

ITEM Strategic Planning

Two Approaches

Christopher D. O'Mahony

Uppingham School, UK

Abstract: Best practice in IT for Educational Management (ITEM) promotes the value of robust strategic planning. In schools, however, the experience of the 1980s and early 1990s suggested that school senior management teams were inadequately trained and prepared for managing the development of an ITEM Strategic Plan and driving its implementation. From around 1995 to the present day, school management teams have been becoming more sophisticated in their approach to ITEM Strategic Planning. This paper considers the approaches of two schools to ITEM Strategic Planning – one in Australia and one in England – and compares the advantages and disadvantages of the two approaches. The paper discusses issues surrounding governance, collection of evidence, approaches to professional development and feedback mechanisms. Similarities and differences between the two approaches are highlighted, and recommendations made that are of relevance to schools that are seeking increased effectiveness in their ICT efforts.

Keywords: School information systems, Strategic Planning, Professional Development, Educational Management, information technology

1. INTRODUCTION

It was Harry Mintzberg who once wrote that “strategic planning” as a process was inherently doomed, since it attempted to integrate two fundamentally different mindsets (Mintzberg 1994, 2005). From his point of view, “strategy” is about inspiration, intuition, vision, whereas “planning” is about perspiration, persistence, and sheer plod. The author would argue that, although this disconnect can explain why so much strategic planning fails, genuine organisational growth depends on effective synergy between these two mindsets. A similar dichotomy often exists between “leadership” and “management”, and between “effectiveness” and “efficiency”. Other authors argue that, by harnessing the dynamics of these apparent opposites, they in fact become complementary (Covey 1990, 1992, 2004; Bossidy & Charan 2002). That is, one depends on, relies on, works with the other to achieve true organisational improvement. Leaders need managers, and managers need leaders; efficiency depends on effectiveness, and vice versa; strategy

relies on planning, and planning starts with strategy. Leaders are into strategy, managers are into planning.

In schools, another dichotomy exists – between two quite different organisational cultures. Academic members of school staff tend to function in a professional, collegial mode, whereas non-academic support staff tend to function in a more bureaucratic, mechanistic mode. Schools, like universities and hospitals, demonstrate an organisational culture described as a “professional bureaucracy” (Mintzberg 1994, O'Mahony 2000). Given that most school senior management teams are academics, strategic planning skills often tend to be under-developed.

IT for Educational Management (ITEM) has had a very brief history of implementation in schools, dating from the mid-1980s. During the period from 1985 to 1995, ITEM strategic planning was generally unsophisticated. In educational ICT, change is the one constant. For the most part, educational institutions have been on the receiving end of ICT innovation, responding to change rather than driving change. As a result, the adoption of ICT innovations in schools more often follows ad-hoc diffusion models, rather than as an outcome of specific decision-making strategies. Thus, investments by schools in products / solutions such as school administration systems, email systems, local area networks, laptop programmes, intranets, VPNs, VLEs and the like, can be isolated decisions rather than forming elements of some wider strategy (Jones 2003).

From 1995 onwards, however, as ITEM has become more embedded into educational institutions, school efforts at robust ITEM strategic planning have been improving. This paper investigates the efforts of two schools at building comprehensive ITEM strategic plans, noting their similarities and differences, and discussing the positive and negative aspects of each.

The following sections consider the two case study schools in terms of:

- Base school profile comparisons
- Overall strategic directions
- Governance mechanisms
- Consultative processes
- Key components of the plans
- Professional Development themes

The paper concludes by exploring those dimensions that characterise a good ITEM strategic plan.

2. SCHOOL PROFILES AND STRATEGIES

The Australian case study school is an independent day and boarding college for boys in Sydney, Australia, established in 1880. Although initially hesitant to embrace ICT innovations in the early 1990s, the school's management realized in 1994 that a number of factors were at work which required a whole-school strategy for ICT. The school tabled its first ICT Strategic Plan in late 1995, with a focus on core network connectivity,

hardware supply, staff training and support services. From that time onward, the school has produced successive ITEM strategic plans on a triennial basis.

The UK case study school is an independent boarding school for boys and girls in the East Midlands area of England, established in 1584. The school’s journey with ICT has been quite haphazard in approach, moving from a low base in the 1990s to a significant investment in networks and hardware in 2000. Despite this one-off capital injection, ongoing support for ICT in the school has been piecemeal, and the first formal ITEM strategic plan was only tabled in 2007. A useful comparison of the two case study schools is as follows:

Dimension	UK Case	Australian Case
Pupils	760	1550
Pupil gender	Boys and Girls	Boys
Academic Staff	110	190
Support Staff	370	60
Acres	120	110
Computers	1400	750
ICT suites	10	14
Servers	14	35
Printers	300	80
ICT Support Staff	8	10
Computers - to - ICT Support Staff	1-to-175	1-to-75
Internet connectivity	2mbps	10mbps
Annual fees income	GBP 18,000,000	GBP 14,000,000
Annual ICT expenditure	GBP 500,000	GBP 1,000,000
% ICT spend vs. income	2.8%	7.1%

