

Visualizing strategic change in an educational development centre with product-based analysis

Saleem, M. , Prot, S. , Anderson, C. A. and Lemieux, A. F.

Author post-print (accepted) deposited in CURVE February 2016

Original citation & hyperlink:

King, V. (2012) Visualizing strategic change in an educational development centre with product-based analysis. *International Journal for Academic Development*, volume 18 (3): 222-236

<http://dx.doi.org/10.1080/1360144X.2012.680888>

ISSN 1360-144X
ESSN 1470-1324
DOI 10.1080/1360144X.2012.680888

Copyright © and Moral Rights are retained by the author(s) and/ or other copyright owners. A copy can be downloaded for personal non-commercial research or study, without prior permission or charge. This item cannot be reproduced or quoted extensively from without first obtaining permission in writing from the copyright holder(s). The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the copyright holders.

This document is the author's post-print version, incorporating any revisions agreed during the peer-review process. Some differences between the published version and this version may remain and you are advised to consult the published version if you wish to cite from it.

ARTICLE

King, V. (2013) 'Visualizing Strategic Change in an Educational Development Centre with Product-Based Analysis'.
International Journal for Academic Development, 18(3), 222-236. DOI:10.1080/1360144X.2012.680888

Visualizing strategic change in an educational development centre with product based analysis

Virginia King*

Centre for Educational Research, Coventry University, Coventry, UK
Centre for Educational Research,
Coventry University,
Priory Street,
Coventry
CV1 5FB

*Email: v.c.king@coventry.ac.uk

Acknowledgements

Thanks are due to colleagues for their friendly critique on early drafts of this paper and the development of the two strategies it contains, as well as to all those who have supported the development of the PBA technique over the years. PRINCE2® is a trade mark of the Office of Government Commerce, UK.

Notes on contributors

Virginia King is a UK-based higher education consultant. Specializing in project management and educational research evaluation, she works with a range of higher education institutions. In diverse international roles as editor, conference convenor, peer reviewer, collaborator and critical friend, she has helped numerous colleagues refine and publish their research. Her own publications concern visualization techniques, change, and education research communities.

* Email: v.c.king@coventry.ac.uk

Visualizing strategic change in an educational development centre with product based analysis

Product based analysis (PBA) is a new way of modelling the strategic direction of an educational development centre (EDC). It was developed within an English EDC to complement other strategic techniques, providing a means of visualizing the overall strategy. This critique of PBA is set in the context of global university reforms, restructurings and economic constraints which EDCs mirror in miniature. The case for PBA is demonstrated through two exemplars, one retrospective, the other applied to the same group, now dispersed several years on, as it sets out a collaborative strategy to address the future uncertainties shared by many EDCs.

Keywords: academic development; case study; educational development centres; higher education strategy; product based analysis

Introduction

Educational development centres (EDCs) have always known change. This article introduces, demonstrates and critiques product based analysis (PBA), a new way of modelling a change strategy. The need for suitable approaches to support strategic change has been expressed repeatedly in this journal. For example, Reid and Marshall (2009); Di Napoli, Fry, Frenay, Verhesschen and Verburch (2010); and Holt, Palmer and Challis (2011) each in their own way, argue the need for new ways of clarifying the strategic position and of responding to it imaginatively and proactively. PBA is therefore offered as a new tool in the 'toolbox' of strategic analysis techniques. Its role is to help an EDC meet its institutional challenges when used alongside such established approaches as force field analysis or stakeholder analysis. PBA is a holistic approach which supplies the process-flow missing from these static and specialist techniques. PBA potentially benefits educational development in three ways: by helping to clarify the factors that are driving strategic change; by encouraging the exploration of alternative ways forward which prioritize strategically beneficial activities; and by highlighting which aspects of a strategy are within an EDC's sphere of influence, which are not, and how they relate to each other. In addition to these potential benefits, PBA's contribution is a diagrammatic model of strategic direction which provides the focus for debate and subsequent planning.

