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BENCHMARKING E-LEARNING IN UK UNIVERSITIES: LESSONS FROM AND FOR THE INTERNATIONAL CONTEXT

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Summary

Using participant-observer evaluation with documentary review, the author traces the history of the Pick&Mix benchmarking methodology in the UK programme on benchmarking e-learning up to the current day. The paper aims to show how other countries can use a similar methodology, and discusses the ranges of applicability.

The paper focusses on: benefits of an open educational methodology; refinement of criteria; issues of alignment to national government and quality agency mandates; project management approaches; making use of consortia, and how to ensure deep discussion within institutions. In particular, evidence is put forward for the restriction to around 24 criteria.

The author has been active in all four phases of the UK programme; has been an international advisor to the Australian scheme, collaborated closely with the main New Zealand expert, worked with EU projects, and analysed other schemes for their relevance to the UK. The author had a unique position in the UK programme including creating one of the leading methodologies (Pick&Mix) and updating three others, directly overseeing half the activity and being in charge of the final phase in Wales. The full range of comparative work on criteria has not been published and the conclusions on international use are new.

Introduction

This paper traces the history and features of the benchmarking methodology Pick&Mix (used throughout the UK programme on benchmarking e-learning in universities). Pick&Mix has drawn on and influenced work from the US, Australia, New Zealand and EU projects. The paper concludes by suggesting how other countries can use Pick&Mix.

Setting the scene

Benchmarking originated in the US as a response to competitive pressures in the early 1970s (Camp 1993). Gradually it took on aspects of self-analysis and comparison against industry "best practices".

The first occasion in the UK when "benchmarking" started to be used in university e-learning circles was when the Higher Education Funding Council for England (HEFCE) put it into its e-learning strategy (HEFCE 2005):

> Possibly more important is for us to help individual institutions understand their own positions on e-learning, to set their aspirations and goals for embedding e-learning - and then to benchmark themselves and their progress against institutions with similar goals, and across the sector.

This led to the *Higher Education Academy/JISC Benchmarking of e-learning Exercise* - the *Benchmarking Programme*. This ran in three phases (Pilot then Phases 1 and 2) from late 2005 (Higher Education Academy 2008, 2009). For the main phases, two contractors were appointed: Observatory on Borderless Higher Education (OBHE) and Benchmarking e-Learning Associates (BELA). These phases were in turn followed by the *Gwella* phase in which four universities in Wales were benchmarked by BELA using Pick&Mix.

History of Pick&Mix

Pick&Mix was developed in early 2005 so that Manchester Business School (MBS) could benchmark e-learning against its global competitors (Bacsich 2005c). To do this required the creation of an analytic framework - created within the parameters of HEFCE (2005).

It is never easy to recapture the "Eureka moment", but the author recalls weeks of hard work, relaxing one evening, and waking up with the bare bones of the system (Bacsich 2005a). The "parents" were the CITSCAPES approach from UK Further Education (colleges) and the Quality on the Line system from US distance learning (Bacsich 2005b). Like all children there were unexpected features - the 6-level scheme, the focus on output and process, and the "realistic" style of criterion phrasing.

Criterion P01 "Adoption" is an archetypal example of a Pick&Mix criterion:

1.   Innovators only.
2.   Early adopters taking it [e-learning] up.
3.   Early majority taking it up.
4.   Late majority taking it up.
5,   All taken it up except some laggards.
6.   First wave embedded and universal, second wave starting.

In late 2005 Pick&Mix was adopted by the Higher Education Academy as one of the three main methodologies for the Benchmarking Pilot. Across all the phases, 24 institutions used it out of the total of 82 benchmarked. The BELA team ran Pick&Mix and three other methodologies in their part of the programme, with overlapping sub-teams, leading to fruitful cross-flow between methodologies.

There was detailed analysis of MIT90s (Bacsich 2006c) - including a review of the considerable Australian and New Zealand work (Wills 2006; Uys 2000). A decision was then made for Pick&Mix to adopt the MIT90s categories. This rapidly became the approach of Pick&Mix - to seek to incorporate best practice without compromising the initial vision.

The MIT90s work was part of the Concordance Programme (Bacsich 2006b) which carried out studies of most methodologies including the EU schemes BENVIC (Bacsich 2006a), E-xcellence (EADTU 2006; Bacsich 2006d) and CHIRON (2006). The main output from these studies was to extend Pick&Mix with some additional criteria e.g. from BENVIC. Originally Pick&Mix had a number of core criteria, *all* of which had to be analysed. However, it became

clear from the Pilot Phase onwards that new criteria were needed, but not necessarily relevant to all institutions. Thus was born the concept of *supplementary criteria* which institutions could *choose* to use in addition to the *compulsory* core criteria. This was one of the most popular features.

