“Standards are not there to replace regulations, but to complement them. Standards are shaped by best practice, so if an organization is using them, it’s probably being well managed. This makes it easier for regulators to decide where to focus their attention. Standards are the foundation on which a risk-based approach to regulation can be built”. BSI (2021)

INTRODUCTION

Standards are all around us and underpin the way we live and work. Without standards, it is arguable that we would not be able to operate as a civilised society. Businesses would not have the mechanisms to work collaboratively with the public, other businesses and stakeholders.

Due to the complexity of technology today, and the high reliance on computer-based solutions, there is an urgent need for those providing technology to understand and adhere to agreed standards. This applies to both the engineered aspects of computing as well as service components.

It would seem logical, therefore, for even a basic level of knowledge of relevant standards to be taught in traditional education settings. There are a couple of examples from research (relevant to this discussion) which describe the benefits of International Standards being taught to students. Abran in 1996 wrote an article describing “Teaching Engineering using ISO Standards” and Talib, Khelifi and Tahsin in 2012 wrote about their experiences in “Using ISO27001 in Teaching Information Security”. Both examples extolled the value to the learner.

Of concern, is the fact that there is no consistent empirical evidence to show that Technology Management Standards and their underpinning Frameworks are taught consistently in educational institutions. This is surprising as many, such as IT Service Management (ITSM) frameworks, have existed for over forty years.

The two examples above are a small part of the story. Given the nature of the challenges within IT, it would be wise to include IT Service Management Frameworks and Standards in this discussion as they add greater value to learners because IT services underpin so much of the operation of society today.

WHY THIS MATTERS

Employers need a well-informed workforce made up of individuals with the relevant skills. The high reliance on digital solutions creates an urgent need for employees who have acquired relevant knowledge.

School children are taught the basics of computing and this underpins the knowledge of those leaving school when they join an undergraduate programme in computing. This long-standing discipline is one of the important subjects in Higher Education. As a former student on a UK BSc Computing course (and now a lecturer), the author knows what the typical content and theme of these programmes are for students. There will be content on Ethics, Professionalism and Management of IT in general on a Degree Course, but of concern is that IT Standards are only likely to be mentioned in one or possibly two modules on the entire programme. Thus, topics on professionalism are often viewed by students as either uninteresting or irrelevant, leaving them with little knowledge of the complexity of working in the technology environment.

What is missing is a systematic and determined mechanism to explain exactly why all the non-technical aspects are just as important as the core technologies themselves. Essential, too, will be to design creative ways to engage with those new to IT, to explain to them why IT Management Frameworks and Standards are essential to their career development.

WHAT NEXT?

There is an argument to be made that IT frameworks and standards should be taught at all educational levels. However, content becomes more relevant to older learners as they think about their future career. From the age of 16 and upwards, a case must be made that all educational institutions teaching computing should include ITSM content. However, therein lies a conundrum. How do we persuade young people to take up and enjoy ITSM material when they have no prior knowledge of the topic at all?

Given the potential constraints of a country’s educational curricula, it would be best to start delivering ITSM content to those who are aged 16 and above. As stated above, computing degree students do study at least the principles of complementary topics alongside core technology content. Therefore, improving what is on offer to include more in-depth material is likely to help.

Because IT Standards and Frameworks can be viewed as “add-on” topics, it is arguable that what universities currently deliver is not enough to fully encourage learners. Very often IT Frameworks and Standards are seen as topics for Continual Professional Development (CPD). Throughout the past decades, training organisations and industry certification boards have established themselves as the only route to qualification. This is an entire marketing ecosystem, which potentially adds costs to businesses and time and energy for employees, the latter having already progressed through an educational programme.

EDUCATIONAL CHALLENGES

All national University undergraduate programmes must meet an agreed standard in their country. Educational standards exist as underpinning criteria and are put together by subject group specialists and industry advisors in their respective countries and are periodically reviewed. Within a country or a region, academic course designers tend to put material together which
incorporates and supports their specific economic and political environment.

As yet, there is no international consensus about what ITSM content to teach in traditional educational settings. This puts the onus on learners who then have to depend entirely upon accredited ITSM training providers and the existing qualification scheme if no alternative is on offer in their home country.

There is anecdotal evidence that some in education believe that ITSM content is best left to CPD and is therefore outside of the scope of what they should teach.

If educationalists worked in a more trans-national way it would arguably help mitigate some of the challenges to lifelong learning often experienced by students. Students often understand the need for a degree or higher degree qualification in ITSM, and this could help drive change.

Pressure must therefore be placed by students and those working in the IT industry and this can come from many quarters. Concerns from students require an urgent rethink about what value they get from formal study. Businesses too can exert leverage because it is a cost to them if they have to pay for their employees CPD qualifications.

**CONCENTRATE ON THE ESSENTIALS**

Foundation level material in IT Service Management and Standards is surely **MUST HAVE** content at undergraduate level. Extending the reach of the learner’s “inquiry” to include more contextual investigations is arguably a **SHOULD HAVE** and therefore relevant on a degree programme. More advanced material would be categorised as **COULD HAVE** and are thus best delivered after completion of a degree to form dynamic, relevant and progressive CPD schemes. By locating content where it belongs and fitting it into a lifelong learning journey, it could help eliminate ITSM material which is seen as superfluous by employees and employers. Therefore, such content **WILL NOT BE NECESSARY FOR NOW.**

There is also a case to be made for creating an environment where advanced CPD certificates are jointly accredited with universities.

**COMPETING MARKET SPACES?**

By co-operating, education and traditional training organisations will more likely help to create a more inclusive and knowledgeable ITSM community. The diverse market spaces must become more mutually supportive. This is because the more knowledge of the basics and application of IT Frameworks and Standards students acquire, the more likely they are to embark on lifelong learning and research.

**JOINED UP THINKING**

It is unhelpful if a country does not have a central management body which oversees all education provision. That said, any lack of political will from stakeholders should not (in theory) be an issue, as there is an urgent need to go beyond politics and vested interests. However, important questions do arise such as “do educationalists know enough about IT Service Management Frameworks and Standards to competently embed and deliver them on their courses”? Or conversely “do overarching IT industry bodies really want to push (what is normally) CPD content down into traditional education settings” thus reducing their market space?

**DON’T REINVENT THE WHEEL**

Many industries have addressed similar concerns by adopting whole-of-life education pathways which create professionals for their disciplines. Particularly noteworthy are nursing, education and law. These disciplines utilise a combination of approaches which generally focus on:

- Specifically designed courses
- Industry support
- Mentoring and Coaching
- Probationary post-graduate support
- Embedding the concept of CPD
- Lifelong-Learning embedded within the programme

By utilising existing education content, dedicated IT Service Management Degree Programmes could be created. It would require adopting methodical yet imaginative course design methods, which are supported by industry experts, who have the relevant knowledge and experience. By doing this it would add value to existing educational standards.

**SHORT-TERM ACTIONS**

In the short-term there has to be small-scale, but progressive activities. One example of this is that the IT Service Management industry could help co-create a free-to-all short learning package. If they are affiliated with a traditional university, (for example the UK Open University **OPEN LEARN SCHEME**), the content could be shared widely, especially internationally and could potentially integrate into University accreditation.

**A LONG-TERM STRATEGY**

An environment must be created which is underpinned by an effective strategy. IT Service Management must be identified by educationalist and governments as an essential and important career.

References


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Sandra Whittleston
MA Ed, BSc (Hons) Computing, FHEA
Open University, UK