The educational development centre strategic context

Demographics, changing values, emerging technologies, funding, competition, employer engagement and interdisciplinarity are just some of the drivers for strategic change in higher education anticipated by Kubler, Sayers, and Watson (2010). In the current global 'frenzy' of university reforms (Wright & Rabo, 2010, p. 1) the drivers themselves may be contested, but the constancy of change cannot be. Gosling (2009), in the United Kingdom, and Holt, Palmer, and Challis (2011) in Australia show how these pressures and reforms are replicated in miniature within universities, as educational development functions face the 'need to justify their existence and explain what they do to a sometimes skeptical management' (Gosling, 2009, p. 17). The many drivers for change contribute to the number, diversity and inter-connectedness of stakeholders and functions in higher education (Barnett, 2011) which are mirrored in academic development (Reid & Marshall, 2009). The complex and dynamic character of this challenging context necessitates keen strategic awareness in educational development centres internationally.

Gosling (2009) notes the near ubiquity, and increasingly strategic role of the educational development function in higher education institutions in the United Kingdom and other countries, while Holt, Palmer, and Challis (2011, p. 6) predict continuing change for EDCs 'as universities search for long-term strategic benefits from their centres'. Hence, it is argued that an EDC's existence would be more secure if it could clearly

demonstrate its contribution to its host institution's strategic vision, given the risks of 'institutional *realpolitik*, when it comes to the vulnerability and expendability of centralized operations such as educational development' (Land, 2004, p. 33). Blackmore, Chambers, Huxley and Thackwray (2010) acknowledge the influence of EDCs in facilitating the alignment of individual staff development with broader strategic aims of the host institution; however they suggest that the associated funding is at risk as institutions cut back future expenditure.

EDCs present a diversity of role and focus within their host institution. This range of possibilities may be a consequence of the unit leader's strategic 'orientation' (Land, 2004, p. 13) and response to the given 'strategic terrain' (Land, 2004, p. 177). Alternatively, the EDC may be characterized by its span of remit (Blackmore & Castley, 2006), by its position on the 'service-academic spectrum' (Di Napoli et al., 2010, p. 15) or by the almost random result of 'organisational volatility' (Gosling, 2009, p. 11). Over time, an evolution may be perceived within an EDC which may begin with the comparative simplicity reported by Moses (1985, p. 76) who was able to state that '[t]he main purpose of units is, generally speaking, to improve the quality of teaching and learning in a particular institution'; through a more self-aware role such as that controversially proposed by Badley (1998, p. 71) who suggested that educational development's purpose was to 'arrest the drift of teaching and research away from each other and, ... to some extent, subvert the managerial nature of the modern university'; to an instrumental role as diversely pictured by Di Napoli et al. (2010) with the EDC variously located (physically, politically and financially) within its host institution.

This brief review of the difficult context in which EDCs operate demonstrates the need for new ways of coping with change. PBA provides a means of visualizing strategic direction no matter where or how the EDC is positioned. The usefulness of the approach will be demonstrated in two ways. Firstly, through analysis of the successful strategy of a centralized EDC, which is modelled retrospectively (Figure 1). Secondly, by making explicit a collaborative strategy for the same but now dispersed group as a means of informing planning to overcome current and future challenges (Figure 2).

Introducing Product Based Analysis

Why 'Analysis'?

Numerous structured frameworks for managing strategic change have been proposed over the years, each characterized by its contributory phases and underlying techniques. In a synthesis of over thirty strategic change approaches, Bullock and Batton (1985) demonstrated that whatever their individual strengths and weaknesses, these frameworks share a common pattern of four underlying generic phases (*exploration, planning, action* and *integration*). The initial 'exploration' phase provides a forum for debating organizational needs and considering alternative solutions to satisfy those needs, leading to commitment to a strategic 'intervention' (Bullock & Batton, 1985, p.401). In other words, the exploration phase supports the 'reconceptualisation of the purpose and modus operandi' of EDCs called for by Holt, Palmer and Challis (2011, p. 15). According to Marshall (2007), the Bullock and Batton four-phase generic framework was adopted to good effect by over half of the twenty-five strategic change projects in a major UK Leadership Foundation for Higher Education (LFHE) initiative. However, Marshall (2007, p. 7) prefers to call the first phase '*analysis*', explaining that this phase comprises an initial examination of the current situation, the desired situation and the distance between the two. However, she reports a frequent lack of rigour in this initial phase of strategic change projects and a widespread failure to take account of cultural anatomy and values. This suggests a need for initial-phase techniques suited to higher education. Product Based Analysis (PBA) is a tool for this initial phase, since it supports exploration, reconceptualization and analysis of the current situation, the desired situation and the route between. The purpose of PBA is to aid understanding of

the strategic change context and options, and to provide input to the subsequent planning of a strategic change project.

