tweddell Levinsen in her paper presents research findings from a project titled Project IT-folder (PIF) that aimed at inclusion of young children with potential reading and writing difficulties into normal classes in the suburbs of Denmark. This was a collaborative project spanning three years from 2007 to June 2010, having the Danish University School of Education, the local municipality government, the Pedagogic Development Centre and two primary schools in the municipality as its member organizations.

The subsequent paper by Ahmad Rafi and Khairulanuar Samsudin gives an account of the findings from an experimental research study based on the pre test–post test control group design that examined the differential outcomes of spatial ability training attributed to training condition and gender. From the research findings, it is revealed that spatial ability could be trained and training by interaction was the most effective condition.

The seventh paper discusses cases that show the practical contributions of IT tools, specially of e-learning platforms and of Geographic Information Science and Systems, in facilitating the exchange of fact-based concepts for the construction of social spaces and spaces of understanding. These tools have also promoted the dialogue of cooperative learning both in developing countries and in administrations and within academia of industrialised countries. According to Gilbert Ahamer, Thomas Jekel and Robert Vogler, societal learning can enlarge and approximate spaces of understanding. They are of the view that social spaces are a type of “social capital”.

All these cases present significant evidences of myriad use of information technologies in education. The most important fact that emerges from all these studies is that IT is one of the most important agents for educational development and it is for the institutions to realise how best they can adapt themselves and apply these advancements for their benefit and for the overall advantage of the society.

As guest editors of this special issue of Journal of Cases on Information Technology, it has been our effort to bring to the readers seven case studies of successful use of information technology in various domains of education. We thank all the authors for entrusting their work to us for this issue and we hope through the Journal their work will reach scholars, academics
and students across the globe. We are grateful to IGI-Global for entrusting us this responsibility of editing the special issue; here we would like to particularly thank Kristin Klinger and Heather Probst for the support and cooperation we received from them. We welcome feedback, suggestions and submissions from our readers.

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REFERENCES  


