a New Training Experience

By Anthony Basham FSCTE, Chair of the Training Sub Committee, SCTE

The SCTE has improved its broadband training pedigree with the launch of its new Learning Management System – accessible 'on the go' for engineers and technicians. Test your knowledge on the LMS at SCTE's Partnership Pavilion stand (8.F59) during IBC in Amsterdam and win a holder for a mobile phone/tablet!

Anthony Basham FSCTE, Chair of the Training Sub Committee, SCTE

Anthony Basham is a sales engineer/director for Technetix Ltd, covering the Nordic areas, and is also chair of the SCTE Training Sub Committee. He has 25 years of experience in HFC, in different areas of engineering from R&D; sales engineering; field support; service technician; network technician; operations and development manager; head of product and application engineering from the customer all the way to the headend.

Anthony has been on the SCTE Executive Committee for the last two terms, working on standards and training.

The SCTE has been training engineers, technicians, installers and those involved in the cable, fibre and broadband industry for the last two decades. Its mission statement is to raise the standard of broadband telecommunication engineering to the highest technical level, elevate and improve the status and efficiency of those engaged in broadband telecommunication engineering, and provide and accredit training courses for the advancement of technical skills and knowledge within the broadband industry. This has been done through tutor-led courses, self-learning courses and training courses developed directly by the Society.

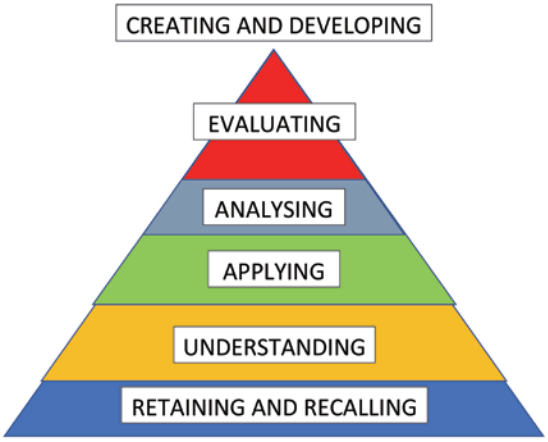
However, the education process and learning in general have gradually changed and given rise to a new thought process for learning to be effective. Learning is the transfer of knowledge; it requires different approaches and can be a difficult and time-consuming task.

The learning process

How do we learn? It is necessary to take several steps before knowledge can be effectively transferred. The first phase of knowledge transfer is remembering; this involves recognizing and recalling the learning. It is an area where learning has always provided knowledge and then tested knowledge by examination of the student.

Everybody learns differently, through visual, auditory or kinesthetic approaches. All of these must be available to enable the widest possible knowledge transfer options. The SCTE has, through the years, relied upon the visual and auditory approach to enable knowledge transfer and this will not change. However, allowing a kinesthetic approach involves movement of the whole body, enabling the student to use the body (or, at least, parts of it) to aid remembering. Some students use a pen when reading to mark the word they are reading, some use their fingers; all enable a better learning experience. Moving the learning into movement requires a different approach.

The SCTE has moved its education into different media such as training books, courses, PDF files and, now, into a Learning Management System (LMS). This opens the student to different stimuli through the text on the screen, videos, sound, clicking on information; all of these move the student towards a range of different learning approaches.



The stages of learning are Remembering and Recalling; Understanding; Applying; Analysing; Evaluating; and Creating and Developing.

- **Remembering and Recall** - this is retention of information and the ability to recall it when necessary.
- **Understanding** - using the knowledge and the ability to know when it is necessary to recall.
- **Applying** - this refers to applying facts, rules, knowledge, concepts and ideas and using these when necessary.
- **Analysing** - breaking down the knowledge into its component parts, enabling knowledge to be used and utilised in different ways.
- **Evaluating** - judging the information against experience, value and ideas to enable clear knowledge of the right approach.
- **Creating and Developing** - using the knowledge to develop new areas, define a better approach and create new teaching.

These areas together create and disseminate knowledge with each step, so that learning then becomes integral to the engineer or the student.

