

The Teaching of First Year Economics in Australian Universities^{*}

Nilss Olekalns
Department of Economics
University of Melbourne
Victoria, 3010

Email: nilss@unimelb.edu.au
Phone: 61 3 8344 5342
Fax: 61 3 8344 6899

This paper surveys current pedagogical practice in the teaching of introductory macroeconomics and microeconomics in Australian universities. Survey results are presented detailing lecturers' approaches to their teaching over 2001 and other aspects of their teaching environment. A comparison of the content and methodology of the main textbooks used in Australian introductory economic courses is also presented.

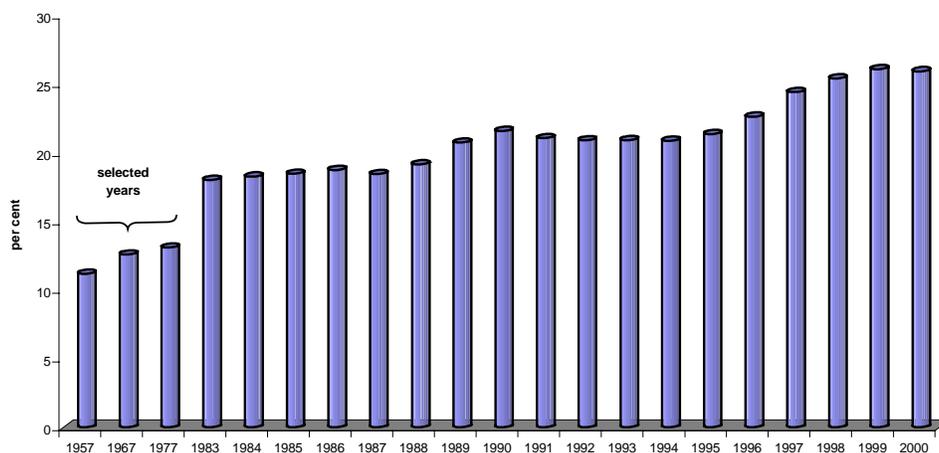
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1. Introduction

The teaching of economics in Australian universities began with the foundation of domestic tertiary institutions in the nineteenth century.¹ From humble beginnings, enrolments in economics and commerce related disciplines have assumed a major role in Australia's tertiary system. Spectacular growth from 1977 to 1983, in particular, has meant that enrolments in economics, business and commerce now account for over one quarter of total enrolments in Australian universities; see Figure 1.

Figure 1

Proportion of Total Higher Education Enrolments in "Business, Administration and Economics"



Source: Groenewegen and McFarlane (1990, page 175) and DETYA (2001).

The growth in “business, administration and economics” enrolments disguises some significant changes in enrolments between the sub-disciplines; most notably, a dramatic decline in the number of undergraduate economics degrees awarded by Australian universities in the first half of the 1990s, albeit with some modest recovery recorded towards the end of the decade.² Similar trends have been recorded in other countries (Siegfried and Round 2001).³ Despite the decline in specialist economics degrees, all Australian courses in business, commerce, and finance routinely include some component of economics at the first year level.

¹ W.E. Hearn, one of the four founding professors at the University of Melbourne, taught in several areas including political economy. Formal lectures in economics began at the University of Sydney in 1866-67, and courses in political economy were features of the early history of all the other “sandstone” universities (Groenewegen and McFarlane 1990).

² Enrolments in economics degrees in Australia fell by 13 per cent between 1992 and 1996 (Lewis and Norris 1997).

³ There has been a great deal of discussion about the possible reasons for the decline in economics enrolments; curriculum and course delivery, the introduction of vocationally oriented business courses and insufficient attention paid to the teaching of economics at high school have all been suggested as the cause (Keneley and Hellier 2001, Millmow 2000, Hodgkinson and Perera 1996, *inter alia*).

In this article, I review some of the main characteristics of the teaching of first year economics in Australian universities. Why undertake such a review? As mentioned above, a large number of students will, during the course of their tertiary studies in Australian universities, study basic macroeconomic and microeconomic principles. This alone makes it a matter of public interest to inquire as to the nature of the instruction that these students receive.

It is also possible that the content and mode of instruction that these students receive varies across institutions. How great is this variation? Is it true that economists agree on a core body of material, central to the discipline? Answers to these and similar questions are important inputs in assessing current Australian practice in economics teaching.

These are not trivial issues. Nor is it necessarily obvious that more, or less, diversity in the delivery and content of economics courses is desirable. Few, if any, readers of this journal would doubt that the ability to process economics and economics related material is a socially useful skill:

(T)hat the public does concern itself most frequently with economic questions . . . is a true and persuasive reason for its possessing economic literacy. . . . The public has chosen to speak and vote on economic problems, so the only question is how intelligently it speaks and votes. (Stigler 1970).

The extent to which that skill is shared amongst graduates depends, partly, on the use of a common vocabulary and knowledge gained of a (perhaps fairly narrow) standard set of economic principles (Gartner 2001). On these grounds, one might favour a tight curriculum that is common across institutions (Colander 1992). Offsetting this is society's need for diversity in opinion (Mosley and Wolff 1992). Treading the fine line between a common core of economic principles and the recognition of difference is a familiar problem faced by all who teach economics.

This review will necessarily be positive in nature. My aim is to document broad trends in teaching practice and course content in Australian universities, not to suggest that one approach is superior to others. There are two key sources of data that I use; (i) the results from a survey of Australian lecturers and/or subject co-ordinators in first year economics subjects and (ii) an analysis of the content of the major text books used in Australian introductory economics subjects.

2. The Survey

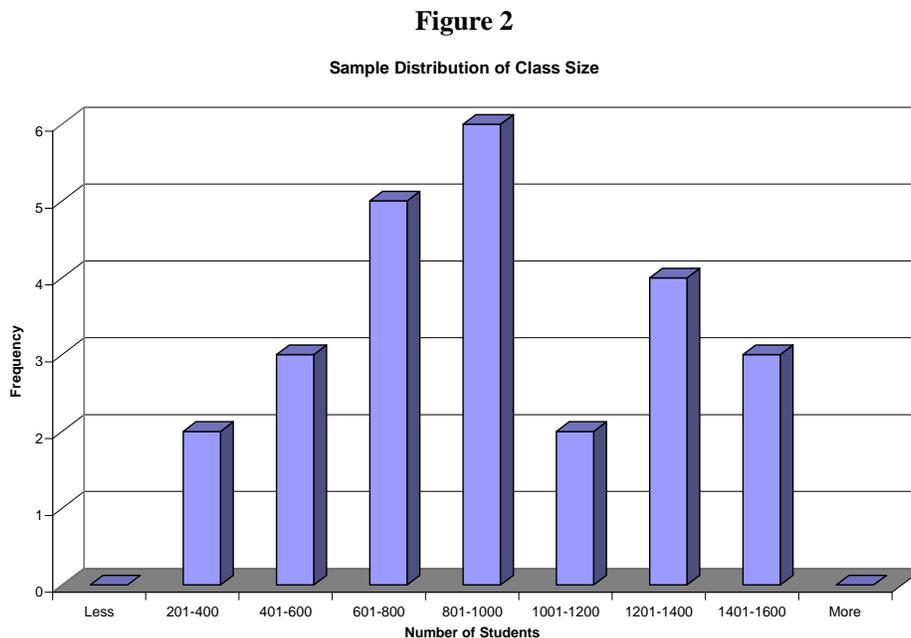
A survey was conducted of all lecturers identified as possibly having responsibility for a first year economics principles subject in Australia. The survey was conducted in September 2001 with a follow-up survey for non-respondents undertaken in December 2001. The surveys asked lecturers to consider their experiences teaching either first year macroeconomics or microeconomics in 2001. Sixty-five surveys were mailed to potential respondents. Eventually, 30 surveys were returned. It is possible that some surveys were sent to institutions in which an economics principles course is not taught, or that some lecturers simply chose not to respond⁴. Nevertheless, a response rate of nearly 50 percent was pleasing. The survey asked for basic information about course structure and content, including contact hours, choice of textbook, assessment procedures, feedback mechanisms, multimedia and World Wide Web use.