Why 'Product Based'?

Product based approaches were originally developed for use in IT where intangible products such as software are particularly difficult to conceptualize and manage (Office of Government Commerce, 2009). Since strategic change projects typically concern such intangible products as capabilities, structures, attitudes and knowledge transfer, they are suited to product-based approaches and potentially benefit from a shared understanding of what a change would mean in practice. For example, '*Learner Empowerment*' might attract different interpretations. Using a product-based approach, the product '*Empowered Learner*' would be proposed, debated and defined. The purpose of product naming and any ensuing discussion is to turn an abstract concept into something more concrete; not to objectify it, but the opposite, to personalize and clarify it. A set of achievement criteria and data collection mechanisms could also be discussed which could later be used in evaluating whether learners had been empowered as a result of the related strategic activities.

Discussion is also necessary in order to place a product within the PBA model: what must pre-exist the '*Empowered Learner*'? Should it be preceded by '*Revised Course Provision*', '*Empowered Course Provider*', both, or neither? Exploring these issues may reveal tensions at the start of strategy development which might otherwise remain hidden until later when the changes begin to take effect.

Origins

PBA was first developed in 2006 within and for an English EDC undergoing reorganisation. PBA draws on the project planning technique called the 'product flow diagram' used in the PRINCE2® project management methodology (Office of Government Commerce, 2009). Product flow diagrams use boxes to represent the abstract and physical changes to be created by a project, the boxes being linked by arrows to show the sequence in which the changes must be produced. However, rather than use it as a planning tool, the author used the technique to scrutinize and model the proposed EDC strategy contained in a report which had been circulated to unit members for comment. Scrutinizing the report and modelling its key elements as a product flow had the benefits of:

- Revealing expected elements that were missing from the written strategy;
- Identifying aspects of the written strategy that required clarification;
- Opening the strategy for debate amongst stakeholders whether or not they had read the full document.

This analysis led to greater openness between the departmental head and those involved (King, 2006).

Wider Use

Early in its development, PBA was shared externally through an international workshop attended by colleagues from Australasia and Europe. Attendees each used the technique to create a model to explore their conception of a change situation. They reported finding the technique useful in depersonalizing issues involved in developing a strategy, in providing a focus for debate, and helpful in prioritizing the activities needed to achieve a strategic vision. In addition, workshop attendees found that the PBA model aided the identification of the strengths and weaknesses of a proposed change strategy, and encouraged the exploration of alternative ways of achieving their goals.

The technique has since been used to develop local research groups' strategies. While PBA alone could not guarantee an effective strategy, its analytic strengths have helped answer the questions:

- What is driving this change and why might particular responses be required?
- Where could these drivers take those affected?
- Who could be involved and how?

As a result, the name ‘product based analysis’ has been adopted, and the original notation adapted to reflect this diagnostic use. PBA continues to be used successfully within its original institution and has generated further interest when shared externally (King, 2011).

Applied Case Study

Methodology.

In order to demonstrate the range of settings in which PBA could be applied, two exemplars have been developed and modelled. These represent the strategies at two points in time for a single EDC function in an English university, in 1997 (Figure 1), and 2010 (Figure 2). The former is accompanied by step-by-step guidance through the PBA process.

Stake (1995) suggests that studying individual cases enriches our understanding of the broader picture, since the specifics of an individual case supplement our knowledge of other cases. This case study was selected because it provides two different contexts and two different points in the generic evolution of the EDC discussed earlier. The former concerns a centralized educational development function holding the kind of clear and bounded role described by Moses (1985). The latter concerns the same educational development function but now reorganized and distributed with the kind of challenging role depicted by Di Napoli et al. (2010). In each case, PBA has been used to model the group’s strategic response to the host institution’s vision.

