



<b>Title</b>	Initiating curriculum revision: Exploring the practices of educational developers
<b>Authors(s)</b>	O'Neill, Geraldine
<b>Publication date</b>	2010-03-22
<b>Publication information</b>	O'Neill, Geraldine. "Initiating Curriculum Revision: Exploring the Practices of Educational Developers." Taylor and Francis, March 22, 2010. <a href="https://doi.org/10.1080/13601440903529927">https://doi.org/10.1080/13601440903529927</a> .
<b>Publisher</b>	Taylor and Francis
<b>Item record/more information</b>	<a href="http://hdl.handle.net/10197/6474">http://hdl.handle.net/10197/6474</a>
<b>Publisher's statement</b>	This is an electronic version of an article published in International Journal for Academic Development, 15(1): 61-71 (2010). Journal for Academic Development is available online at: <a href="http://www.tandfonline.com/doi/abs/10.1080/13601440903529927">www.tandfonline.com/doi/abs/10.1080/13601440903529927</a>
<b>Publisher's version (DOI)</b>	10.1080/13601440903529927

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# Initiating Curriculum Revision: Exploring the Practices of Educational Developers

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## Abstract

Curriculum revision is an important part of academic work. Despite theoretical literature on curriculum development and design, there is a scarcity of literature available for either academic staff or novice educational developers on the initiation of this curriculum revision process. This study, therefore, set out to explore the practices of experienced Irish and UK educational developers working in this area. A mixture of in-depth interviews followed by a semi-structured questionnaire was used to explore the approaches of these educational developers. The results suggest that curriculum revision tends to benefit from initial, intensive dialogue between educational developers and academic staff, and that such initial interaction provides an important understanding of the context in which the curriculum revision occurs. This paper highlights that despite some suggested starting points at programme<sup>2</sup> and module level, educational developers should be open and flexible in their approach to this activity.

**Keywords:** Curriculum revision, curriculum design, educational development.

## Introduction

In the changing context of higher education, many academic staff (Faculty) find themselves in the position of revising their curricula. Because academic staff may have limited experience in this area, educational or academic developers are often involved in supporting this complex activity. Educational development itself is in the early stages of development in many countries and therefore developers themselves may also lack experience in this task. From both academic staff and educational developers' perspectives, the literature on the practice of curriculum revision in higher education is not highly developed: 'there are hardly any modern books at least produced from within the UK that explicitly focus on the curriculum in higher education' (Barnett & Coates, 2005, p15). Stark (2000), working in the American context, also notes the scarcity of literature on college teachers' course planning and recent US publications appear to focus on the more theoretical aspect of curriculum planning (Ornstein & Hunkins, 2009).

To further complicate this picture, the term 'curriculum' can mean different things to different groups (Barnett & Coates, 2005; Fraser & Bosanquet, 2006). In an Australian study by Fraser and Bosanquet (2006), four different categories emerged when academic staff were asked about their understanding of the term 'curriculum'. This ranged from: (i) the structure and content of a unit (subject); (ii) the structure and content of a programme of study; (iii) the students' experience of learning; and (iv) a dynamic and interactive process of teaching and learning. They related these concepts to the well-referenced literature on the process and product models of curriculum development (Fraser & Bosanquet, 2006). Neary (2003) also highlighted these two different models, one (the product model) which emphasises plans and intentions and one (the process model) which emphasises activities and effects.

These two contrasting models appear to differ significantly in how one approaches the early stages of curriculum development and it can be confusing for those involved in supporting curriculum development

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<sup>2</sup> For the purpose of this study, the term 'programme' is the complete course of study, i.e. degree programme, whereas, the term 'module' is a unit of study, often in one semester of one year

to know where to start in this complex process. Educational development is relatively new in the Republic of Ireland compared to some countries, with many working on their own with limited opportunities to observe and role model the experienced educational developer. In addition, as in many countries worldwide, Irish educational developers come from a variety of disciplinary backgrounds and are challenged to work with a cross section of other disciplines that are using curriculum approaches possibly unfamiliar to the developer's home discipline. The scarcity of 'theory to practice' literature is, therefore, even more accentuated in countries where educational development is in its early stages of growth. In my own experience, curriculum revision had been a daunting task as a new educational developer. Therefore, this paper was designed in particular for novice educational developers in order to shed light on some of the key issues that relate to this complex and often poorly understood process. I have also focussed this research on curriculum revision as it is more common, and often more difficult, than starting with a new curriculum.