⁴ The envelopes were addressed to "The Lecturer in Charge, First Year Macroeconomics / Microeconomics.

3. Survey Results

3.1 class size

The survey results strongly reinforce that lecturers in economics principles subjects deal with large enrolments. In total, survey respondents taught 24,530 students in 2001. The average cohort size was 893 with the median and mode both being 800. The smallest subject enrolment was 300, the largest 1560. Figure 2 shows the sample frequency distribution.



Subject enrolments of this size almost necessarily guarantee that class sizes will be large by international standards. The Centre for Teaching Excellence (University of Maryland), for example, defines a large class to be anything in excess of 60 students!⁵

Whether large class sizes inhibit student performance has been the subject of an ongoing debate in the higher education literature. The most common finding is that class size has little impact on students' performance in introductory courses (Raimondo et al 1990). Furthermore, recall of the material two years after completion of the subject also seems to be unaffected by class size.⁶ However, there is an impact of class size on students' attitudes to their study with, not surprisingly, students in small classes reporting more positive attitudes than their peers in large classes. End of semester student evaluations of students' subject experiences also do not seem to be systematically affected by class size.⁷

⁵ See <http://www.inform.umd.edu/CTE/large/intro.html>

⁶ See Richard C. Schiming, "Class Size and Teaching Effectiveness", <http://www.mankato.msus.edu/dept/cenffd/classsize.html>.

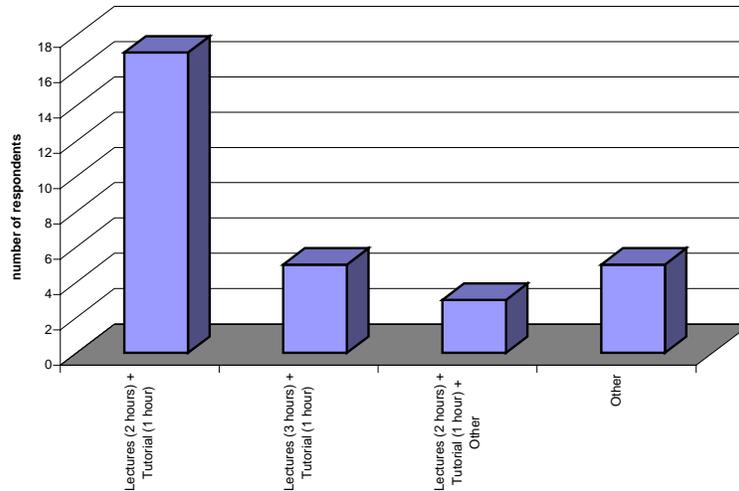
⁷ Schiming op. cit.

3.2 contact hours

Figure 3 details weekly contact hours as reported by respondents. Clearly, the model in which there are two hours of lectures together with an hourly tutorial per week dominates. There are variations on this model, for example, three hours of lectures plus a tutorial or the supplementation of the lecture/tutorial program with workshops (“other”).

Figure 3

Contact Hours

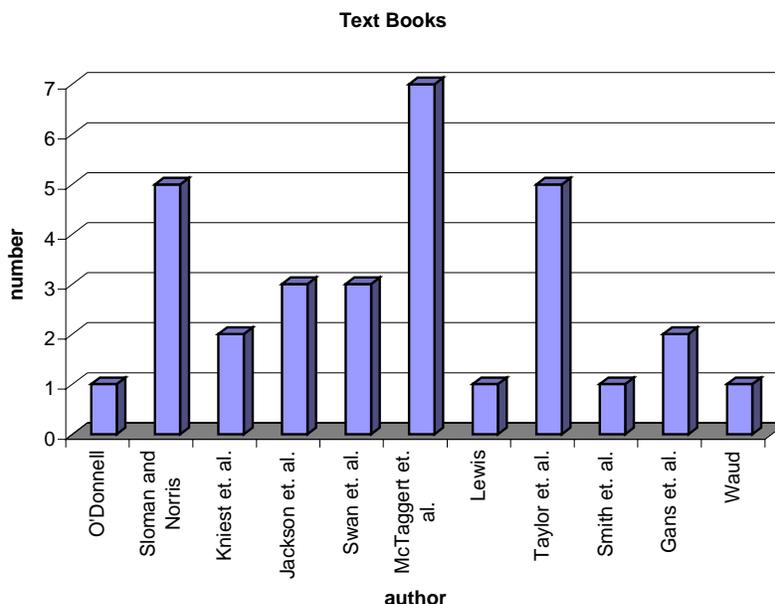


Results from the survey suggest that active learning strategies are often used in tutorials. For example, nearly a third of the respondents reported that their respective tutorial classes were conducted using the collaborative problem solving approach. This involves students working in groups to solve previously unseen problems, with practice problems assigned in the week leading up to the tutorial. Johnston et. al. (2000) report the results of a controlled experiment at the University of Melbourne in which students and tutors responded positively to the use of collaborative problem solving tutorials relative to a control group who used a more traditional tutorial approach.

3.2 textbooks

In global terms, the market for Australian economics textbooks is small. This means that most texts used in Australian principles subjects are local adaptations of successful texts used in other countries (usually the United States, occasionally, the United Kingdom). Figure 4 shows textbook use as reported by the survey respondents. Only four respondents reported using a text that was not an adaptation of an overseas book.

Figure 4



The Australian market is dominated by three books, McTaggart et. al (1999), Sloman and Norris (2002) and Taylor et. al. (2002).⁸ Together, they account for over half of the subjects covered by the survey (and nearly 16,000 students). The extent to which these books differ from each other, both in content and pedagogical approach, will be discussed in more detail below.

Table 1 reports the average scores from questions asking respondents to comment on particular aspects of their chosen texts. Scores are shown for all texts and for the three most commonly used texts, McTaggart, Sloman and Norris, and Taylor. The first two questions ask lecturers to comment on whether the standard of their chosen text was appropriate for students at either end of the ability range. The third question considers the diversity of views that are presented in the texts whilst the final three questions examine the use of real-world examples, including the quantity of domestic and overseas examples. This is a relevant issue given the foreign origin of the majority of the texts.