The first model concerns the centre’s strategy for the period 1997-2001. It has been recreated retrospectively from documents produced in 1997 and from personal insights as a seconded member of the department. This ethnographic approach enables the PBA to be validated firstly through the actual unfolding of events, and secondly through documentary analysis of publications by the centre’s director, the head of e-learning and two of the key evaluator-researchers as set out in Appendix 1. These publications (dated 1999-2005) also evidence the successful achievement of the centre’s strategic goals. Study of this centre therefore reveals a number of characteristics of interest to EDC strategists.

The second model concerns the centre’s strategy for the period 2010-2015. This EDC provides an embodiment of the changes and restructurings discussed by Land (2004), Gosling (2009), and Holt, Palmer and Challis (2011). The case therefore offers the opportunity to draw out issues faced by many EDCs. The PBA was first drafted from university documentation and from insights as an independent consultant working with the various EDC sub-groups. The head of educational research, the head of personnel development, the leader of student-staff research, a trainer-consultant and two educational developers were then interviewed, and the model discussed with each. A revised model, which the head of educational research asserted was ‘broadly deemed to be valid’, was then presented to and discussed with members of all the associated research groups and functions. The version presented here represents the agreed version.

Centralized educational development 1997-2001

Figure 1 sets out the strategic direction for the EDC within this English university. While aspects of this strategy appeared in various documents over the years, the whole has never before been assembled. The PBA

captures the insight and epistemological stance of the centre's director, the vision of the pro-vice-chancellor to whom the director reported, and the views of the EDC team in 1997.

Figure 1. Retrospective product based analysis depicting the centre's 1997-2001 strategy.

PBA development step-by step

- (1) Begin with the end: the target product should encapsulate the proposed strategic vision. This is a rectangular text box and should be placed at the far end of the diagram. In Figure 1, '2001: Enhanced Student Experience' articulates the vision of the pro-vice-chancellor (PVC) when he recruited a new centre director and re-financed the centre in 1997. Progress towards this goal was to be kept under tight review via the audit of quality, financial, technical and student-satisfaction targets.
- (2) Add the key strategic drivers at the top of the diagram. These are shown as text-arrows. Here 'Mission to Exploit ICT and Enhance Student Experience' mirrors the university strategic vision but is mitigated by the 'Centre Director's Research Focus'.
- (3) Break down the strategic vision into its preceding constituent products; each product is shown as a rectangular text box. 'Added Pedagogic Value in Course Provisions'; 'Evaluated and Selected VLE'; 'Institution-wide VLE Implementation'.
- (4) Identify any products which are outside the strategists' direct control. Use a text oval rather than a rectangle to highlight this. 'Alternative VLE Platforms' were supplied by independent businesses; while the university's 'Early Adopters and ICT Enthusiasts' existed independently of the centre and their involvement would require negotiation with their management. Such products suggest increased risk to a strategy, thus it is important to identify them early.
- (5) Propose products that encapsulate the skills, capabilities or other changes needed. Name products carefully in order to express exactly what the strategy intends to create. 'Agreed Teaching and Learning Strategy'; 'Embedded Action Research'; 'Bonded Action Learning Sets'; 'Effective Reflective Practitioners'.
- (6) Propose any necessary interim products required to convert the drivers into the vision. Consider how the successful creation of each product could be evaluated: 'Selected Taskforce Members'; 'Discipline-based Trials'; 'Hub & Spokes Communication Strategy'; 'Readied Terrain'.
- (7) Review the sequence of products and ensure that it is logical.
- (8) Use the resultant diagram for debate, reflection, and, if agreed, for subsequent planning.

Validating the PBA

In 1997, the case study university exemplified:

the pressures created by the massification of higher education, the reductions in funding per student alongside the diversification of the student profile, the growth of educational technologies, the funding made available for educational development projects [and] the trend towards viewing students as clients. (Gosling, 2009, p.7)

Strategic thinking at the time is revealed through documentary analysis of four publications by key players within the centre (Appendix 1).

Source 1:

- Confirms that the strategy to exploit ICT was underpinned by the discipline-based trials of task force members;
- Explains how these seconded academics provided exemplars of technology delivering real benefits to students, making an institution-wide VLE implementation feasible;
- Reports on preparations for the implementation involving new staff and student roles, new procedures, and new ways of teaching and learning.