### **Literature Review: The Sequence in Curriculum Planning**

Curriculum development models appear to have many features in common across the international literature, but one aspect that appears to be quite diverse in its presentation is the start of the process. This initial stage of curriculum development appears to focus on the context and the people (students/staff) involved in the process. Ornstein and Hunkins (2009, p15) contend that curriculum development encompasses how a 'curriculum is planned, implemented and evaluated, as well as what people, processes and procedures are involved..'. They also maintain that although curriculum development models are technically useful, they often overlook the human aspect such as the personal attitudes, feelings, values involved in curriculum making. Stark (2000, p414) in a large three year study (n= 267 Colleges and Universities) in America found that lecturers' 'disciplinary socialization and their current beliefs about the fields they teach influence how they plan their courses...'. Other authors have supported the strong influence of the discipline on curriculum planning (Barnett & Coates, 2005). As a result of her findings, Stark (2000) developed a model that supports the idea of a two-phase filtering process at the initiation of curriculum design. The phases in this early filtering process were a) to explore staff considerations/beliefs' and b) to filter the student and other contextual influences.

Diamond (1998) articulates a different initial step as he argues for an assessment of needs at the early stages of a new curriculum. Toohey (2000) also supports the idea of a needs analysis prior to launching into other steps. However, in addition, she, like Stark, emphasises the importance of exploring the beliefs/philosophy of those involved in the programme. She challenges the designers to think about their view of knowledge; how learning occurs; what goals are worthwhile and how these are expressed; how content is chosen and organised; what purpose does assessment serve; and what kind of resources and infrastructures are needed (Toohey, 2000). It is only after addressing these concepts that Toohey explores the task of thinking about goals and content.

Despite this disparate start to the process, there does appear in the literature to be some consistency in the process at the core. There appears to be three steps in common to most models. There is usually the work on developing: 1) the learning goals/aims/outcomes; 2) the design of the teaching and learning approaches; and 3) the design of assessment methods. In addition, most have a final step of an evaluation plan of the curriculum. These steps appear to be common in both programme and module level planning. Diamond (1998) described this core process as developing: statement of goals (general to specific); design of instruction/assessment; implementation and assessment; followed then by revision as needed. Looking back at the literature over the last fifty years, these core steps appear to have been always included in the

curriculum planning process (for example see Wheeler's 1967 description of curriculum planning, cited in Neary, 2003, p43).

The steps, therefore, seem to have passed the tests of time and of transfer across international borders. However, within these common core steps, some authors have put different emphasis on the order of these steps. Biggs, who has researched in America, UK and Hong Kong on his popular curriculum alignment model (2003), emphasised that the first aspect to explore within these three steps was setting the curriculum objectives. He believed that 'get them right, and the decision as to how they are to be taught and how they may be assessed, follow' (Biggs, 2003, p29). There appears to be different beliefs in practice as to whether assessment should be designed before or after teaching/learning methods.

Some, but not all, of this common core can be traced to the work of the writings of Tyler (1949) who greatly influenced curriculum development in America. Tyler's model encouraged the curriculum planner to have questions regarding the selection of educational purposes, the determination of experiences, the organisation of experiences and the provision for evaluation (Posner, 1995). This approach is often associated with the product model. Models that developed out of Tyler's work, such as Popham and Baker (1970), were criticised for their over emphasis on learning objectives and were viewed as employing very technical, means-to-end reasoning. The higher education context in Europe, which has been strongly influenced by the 1999 Bologna Declaration (European Commission, 2009), uses a model not dissimilar from Tyler's work. This has provided many European universities with a blueprint for supporting staff in developing transparent learning outcomes and as a consequence facilitates student mobility. In contrast, to this technical model, theorists such as Kliebard, Eisner and Greene 'are more concerned with reformulating curriculum along an aesthetic, linguistic, historical, humanistic, and existential line' (as cited in Ornstein & Hunkins, 2009, p101). This model of curriculum-often described as a process model-is presented as a contrast to the more objectives-focused curriculum with its emphasis on student activities, teacher activities and the conditions in which learning takes place (Stenhouse, 1975, Posner, 2004; Barnett & Coates, 2005). Knight (2001) critiques the more technical, outcomes or product model. He doubts that complex learning, especially skills, qualities and beliefs, can be captured by learning outcomes. He explores whether it is possible to set out at the start what we think students will learn. Knight refers to the gap between what we ought to do and what we think, feel and act. He argues that the more technical models do not allow space for creativity and divergence (Knight, 2001). The process model has gained popularity for its emphasis on student learning. One way in which these models differ is that the process model emphasises more flexible student learning outcomes and more flexibility in choice of student assessment and learning activities. However, despite the order of emphasis, both of these models seem to contain aspects of the three core steps mentioned.