What emerges from these results is a general level of satisfaction with the texts, although one could hardly claim there is a wild degree of enthusiasm for any one particular book. Given such a small sample, extreme caution must be exercised before drawing inferences from these results. However, some tentative conclusions do emerge. Of the three main texts, Taylor does best in terms of being an appropriate standard for both the top and bottom 25 percent of the class. However, it does worst in terms of its coverage of different schools of thought. Relative to the other two books, McTaggart is regarded as being less appropriate for

⁸ To conserve space, henceforth these books will be referred to as McTaggart, Sloman and Norris and Taylor. Note that Taylor's Australian co-authors vary between the macroeconomics and microeconomics volumes.

the less able students. In all other respects, satisfaction did not significantly differ across the respective texts.⁹

Table 1: Lecturers' Satisfaction with Textbooks

	All books	Sloman and Norris	McTaggart	Taylor
1. The level of difficulty of the text I use is appropriate for the top 25% of my students	3.73	3.40	3.00	4.60
2. The level of difficulty of the text I use is appropriate for the bottom 25% of my students	3.23	3.60	2.67	4.00
3. The text has a good coverage of the main schools of thought in macroeconomics/microeconomics	3.30	4.00	3.67	2.60
4. The text makes good use of examples from the real world	3.67	3.60	3.33	3.40
5. The text uses too many examples from overseas	2.00	2.60	1.83	2.40
6. The text uses too many examples from Australia	1.70	2.00	1.83	1.40

1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree;

5 = strongly agree.

3.3 Content

Respondents were asked to select from a list of macroeconomic and microeconomic topics, those topics that were covered in their respective subjects. The list of topics was based, in part, on Gärtner's (2001) characterisation of traditional and recent macroeconomic and microeconomic topics. Some topics were added to the list to reflect some specialist areas that might be thought to feature in Australian courses (such as post-Keynesian macroeconomics and microeconomic reform). The results are summarised in Figures 3 and 4.

⁹ The caveat about small sample size needs to be kept in mind in what follows. One-sided Mann-Whitney tests for the difference in the mean scores found that Taylor scored higher on questions 1 and 2 relative to McTaggart but less than Sloman and Norris for question 3. The only other significant difference in mean scores was for question 2 where Sloman and Norris scored significantly higher than did McTaggart.

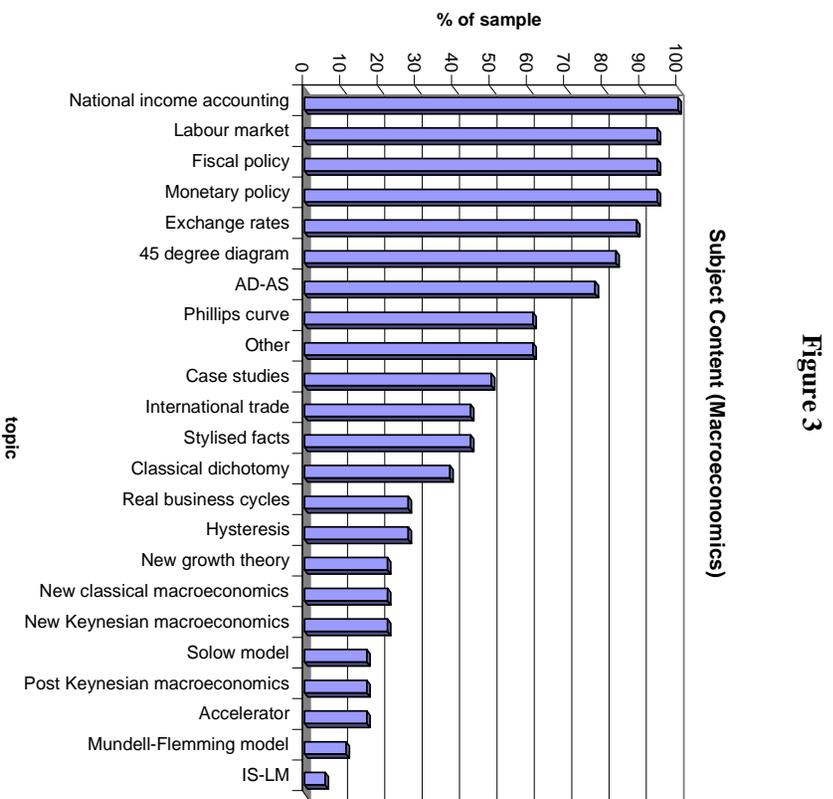


Figure 3

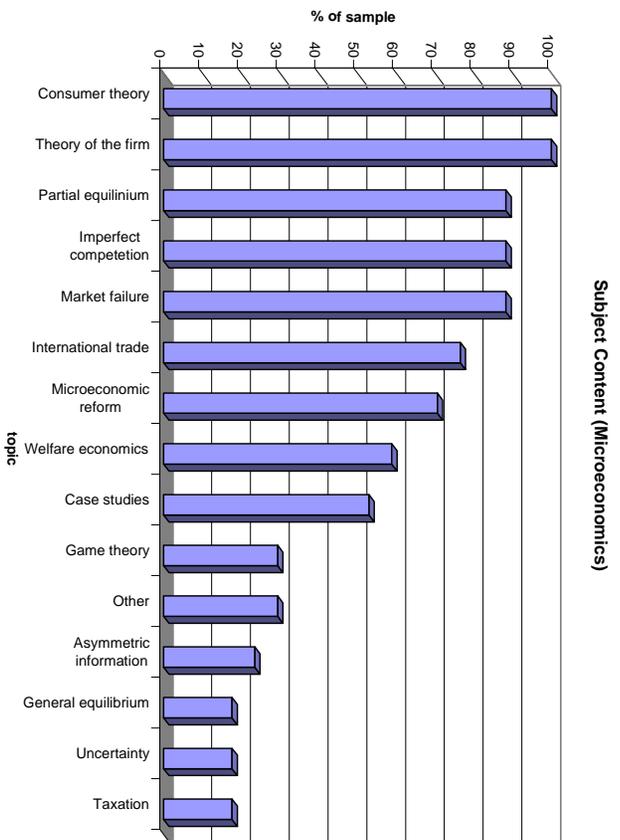


Figure 4

Considering first the results for macroeconomics, all respondents reported that they covered the core material of national income accounting, but that was the only topic where there was 100 percent coverage across institutions. Topics that once would have been thought of as the standard "workhorse" components of an introductory macroeconomics subject, such as the Keynesian cross 45 degree diagram and aggregate demand/aggregate supply analysis, were not covered everywhere. However the analysis of the labour market featured almost everywhere. Topics with a clear policy dimension tended to feature more prominently, especially monetary and fiscal policy. Surprisingly, although the study of exchange rates was widespread, the Mundell-Fleming model was not often given an explicit treatment. There was little coverage of different schools of thought; barely a fifth of respondents reported that they covered either new Keynesian or new classical macroeconomics with even fewer considering post Keynesian analysis. However, over a third of respondents dealt with the classical dichotomy. Half of the respondents reported that they made use of case studies and stylised facts in their teaching.