Source 2:

- Presents the PVC as the strategy's champion;
- Notes that the strategy was inspired by the student administration and learning portals the authors were shown in the USA and Canada which supported large student cohorts;
- Explains that the teaching and learning strategy set out two synergetic initiatives. Firstly, to select and fund a task force of over twenty half-time secondments for discipline-based academic staff drawn from the pool of existing pedagogic and ICT innovators, each charged with the development of useful teaching interventions. Secondly, to invest in an institutional VLE drawing on existing research into the range of alternative VLE software available;
- Reveals the director's commitment to reflective practice and the action research methodology that supported the individual secondees in developing their pedagogically innovative case studies;
- Presents these secondees as change agents, who, by means of a purposive hub and spokes communication strategy conveyed task force progress to their faculty colleagues, ensuring good levels of local awareness of progress and the consolidation of the existing piecemeal e-learning activity;
- Confirms the pedagogy-driven VLE selection process.

Source 3:

- Details the multi-faceted VLE implementation evaluation. Data collection was both quantitative and qualitative so that judgements could be made on the extent to which pedagogic value had been added to courses and modules in terms of motivation, achievement and satisfaction, as well in terms of VLE usage;
- Argues that this pioneering institution-wide implementation of e-learning was of international interest and that the evaluation website provided a means of disseminating the experience and of building new theory.

Source 4:

- Explores the theory-driven creation of facilitated action learning sets which enabled the secondees to support each other and co-author research outputs;
- Shows how the director conceived the task force as an action research project. While each academic year acted as an action research cycle for secondees, the project overall benefited from a similar pattern of planning, action, monitoring and reflection, providing input to the VLE evaluation;
- Describes the many hurdles overcome in achieving the strategic vision by 2001.

Thus the PBA is validated. The sources confirm the strategic drivers, the vision and other products which were modelled from original 1997 university and departmental documents, and from the author's recollections. The strategy grew out of a well-bounded mission to exploit ICT for the benefit of students. The department head was recruited on the basis of her willingness and ability to fulfil this mission. Her epistemological stance led her to introduce action research as both a shared research methodology and a means of evaluating strategic progress; to establish action learning sets in order to develop reflective and collaborative staff; and to construct a hub and spokes communication model to connect the centralized EDC with the disciplinary departments. All of these decisions contributed to the successful achievement of the strategic goals and the longer term sustainability of the department, anticipating the 'preferred strategy [of many modern EDCs] ... to become more focused on the professional development of staff (faculty), encouraging innovation and enhancement in teaching and learning, and overseeing implementation of the learning and teaching strategy' (Gosling, 2009, p. 17). The VLE implementation and task force activity led to a virtuous circle of pedagogical innovations, opportunities for research funding bids, and collaborative publications which together secured the future of the centre while the key players remained there.

Dispersed educational development 2010-2015

Following the departure of the original director in 2001, three successive directors each brought their own vision and research priorities to the centre. In 2009, the university closed the centre on economic grounds. Today there is no single director of educational development; instead the function is undertaken by a number of different units located in the human resources department and the library. The centre's research group – which had persisted in using the PBA technique – was retained as a virtual Centre for Educational Research reporting directly to the PVC for Research. Figure 2 models a strategy for this dispersed EDC function to help it regain a strong, coordinated and central strategic influence within the institution. The original intention was simply to create this model as an exemplar by drawing out the educational research and development elements latent within the University's mission documents. However, having critiqued the resultant strategy, it became clear that the PBA had much to offer those concerned. The strategy has been widely discussed and approved by the EDC's senior staff and by EDC members with varied insights; nevertheless as yet it has not been fully adopted.

Figure 2. Product based analysis depicting the dispersed EDC's strategy (2010-2015).

Features of the PBA

Strategic alignment, an attitudinal change. Adoption of the university's mission as both a strategic driver and the ultimate product for the PBA is essential to the strategy. So too is the adoption of the institution's interpretation of the mission's constituent products and their associated targets ('Achieved Teaching & Learning Targets', 'Achieved Internationalisation Targets', 'Achieved Research Targets', 'Achieved Sustainability Targets'). While this was seen as pragmatic by some stakeholders, others thought it uncritical. However, since the opportunity to influence these targets has passed, priority must be given to the agreed interim product 'Research to Inform Future Institutional Strategy'.

