What’s different about large classes?

Introduction

In the last decade, the way higher education has been delivered has undergone profound transformations. One of the most significant changes in the university sector in this respect has been the burgeoning participation rate. In many developed countries the participation rate of high school graduates has risen over the last decade from 5-10% to 30% (Newstead, 2000). Many academics and critics of government policy have lamented what they claim to be an inevitable undermining of academic standards as universities lower requirements to open entry to more students. But most evidence suggests that this expected diminution of standards has not occurred and that universities have managed to maintain the quality of the degrees produced (Newstead, 2000).

Whilst there is very little large scale data examining degree standards in Australia, quantitative research from the UK has challenged various assumptions about the results of increasing student participation. In a study spanning ten years, Myron-Wilson & Smith (1998) demonstrated that the number of high level (first and upper-second class) degrees bestowed inevitably increases with the size of the student population. But the problem with quantitative studies of this kind is that they neglect to ascertain the influence of class size on teaching and learning, or the effects that class size have on student satisfaction, self-esteem or attitudes to study. The reality is that although most students and teachers declare a preference for reduced class sizes and believe in their superior efficacy over large classes, the economy in the consumption of resources (both human and financial) entailed in large classes will ensure their continued employment in the future. Therefore, the need remains for the higher education sector in Australia to identify the various problems that are unique to large class teaching environments, as well as strategies to overcome or minimise these problems, in order to maintain the quality of student learning in the face of burgeoning class sizes.

The major problem in identifying trends with large classes is that what constitutes a large class will differ according to the discipline, the nature of the class (such as lecture, tutorial or lab work), and the perceptions of lecturers and individual students. It is further complicated by the reality that the problems usually uniquely characteristic of large classes often occur with small classes in certain situations, such as where student numbers increase markedly from one year to the next or when an academic first assumes responsibility for a large class. For the purpose of the following literature reviews, class sizes of eighty or more have been considered large, although it must be acknowledged that many of the conclusions may be of relevance to smaller classes.

Students’ preferences with respect to class sizes and concerns about the impact of class sizes on their learning are invariably determined by their previous experiences. Papo (1999) surveyed 246 higher-level undergraduate
students (2\textsuperscript{nd}, 3\textsuperscript{rd} and 4\textsuperscript{th} years) from various faculties to investigate learning problems associated with class size. The results indicated that students at higher levels of study and with previous experience of various class sizes do not perceive large classes to pose significant problems to their learning. These results have confirmed previous research (Feigenbaum and Friend, 1992) that more experienced students express stronger preferences for large classes than do first year students, who usually favour the greater interaction involved with small classes. Irrespective of student preferences, the reality is that there are mixed findings about the effect of large classes on student performance, though the quality of teaching and the learning experience are the paramount influences over student results.\textsuperscript{1}

What’s different about large classes?

The successful teaching of large classes involves addressing many of the requirements of good practice in teaching relevant to all class sizes. For example, teachers of all classes are required to motivate students, be systematic and organised, provide quality of learning and develop stimulating assessment tasks. But these problems are exacerbated with large classes, because the corollary of expanding student numbers is increased diversity of the student population and increased complexity of teaching. In many cases with large classes this strain on an academic’s resources undermines the quality of the teaching and detracts from the learning experience of the students. Thus, it is imperative that the problems specific to large classes are identified and investigated, especially in the realms of administration, teaching and assessment. These issues are reviewed and discussed in the linked sections mentioned below.

Administration and management of large classes

The problems associated with the administrative burden of teaching in higher education, such as workload on coordinators, space requirements, liaising with other teaching staff and allocation of financial resources are significantly magnified in larger classes. One of the primary reasons for the increasing incidence of large classes in higher education is their highly efficient use of resources. As a consequence, solutions to administrative problems in large classes must be significantly different to the management strategies used with smaller ones. For example, the coordinators of large classes are usually granted less money per student than the coordinators of smaller classes and, therefore, require different approaches to similar problems.\textsuperscript{2}

Teaching and assessment in large classes

Valid assessment of student learning is also problematised in large classes,

\textsuperscript{1} The section on Student performance in large classes describes research findings on the effects of class size on student performance, student ratings and student morale.

\textsuperscript{2} The section on Administration and management of large classes reviews the literature on this issue more extensively.
especially because classes have increased in size at the same time as pressures have mounted for a change in the focus of assessment. Interpersonal and applied skills, such as communication, negotiation, linking theory and practice, lateral thinking and metacognition, which are increasingly valued by government and industry, are more difficult to incorporate into the learning activities in large classes. Higher student-teacher ratios inevitably make it more difficult for academics to personalise lectures, maintain students’ attention, facilitate collaboration between students, or even to assess such processes. For this reason, research is increasingly being undertaken into successful strategies in teaching and assessing large groups.  

Large classes across disciplines

The problems associated with large classes vary according to the discipline. For example, courses with practical components such as science, nursing and education necessitate highly organised and systematic ways of administering large numbers and groups of students. In contrast, courses such as those in the social sciences and humanities, which aim to improve students’ skills in research and analysis, invariably burden academics with unmanageable marking loads.

Policies and trends in higher education

The changing government ideology and approach to higher education, along with funding cuts and increased participation rates, have had significant effects on the function of universities as institutions, the roles of academics and the experiences of students in the sector. The most apparent manifestations of these changes have been the dramatic burgeoning of class sizes, and the increased prevalence in the use of flexible delivery methods of teaching, such as online and off-campus education. At this stage, research into the implications of increased class sizes has focused on the level of teaching and assessment, neglecting to sufficiently examine best practice at the higher echelons of administration, notably departmental, institutional and governmental levels (Newstead, 2000; Biggs, 1999; Gibbs & Jenkins, 1992).

Summary of the literature

The research into the impact of increased class sizes on the learning experience of students suggests that the quality of teaching and assessment provided are more important than class size. Nevertheless, increasing class sizes inevitably engenders further problems because it increases the complexity of teaching. Academics have to deal with a more diverse population of students,
have more problems communicating with other members of staff as well as students, suffer under a greater administrative burden, as well as face more difficulties in promoting active participation and monitoring student progress.

Despite the considerable research into good practice in teaching large classes, teaching in this context is not yet as proficient as it could be. This is largely because this research has not been disseminated to sufficient prevalence at the departmental and institutional levels. Most of the relevant literature has been published in discipline specific journals and texts on university teaching, which has resulted in unilateral implementation by various academics, rather than the formulation of policies at a managerial level to ensure departmental or institutional approaches to the problem.

List of references