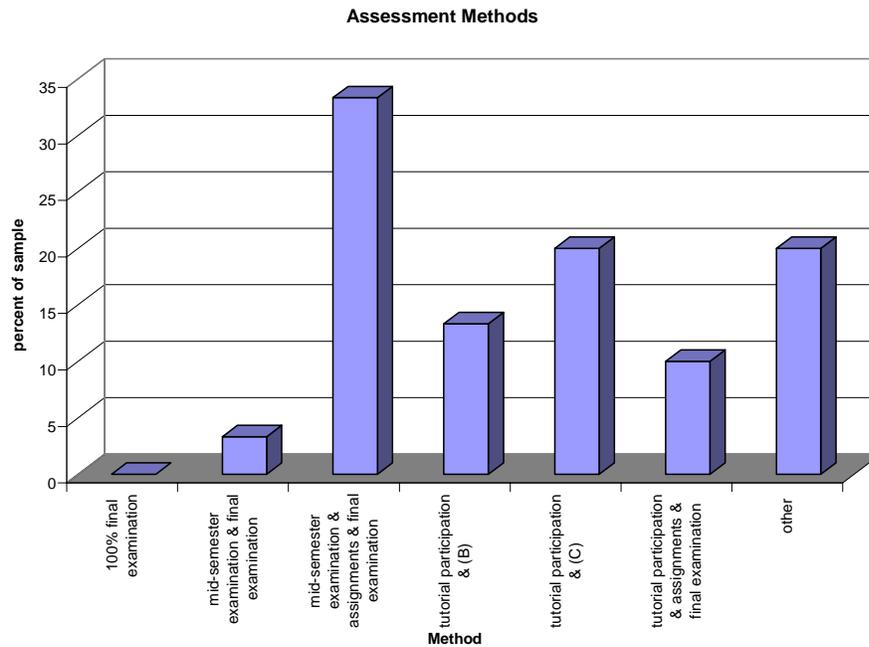
The range of topics covered in introductory microeconomics subjects is smaller than that found in macroeconomics. Gärtner (2001) found that this was also the case for European universities. All subjects cover consumer theory and the theory of the firm with most subjects also tackling partial equilibrium, imperfect competition and market failure. International trade was more likely to be covered in introductory microeconomics than in its macroeconomic counterpart. Recent developments in microeconomics, such as asymmetric information, uncertainty and game theory, were reported as being covered by less than one third of respondents. Public finance (or at least the analysis of taxation) was taught in only 17 percent of courses. Around half of the courses featured analysis of case studies.

3.4 Assessment

Assessment has proven to be a powerful means of eliciting positive learning outcomes from students, particularly in the development of critical thinking and deep approaches to learning tasks (Johnston and Olekalns 2002). The achievement of improved learning outcomes may, however, require the use of non-traditional assessment mechanisms and the careful matching of assessment practice and the learning objectives of the lecturer (Walstad 2001).

Figure 5 shows the range of assessment procedures reported by respondents. The figure shows a fairly narrow range of assessment practices with a mid-semester exam, one or more assignments and a final examination being the foundation of most assessment methodologies. Nearly one half of respondents also made some use of tutorial participation as an assessment device. Twenty percent of respondents used assessment procedures that didn't naturally fall into one of the stated categories. From comments that accompanied some of these surveys, it seems that many of these made use of computer technology in some way to provide at least part of students' assessment; examples included on-line quizzes and Internet submitted commentary on other students' work (Johnston and Olekalns 2002).

Figure 5

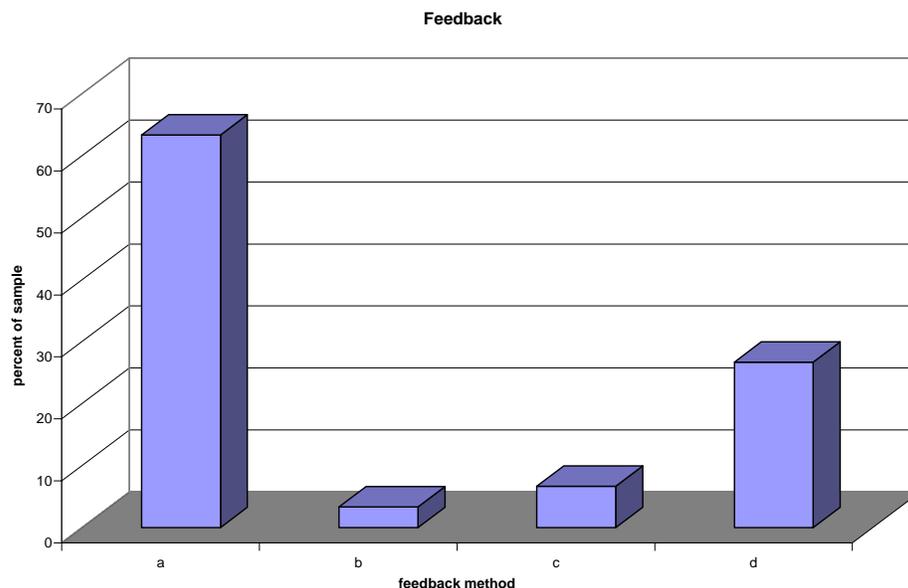


3.5 feedback on students' perceptions of quality of teaching

Surveys of practice in the United States show that end of semester subject evaluation questionnaires are the most common means used by departments of economics to evaluate the teaching performance of economics lecturers (White 1995, Becker and Watts 1999).¹⁰ The Australian survey reveals a similar trend. The results are shown in Figure 6. Over 60 percent of the respondents reported using *only* end of semester questionnaires to evaluate their teaching performance whilst all other respondents reported using end of semester questionnaires in conjunction with at least one other form of evaluation. Most respondents who reported using an additional feedback mechanism used tutors to provide feedback about their teaching performance. Peer review and meeting with student representatives were undertaken by only a relatively few respondents.

¹⁰ Poorly designed student evaluation questionnaires can be limited in the teaching and learning attributes that they encompass, in particular, focussing on the mistaken notion of teaching and learning as a process consisting only of the transmission of information from the lecturer to students (Kolitch and Dean 1999). It is hardly surprising that the results derived from these questionnaires do not always correlate with other measures of teaching performance (Bosshardt and Watts, 2001).

Figure 6



- a. end of subject questionnaire
- b. meeting with student representatives
- c. peer review
- d. other

3.6 multimedia and Web use

The responses to questions regarding the use of multimedia in lectures, summarised in Figure 7, show that “chalk-and-talk” has now been replaced by “click-and-talk”; PowerPoint presentations were used by nearly three quarters of the respondents.¹¹ Overhead projector slides (sometimes used in addition to PowerPoint) were also used by nearly one half of the sample. Video was used rarely although there were a variety of “other” unspecified uses of multimedia.

Figure 8 relates to one aspect of respondents’ use of the World Wide Web, subject home pages. Nearly all respondents maintained a home page. There was some degree of commonality regarding the features of the various home pages with subject objectives, lectures outlines and reading lists usually featuring. Around half of the respondents made lecture notes available in some form in advance of the lectures, while a much smaller proportion made lecture notes available after the lecture.¹²

¹¹ Parks (1999) discusses the advantages and disadvantages of lecturing using PowerPoint.

