'MAKING CHANGE HAPPEN': SUPPORTING COLLABOARTIVE DEVELOPMENTS IN DEPARTMENTS

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Abstract

This paper focuses on the Supported Change Program, an initiative pioneered by the UK Centre for Materials Education (UKCME), drawing on a range of literature. The program has at its basis an appreciation of the real barriers that exist within Departments to implementing change; an appreciation heavily influenced by detailed external evaluations undertaken of UKCME's early initiatives. A lack of time and the absence of a tradition of a culture of collaborative development feature very strongly as limiting factors.

The authors will share how the UKCME Supported Change Program has operated to address this situation, drawing on experience gained when working alongside Departments of Engineering and of Materials in five contrasting higher education institutions. A number of strategies have been adopted by UKCME, with a view to 'create time' on behalf of colleagues. These will be considered and evaluated.

However, experience has taught that change is most effectively implemented when mechanisms are put in place which enable colleagues to engage collectively in a process of critical appraisal of current practice. Collecting, analysing and sharing staff perceptions on what is currently being done is a necessary precursor to pushing forward development. The experience gained through this process, along with the outcomes, will also feature in this paper.

Finally, the applicability and value of the UKCME Supported Change Program will be considered in relation to what is being attempted by the planned expansion of the CDIO approach within the higher education sector.

Keywords: change management, collaborative development, critical appraisal, collegial support

Background

The UK Centre for Materials Education (UKCME) is one of 24 Subject Centres which form part of the Higher Education Academy, providing discipline-based support to

universities and communities of practitioners across the UK. Its primary aim is to enhance the quality of student learning in higher education.

In undertaking its work, UKCME has adopted a variety of approaches, each subjected to a detailed external evaluation. While much of this evaluation was positive, it also identified the existence of major barriers to change which lay beyond the control of the Centre. As a result, UKCME is now aware that there are limits to what can be achieved through the presentation of workshops / seminars and the production of resources – stimulating as these may be in the short-term.

The evaluation revealed three major barriers to change operating at Department level [1]. The first factor related to workplace culture; a focus on teaching could limit colleagues' promotional prospects. A second barrier is associated with workplace reality; issues other than teaching and learning may be regarded as more important. The major factor to emerge, however, was that colleagues simply do not have enough time to engage in educational development.

More recent work undertaken by UKCME – involving 88 in-depth interviews with academics in 28 UK higher education institutions – has further enhanced understanding relating to the management of change. This research confirmed the findings of the earlier work, but added further barriers, as represented in Table 1.

Table 1. Barriers to Change – identified from UKCME research

	Barrier to Change
1	A mismatch exists between the priorities of the would-be developer and the Department
2	There can be a limited collaborative culture in relation to educational development
3	There is a lack of time to initiate and implement change effectively
4	There is limited ongoing support for the change initiative
5	Institutional factors can operate (e.g. reorganisation, relocation, etc)

Impact on UKCME Practice

To address these barriers, traditional approaches to promote educational development, e.g. awareness-raising events, have now been augmented by UKCME with an alternative approach, which emphasises development located within the subject Department. This progression can be seen most clearly in the Supported Change Program, initiated in 2005/06. An analysis of the differences between earlier and current approaches has been presented elsewhere [1, 2]. The evolution in thinking and processes which has taken place is represented in Figure 1.

Awareness-Raising Events (e.g. workshops / conferences) Bespoke Training Courses (e.g. New Lecturers / Student Reps) For individuals or groups (focuses on national and regional agendas); one or two days in length For target groups (of same position or role) in the subject community; focused residential activities For enthusiastic individuals within a Departmental context; one year maximum

Target and Duration

At the full Departmental level;

two year commitment

Approaches

Supported Change Program

Figure 1. Evolving Practice at UKCME

It is important to note that, although the Supported Change Program has emerged as a major strategy for implementing change, it cannot operate in isolation. Crucial to its success, is that it connects directly with other aspects of UKCME's work; notably its Pedagogical Research (PedR) and its program of Teaching Development Grants (TDGs).

The focus of this paper, however, will remain primarily on the Supported Change Program, and particularly on how practices associated with the Program have now evolved to address barriers.