In reflecting on this literature it is not surprising that, as a new educational developer, I had struggled to know where to start in supporting the initiation of the curriculum revision process. Therefore, I decided to study the practices of experienced educational developers in order to ask them:

- What approaches do they take, in particular, at the initiation of the curriculum revision process and
- What factors influenced these practices?

## **Phase One of the Research: The interviews**

### *Methodology, Data Analysis and Results*

I decided to explore the above questions initially using in-depth qualitative interviews but it emerged from these interviews that I needed to further explore the contextual influences and extent of the findings. Based

on the interview results, I designed and implemented a semi-structured postal questionnaire. Therefore, there were two phases to this study.

In phase one, the in-depth interviews (Fontana & Frey, 2000) were used to explore the practices of experienced educational developers working at the time in the Irish higher education system. In order to elucidate naturally occurring practices the interviews were not structured; instead the natural flow of the interview was encouraged and guided by the research questions (Bogdan & Biklen, 1998). Six **experienced** educational developers, known to the author, were selected for interviewing, including some who had also worked in systems outside of Ireland (selective sampling).

The Annotape computer package was used to record and to assist in coding the interviews (<http://www.annotape.com/>). Following this, coded excerpts were then placed into categories using a constant comparison method. The codes and categories were discussed with another educational developer in order to confirm their validity by performing a credibility check. The researcher revised the categories many times before arriving at the following two main categories:

- A dialogic approach by the Educational Developers
- Diverse starting point(s) in the process.

#### *Category 1: A dialogic approach by the Educational Developers: listening, questioning*

In the interviews, the educational developers stressed that it was imperative at the start to investigate the main driver influencing the curriculum change. They emphasised the importance of listening carefully to the rationale for the curriculum revision. Many commented on the fact that it was rare that academic staff would seek advice on the whole curriculum and most were focused on one aspect of the curriculum, i.e. assessment issues, evaluation of curriculum or difficulties with trying to deliver a content-heavy curriculum. This in-depth exploration was a key starting point for the six developers interviewed. They carried this out by asking multiple questions. The key questions emerging from the data which were used by the educational developers early in the process were: Why are you making changes? What do the students need to know? What are you trying to achieve? What are the essentials for students to be able to do?

One respondent (Interviewee 3) explained that he ‘would ask him (the lecturer) a lot of questions about what he wants and why’. There was a need for ‘a long, long dialogue’. He also reinforced the importance of other interpersonal skills such as listening which was emphasised by all of the educational developers. These listening and questioning skills were described as central to the rest of the process that would help educational developers understand the drivers and the context in which the academic staff were working.

#### *Category 2: Diverse starting point(s) in the process*

The educational developers were then quite diverse in how they approached the initial step of the formal curriculum revision process. There was frequent reference to the concept of *flexibility* as an important approach for the educational developer. The educational developers maintained that there were no recipes for solving curriculum revision issues and what worked well in one area did not necessarily transfer to another: ‘Learning is idiosyncratic’, ‘you need to test the waters’, ‘give people choices’, ‘the models are not a strait jacket’. Between the six educational developers, there were four different ways of starting this aspect of the curriculum revision process, demonstrating the contextualised nature of their approaches. One (Interviewee 6) had a preference for always starting with the concept of ‘graduateness’ by asking:

What are you trying to produce? Before we start the bun-fight about which bits of content to include or to take out, or even what teaching methods to use, what kind of graduate are you trying to produce?

This respondent elaborated that this approach helped the lecturer focus on what the students needed to know, do and what values they should hold. One had a preference for starting with exploring the educational philosophy of the programme (Interviewee 1). Two preferred to present the research/literature related to the different drivers for change (Interviewees 2 and 3). For example, Interviewee 2, maintained that:

There is usually some prompt. If the prompt is for example, high drop-out rate, I'll start with the research on high drop-out rates.