¹² The availability of on-line lecture notes, and the extent to which this influences learning outcomes, has not yet been the subject of systematic research. What is known is that active learning is an important means of developing deep learning, and this requires students do more than just sit and listen (Bonwell, and Eison 1991). Note taking in lectures might help to create an active learning environment in which students take more responsibility for their learning. The prior provision of detailed lecture notes carries with it the risk that the lecture becomes an entirely passive experience for students. Offsetting this is students’ propensity to become inattentive during the course of the lecture; one estimate is that students have an effective attention span of only twenty-five to thirty minutes (Bligh

Figure 7

Multimedia in Lectures

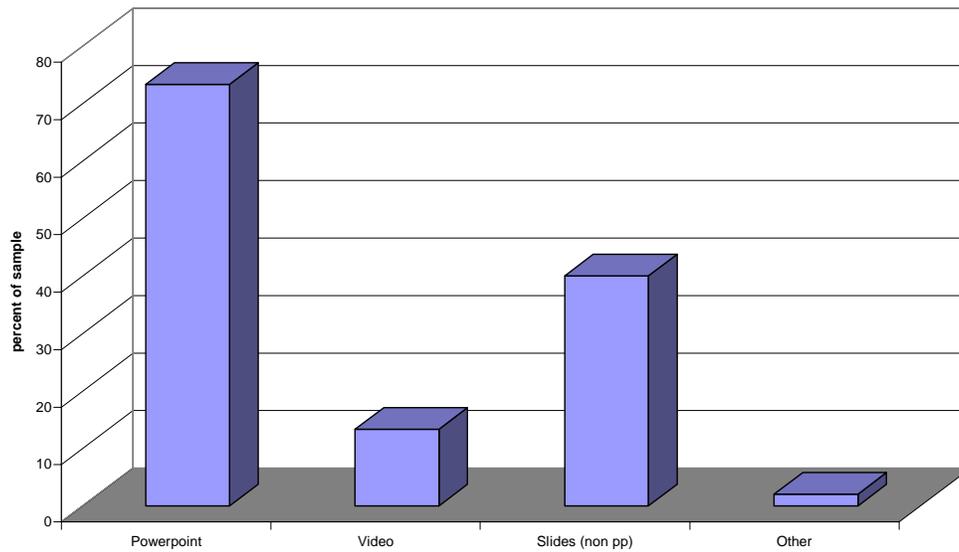
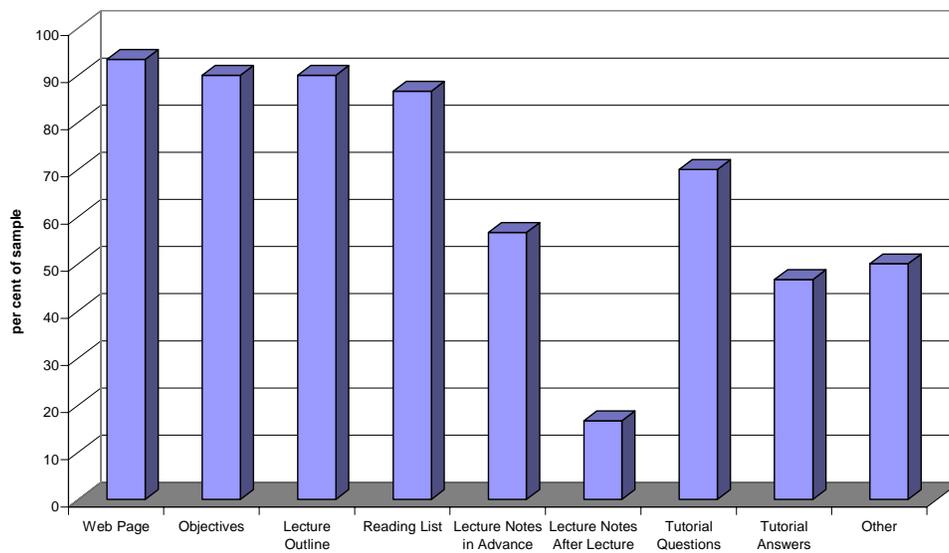


Figure 8

Web Page



1998, page 56). The quality of students' note taking over the entirety of a lecture might therefore be questionable, in which case, the provision of some form of lecture note prepared either in advance or after the lecture might be of educational assistance.

4. Textbooks

I now turn, in more detail, to the question of textbooks. There is a perception that economics textbooks are a relatively homogeneous product.¹³ This is especially seen as being the case for microeconomics texts (Gärtner 2001). To see whether such a view is warranted, in this section, the focus will be on the three main texts used in Australian principles subjects, McTaggart, Sloman and Norris, and Taylor.¹⁴ Rather than attempting a general comparative exercise, the emphasis will be on selected key issues in macroeconomics and microeconomics and an examination how each is analysed in the respective texts.

4.1 Macroeconomics

The current research agenda in macroeconomics, broadly speaking, encompasses one of three themes. First, there is growth theory, the analysis of long-run structural forces that cause economic growth rates to vary across countries (Lucas 2000). Second is New Keynesian macroeconomics, focussing on the role of price rigidities in the transmission of nominal shocks to the real economy (Mankiw and Romer 1991a, 1991b). Finally, there is new classical macroeconomics, which views the business cycle as deriving from the stochastic nature of economic growth (Kydland and Prescott 1982).¹⁵

If one accepts the above categorisation, then Sloman and Norris, McTaggart, and Taylor clearly provide a less than comprehensive coverage of the current state of the discipline. The texts emphasise short run stabilisation issues, and do so almost exclusively from the viewpoint of the aggregate demand side of the economy. Each of these texts adopts what is essentially a new Keynesian approach, focussing on imperfect price adjustment as the key to understanding how aggregate demand changes influence the business cycle. Two of the texts, Sloman and Norris, and McTaggart, articulate an “old-school” version of Keynesian macroeconomics, using the 45-degree diagram to define macroeconomic equilibrium, and aggregate demand/aggregate supply analysis to develop the comparative statics of aggregate demand changes. Taylor’s approach differs from the traditional presentation of Keynesian macroeconomics by constructing a theory of aggregate demand based on the sensitivity of expenditure decisions to inflation.¹⁶ The texts do provide some coverage of growth theory, though the space devoted to this is far less than that which is allocated to stabilisation issues. None of the texts provide more than a cursory look at new classical macroeconomics.

Differences between the texts (or more correctly, between Taylor’s text and the other two books) are apparent in their respective discussions of how demand shocks are transmitted to the economy. Taylor views the interest sensitivity of expenditure decisions as being central to the analysis of how demand shocks propagate the business cycle. The role of interest rate changes is combined with an assumption that inflation is “sticky” in the short-run, with the rigidity derived from overlapping wage contracts which lock in a particular rate of nominal wage increase. As a result, a fall in aggregate demand causes actual GDP to fall below its potential level. Firms then modify the rate at which prices are increased. Monetary policy, which by assumption is conducted via a Taylor policy rule, is then eased, causing investment and net exports to increase. This results in the economy moving downwards along a

¹³ One writer goes so far as to argue that the traditional “hand-wringing” that accompanies the choice of a textbook is largely illusory (Wirtz 1998).

¹⁴ Lecturers’ perceptions of these books were presented in Section 2.3.

¹⁵ See DeLong (2000) who defines contemporary macroeconomics in terms of adherence to either of the new classical or new Keynesian schools.

¹⁶ This is in contrast to the more usual treatment of aggregate demand and aggregate supply as being related to the price level.

negatively sloped aggregate demand curve drawn in inflation/output space.¹⁷ As a result, output is below its potential level only in the short to medium term. In the long run, the combination of lower inflation and lower interest rates, via the Taylor rule, returns the economy to its potential level of output.