What is the LMS?

The SCTE's Learning Management System (LMS) delivers online courses and training material to students. At present, the SCTE's 'Fibre Optic Transmission for Technicians' course and its 'Understanding Wi-Fi and Wireless Technology' course, as well as a taster course in Dutch and English, are available on the LMS.

LMS provides consistency, tracking and reporting, engaging courses and gamification. Centralising the knowledge into one area allows consistency.

- **Consistency** - A central repository for information allows all students to reap the same knowledge whilst unlocking all the expertise from different tutors in one place.
- **Tracking and reporting** – LMS, as a system, enables tracking of progress e.g. which student has started, who is halfway through the course and who is finished, who needs help or who is capable of more etc. This is a powerful tool in an organisation as it offers other measurement benchmarks to ensure that the student reaches his/her full potential.
- **Engaging courses** - this is the ability to take things that are described on paper into different dimensions i.e. video, audio, text or a combination of these to ensure that the student is engaged and keeps focus, learns more and keeps motived. Engaging also involves gamification, where the course material becomes more attractive and both interests and challenges students.

There are also a range of other benefits and advantages offered by LMS. The course content can be kept up to date and any change in the course content can be implemented immediately, whereas books are static and require a reprint. All a student needs is access to the internet to download a course. An email is all that is needed to enable the student to start the course.

The LMS also offers cost savings. Sending students into a classroom costs time and money, with the student restricted to the classroom for the duration of the course. The LMS allows a student to fit training into his/her schedule and take the course when time allows. Engineers are mobile and need to be in different locations throughout the day: some tasks can be finished quickly and the engineer or student can then resume the training course, for a more efficient approach.

Who uses the LMS?

The LMS is easy to use, requires no advance training and is very accessible.

Any person, or organisation, focusing on learning and development, can use the LMS. LMS keeps the focus on the deployment of training and development and keeps the organisation ahead of competition and the workforce ahead of competitors.

Schools, colleges and universities can also benefit from the LMS as this unlocks the mobile phone, tablet or computer as library and retention vessels for knowledge.

What can an LMS do?

An LMS is used to create courses and examinations and to track the progress of the learners. It can also be used to export reports; invite users; hand out certificates and integrate with a range of other tools, making it a seamless addition to any organisation.

SCTE training courses

The SCTE has, for the last two decades, provided the following training courses:

- SCTE Installers course.
- Service Technicians course.
- Network Technicians course.
- Network Architecture and Design course.
- Fibre Optic Transmission for Technicians course.
- Fibre Optic hands-on course.
- Business Data Solutions.
- MPEG.
- Understanding Wi-Fi and Wireless Technology.
- An Introduction to Broadband.

SCTE courses have been the backbone of the broadband industry. The Society develops courses to fulfil current

These courses are full courses that propel the novice to the expert. The SCTE is in the process of developing these into Novice, Intermediate and Expert courses. This enables students to climb the learning pyramid and achieve their full potential.

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knowledge or technology gaps. With technology changing, the SCTE has stepped up the need for knowledge and the courses will soon be divided into smaller courses to allow the students to progress from novice to expert in each knowledge area. The SCTE can customise courses to trainee requirements, allowing students to achieve their full potential, and offer smaller, tailor-made courses for students.

Over the next six months, the SCTE will be re-designing and aligning course content towards these smaller courses, incorporating new developments and developing small, subject-specific courses where knowledge of a specific area is necessary.

The SCTE's Fibre Optic Transmission for Technicians course and Understanding Wi-Fi and Wireless Technology course are also both available as SCTE training books (SCTE- Broadband Online Onward Knowledge System).

The SCTE training team can be emailed for specific information and advice at office@thescte.eu. You can also meet the team for an LMS demonstration on the Partnership Pavilion booth (8.F59) at IBC in Amsterdam (13-17 September 2019). Take the demo, test your knowledge and win a free holder for a tablet/mobile phone! Alternatively, see www.thescte.eu/professional-development or www.broadbandtraining.eu