Three preferred starting by giving an introduction to different curriculum models (Interviewees 2, 4 and 5) although these were often linked with the literature/research on the drivers:

Sometimes I start with curriculum models. It goes back to this question of why you are doing it (drivers for curriculum revision). (Interviewee 2)

It appeared from the data that some had more than one starting point (e.g. Interviewee 2). This was not surprising given the emphasis placed on taking a dialogic and in effect, a customised approach. There was agreement by all however, that attention to the content should be last. As there were up to four different starting points mentioned by the six educational developers, it was decided to further investigate these practices.

## **Phase Two of the Research: The Semi-Structured Questionnaire**

### *Methodology, Data Analysis and Results*

I designed a semi-structured postal questionnaire (open and closed questions) to explore the following questions:

- Why, and to what extent, were their approaches used at module and/or at programme level?
- Were the educational developers' decisions based on theirs or their clients' discipline?
- How did they know their approach was effective?
- Finally, to what extent had their approach evolved over time?

The questionnaires (n=74) were sent to both UK and additional Irish Educational Developers through the professional organisation mailing lists, i.e. Staff and Educational Development Association (SEDA) and the Educational Developers Irish Network (EDIN) retrospectively. Twenty-two questionnaires were returned; 10 from Ireland; 10 from the UK; 1 from Holland and 1 from South Africa (who were also members of SEDA, the UK developers' network), giving a response rate of 30%.

The majority of the Irish educational developers reported that they were less than nine years practicing as educational developers, whereas there was a greater spread of experience in the UK with three of the 10 UK educational developers reporting they were more than 18 years working in that role. The majority (86%) of the 22 educational developers worked with multiple disciplines as opposed to one specific discipline. The questionnaire was designed to explore the extent to which the approaches that emerged in the interviews were used when revising a full programme and/or revising a module. Therefore, a list was devised from which the participants had to choose their preferred starting point for both levels (See Table 1 for closed question results).

Table 1: Educational developers starting points for programme and/or module revision.

Approaches to revising a programme and a module	Programme First choice	%	Module First Choice	%
I start by working, with the staff on the learning outcomes/aims of the <i>programme</i>	N=10	(43.47%)		
I start by working with the staff on the learning outcomes/aims of the <i>module</i>			N=9	(40.90%)
I start by exploring the graduate attributes	N=5	(21.74%)	N=3	(13.64%)
I start by looking at the educational philosophy associated with the full <i>programme</i> .	N=4	(17.39%)	N=5	(22.73%)
Other: I start by .....	N=4	(17.39%)	N=2	(9.09%)
I start by presenting to the staff the literature/research related to the driver for change	N=1	(4.34%)	N=1	(4.54%)
I start by looking at the educational philosophy of the staff involved in the <i>module</i>			N=1	(4.54%)

Note: some respondents put two choices down as first

Although the numbers are small, there are some trends that can be drawn from the closed questions to support the interview data. The initiation process by the educational developers appeared to have some similarities at the two levels of curriculum revision. The developers strongly favoured working on the learning aims/outcomes as their first preference, either when revising a programme or when just revising a module. In addition, the developers highlighted the importance of linking with the concept of exploring graduate attributes at both levels (slightly more emphasis at programme level revision). The exploration of the educational philosophy of the programme was important at both levels however, at module level, it was the educational philosophy of the programme (the higher level) and not the module that appeared to be more important. In contrast to those interviewed, the questionnaire respondents were not as keen on starting with a presentation of the research on the drivers for change, either at the module or programme level. Finally for both module and programme level, the ‘other’ (open-ended) category supported the dialogic approach that emerged from the interviews, i.e. listening, questioning, exploring reasons for change etc.