A harder task was to understand the commonalities with eMM (Marshall 2005; Marshall and Mitchell 2007), which adds a cross-cutting layer of five "dimensions" to the basic benchmarking scheme. Thus every criterion has to be scored *five* times, making the scoring process more time-consuming even if more thorough. Eventually, most institutions decided that this was not worth the extra work, though eight institutions did use it. In converse, it was decided that it was not useful to produce a "dimensionalised" version of Pick&Mix.

The author of Pick&Mix was the international advisor to the Australian ACODE (2007) benchmarking scheme. This had benefit in reverse also. In particular, ACODE had an interesting concept of *sub-criteria*, where a criterion is split into a few parts, scored separately. This had a direct effect on Pick&Mix: in the Pilot, one of the Pick&Mix criteria "Decision-making" was in reality treated by most institutions as a group of two sub-criteria: this was then split into one criterion for "Projects" (IT developments) and one for "Programmes" (courses). Similar considerations led to the split of "Quality Enhancement" out of "Quality Assurance". Thus the original 18 core criteria became 20 in summer 2006.

Key topics

Number of criteria

Pick&Mix had a founding vision that the senior management team of an institution would be involved in the final scoring of criteria so that they, not experts, "owned" the decision. Reflecting on his own knowledge of such meetings, the author concluded that the number of criteria that such a team could effectively process was around 24. This limit is often associated with the Balanced Scorecard (Kaplan and Norton 1996) and is found in implementations of this in education - e.g. the Balanced Scorecard (Becta 2007). See also Institute for Higher Education Policy (2000) for another 24-criterion scheme.

In Pick&Mix this limit was confirmed in practice. Institutions rarely add more than 4 new criteria to the core 20, and in only two cases more than 7 (Bacsich 2008a, 2009). This limit raises questions over other methodologies with more criteria - the vital element of "buy-in" from senior management cannot be obtained in the same straightforward way as with Pick&Mix.

Benefits of an open educational methodology

Pick&Mix works within a context of an "open educational methodology". Each release of the system and associated reports is placed in the public domain (via a Creative Commons license). There is also a wiki supporting a mass of benchmarking material including much on Pick&Mix (ELDDA 2008). It is rare to be *this* open - several other methodologies used in across the world for benchmarking e-learning do not operate in this way. Being open implies that a "scholarship of benchmarking" can more easily arise, since the methodology, underpinnings, evaluations and uses are easy to access, and users motivated to improve the system.

Refinement of criteria

Similarly, criterion statements can be "polished" over each phase of development. It is extremely hard to write good benchmarking criteria - it needs clarity without abstraction, conciseness without vagueness, etc - and there is almost no documentation to help - except *Creating criteria* (Bacsich 2006e).

Project management approaches

The main distinction between benchmarking methodologies used in UK higher education has emerged as between those that (1) require an up-front creation of a report which experts then analyse or (2) engage in "co-creation" of insight with a document as an end-product. All the methodologies that BELA uses are type (2) - "moderated developmental self-review" - more suited to quality *enhancement*. Type (1) seems the standard approach now for quality *assurance*.

Making use of consortia

However it has become routine for BELA to use peer review also - but of a rather different kind from that in quality assurance. Typically each benchmarking group of institutions meets around four times during its life cycle, usually rotating meetings round institutions. When there are four institutions and four meetings this model works particularly well and is called *CAMEL* (JISC infoNet 2008), but up to 10 can be grouped. Unlike in quality assurance the peers are not experts: the benchmarking consultants are. Group working again introduces upper limits on the complexity of the benchmarking methodology, because a key part of the approach is for each institution to give an "elevator presentation" at each meeting.

How to ensure deep discussion within institutions

Some methodologies have a two-level approach with relatively few criteria but a large number of "indicators" (detailed questions) - like ELTI (2006) and the "practices" level of eMM. The new *Generator* methodology (Becta 2009) for colleges in England is similar. A potential danger of these is that the process of generating answers to so many indicators becomes "ticking boxes" not discussing issues. A related danger is when benchmarking is conflated with a survey - as had to be done in the DSA study (Sero 2007) on Scottish colleges. For English colleges, Becta has decided that the benchmarking (via Generator) and the survey will remain separate activities.

Pick&Mix has always resisted the creation of a lower layer of indicators, feeling that the benefits of uniformity are outweighed by the risks of superficiality - but analysis is done at a detailed level within the institutions, for example by using staff surveys and student surveys.

Issues of alignment to national government and quality agency mandates

In most countries, the development of e-learning by institutions is seen as mainly an issue for the institutions. However, in some countries, national initiatives for e-learning have been set up: this raises the issue of how they relate to the national quality agency for the country's universities.