Figure 1: Comparative profile of case study schools

Each of the case study schools has encapsulated its vision for ICT with a visual device that brings together the disparate elements of their respective ITEM strategic plans. These models assisted in providing visual links with each school’s over-arching development plans, ethos and mission statements. These ‘top level’ models are shown in the following figures:

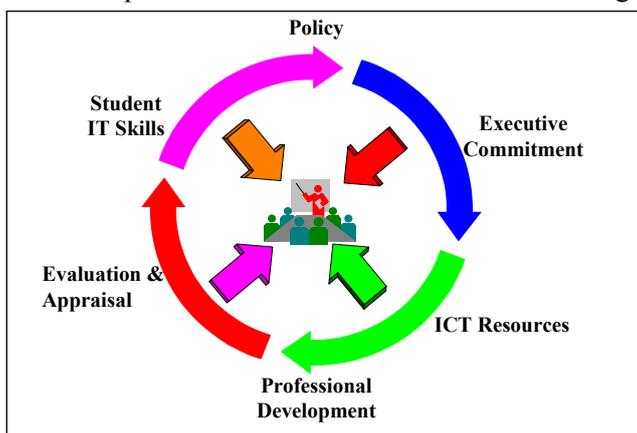


Figure 2: Australian strategic model

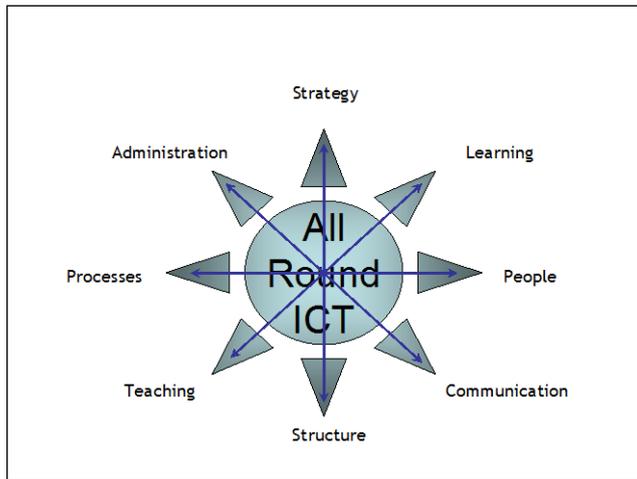


Figure 3: UK strategic model

3. GOVERNANCE MECHANISMS

One of the critical success factors for an ITEM strategic plan is the degree of ownership or ‘buy-in’ from various stakeholder groups within a school. An ITEM strategic plan does not spring fully-formed from the mind of a single individual, but is the result of much consultation, both horizontally across many people at the same organisational level, and also vertically across many people at different authority levels in the school.

Governance mechanisms in place in the two case study schools showed many similarities, but also some key differences (see Figure 4 below):

Organisational Level	Australian case study school	UK case study school
1	College Council	Trustees
2	Headmaster	Headmaster
3	Finance Committee	SMT
4	IT Committee	Bursar
5	Director of Business Operations	Director of Information Systems
6	Head of IT	IT Steering Committee
7	Heads of Department	Heads of Department
8	Teaching and Support Staff	Teaching and Support staff

Figure 4: Governance elements in case study schools

In the development of ITEM strategic plans at the case study schools, the Head of IT (Director of I.S.) acted as the main point of contact in both cases. The development of ITEM strategic plans at both schools tended to be iterative in nature, with successive drafts of the plans requiring critique and sign-off at various governance levels.

An indicator of the evolving sophistication of ITEM strategic governance was the increasing degree of rigour and justification required in successive plans over the period 1997 to 2007. In 1997, the Australian ITEM strategic plan achieved sign-off at level 3, whereas in 2006 this sign-off was reserved for level 1. In 1997, the UK school did not have an ITEM strategic plan, but in 2007 sign-off was at level 2.

A further point of divergence is the organisational positioning of the IT Committee within this governance structure. In the Australian school, the IT Committee was a sub-committee of the Finance Committee, which in turn was a sub-committee of College Council. As a result, the IT Committee had a predominantly finance-loaded composition, tending to favour the 'bureaucratic' over the 'professional' culture. The Head of IT acted as secretary to this body. In the UK school, the IT Committee was a sub-committee of SMT, had a stronger composition of academic staff. In this case, the Director of I.S. chaired this body. Understandably, given these differences, accountability in the Australian case tended to be quantitative, whereas accountability in the UK case tended to be qualitative.

