Standards for Teachers of ICTs: Recognising professionalism

**ABSTRACT**

*What does it mean to “develop professional standards”? This paper argues that the task is one of setting up the processes and resources that will bring about an informed and growing teaching community. This is not a task in making lists of the “competencies” that teachers are to be measured against. Considerable work by government and professional associations worldwide have produced useful documents, projects and auditing methods that may not adequately address the implied processes of change. In recognising that professional standards are in fact located in the ongoing development of individuals and groups, we can pursue a standards debate which is located within this process, and with the clear aim of recognising and advancing good practice.*

**Domain**

This paper has been written in attempt to clarify what, for the author has become and elusive debate with a worrying trend towards a single outcome of accountability. To explore this terrain, the issues of standards for teachers of ICT are considered in several dimensions:

- Standards of teaching, how and by whom they are recognised
- The notion of teacher competency
- Determining the nature of ICT teaching.
- The ICT competencies and skills of teachers
- Pedagogical “capabilities”
- Approaches to integrating ICTs in student learning
- Assessment, self assessment, and documentation of competency
- Ambiguity of “raising the standards”

An attempt to explore some of these dimensions follows, along with critical issues that are implied.

**Recognising standards and understanding competency**

Standards of professional practice articulate what members of the teaching profession value and understand to be the specialized knowledge and practice of teaching.

*(Victorian Institute of Teaching 2003)*

The evidence brought from typical standards documents suggests a tension between the role of professionals in developing this articulation of standards, and the realization of the debate in terms of assessment “tools”, checklists, and other material that treats the standards as something static and absolute. An enlightened approach to the standards debate such as the one given by VIT above locates standards in the discourse of the profession. Naturally, teachers are the people best able to recognise and understand good teaching practice, but there needs to be a confidence in the profession’s ongoing and passionate involvement in this work. To continue with the example of the Victorian Institute of Teaching, an organisation specifically set up to provide standards for teacher accreditation, the recognition of what makes good teaching is organised in terms which are largely beyond question. For example in the area of Professional Practice:

> Teachers develop a positive learning environment where respect for individuals is fostered and where learning is the focus…

*(ibid.)*

When we think about standards for teachers of ICT, one would of course expect more specific statements, pertaining to teaching with and about ICTs, and yet the above example alerts us to the position of teachers constantly evaluating our own performances in a bigger picture. This is particularly useful when considering the nature of competency. Traditional understandings of competency necessarily limit expectations and lend themselves too easily to checklisting or other reductive assessment methods. It is easy to test whether a teacher or student is able to operate specific software functions. It is equally easy to test whether a teacher is using a particular software function in building learning experiences for students, but neither of these activities suggests quality learning, nor do they encourage or recognise good teaching practice. Understanding the many contexts of the learner, teacher and system is critical and not easily documented with traditional measures of competency.

Recent work by the Department of Education, Science and Training (DEST) identifies these contexts along with a recognition of the real need to provide teachers...
with technology skills. In this paper, it is argued that the two issues have become confused, and that ICT competencies are an outcome of a solid ongoing debate of standards, and far from an issue of accountability.

**The nature of ICT in teaching**

It is widely understood that learning experiences can, in many cases gain from the applications of ICTs in students research, simulation, collaboration, concept mapping and documentation to name a few. Teachers in all Australian states and elsewhere in the world are encouraged to “integrate” and “incorporate” relevant experiences of ICTs to enhance learning and to prepare students of all ages to participate in a world where these literacies have become critical. Naturally then, standards of teaching with ICTs and ICT competencies for teachers and students are of interest to the entire profession.

Teachers responsible for studies about ICTs in Information Technology / Computer Studies courses are in the same position although particular pedagogies addressing the ways that people learn this particular subject matter merely create an additional dimension. It remains to be asked whether specific arrangements need to be made to address ICT standards and competencies for the latter group. It could be argued that these groups are codependent to the extent that one discourse will be more valuable than isolating them. This is particularly evident when either group is to be consulted with respect to accreditation standards or promoting best practice.

**Assessment, self assessment, and documentation of competency**

References to levels of technology proficiency are common in government and independent documents, and there are many examples of instruments designed to be used to assess teachers’ proficiency or readiness (UNESCO). Typical of these, the International Society for Technology in Education (ISTE) has worked with the National Educational Technology Standards project since 1998 to develop documents for a comprehensive overview of ICT standards for teachers as well as for students and administrators. The detail of the NETS standards are defined in terms of “profiles for technology literate teachers” (ISTE) and generally use a pedagogical language, although the first several items require demonstrated competence with hardware and software, and knowledge about systems and devices. The important concern with extensive documents of this kind is that without the context or “ownership” of the group who are to use them, they become mechanical checkboxes too easily appropriated to accountability measures.

In Australia, the state of Queensland has produced documentation and an assessment instrument known as “Continua” allows teachers to create a personalized document and map of their responses to challenges in four key areas:

- ICTs and curriculum integration, classroom planning and management
- Productive Pedagogies through the use of ICTs
- ICTs knowledge, skills, processes and attitudes
- Decision making and planning

(Queensland Department of Education, 2002)

Two issues are raised by documents of this kind. Notwithstanding the high quality of these materials in their pedagogical underpinnings and background, their connection with the profession is seemingly incomplete. Feedback by these instruments is usually in terms of implied developmental stages, and yet there is little recognition that teachers (or students) arrive at various points of expertise as a result of their own interests and personal development. Instruments which provide scaled measures are intimidating and negative in design.