EDC sub-group synergy, a change in ethos. While recognizing budgetary barriers, interviewees wanted existing 'Disciplinary Insights & Expertise' to be harnessed. There was broad support for Web2 enabled 'Mentoring System', 'Targeted Academic Writing Support' and an 'Integrated Research Seminar Series'. Economic constraints have encouraged the human resources department to use faculty experts rather than external consultants to run training and development workshops. However, a significant change in ethos

would be required before individuals and sub-group leaders routinely set payment for ‘Workshop, Module, Action Learning Set Input’ against their consultancy income targets so as to benefit themselves and the institution.

Teaching and research synergy, an organisational change. Interviewees identified a number of staff-student communities of learning but recognized that more needs to be done to embed them as a way of improving student satisfaction, to involve external partners in the co-construction of knowledge, to internationalize them and to exploit them as research exemplars. The Centre for Educational Research’s offer of ‘Friendly Critique’ to enhance the quality of funding bids and other research outputs was welcomed. It was agreed that ‘Demonstrated Societal Impact’ would be essential to sustain the future of the EDC and provide useful research case studies. To this end, the Centre for Educational Research would monitor and measure progress (‘Achieved Individual Targets’).

Figure 2 shows a strategy for a dispersed educational development function at a time of economic cuts. The strategy proposes changes in attitude, ethos and organisation in order to influence future university strategic direction, with the EDC sub-groups ‘working in concert’ to maximize strategic impact (Holt, Palmer, & Challis, 2011, p. 7). However, as separately funded entities, the case study EDC sub-groups have no short-term necessity to commit to a collaborative plan.

To sustain future educational research activity the PBA exploits expertise in academic writing, critique, e-learning, and the scholarship of teaching and learning to contribute to institution goals. Reid and Marshall (2009, p. 155) highlight the need for coherence in strategic development ‘between policy, activity, and involvement’. Difficult as it is to develop such a strategy, the chequered history of EDCs described by Land (2004) and Gosling (2009) demands a strategic response. Kubler, Sayers and Watson (2010) highlight the need for flexibility so that a higher education institution can respond to unanticipated changes. A strength of the centre’s 1997 strategy was the development of reflective practitioners as effective role models, able to adapt whatever contingency might arise. While the case study institution currently plans to develop staff who can contribute effectively to a globalized and increasingly competitive education sector, it has decoupled academic development and educational research, leaving it to individuals to ground their research in practice and their practice in theory. The mutually beneficial integration of research and teaching through the centralization of educational development is widely recognized. Where such centralisation is impractical, Schapper and Mayson (2010) offer universities guiding principles encouraging individuals and departments to marry research and teaching, as here.

Critique of PBA

While the ‘higher education sector is a relative newcomer to the range of strategic planning and foresight tools’, adoption is increasing (Kubler, Sayers & Watson, 2010, p. 2). PBA is offered as a technique for the initial phase of any strategic change project (Bullock & Batton, 1985). Use of PBA complements such established approaches as force-field analysis, SWOT analysis, PEST analysis, scenario planning and stakeholder analysis by supplying the process-flow missing from these static techniques. Furthermore, PBA offers a holistic view of the strategy which other techniques lack and which is normally unavailable until the subsequent planning phase. Table 1 sets out a comparison of the better known strategic analysis techniques, together with PBA.

Table 1. The role of product based analysis and other strategic analysis techniques

Strategic Technique	Major Focus	Typical Format	Contribution	Comment
Balanced	Decomposition of a vision into	Diagram	Partial contextual	Limited

Scorecard	aims, critical success factors, measures of success and action points		understanding	adoption in HE
Force Field Analysis	Identification of what is driving and what is restraining a contemplated change	Two lists separated by a two-headed arrow	Partial contextual understanding	Widely used in HE.
PEST/LE Analysis	Identification of external pressures (political, economic, social, technological; plus optionally: legal, environmental)	Lists in 4 or 6 sectors	Partial contextual understanding	Widely used in HE
Product Based Analysis	Process flow from the key strategic drivers to achievement of a vision showing necessary interim changes which may include changes in attitude, ethos or organisation	Diagram	Holistic view of strategic way forward	New technique
Scenario Planning	Exploration of potential responses to possible future pressures or changes	Report	Partial contextual understanding	Recently adopted in HE
Stakeholder Analysis	Identification of those involved in or affected by a contemplated change	Text grid	Partial contextual understanding	Widely used in HE
SWOT Analysis	Internal strengths and weaknesses, external opportunities and threats. Sometimes drawing on PEST/LE	Lists in 4 sectors	Partial contextual understanding	Widely used in HE