Each of the schools investigated engaged in wide consultation in the development of their ITEM strategies. As can be seen in the tables below, each sought to engage in dialogue with as many relevant parties as possible. Each school also went through multiple iterations of the draft strategic plan, before achieving final sign-off.

The components of each school's ITEM strategic plan were carefully compared. Many elements were seen to be common between the two plans – strategies for hardware acquisition, software acquisition, business continuity and disaster recovery, learning management systems, database strategies, professional development programmes, and the like. A detailed analysis of the two ITEM strategic plans suggested that ICT efforts at the two case study schools was at differing levels of sophistication. In this regard, 'stages of growth' models of ICT evolution would suggest that the Australian case study school was at a higher stage of growth than the UK counterpart (Nolan 1979, Galliers & Sutherland 1991, O'Mahony 2000). This is unsurprising, given that the Australian ITEM strategic plan was in its fourth triennial phase, whereas the UK school had only just completed its first plan.

4. PROFESSIONAL DEVELOPMENT COMPARISONS

Other papers presented at ITEM conferences by the author have highlighted the crucial nature of ICT professional development to achieve effectiveness in ITEM efforts (O'Mahony 2002, 2004, 2006). Other authors acknowledge that merely providing hardware and software resources in schools is not sufficient to generate effective use (Cuban 2000, Kennewell et al 2000, Mumtaz 2000, Lambert & Nolan 2003, Kennewell 2003.)

All schools acknowledge that, in addition to the provision of ICT hardware and software, it is crucially important to provide ICT training for staff. Broad-brush initiatives such as ECDL have always been a useful starting point, but it is increasingly recognized that staff ICT training must be customized, both for individual schools and for individual staff. A growing body of empirical evidence makes it clear that there are genuine and measurable improvements in ICT use through a robust ICT PD programme and strategy.

In both case study schools, staff were asked to complete ICT competence surveys, in an effort to discern professional development needs. Staff were asked to self-evaluate their current competence on a range of applications, and then asked to indicate their desired future competence on the same application set. By analyzing the difference between 'current' and 'desired', a set of PD priorities can be established. Key points in both schools were:

- Staff believed themselves generally competent with websearching, email and wordprocessing;
- Staff were seeking to improve their skills with Excel, Powerpoint, Intranet and digital whiteboards.

In both case study schools, staff were asked in the same survey to rank a set of 'ICT inhibitors' – elements that may be holding them back in their use of ICT. In rank order, these were as follows:

1. Time
2. Quantity of ICT Training
3. Quality of Staff ICT
4. Quantity of ICT Support
5. Quality of classroom ICT
6. Quantity of Staff ICT
7. Quality of ICT Training
8. Quality of ICT Support
9. Quantity of classroom ICT
10. Willingness

This result is consistent with similar research in other educational establishments (ACCAC 1999). "Time" and "Lack of Training" are seen as the two biggest areas preventing effective ICT use. Any ITEM Strategic Plan needs to genuinely address items ranked 1 to 5.

5. CONCLUSIONS

There are many lessons learned by schools, and in particular by school management teams, through the development of ITEM strategic plans. Some of these lessons are summarized below:

- Good ITEM strategy must be informed by robust research and well-exercised methodology;
 - An ITEM strategic plan is much more likely to receive acceptance across a school community, and to achieve its

objectives, if it is based on validated evidence and if it is developed using methods designed to articulate comprehensive goals and objectives;

- Good ITEM strategy must be continuously evaluated and reviewed;
 - An ITEM strategic plan needs to include relevant checks and balances. Regular review checkpoints needed to be included at all stages – development, implementation, and post-implementation. Strategies and programmes need to have specific and measurable (SMART) targets associated with them, enabling clear analysis of return-on-investment and other metrics.
- Good ITEM strategy leads to improved organisational agility and effectiveness;
 - By ensuring clear articulation with school-wide development plans, by ensuring ‘ownership’ of the strategy by all relevant stakeholders, by ensuring that the strategy is grounded in firm evidence, and with appropriate control mechanisms, it is highly likely that the plan will be a valuable tool in taking the school forward.

Characteristics of a good ITEM Strategic Plan, as seen in the two cases discussed in this paper, include:

- Articulation with school-wide development plan
- Clearly-articulated governance mechanisms
- Evidence of wide consultation
- Development of the Plan should be iterative
- Initiatives linked to programmes linked to strategies
- SMART targets
- Feedback mechanisms
- Built-in regular review process
- Well-communicated with all relevant stakeholders

A robust ITEM strategic plan demonstrates to school leaders and the wider school community that ICT efforts are genuine and sincere, and that the strategy is an expression of collective will. It is also a clear indicator that a school is willing and able to evolve its ITEM efforts to more complex levels, ultimately with visible benefits in teaching, learning and administration.

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