Rhetoric from system designers will not overcome a user’s view that they are being measured against arbitrary criteria, and the uses of words like “leader” or “expert” or “advanced” will not relieve this. An implied sequence is meaningless except for the questionable role of comparison. My second point is that the ownership of standards is taken from the professional by the developer of standards. Many projects enlist groups of teachers to develop and refine criteria for these documents and instruments, but the teacher who is faced with using one is most often at a great distance from the community that discusses or “sets” the standards. The standards are then seen to be immutable, fixed and with a precision relating to some else’s contexts. In the worst cases, professionals are recruited to the task of identifying good practices, competencies, capabilities for the purpose of developing initial ownership and cooperation. In certain cases this includes donating resources to this professional cause.

It’s important to ask, What will be left at the conclusion of the consultative phase? A measurement tool? Materials in databases? Implementation guidelines? None of these creates or implies a process of improving standards. The language of standards emerges from discussions about learning and teaching in a dynamic way This is a continuous discussion, and not one that took place some time ago and was resolved. Expressions such as “performance management” and “indicators” is likely to remain in the place that should be occupied teachers able to organise and meet and argue.

Since the very first computer disks were passed around, and moderns dialled, teachers have been encouraged to donate
their work and ideas to databases. In so many years examples of good work, rightly regarded as professional treasure, are separated from the people who create and adapt them. The present models of standards debates similarly revolve around samples of work attached to self-evaluation grids in the belief that this would inspire encourage better learning and teaching. Teachers need to meet with other teachers in both structured and semi structured spaces for legitimate talk about standards. Creating those spaces is in fact the issue for standards.

**Voice**

This paper argues for a community to produce and collect examples of good practice in ICT education. Such a community needs to encompass a wide group to speak to many stakeholders. It should speak on behalf of ICT teachers and teachers using ICTs, to colleagues, government, the public, industry and tertiary education. There are particular needs for ICT teachers to speak to tertiary and other institutions to resolve a debate about pathways from secondary school Information Technology studies to work in the information technology sectors. Equally there is a need for all teachers engaging with ICTs to have a public voice in the areas of values, ethics and equity with respect to technology in society.

Other stakeholders include:

- Researchers and teacher educators. When engaged in an ongoing discourse about standards, strong connections are made between theory and practice and effective networks are celebrated. Equally, channels for communicating research needs and findings can be established as integral to teaching.
- New and returning teachers. The discussion of standards can be based in an identified and well resourced community.

**Ambiguity**

When we talk about standards for teachers, much of the current literature implies a static and measurable paradigm. There are many attempts worldwide to create documents of this kind as I have discussed. “Standards” in the context of professionals working in a field that produces so many challenges might be better understood as the professional discussion and associated collection of support networks and resources. “Raising the standards” might mean improving the quality of our work when measured against various criteria, but it could just as well mean introducing a discussion.

**Work to Date**

In order to meet the perceived need for better collaboration across Australian states and to address “patchy statements” of teacher competence, The Australian Council for Computers in Education (ACCE) produced a comprehensive discussion paper (Pagram, 2000). This report noted that:

Teachers need programs of professional development, which provide them with experience and understanding of the use of information technology and which provides frameworks for them to interpret their personal experiences.

(Pagram 2000)

ACCE has officially endorsed a view of the standards debate in terms of learning outcomes for students, and standards that accommodate the diverse roles of teachers. Measurement does not feature in this paper. Significantly, the authors state that without access to technology, resources and professional development, the notion of competencies represents a threatening framework for teachers (Pagram 2000). In this context, standards are regarded as a “formative tool” rather than conditions of employment or advancement.

This view is consistent with the profession constructing its own policies and resources relating to standards. On the other hand, Tool is still problematic to this discussion since it implies a simple one-dimensional method that can identify features, practices, competencies, capabilities, skills and so on. More troubling is the assumption or application of such tools in presuming a linear progression as one moves from a defined category of teacher to the next. It is surprising that educators who are so capable of discussing the “whole” student, and their many dimensions of experiences and qualities are unable to regard their own profession being as equally complex.

**CONCLUSION**

In 1999 the Australian Research Council funded a three year project to develop standards in English language and literacy teaching. This project involved a consortium of professional associations who worked extensively across all states to develop materials, strengthen networks, and collect narratives of best practice from practicing teachers. This project is an example of the profession making the issue of standards its own. Furthermore, in producing extensive documentation, website and CDROM of documents and narratives it aims to strengthen that community through the process (Australian Association for Teacher of English [AATE] 2003).

A resolution to the debate about competencies and standards cannot to be “settled” but it should be possible to provide the opportunities and issues for debate and to highlight the tensions that arise from teachers’ concerns and differing contexts and curriculum imperatives. Such an approach might be taken by professional associations interested in the promotion and support of ICTs in education. This addresses the purpose of locating a discussion and documents of professional standards for ICT in education.

Teachers discuss standards every day of their lives, and they do this in the forms of stories about their teaching and the work of their colleagues. It is the collection and connection of these narratives that can make up the context for standards. In this project, teachers of ICTs could reclaim the discussion about standards and then provide a forum for debate and specific tasks like accreditation and transition. This approach rejects an externally set paradigm of accountability. The profession is the expert and the appropriate commentator and resource for standards.


**REFERENCES**


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