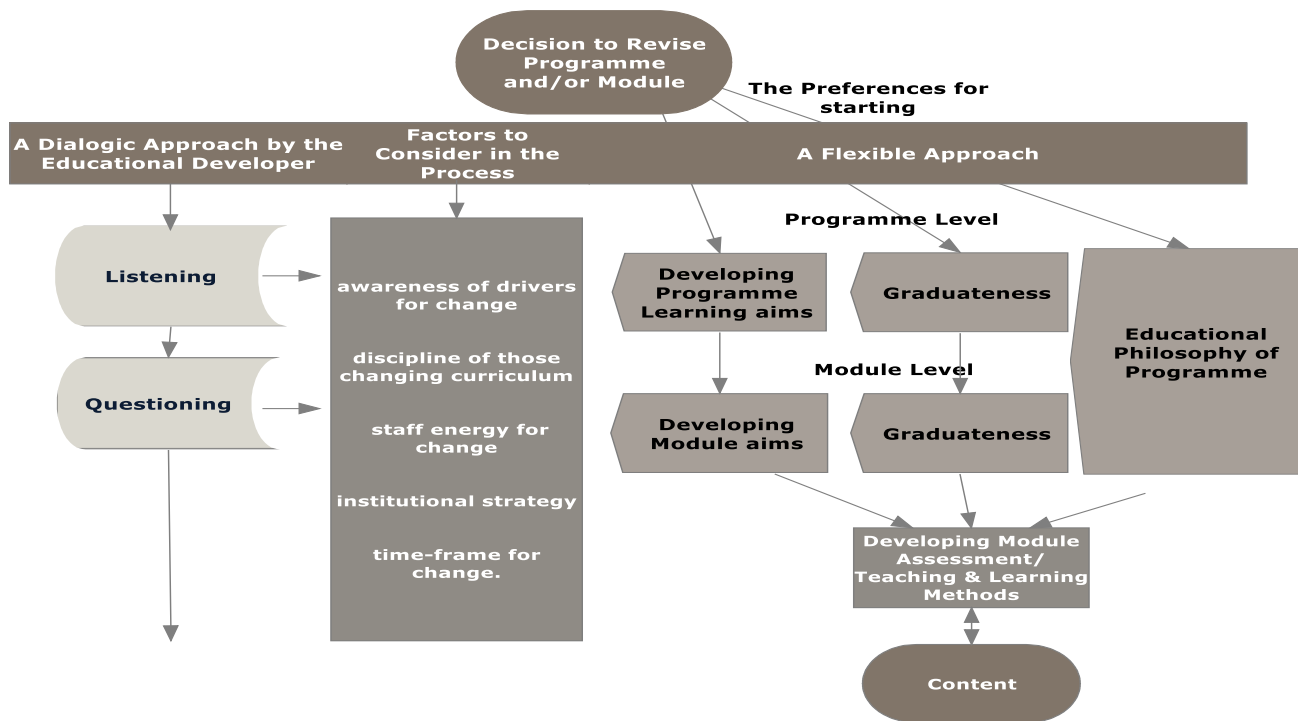
Despite asking respondents to give their preferred starting points, some commented in the questionnaire’s open-ended questions that they had used different approaches in different contexts:

In reality however depending on the context.....I reckon I have used all the starting points identified above with varying degrees of success (ID 4, >18 years as Ed Dev).

The majority of the respondents believed that the approaches used in revising curricula were dependent on the discipline of those involved in the curriculum. In addition, some educational developers supported using disciplinary expertise. The educational developers were nearly unanimous that their practices had changed and evolved over time which demonstrated that with expertise people are changing their practices. The extent to which the educational developers knew whether their approaches were effective varied from responses such as ‘I’m afraid I don’t know’ to ‘experience’ to ‘people come back’. There did

not seem to be a systemic evaluation of these approaches, although it was mentioned that evaluation of these approaches was important. A final point emerging was that the context of the institution was important and that programme review did not happen in isolation: ‘size of institution, history and culture are important factors’ (ID1). Institutional strategy should be, they noted, a key driver for change. Figure 1 summarises the findings from both phases of the study.

Figure 1: The initial curriculum revision process used by the educational developers



## Discussion and Conclusions

In considering how educational developers approached their curriculum revision activity, it became apparent that those who participated in this study, unanimously supported the need for an ongoing dialogic approach with the academic staff, including listening and in-depth questioning. It appeared they allocated a lot of time to trying to understand the drivers and other aspects of the context in order to be well placed to support the staff in revising their curricula. There was a sense that this part should not be rushed, that it should be ‘a long, long dialogue’. Stark’s work on the filtering process (2000) appears to relate to both this dialogic approach and the emphasis on the programme’s educational philosophy. In his ecological paradigm of educational development, Land (2004) categorised educational developers into 12 different orientations. One appears to be similar to the dialogic approach used by educational developers in this study, i.e. ‘internal consultant’. In his study, those with this orientation highlighted that it was not just a question of going in and telling people what to do. One respondent in this orientation explained it was about familiarising himself with the department, and similarly, emphasising the concept of listening: ‘Yes, it is all about situated cognition so you go in and you listen and watch and you say very little at first...’ (Land, 2004, p101). Land might also link this dialogic approach to those with an interpretive-hermeneutic orientation who seek to understand the situation and the inner world of the person, i.e. the academic staff

member. The approaches described by the educational developers in this Irish/UK study contrasted with some of the more managerial orientations described in Land's study.