In contrast, the analysis of aggregate demand changes in Sloman and Norris, and in McTaggart, emphasises the sensitivity of expenditure to aggregate income. The consumption function and the autonomous expenditure multiplier are highlighted and the analysis proceeds, for the most part, with the assumption of a fixed price level (though McTaggart gives relatively more consideration to long-run price flexibility than do Sloman and Norris). The 45-degree diagram is the main analytical tool, though both Sloman and Norris and McTaggart provide an outline of the aggregate demand/aggregate supply model. Neither text does more than provide informal arguments for why the economy's aggregate supply curve might be upward sloping in the short-run.

One risk of placing such a strong emphasis on the demand side of the macroeconomy is that non-demand side issues may be inappropriately downplayed. This is most readily apparent in the respective texts' treatments of fiscal policy, which focuses almost exclusively on the question of counter-cyclical policy. However, fiscal policy outcomes in Australia and other countries have, for a number of years, been directed towards a much broader range of objectives, with very little weight on counter-cyclical policy, except through automatic stabilisers. For example, Australian budget statements have repeatedly made the point that a primary aim of fiscal policy in Australia is to narrow the gap between national savings and investment (Olekalns 1998). Compared with the treatment accorded to counter-cyclical fiscal policy, there is relatively little discussion in the texts about the role of fiscal policy as a contributor to national savings. Nor is the rationale behind fiscal consolidation explained or much emphasis given to the implications of the government's inter-temporal budget constraint. Even in terms of their treatment of the aggregate demand effects of fiscal policy, there are some important omissions. Crowding out, for example, is given an extensive coverage in McTaggart but does not feature in the other texts. Perhaps most surprising, is that the effect of a flexible exchange rate on fiscal policy's influence over aggregate demand receives little mention in any of the texts; a world of fixed exchange rates is implicitly assumed.

Pedagogical differences between the three texts also emerge in their respective treatments of the Phillips Curve. Stiglitz (1997) identifies three reasons why knowledge of the Phillips Curve might be useful for macroeconomists; (i) it succinctly summarises the determinants of inflation, (ii) it provides a framework for thinking about policy issues and (iii) it enables forecasts to be made of future inflation.¹⁸ With the possible exception of Stiglitz's third point (which may be of more relevance in an econometrics course), (i) and (ii) provide useful reference points for including discussion of the Phillips curve in an introductory macroeconomic subject. Whether Stiglitz's first or second points are emphasised depends on whether a positive or normative approach is being taken.

Sloman and Norris emphasise the normative aspects of the Phillips Curve, namely, the use of the curve to highlight the sacrifice in terms of inflation that would accompany any attempt to reduce the rate of unemployment (Stiglitz's second point). The curve is seen as providing a guide to the policy options available (especially in the short-run) to the government. However, absent from the analysis is any discussion of other implications of the Phillips Curve that relate to policy design, most notably, time inconsistency issues and/or policy credibility. Less use is made of the Phillips Curve as a positive theory of inflation, although

¹⁷ The assumed sensitivity of expenditure decisions to the interest rate is crucial for the downward slope of the aggregate demand curve.

¹⁸ Gruen et. al. (1999) also discuss the Phillips Curve using this framework.

this is touched on when considerations of supply side shocks are introduced. Even so, there is no attempt to use the Phillips Curve (or shifts in the curve) to explain Australia's actual inflation experience.

The positive aspects of the Phillips Curve are emphasised in McTaggart, with the natural rate hypothesis used as the basis for a theory of inflation. The policy implications are downplayed, although there is some mention of the short-run trade-off between inflation and unemployment. The interpretation of the Phillips Curve as a positive theory of inflation is reinforced through the linking of the short and long run Phillips Curves back to the aggregate supply/aggregate demand analysis. The short run Phillips Curve is identified with the aggregate demand curve shifting along a short run static aggregate supply curve consistent with a given expected rate of inflation. The vertical long run aggregate supply curve (where the actual and expected inflation rates are equal) is shown to be consistent with the vertical long run Phillips Curve.

Taylor's emphasis with respect to the Phillips Curve is normative, the focus being on the existence of an unemployment-inflation trade-off that can be exploited in the short-run for policy purposes. The treatment is very concise (barely two pages). This downplaying of the Phillips Curve is at odds with other aspects of the book. The economic fluctuations model, which forms the core of the analytical material in the book, is predicated on the slow adjustment of inflation to any policy shock. To support this, Taylor cites the existence of staggered nominal wage contracts. However, it is precisely under these circumstances that a trade-off between inflation and unemployment might exist, at least over the time interval it takes for all contracts to be renegotiated to take account of any changes in the outlook for inflation. Of all the texts, it is Taylor's that pays the greatest attention to the microeconomic foundations that might provide a justification for the use of the Phillips Curve as a normative guide to policy options (slow adjustment of expectations, overlapping wage contracts etc.). Yet it is Taylor's text that pays least attention to the Phillips Curve in its treatment of inflation, unemployment and macroeconomic policy options.

Relative to their coverage of stabilisation issues, the texts devote less discussion to long-term economic growth. A common approach is adopted; each begins with some stylised facts showing the magnitude of growth that has occurred in the developed economies. Simple Solow/Swan growth models are then presented (although McTaggart and Taylor both also outline classical subsistence growth theory) and this is used to highlight the role played by savings (in determining the steady state income level) and technological change (in driving growth). Sloman and Norris, after a brief survey of policies to promote growth, stop at this point. McTaggart has a relatively more developed discussion of policies for faster growth; national savings, investment in human capital, microeconomic reform and improved macroeconomic management. Taylor's text takes a relatively broader view and attempts to place growth theory in the wider context of economic development. This is done through a discussion of convergence, which is introduced by showing that it holds for the Australian states and for the advanced economies, but not for the world's poorest nations. Taylor attributes this to the difficulties that poor countries have in developing a technological base that would enable them to catch-up with the rest of the world. Missing from all three texts is discussion of the results from empirical cross-country growth regressions (Barro 1997), which would have been a useful way to motivate discussion of non-economic influences on growth, such as the link between political institutions and economic performance.

4.2 Microeconomics

Gärtner (2001), in his survey of introductory economics texts used in European universities, argues that microeconomics texts are much more homogeneous in their coverage than macroeconomics texts. With Australian microeconomics texts, one could be excused for thinking that a similar overlap exists. All of the texts cover what might be thought of as core microeconomic material such as consumer and producer theory, theory of markets, etc. However, it is a mistake to simply rely on the coverage of topics as a guide to the contents of texts. For even within the microeconomics sections of Sloman and Norris, McTaggart, and Taylor, there is some diversity.

A good example of this is in the presentation of consumer theory. Economists, in general, share a common view as to what constitutes consumer theory. Nevertheless, there are significant pedagogical differences in how the introductory texts present the material. The main issue is the emphasis given to the behavioural assumptions that underlie the theory. The law of demand is perhaps as intuitive a result as exists in economics. Introspection is often enough to convince students of the law's validity. Not surprisingly, therefore, most texts, including the three under discussion here, begin their treatment of consumer theory by deriving demand curves in an informal manner, citing a simple numerical example and then plotting the price/quantity combinations to draw a downward sloping demand curve. The question is then how much detail needs to be given to the behavioural assumptions, such as diminishing marginal utility, that underlie the law of demand. Here, the texts differ, reflecting the extent to which the respective authors regard microeconomics as a discipline relating to the study of markets or to the study of how individuals operate within markets.