In the UK the Quality Assurance Agency (QAA) has a *Code of practice*, of which one part is "Collaborative provision and flexible and distributed learning (including e-learning)" (QAA 2004), with 23 precepts. Pick&Mix ensures that these are covered by its criteria, although it regards the precepts as indicators feeding into the Pick&Mix criteria rather than always

criteria in their own right. (Quality criteria tend to operate at a more detailed level than benchmarking criteria.)

The other type of national indicators that are relevant prescribe not the "quality" of e-learning but the "quantity" or "mode". This is the case in some of the UK - the discussion that follows applies only to England and Wales.

In England HEFCE (2005) introduced in its national e-learning strategy the 8 "Measures of Success". For example Measure A said:

> ICT is commonly accepted into all aspects of the student experience of higher education, with innovation for enhancement and flexible learning, connecting areas of HE with other aspects of life and work.

In Wales the equivalent body (HEFCW 2008) introduced 22 "Indicators of Success". The English college sector had the *Harnessing Technology* Balanced Scorecard (Becta 2007) containing 19 indicators.

It used to be thought (including by the author) that the best way to align Pick&Mix to national indicators was as follows, adapted from Appendix E of (Sero 2008):

* Rewrite each indicator from the national indicators set to remove "political" and "aspirational" language elements
* Decompose each indicator into one or more "atomic" indicators. (Measure A above decomposes into four atomic indicators.)
* Rewrite each atomic indicator into criterion format with level statements.
* Adopt that criterion as a new supplementary criterion for Pick&Mix, possibly replacing some existing criterion, maybe one in the core set.

However, this approach is difficult in practice. The meaning of national indicators is often unclear and the indicators often omit key features. Moreover, the lifetime of national indicators is less than that of university planning cycles - universities want consistency.

Thus experience has taught that it is better to be *informed* by national indicators rather than *dominated* by them - one erects a "cordon sanitaire" between the benchmarking system and the national indicators. This is now the strategy for Pick&Mix, in particular for Wales.

Internationalisation aspects

There is a tradition of moving e-learning methodologies between countries, for example the adaptation of the "Round Table" methodology to the UK (Mistry et al 2002; JISC 2002). Lessons learned stress the importance of ensuring that both the terms and the concepts translate appropriately, quite separately from any translation of the language.

In benchmarking the main transfer has been of eMM from New Zealand to UK universities and Scottish colleges. The eMM transfer raised language issues - Adamson and Plenderleith (2008) noted that there was "need to change the language and terminology in one approach (eMM) for use in the UK HE context". Similar more substantial changes were required when adapting eMM to be used with Scottish colleges (Sero 2007).

However, a further UK complication is that there is not *one* vocabulary. The "old universities" and the "new universities" have different vocabularies even though they are slowly converging. The college sector has another vocabulary yet delivers an increasing amount of university-level teaching (QAA 2008). Pick&Mix copes by using a "smeared vocabulary" in its

criterion wording - the scheme notes that "An idealised model of an HEI is used to simplify the narrative" (Pick&Mix 2007).

So how does one adapt a national methodology to international use? As evidenced above, one can get practice in this within the UK. Lessons from this and the modifications to use Pick&Mix in Wales led to adjustments. Pick&Mix now has a *generic version* called ELDDA (2008). Then the generic version is *instantiated* into a particular country and sector - with appropriate changes in vocabulary.

It is also likely that the specific set of core criteria will change. However, it is believed that there would still be some "common core" of criteria, perhaps around ten, that would always be relevant to Pick&Mix in any country. For example, only a few countries take seriously the issue of costs in e-learning, yet two whole core criteria are devoted to it in the UK (Pick&Mix) version of ELDDA. Yet many other core criteria are not usually challenged.

There is confirmatory evidence from the Re.ViCa (2009) project. A group of international experts have been looking at the Pick&Mix criteria from the point of view of relevance to critical success factors for e-learning - in that set only 10 of the core criteria were specified as vital. This list generated impassioned debate with very different views from different countries. Interestingly some issues which in the UK are seen as very important such as marketing and costs were seen as much less important by some other delegates - on the other hand there seemed to be more agreement on fundamentals of pedagogy, technology and strategy.

Conclusion

Pick&Mix is a methodology used for benchmarking e-learning in UK universities on a wide scale. It is still under active development - including adapting it to benchmark distance learning - in the DUCKLING project (Salmon et al 2008) - and to include further output measures (Bacsich et al 2009). It has benefited from substantial input from outside the UK higher education sector and has begun to influence developments outside the UK.

The most natural set of countries where Pick&Mix could be applied in the near future are those with:

* a critical mass of existing e-learning implementations
* a funding approach where "funding follows the student" rather than fixed grants to institutions
* a blend of competition plus collaboration between institutions.

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