Addressing Barriers – the Supported Change Program

A summary is presented in Table 2 of the range of strategies adopted within the Supported Change Program to address barriers to change.

A more detailed consideration of the rationale underpinning these strategies follows, focusing in particular on addressing the first two barriers. Here, connections are made where appropriate to relevant literature, most specifically on relationship-building, fostering collegiality and knowledge-construction.

Table 2. Barriers and Strategies

	Barriers to Change	Strategies – the Supported Change Program must:
1	Mismatch of priorities between would-be developer and Department	 Build on previous engagement Hold initial meetings Synthesise and report outcomes of the meetings
2	Limited collaborative culture in relation to education development	 Undertake a program of structured interviews across the Department Create forums within the Department
3	Lack of time to initiate and implement change effectively	Do things on behalf of colleagues
4	Limited ongoing support for the change initiative	 Hold regular visits and report back Undertake ongoing evaluations Celebrate impact / outcomes Lever external funding
5	Institutional factors (e.g. reorganisation, relocation, etc)	 Increase support to help keep on task Provide additional resources / expertise to give active support

Mismatch of Priorities

The importance has earlier been stressed of linking the Supported Change Program with other approaches. Engaging in this way is crucial, if common and shared priorities for development are to be established. The starting point for UKCME must be what has already been developed by potential partners through 'strategies from the past' – including workshops, bespoke training, and most particularly the program of Teaching Development Grants. Focusing in this way, raises awareness of possible foundations for future development. It identifies what can be built upon, and clarifies the context in which this can happen. Raising such awareness represents the initial stage in establishing a working relationship with colleagues [3]. It strengthens the connections that had previously been made [4]. Crucially, it builds the trust essential to establishing an effective collaborative relationship, and to increasing commitment for change [5].

Development takes a major step forward as a result of holding initial meetings at the institution between UKCME and Departmental colleagues. These meetings serve a number of important functions. They explore current practice. They establish priorities for a program of development, drawing on the history of previous attempts at change. In addition, they clarify any possible blockages and barriers which may operate to inhibit development.

Important as these meetings are, they cannot operate in isolation. A synthesis of outcomes must be undertaken, and compiled into a written report. This report benefits from being in the form of a narrative and devoid of any educational theory [6], and must be presented to colleagues for immediate feedback.

Reporting in this way acknowledges the importance of communication; "of establishing a commonness or oneness of thought between sender and receiver" [7]. Communication is a vital and often overlooked component. It helps achieve convergence; and is essential if a mismatch of priorities is to be avoided. It is fundamental to the establishment of relationships.

The report clarifies the way forward, by identifying first steps. It begins the process of action-planning, clarifying responsibilities of each of the partners, and identifying what support and resources will be made available. The report establishes a program for the future, which is to include regular visits and ongoing systematic evaluation. It reinforces the message that the program of development is being taken seriously, and is valued by all parties.

Limited Collaborative Culture

An earlier approach adopted by UKCME, through its program of Teaching Development Grants, has confirmed the value of supporting individuals in the development of educational practice relating to their own needs and interests. However, this approach has its limitations. To make a real difference, a Department-wide initiative is required [1]. For this to be a success, it will be necessary to overcome a second major barrier: that of the limited collaborative culture in relation to educational development.

This means that attention must be paid to promoting social aspects of development – establishing a radical collegiality – along with the promulgation of technical implications [8, 9].

Strategies must be adopted which address limited collegiality. These will involve exploring divergent ways of thinking in relation to the proposed development – in effect, "bridging cultures and crossing borders" [10]. They will give colleagues opportunities to address questions and explore issues relating to the nature and practicality of the intended change [11]. They will also mean that UKCME will gain an appreciation of the 'Departmental milieu' [12], so that it is dealing with the particular, rather than operating on general assumptions. To achieve these ends, UKCME must work alongside colleagues in the Department.