Sloman and Norris fall into the latter camp, emphasising the nature of individual behaviour. They begin with an explanation of total and marginal utility. This leads into a discussion of what constitutes optimal consumer behaviour, first in the context of a single good world (marginal utility equals price), then extending into multi-good space (the ratio of marginal utilities equal to the relative price ratio). This formal treatment of utility is then extended to illustrate the nature of risk aversion and how this affects choice under uncertainty; insurance markets are used to motivate a discussion of risk spreading as well as issues concerning adverse selection and moral hazard. These topics would be impossible to cover without students having a good understanding of the concept of utility. Indifference curves and utility maximisation subject to the budget constraint are outlined in an appendix.

Sloman and Norris's treatment of consumer theory is unusual in its formal emphasis on optimality. Taylor, although introducing marginal utility at an early stage, does not explicitly detail the conditions for consumption optimality (although some informal discussion is given of constrained optimisation). Instead, the law of demand is derived by appealing to the income effects of a price change for a consumer whose income is held fixed. The concept of indifference is introduced via an example, but there is no subsequent development of indifference curves, the relation between the ratio of marginal utilities and relative prices, or of constrained optimisation.

McTaggart is different again. Here, there is scant mention of utility (total or marginal). The demand curve is derived via an informal appeal to income and substitution effects. There is no discussion of the concept of optimality and of how constrained utility maximisation determines consumers' choices. Instead, the text maintains an informal approach to individual choice, before quickly moving on to a discussion of firms' supply decisions, within the same chapter. The analysis is entirely within the context of consumer

behaviour within markets; relative to the other two texts, and especially to Sloman and Norris, the individualistic character of microeconomics is heavily discounted in McTaggart.

There is more uniformity between the texts in the way in which cost theory is presented. The texts all cover the same basic material; total, average and marginal costs, short run and long run costs and economies of scale.

Sloman and Norris motivate the analysis as costs in the context of the profit maximising behaviour of the firm (although costs are treated in a separate chapter before a chapter covering revenue and profit maximisation). As do the other texts, they discuss the distinction between costs in the short and long run, the concept of marginal product and the law of diminishing marginal returns and economies of scale. Costs are classified as explicit (involving an immediate monetary payment) or implicit (where resources already owned by the firm are used). There is a detailed discussion of flexible and fixed costs and their relation to average and marginal costs. Sloman and Norris, however, is the only text to discuss the condition for the optimal employment of factors in terms of the equalisation of the ratio of marginal physical product to factor price across factors of production. This enables the discussion of the choice of the optimal mix of factors by the firm.

McTaggart covers much the same material as Sloman and Norris (with the optimality condition being an exception). A useful pedagogical device is the use of the actual experiences of two small firms (one, a small general store; the other, a McDonalds hamburger franchise) to illustrate the concepts of cost and production functions. Profit maximisation is again used to motivate the analysis of costs. Technological constraints, and their impact of firms' cost structures, are given more emphasis than in the other two texts.

Taylor, while again covering essentially the same material, takes a slightly different approach. Cost analysis is introduced in the context of profit maximisation in perfectly competitive markets leading to the equivalence of price with marginal cost (Sloman and Norris also cover profit maximisation for a perfectly competitive firm but do so in a chapter subsequent to that dealing with cost theory). A generalisation to an imperfectly competitive market structure is made in a later chapter dealing with entry and exit from industries in the long run.

Central to all three texts' respective treatments of microeconomics is the theory of markets. Here, there is little to differentiate the three texts. Each begins with the benchmark case of perfect competition before moving on to imperfectly competitive structures in some detail; monopoly, monopolistic competition and oligopoly are all analysed using a common set of analytical devices. Game theory, for example, is used by all three texts to illustrate why defection might be an optimal strategy for firms in a duopoly collusive agreement. The texts also identify the implications for economic welfare of different market structures and discuss government policy responses to the welfare losses associated with imperfect competition. With regard to the latter, Sloman and Norris, and Taylor give relatively more weight to competition policy and microeconomic reform, highlighting the role of the ACCC and the findings of the Hilmer Report, than does McTaggart (although McTaggart and Taylor both provide a description of the process of microeconomic reform in Australia). There is a standard treatment of the arguments for government intervention in the market relating to externalities and public goods.

One key difference between the texts is in relation to the rationale for the existence of markets. Taylor's text is the only one that provides such a rationale; this is done in terms of the need for a social institution to process information and coordinate the actions of buyers and sellers. This leads naturally into a discussion of transactions costs and their gradual reduction over time due to the introduction of new technologies and new forms of retailing. The existence of markets is taken as given in the other two texts.

5. Conclusions

Introductory economics has, for a long time, and one hopes, will continue to be, an integral component of business, commerce and related degrees in Australia. This can easily be justified since economic forces, as well as being an important area of study in their own right, condition the environment in which business decision are made.

Commonality rather than diversity, for the most part, characterises economics principles subjects in Australia. First, and perhaps foremost for those concerned, is that all who teach economics principles subjects in Australia can expect to encounter very large course enrolments. There is now recognition that the teaching of large classes provides lecturers with considerable challenges, which may require the adoption of different teaching and assessment strategies to those used when class sizes are relatively small.¹⁹ The survey results reported above suggest that traditional lecture/tutorial arrangements remain the norm in principles subjects. Given the scope for economies of scale, it is difficult to see many alternatives to the traditional lecture format for large classes. However, there is increasing use of multimedia in lectures as well as the use of electronic technologies to provide innovative assessment devices. It is clear that use of the World Wide Web, as a means of disseminating basic course information, is widespread.

Subject content is also relatively homogeneous across institutions. As might be expected, this is especially the case in the teaching of microeconomics, which features a relatively narrow range of topics that are taught almost everywhere. There is greater diversity in the content of macroeconomics subjects; this is inevitable given the nature of the discipline. Nevertheless, there is a common core of macroeconomic principles that are routinely taught in most Australian institutions. Broadly, this could be thought of as short-run demand side macroeconomics; the Keynesian emphasis on aggregate demand is well represented in the content of most subjects.

Assessment and feedback are other areas where the experiences across Australian institutions are fairly uniform. Assessment strategies are based around the final examination, although all institutions have some degree of continuous assessment. The importance of the tutorial program is reflected in the fairly widespread practice of rewarding students for tutorial participation. Lecturers use a narrow range of feedback options to obtain information about the quality of their teaching; reliance on the end of semester questionnaire is pervasive.

An analysis of the major textbooks used in Australia did, however, reveal differences, some subtle, some more extreme. As a result, students' subject experiences will not be completely invariant to the university in which they enrol. Textbooks do make a difference and do shape the manner in which material is presented.

Lecturers' perceptions of the texts reveal some of these differences. Taylor's book is seen as having a fairly narrow coverage of the discipline. It is very much an exposition of John Taylor's views about the structure of the economy, particularly, (and not surprisingly given Taylor's area of comparative advantage) in macroeconomics. McTaggart's text is seen as challenging for the lower tail of the student population, while Taylor's exposition is viewed as appropriate for those students. Sloman and Norris' text falls somewhere in between.

The pedagogical differences between the texts are most apparent in their treatment of macroeconomics. Taylor's book is clearly differentiated from the other two in its downplaying of traditional aggregate demand/aggregate supply analysis. There other differences between the texts, although these are often matters of detail rather than substance.

