Chapter 1
Developing a Pedagogy for Interactive Learning

John Cowan
Edinburgh Napier University, UK

ABSTRACT
Recent developments in higher education have seen the demise of much didactic, teacher-directed instruction, which was aimed mainly towards lower-level educational objectives. This traditional educational approach has been largely replaced by methods that feature the teacher as an originator or facilitator of interactive and learner-centred learning—with higher-level aims in mind. The origins of, and need for, these changes are outlined, leading into an account of the emerging pedagogical approach to interactive learning, featuring facilitation, and reflection. Some of the main challenges yet to be confronted effectively in consolidating a sound and comprehensive pedagogical approach to interactive development of higher level educational aims are outlined.

INTRODUCTION
Schemes for purposeful learning need not necessarily be interactive. At the lower level of the most common cognitive taxonomy, in which intellectual demands related to thinking are arranged in a hierarchical structure (Bloom & Krathwohl, 1956), learners may drill themselves effectively to acquire, know and retain the vocabulary of a foreign language - in a solitary activity (Cowan, 1995). Learners can come to understanding of concepts or methods by wrestling with clear and structured opening explanations at their own pace, and in their own individual ways (Cowan, et al., 1973; Cowan, 1975). Even at the higher levels of the cognitive taxonomy, today’s learners will often engage profitably and individually in recall of experiences, with analytical reflection thereon, leading into self-evaluation, all following a suggested task structure (Moon, 1999).
However this chapter is concerned with that learning which is purposefully pursued through a two-way interactive exchange, as part of a planned programme of teacher-supported study. In Higher Education (HE), the past 60 years have seen a radical change in the use made of interactive learning within curricula.

Why has interactive learning come to feature so prominently in present programmes, considering UK higher education as a particular example, but within an international context?

CHANGES IN HIGHER EDUCATION PRACTICES

Sixty years ago, there were four common modes of teaching and learning in British higher education. There was the lecture, in which a lecturer presented material and students made notes (or were sometimes given handouts). There were practical or tutorial classes, in which students were given problem sheets and were assisted by a tutor as they tried to solve the problems or deal with the practical tasks. There were seminars, in which students presented short papers based on their reading and discussed these with classmates under the supervision of their teacher. And there were (for small numbers) the Oxbridge tutorials or supervisions, in which students met in pairs with a tutor to discuss papers they had written. Other than in the last example, these approaches did not entail constructive and purposeful two-way interaction. Nevertheless the mixture of methods was deemed to cater moderately adequately with educational demands which concentrated on the lower levels of the cognitive taxonomy (Bloom & Krathwohl, 1956)—namely knowing, understanding, and applying (Cowan, 1975).

In contrast, the situation nowadays is rather different. The learning outcomes which are assessed, expected, valued—and taught towards—are generally at a distinctly higher level than hitherto. There is considerable emphasis on the upper categories of the taxonomy (which has been slightly adjusted in recent years, to feature analysis, evaluation and creativity in that order). This emphasis, amongst other factors, has led to a radical change in approaches to learning and teaching in many but not yet all universities. There is now a widespread assumption that the desired student learning should emerge from the application of a pedagogy which develops cognitive and interpersonal capabilities rather than one which concentrates merely on instructing with the aim of enabling learners to acquire knowledge, understanding and the ability to use familiar algorithms. There is more self-directed learning, and more interactive group work (face-to-face or online). Consequently students, in British higher education at least, are timetabled for distinctly fewer class-contact hours per week than were their predecessors a generation earlier. For example, the insistence by the Academic Advisory Committee for Heriot-Watt University in 1964 on a maximum of 24 class-contact hours per week (Cowan, 1975) contrasts with the national average of 15 hours per week in 2008 (Halsey, 2008).

How did these changes come about?

THE REASONS FOR CHANGE

Dissatisfaction with the Status Quo

In mainland Europe, the student revolts in France in 1968 (Dupeux, 1973; Cowan, 1982) sparked off widespread rejections of intellectual authoritarianism, coupled with specific criticisms of the inadequacy of the higher education on offer to young people. Those politically inspired campaigns led almost naturally to the creation of courses in northern Europe and Scandinavia based on student-directed project orientation (Kjersdam & Enemark, 1994). In many such programmes there was initially often expected to be explicit political motivation for the educationally liberal projects on which the new approach centred (Cowan, 1982).