There were many external factors which emerged as influencing the revision process. These were initially explored in the listening and questioning aspect of the process, similar to Stark's (2000) concept of a filtering process. These factors included: awareness of drivers for change; discipline of those changing curriculum; staff energy for change; institutional strategy; time-frame for change. One internal factor identified by educational developers in this study was that they changed practice with experience. There is a challenge therefore, for novice educational developers with neither the tacit nor the procedural knowledge, to know how to proceed without in-situ expert role models (Glaser, 1999).

In parallel to the dialogic approach, the more formalised curriculum revision process was not dominated by any one approach. It appeared that it was important to be flexible. At least three key (neither exhaustive nor mutually exclusive) approaches emerged. The most popular approach either at programme or module level was to focus on the aims/outcomes. This reflects among other approaches, Biggs' constructive alignment of learning outcomes (Biggs, 2003). It could be argued that this is a product model of curriculum design reflecting the objectives-driven curriculum models described by Ross (2000) and Tyler (1949). Knight (2001) however, highlights the limitations of this popular approach which he believes is too reductionistic and does not allow for complex learning. As a point of interest, one approach not mentioned by those in this study on curriculum revision as it relates more appropriately to the development of new curriculum, is carrying out a needs analysis.

Another popular starting point was the 'graduateness' approach, often described as 'backward design' which explores the type of graduates that are needed by the end of a programme. Ornstein and Hunkins (2009, p216) describe the backward design process (advocated by Wiggins and McTighe) as identifying expected end-points, drawing 'from the fields of architecture and engineering'. It appears from the literature that back-ward design is still more prevalent in the professional programmes where there are sets of competencies required by the end. For example, Ziegenfuss and Lawler (2009) used a model of backward design in a doctorate programme in Higher Education Leadership.

The third option for a starting discussion on curriculum revision focused on the exploration of the programme's educational philosophy. This is more aligned with Toohey's emphasis on beliefs, values and ideologies in course design, maintaining that 'sometimes a course is completely revised because enough individuals who share a particular philosophy of education want to replace it to fit with their beliefs and values' (Toohey, 2000, p25). Prosser and Trigwell (1999) also stress the importance of the perceptions and beliefs of the teaching staff when presenting their model of the teaching and learning relationship. This approach is evident, in particular, with those who support the process model of curriculum (Knight, 2001; HEA, 2009). Although it appears that the product (outcomes-led) model of curriculum appeared to dominate those who participated in this study, there are aspects of the developers' approaches more akin to the process model. It may be that there is an artificial polarization of these models but that is a separate debate (see Neary, 2003; Knight, 2001).

In approaching curriculum revision it appears that despite some suggested starts, it is important that educational developers remain flexible by being open to using different approaches in different contexts. Ornstein and Hunkins (2009, p182) summarise this debate as:

How do we choose from among diverse views of education, curriculum and how to organise them? There is no simple answer. Educational thinkers and doers must ponder multiplicity.

The findings of this study do not give novice educational developers a recipe but it should help them and academic staff, to reflect on a number of different starting points in the curriculum revision process. There is a need for further research to be carried out on the rationale for why and when one uses these approaches in different contexts. This study focused primarily on the earlier stages of the curriculum revision process. It did not explore in any depth the latter stages such as implementing the

teaching/learning and assessment methods or the evaluation of the curriculum. Further studies would be needed to explore the latter aspects of the curriculum revision process in more detail.

In conclusion, this paper highlighted some key interpersonal skills and some suggested starting points for educational developers to use in their approach to curriculum revision, in particular having an early in-depth two-way dialogue with staff. Educational developers need to be supported through continuing professional education courses to develop these communication, negotiation and curriculum development skills. There is also a need for more senior educational developers to role model or make transparent, their practices nationally and internationally so that novice educational developers can become more confident and competent in their practices in this area.

### **Acknowledgements**

I would like to thank the 28 educational developers who participated in this research study and to both SEDA and EDIN for access to their members.

### **Notes on contributor**

Geraldine O'Neill, PhD, is a senior lecturer in Educational Development at the Centre for Teaching and Learning, University College Dublin. Her research interests are in the areas of curriculum design and problem-based learning.

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