# A brief introduction to designing courses, programmes and curricula[[1]](#footnote-1)

One of the most common models of course design used by academic staff in UK Universities is the constructive alignment model (Biggs, 1996; Biggs and Tang, 2007). This model is described as ‘constructive’ because it is based on the constructivist theory of education where learners are considered to construct their own knowledge and meaning by making sense of experiences and new information in relation to their existing understandings. New and adapted understandings are created as they assimilate and interpret new knowledge and experience. The model uses the term ‘alignment’ to emphasise the importance of all the elements of course design being coherent. For example, if the aims of a course are for a student to develop a practical skill such as driving a car, the assessment will need to test that a student can actually drive and therefore, a well-aligned assessment would involve a practical test of driving skill. Similarly, well aligned teaching methods would provide students with an opportunity to develop practical driving skills.

The constructive alignment model focuses on designing courses by starting with a focus on the broad aims of a course and what the intended learning outcomes will be for students. It then requires consideration of how you will assess that students have achieved the intended learning outcomes. The early focus on assessment mirrors the behaviour of many students who are ‘assessment-led’ in their orientation to study. So the early focus on assessment when designing courses taps into the potential that assessment has as a motivator for student learning. Assessment should therefore be considered as an opportunity for students to learn – not simply as a test of what they have learned – this is reflected in the idea of moving from assessment *of* learning to assessment *for* learning (Montgomery & McDowell, 2008).

Having clear aims for any course that you are designing is clearly important. Fink (2007) argues that course aims need to consider carefully the elements that contribute to students having a significant learning experience. Fink outlines a taxonomy of significant learning consisting of six elements: 1) Foundational knowledge - the facts, principles and relationships that make up the content of a course; 2) Application – what students are required to do with foundational knowledge including e.g. physical skill or problem solving, decision making or creative thinking; 3) Integration – identifying similarities or interactions between subjects, theories, trends; 4) Human dimension – learning about themselves or how to interact with others; 5) Caring – when students change their feelings, interests, values and motivations in relation to a subject; 6) Learning how to learn – we can’t teach students everything they need to know, so we need to help them learn how to keep learning. “Any course can address all six of these general kinds of learning. And the more the course can promote, the more significant will be the overall learning experience for the student” (Fink, 2007:14).

Susan Toohey outlines the importance of our own values, attitudes and beliefs on the course design process. She describes five different approaches to course design that she considers to be strongly influenced by underpinning ideologies: 1) traditional or discipline based approach – knowledge exists independently, programmes are structured around important concepts. Students are usually required to gain a broad knowledge of the field and methods of inquiry used in the discipline; 2) Performance or systems based approach – this approach focuses on how to achieve desirable goals and how to measure results. Here learning outcomes are stated in advance and in behavioural terms, while teaching focuses on how to help students achieve effective performance of the outcomes – this is where the constructive alignment model probably best fits; 3) Cognitive approach – The focus here is to develop the mind, strengthen intellectual capacity and to help students learn how to learn. There are some questions about how transferable some of the knowledge and skills are to other subjects that are developed in this approach; 4) Experiential or personal relevance approach – In this approach, education needs to meet the needs of learners and therefore knowledge and skills are highly valued if they have personal significance and usefulness. This approach implies learners and teachers collaborate in planning and implementing learning opportunities; and 5) Socially critical approach – the aim here is for students to develop a critical consciousness so they become aware of societal problems and become motivated to change society for the better. Societal values are exposed and understandings are critiqued collaboratively.

It is possible to aspire to more than one of these approaches to course design outlined by Toohey, but where a curriculum is designed by different people informed by quite contrasting ideological positions, this is likely to lead to a lack of coherence in the messages about, for example assessment, and students may react negatively to these mixed messages.

Wiggins and McTighe (2005) warn of the ‘twin sins’ of traditional approaches to course design. They define these as ‘activity oriented design’ and ‘coverage’. In activity oriented design, staff use lots of engaging activities that are often fun, but which tend to lead only accidentally, if at all, to insights or understanding. They term this being ‘hands-on without being minds-on’ (Wiggins & McTighe, 2005:16). In contrast, they describe a second form of ‘aimlessness’, where staff take students page by page through text books or make valiant attempts to cover all of the important factual material in the allotted time. They state “coverage is thus like a whirlwind tour of Europe…*If it’s Tuesday: This Must Be Belgium*, which…suggests that no overarching goals inform the tour” (Wiggins & McTighe, 2005:16). These approaches leave students asking questions such as ‘what’s the point?’, ‘what does this relate to?’ So this is not to say that interaction in the classroom or covering large amounts of factual information are wrong, but rather it reminds us that the aims and learning outcomes should clearly guide our course design including the teaching methods and approaches we use.

Another influence on course design that is gaining increasing attention in higher education discourse, is the issue of who designs courses. In the past employers have sometimes been consulted more frequently than students about the design of university curricula (Bovill et al, 2008). There are growing calls for students to have more agency in designing their own learning experiences (Bovill et al, 2011; Cook-Sather, 2010; Delpish et al, 2010; McCulloch, 2009; Seale, 2010). The implications of student involvement in designing learning include: a more equal relationship and ongoing dialogue between the tutor and students; increased student responsibility for learning; and the shared potential for learning through curriculum design processes. This is not something that is straightforward and many staff might feel uncomfortable at the idea of handing over some decision-making power to students, or may be concerned about for example, professional body requirements that feel constraining in terms of what might be possible. However, it is worth remembering that course design does not have to either involve students or not involve students; rather, there is a continuum of possibility between gathering student feedback to inform course design through to having students as active partners in designing a course or elements of a course.

One of the other common influences on course design, particularly in research-intensive universities, is the idea of creating strong links between research and teaching. Mick Healey outlines a very useful framework describing four ways in which these links might be conceptualised: 1) research led, which focuses on teaching being informed by the latest research in the subject area; 2) research tutored, which is where students write research essays and use this as the basis for research discussions; 3) research-oriented, which is where a course focuses on developing students’ research methodology knowledge and skills; and 4) research-based, where students engage directly in research and inquiry. Seale (2010) argues for the value of meaningful student engagement in higher education learning through becoming involved in participatory research, where a broader range of stakeholders are meaningfully engaged as researchers and participants. While Neary (2010) argues that we should be adopting “research-engaged teaching and learning” as a key strategy within universities (Neary, 2010: 7).These conceptualisations of the ways in which research and teaching are inter- connected are very useful when trying to consider integrating research into any course design.

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1. Note that the terms course, programme and curricula are used loosely in this writing in order not to have to list all the terms throughout this text. Normally courses are viewed as the building blocks of programmes. Curricula can refer to the content, outcomes, structure and processes of any programme or course. [↑](#footnote-ref-1)