Youll (1990) argued that diagrams are much more powerful than text in communicating the interdependence of intangible products such as software. A similar case can be made for PBA in representing the interdependence of the products of strategic change. However, PBA models such as those in Figure 1 and Figure 2 have been mistaken by some interviewees for project plans. In depicting a strategy, a PBA represents both an abstraction of the processes involved in achieving a vision and the logical flow between processes. The intention is that within a time period – in these cases, a five-year window – the complete set of processes will come into play, with all processes active and feeding forward to realize the ultimate vision. Once agreed, a PBA strategy must be enacted as a plan providing the means of managing progress towards achievement of the overall strategy which forestalls such strategic ‘abuses’ as under-resourcing (Healey, O'Connor & Broadfoot, 2010, p. 21). Another issue raised by interviewees concerns the apparent simplicity of PBA models which conceal numerous underlying assumptions. Advantages of offering a simple view of a strategy include ease of comprehension and the greater likelihood of acceptance by those involved. However, skimming over inherent complexities may lead to individuals each having their own interpretation of the detail. This is why PBA is offered as a means of arriving at a strategy through open debate, or of visualizing and scrutinizing a written strategy.

Whether PBA is an appropriate technique for EDCs is still moot. Great interest has been displayed independently by three past directors of the case study EDC, less interest by researcher-practitioners, perhaps reflecting the different priorities of departmental leaders and departmental members, and mirroring Land’s (2004) finding that educational developers’ roles will influence what they see as valuable and effective. Martinez and Wolverton (2009, p. 8) suggest that there is ‘a reluctance to adopt the language and tools of

business' in higher education, which constrains even its strategists. It is not intended that PBA be imposed on those who would not welcome it as a way of visualizing a strategy. However, higher education is changing; the EDC represented in the case study exhibits the turbulence and devolved leadership of competitive sub-units which characterize the enterprise university anticipated by McNay (1995). At a time when some governmental reforms have adopted the language of academia in order to gain acceptance (Wright & Rabo, 2010), there is a need to find tools and language appropriate for EDC strategy. PBA potentially provides such a framework.

Conclusion

Healey, O'Connor and Broadfoot (2010, p. 20), highlight the intricate nature of 'understanding, developing, implementing, and evaluating strategy'. This article has introduced product based analysis as a means by which EDCs might model a strategy which could include changes in attitude, ethos or organisation. The rationale for PBA's adoption alongside other strategy tools rests on its power in analysing the strategic context, and provision of a focus for debate as a visual representation of text-based strategies. PBA has been found useful in these ways from its first application, contributing to Reid and Marshall's (2009) call for approaches that help to effect change within complex contexts. PBA could also assist in the exploration of the role and contribution of EDCs and their staff within institutions as called for by Di Napoli et al. (2010). PBA encourages EDCs such as the dispersed case study centre to reconceptualize their role and ways of working as called for by Holt, Palmer and Challis (2011). Finally, PBA could be of assistance as called for by Blackmore et al. (2010) as institutions review their EDC in the light of budgetary constraints. Wider critique of this technique is now sought.