One important strategy enabling UKCME to do this, involves engaging in a program of semi-structured interviews with colleagues across the Department. These interviews explore current teaching, and often identify aspects of excellent practice which to date has gained little Departmental recognition. They mean that colleagues are looking at the proposed development from the inside, rather than being external receivers of information. These interviews enable staff to develop an 'insider perspective', developing their own interpretation and understanding of what is to happen and of what their part in the process will be [13, 14].

As with the initial meetings, these interviews must be more than an evidence-gathering exercise. Attention must also be paid to communicating findings. This is a further step towards establishing a common understanding – convergence – of the proposed development, and building relationships to promote a collaborative approach.

The value of these interviews has not been lost on those who participated. The comment below is from participants involved in implementing the Supported Change Program at Queen's University Belfast:

"This approach of interviewing staff and analysing responses... was relatively time-consuming. The resource implications... should not be under-estimated; but it must be appreciated that the relevant development potential that resulted far outweighed the effort expended. It could also be accepted that such a collaborative approach, based on supportive yet critical appraisal is necessary, if sustainable curriculum development is to be achieved" [15].

One further collegial strategy must be established. Change agents cannot operate in isolation, even with active support from senior colleagues. Forums must be established, which enable representatives from across the Department to engage actively in change implementation. It is these forums that will make the change happen.

Outcomes of the Supported Change Programme

This paper has given a detailed consideration as to how UKCME through its Supported Change Program has addressed two major barriers to the implementation of change. It ends with a brief summary, given in Table 3, of what the program has achieved since its inception in 2005/06 at the five institutions where the initiative has operated.

Conclusions

This paper has drawn on research and evaluation undertaken by UKCME, to identify five major barriers to the implementation of change. It has considered also how UKCME has responded to these findings, by developing a range of strategies associated with the Supported Change Program; which locates change at Department level. The focus here has been on strategies adopted to address two major barriers — a mismatch of priorities between the would-be developer and the Department; and a limited collaborative culture in relation to educational development.

In each case, a detailed rationale has been provided of the practices developed by UKCME, and these have been placed in the context of relevant literature. What is clear, is that for change to be successfully initiated, UKCME has had to work alongside colleagues. The aim must be to build convergence, by providing opportunities for academic staff to explore and make sense of the proposed developments in their own terms, and in relation to their own context.

Establishing ongoing and effective channels of communication is crucial, if the necessary collegiality is to be built, to enable colleagues to push the development forward. Getting the practice right in relation to these two barriers will not necessarily ensure that change is successfully implemented. Other barriers exist, and there is much that can go wrong. However, what it will ensure is that a first step has been made, and that a strong foundation has been laid from which the development can proceed.

Table 3. Departmental Practices from the Supported Change Program

A package of funding and support has been awarded to the following academic groupings, and these institutions continue to receive extensive hands-on support from UKCME:

Bradford College

• UKCME is supporting the development of new subject-specific Foundation degrees for part-time students in the workplace offered through distance learning; as well as new BEng degree pathways. This support involves producing e-learning resources, establishing work-based projects, and promoting employer engagement.

University of Cambridge

• UKCME is supporting the Department of Materials Science and Metallurgy in establishing practices for using students as 'curriculum developers' to work alongside academics to produce electronic-based teaching and learning packages. Increasing numbers of staff, both in the institution and beyond, are now incorporating these electronic resources as part of the student learning experience, in a variety of ways.

University of Derby

• UKCME is supporting the development of electronic elements of an existing Materials module, in collaboration with a number of Departments from across the Faculty of Arts, Design and Technology. This is for combined use within the Faculty, to be delivered as case-based scenarios through a blended learning approach.

Queens University Belfast

• UKCME is supporting the development of a new Introductory Course module across all Year 1 programmes in the School of Mechanical and Aeronautical Engineering. This is the beginning of a process of ongoing collaborative development, with UKCME also supporting a workspaces survey in the School, and now extending the focus to curriculum developments in Year 2 of undergraduate study. Project outcomes are being disseminated through the network of the international CDIO initiative.

University of Sheffield

• UKCME is supporting the Department of Engineering Materials with an exploration of the teaching of laboratories in Years 1 & 2, to enhance the student learning experience of practical work. This UKCME support is also facilitating a wider process of curriculum review of all programmes of study across the Department.

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