The Internet has changed the way we work, socialise and learn. In the field of education, its impact has not just been technological but also socially and demographically.

"Throughout academia, the popularity of online [Internet-based] courses and programmes is rapidly rising," says Associate Professor Dr Bustam Kamri, dean of the College for Open Learning at Universiti Razak (Unirazak). "In 2006, it was projected that 3.3 million students were studying online," says Professor David Ross of HELP University College. "For 2009, just in the US, there were 12 million school-age students pursuing online education and 10 million preschool children pursuing e-learning. Over 90% of universities globally are using some form of online delivery for their students."

Ross was first introduced to e-learning in 1997, and says that back then, it was basically about how to best support students in communicating and getting feedback on their studies.
using email. "Now it's about creating whole communities of practice for learning in many collaborative environments online."

There are many obvious advantages of online learning, one of which is that it allows students to participate in learning wherever they may be, as long as they have a computer and Internet connection. Time is not wasted on travelling, and students can learn whenever their time permits, allowing them to juggle personal life, work and study schedules as best they can. Experts can also be "brought in" from anywhere in the world.

"Since students can re-read a lecture online, they can take more time to reflect on certain materials before moving on," says Bustam. "The online format also allows physically challenged students to participate in classes online instead of having to be physically present."

In addition, the Internet isn't merely a channel for distributing information; it can also pave the way for more creative methods of teaching and a more dynamic learning experience.

Is it the channel for you?
The value of learning online continues to be controversial among faculty and students in many universities that offer online programmes, says Bustam. The challenges include having good computer literacy and the fact that the student has to deal with the absence of academic consultation.

"For an online programme to be successful, the curriculum, the facilitator, the technology and the students must be carefully considered and balanced in order to take full advantage of the strengths of this format and, at the same time, avoid the pitfalls that could result from its weaknesses," says Bustam.

However, ultimately, a lot will depend on the student. One of the challenges of learning via the Internet is the need to be independent and self-motivated.

Prof Dr Balachandran, professor of finance at Taylor's University College, says the undergraduate student needs guidance and he doesn't think a pure online method is ideal. "Undergraduate students are young, they need the personal touch to motivate them. And it takes a lot of discipline and determination to do your own thing, and at your own pace. It is different for postgraduate students, who are in their 30s and more mature. And their objectives are clear -- they want to acquire knowledge as a passport to career progression."

Ultimately, the best learning medium will depend on your situation, personal characteristics and location, says Balachandran.

"A lot also depends highly on the individual's motivation to learn," says Rustam. "So, it still comes down to the effort that the students put into their education that determines how much they will retain and how beneficial the overall experience is to their future career."

Classroom-based learning allows for personal guidance and immediate feedback. However, one of the obvious disadvantages of face-to-face education is the higher price. You have to pay for campus facilities and for room and board. "Professors and teachers in a face-to-face environment also assess their students as people, and this is a very subjective element in the process of earning a grade," notes Ross. "Some students assess their classmates' personalities and classroom performance before interacting with them, a factor that is lessened in the online environment."

Some studies have highlighted that introverted students may take to an online learning environment better than in a classroom, where they may be more reticent and reluctant to speak up and contribute. While this is true, however, Balachandran says it may also encourage the person to continue being reserved and stay in his shell.

A long-established cousin of e-learning is distance education, or distance learning, which allows you to learn when not physically on site. "Distance learning is a flexible form of learning where a student can study from home, the workplace, on the move or wherever else that is convenient. It is normally supported by a well-designed print-based set of materials," explains Ross. "This style of delivery has been widely used in universities and institutions around the globe since 1728 and the first
E-learning is the way of the future

Ross: The selection and use of appropriate blended delivery methodologies that fits the university as well as the students is the future of higher education.

A university degree was offered in 1858. So it is not a new form of educational delivery. There was a difficulty in ‘connecting’ students with each other to learn together, but with the recent trend of technological advancements, distance learning is becoming more recognized for its potential in providing individualized attention and communication with students locally and internationally.

For distance education, the quality of the course content is crucial. The programme needs to clarify the learning outcome, focusing on students' performance and helping them see how the material is related to educational goals. Students should know what to do and how their performance would be assessed, says Ross.

The best option

Given the advantages and disadvantages of the various mediums, combining the various channels is an approach that has gained favour. This is called blended delivery.

"Blended learning is an approach to learning that blends different technologies or that blends technology and other approaches in the learning process," says Ross. "This may include just about anything — books, classroom instruction, hands-on experience, online self-paced instruction, online chat, online conferencing, podcasting and distance education."

"There are advantages and disadvantages to every type of learning mode," says Bustam. "It is best to use the advantages that each method offers to its fullest extent. It appears from initial studies that a combination of online and classroom teaching to convey subject matter to students is the best method. However, in some instances, the inconvenience of maintaining a consistent lecture schedule prohibits potential students from furthering their education."

Indeed a blended delivery is the approach taken by many universities. HELP University College has adopted such an approach.

At Taylor’s, students attend classes, which are supplemented with notes made available online. The students can also carry out group study sessions online. "At present, most of Unirazak’s academic programmes are conducted via conventional learning," says Bustam. "Each subject consists of 45 face-to-face hours over a time span of 15 weeks, including a three-hour final examination. On the other hand, the College for Open Learning offers popular academic programmes to suit working people. Each subject comes with 14 face-to-face hours over 15 weeks, supported by online notes. Classes are conducted on alternate weekends. In terms of each subject’s contact hours, there is a significant difference between e-learning and conventional learning where the former will have 14 contact hours while the latter has at least double that number."

"I fully believe that providing educational and training delivery programmes that give students a choice in how they want to learn is the future of educational providers," says Ross.

The future of e-learning

The professors see an inevitable push towards more e-learning. Forces driving this include societal issues and demographics, technological factors and sheer critical mass, says Ross.

He cites a few trends that have helped the industry grow, which include video, mass customisation and software for course development and assessment, two-way communication, social learning (Facebook, Twitter, LinkedIn and many more) and real-time distance learning (Skype, Facebook, Gotomeeting Messaging Systems).

There will be a continued move towards online learning and education without borders, says Balachandran. There is no denying that it is cost effective and its outreach expands to students in rural areas. Taking off next is video-conferencing. "Technology now allows you to project a person into a room, via a holographic 3D image."

"Students today are also much different than students of the past. There are different generational needs and approaches to study. Today, in many countries, three-quarters of all undergraduates are non-traditional learners. These include mature students, part-time students, single parents and disadvantaged students," adds Ross.

"We should provide the student with some control over the learning environment, ensuring that the instructional strategy is made clear and build knowledge gradually with stepwise segments of information (sequentially), not in one long presentation. The online-learning environment may be especially useful when information is presented in small ‘chunks’ to hold interest. E-learning software empowers administrators to track performance and measure success. In addition, monitoring usage by learners is simpler; the number of downloads per user can be measured," he says.