References

- Badley, G. (1998). Making a case for educational development in times of drift and shift. *Quality Assurance in Education*, 6(2), 64–73.
- Barnett, K. (2011). System members at odds: Managing divergent perspectives in the higher education change process. *Journal of Higher Education Policy & Management*, 33(2), 131-140.
- Blackmore, P., & Castley, A. (2006). *Developing capability in the university: Strategically enhancing the efficiency, effectiveness and well-being of the institution*. London: Leadership Foundation for Higher Education. Retrieved 29 November 2011, from <http://www.lfhe.ac.uk/networks/theme1outputs.html/>
- Blackmore, P., Chambers, J., Huxley, L., & Thackwray, B. (2010). Tribalism and territoriality in the staff and educational development world. *Journal of Further and Higher Education*, 34(1), 105–117.
- Bullock, R.J., & Batton, D. (1985) It's just a phase we're going through: A review and synthesis of OD phase analysis. *Group & Organization Management*, 10: 383–412.
- Di Napoli, R., Fry, H., Frenay, M., Verhesschen, P., & Verburch, A. (2010). Academic development and educational developers: Perspectives from different European higher education contexts. *International Journal for Academic Development*, 15(1), 7–18.
- Gosling, D. (2009). Educational development in the UK: A complex and contradictory reality. *International Journal for Academic Development*, 14(1), 5–18.
- Healey, M., O'Connor, K.M., & Broadfoot, P. (2010). Reflections on engaging students in the process and product of strategy development for learning, teaching, and assessment: An institutional case study. *International Journal for Academic Development*, 15(1), 19-32.
- Holt, D., Palmer, S., & Challis, D. (2011). Changing perspectives: Teaching and learning centres' strategic contributions to academic development in Australian higher education. *International Journal for Academic Development*, 16(1), 5-17.

- King, V. (2006). Modelling new directions with product-based planning. In Proceedings of the 29th HERDSA Annual Conference. Critical visions (pp 159-166). Perth, Western Australia: HERDSA.
- King, V. (2011, July). *Changing the academy: Exploring the potential of product based analysis to model strategic change*. Paper presented at the HEA annual conference, Nottingham, UK.
- Kubler, J., & Sayers, N. with Watson, D. (2010). Higher education futures: Key themes and implications for leadership and management. London: Leadership Foundation for Higher Education. Retrieved 03 November 2010, from <https://www.lfhe.ac.uk/news/highereducationfutures.html>
- Land, R. (2004). *Educational development: Discourse, identity and practice*. Maidenhead: Open University Press.
- Marshall, S. (Ed.). (2007) *Strategic leadership of change in higher education: What's new?* Abingdon: Routledge.
- Martinez, M., & Wolverton, M. (2009). *Innovative strategy making in higher education*. Charlotte, NC: Information Age Publishing.
- McNay, I. (1995). From collegial academy to corporate enterprise; the changing cultures of universities. In T. Schuller (Ed.) *The changing university* (pp. 105-115). Buckingham: Society for Research into Higher Education and Open University.
- Moses, I. (1985). Academic development units and the improvement of teaching. *Higher Education*. 14(1), 75–100.
- Office of Government Commerce (OGC). (2009). *Managing successful projects with PRINCE2: 2009 edition*. London: The Stationery Office.
- Reid, A., & Marshall, S. (2009). Institutional development for the enhancement of research and research training. *International Journal for Academic Development*, 14(2), 145–157.
- Schapper, J., & Mayson, S.E. (2010). Research-led teaching: Moving from a fractured engagement to a marriage of convenience. *Higher Education Research & Development*, 29(6), 641–651.
- Stake, R.E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage Publications.
- Wright, S., & Rabo, A. (2010). Introduction: Anthropologies of university reform. *Social Anthropology*, 18(1), 1–14.
- Youll, D.P. (1990). *Making software development visible: Effective project control*. Chichester: John Wiley.

Appendix 1. Documentary sources used to validate the strategy expressed in Figure 1

Item	Reference	Note
Source 1	Deepwell, F., & Syson, A. (1999). Online learning at Coventry University: You can lead a horse to water.... <i>Journal of Educational Technology & Society</i> , 2(4), 122–124.	Co-authored by researcher-evaluator 1 and the head of e-learning
Source 2	Deepwell, F., & Beaty, L. (2005). Moving into uncertain terrain: Implementing online higher education. In S. Fallows & R. Bhanot, (Eds.) <i>Quality issues in ICT-based higher education</i> (pp. 7–23). London: RoutledgeFalmer.	Co-authored by researcher-evaluator 1 and the centre director
Source 3	Deepwell, F. (2002). Towards capturing complexity: An interactive framework for institutional evaluation. <i>Journal of Educational Technology & Society</i> , 5(3), 83–90.	Authored by researcher-evaluator 1
Source 4	Beaty, L., & Cousin, G. (2003). An action-research	Co-authored by the centre

approach to strategic development: A case study. In H. Eggins & R. Macdonald (Eds.) *The scholarship of academic development* (pp. 141–51), Buckingham: Society for Research into Higher Education and Open University Press.

director and researcher-
evaluator 2