There is perhaps more uniformity in the respective texts' coverage of microeconomics, although there are also sufficient differences to dispel the myth that all microeconomics texts are exactly the same.

¹⁹ The recognition of these challenges is reflected in the Australian Universities Teaching Committee financing a project on Identifying and Supporting Effective Methods of Enhancing Learning in Large Classes (<http://www.autc.gov.au/pr/large.htm>).

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Issues of quality are impossible to judge in a review of this nature. However, it is clear that students in Australian universities are exposed to the much of what would widely be regarded as the core topics in our discipline. The fact that some one-quarter of all students who undertake tertiary study in Australia receive instruction in the core areas of macroeconomics and microeconomics is a major achievement. One wonders whether any other discipline could claim something similar.

References

- Barro, R.J. 1997. Determinants of Economic Growth: A Cross-Country Empirical Study. MIT Press, Cambridge.
- Becker, W.E. and M. Watts, 1999, "How Departments of Economics Evaluate Teaching," American Economic Review, 89(2), 344-49.
- Becker W.E. and M. Watts, 2001, "Teaching Methods in U.S. Undergraduate Economics Courses," Journal of Economic Education, 32(3), Summer, 269-280.
- Bligh, D. 1998. What's the Use of Lectures? Intellect, Bristol.
- Bonwell C. C., and J.A. Eison, 1991, Active Learning: Creating Excitement in the Classroom. Washington, DC: George Washington University.
- Bosshardt, W. and M. Watts, 2001, "Comparing Student and Instructor Evaluations of Teaching", Journal of Economic Education, 32(1) Winter, 3-17.
- Colander, D. 1992, "Reform of Undergraduate Economics Education", in D. Colander and R. Brenner (editors) Educating Economists, University of Michigan Press, Ann Arbor.
- De Long, J. Bradford. 2000. "The Triumph of Monetarism", Journal of Economic Perspectives, 14(1), Winter, 83-94.
- Department of Education, Training and Youth Affairs (DETYA), 2000 Higher Education Students Time Series Tables: Selected Higher Education Statistics, Canberra.
- Gans, J, S. King and N.G. Mankiw, 1999, Principles of Microeconomics, Harcourt, Sydney.
- Gärtner, M. 2001, "Teaching Economics to Undergraduates in Europe: Volume, Structure, and Contents", Journal of Economic Education, Summer, 219-230.
- Groenewegen, P. and B. McFarlane, 1990, A History of Australian Economic Thought, Routedledge, London and New York.
- Gruen, D., A. Pagan and C. Thompson, 1999, "The Philips Curve in Australia", Reserve Bank of Australia RDP 1999-01, Sydney.
- Hodgkinson, A. and N. Perera, 1996, "Why Aren't They Taking Economics? Attitudes of First Year Students", University of Wollongong, department of Economics Working Paper.
- Jackson, L., R. McIvor, C. McConnell and S. Brue, 1998, Economics, McGraw-Hill, Sydney.
- Johnston, C., James, R., Lye, J., McDonald, I. 2000 "An Evaluation of the Introduction of Collaborative Problem-solving for Learning Economics", Journal of Economic Education, 31(1), Winter, 13-29.
- Johnston, C. and N. Olekalns. 2002, "Enriching the learning Environment: A CALM Approach". Studies In Higher Education, 27(1) February 103-119.
- Keneley, M. and P. Hellier, 2001, "A Market Oriented Approach to Australian Undergraduate Economics Education: Justification and Explanation", Economic Papers, 20(2), 81-94.

- Kolitch, E., and A.V. Dean, 1999, "Student Ratings of Instruction in the USA: Hidden Assumptions and Missing Conceptions About 'Good' Teaching", Studies in Higher Education, 24(1), 27-43.
- Kydland, F.E. and E.C. Prescott. 1982. "Time to Build and Aggregate Fluctuations", Econometrica, 50(6), 1345-70.
- Lewis, P. and K. Norris, 1997, "Recent Changes in Economics Enrolments," Economic Papers, 16(1), 1-13.
- Lucas, R.E., 2000, "Some Macroeconomics for the 21st Century," Journal of Economic Perspectives, 14(1), Winter, 159-168.
- Mankiw, N.G. and D. Romer (editors), 1991a, New Keynesian Economics, Volume 1, MIT Press, Cambridge.
- Mankiw, N.G. and D. Romer (editors), 1991b, New Keynesian Economics, Volume 2, MIT Press, Cambridge.
- McTaggart, D., C. Findlay and M. Parkin, 1999, Economics, Pearson, Melbourne.
- Millmow, A., 2000, "Dismal Prospects for a Dismal Profession", 29th Conference of Economists.
- Moseley, F. and R.D. Wolff, 1992, "Alternative Theories in the Teaching of Economics", in D. Colander and R. Brenner (editors) Educating Economists, University of Michigan Press, Ann Arbor.
- O'Donnell, R. 2001, Macroeconomic Principles, Mind to Mind, Sydney.
- Olekalns, N., 1998. "The Macroeconomic Implications of Current Fiscal Policy". Australian Economic Review, 31(1) pp. 66-72.
- Parks, R.P., 1999, "Macro Principles, Powerpoint, and the Internet: Four Years of the Good, the Bad and the Ugly", Journal of Economic Education, 30(3), Summer, 200-209.
- Raimondo, H.R., L. Esposito, and I. Gershensberg, 1990. "Introductory Class Size and Student Performance in Intermediate Theory Courses", Journal of Economic Education, 21(4), Fall, 369-381.
- Salemi, M.K., W. L. Hansen and J. J. Siegfried, 2001, "Use it or Lose it: Teaching Economic Literacy", *mimeo*, <http://www.unc.edu/~salemi/>.
- Sloman, J. and K. Norris 2002, Economics, Addison-Wesley, Melbourne
- Siegfried, J.J. and D.K. Round, 2001, "International Trends in Economics Degrees During the 1990s", Journal of Economic Education, Summer, 203-218.
- Stigler, G.J. 1970. "The Case, If Any, For Economic Education", Journal of Economic Education, 1 (Spring), 77-84.
- Stiglitz, J. 1997, "Reflections on the Natural Rate Hypothesis", Journal of Economic Perspectives, 11(1), 3-10.

The Teaching of First Year Economics in Australian Universities

Swann, M. and W.A. McEachern 2000a, Microeconomics: A Contemporary Introduction, Nelson Thomson Learning, Australia.

Swann, M. and W.A. McEachern 2000b, Macroeconomics: A Contemporary Introduction, Nelson Thomson Learning, Australia.

Taylor, J.B. and I. Moosa. 2002, Macroeconomics, Wiley, Sydney.

Taylor J.,B, and L. Frost. 2002, Microeconomics, Wiley, Sydney.

Taylor, J.B. 1999, "Introduction", Monetary Policy Rules, edited by J.B. Taylor, National Bureau of Economic Research Studies in Business Cycles, Chicago.

Taylor, J, B. Cowling, and I. Moosa 1999, Miroeconomics, Wiley, Sydney.

Walstad, W.B. 2001, "Improving Assessment in University Economics", Journal of Economic Education, 32(3) Summer, 281-295.

White, L. 1995, "Efforts by Departments of Economics to Assess Teaching Effectiveness: Results From an Informal Survey." Journal of Economic Education, 26, Winter, 81-85.

Wirtz, R.A. 1998, "Econ 101: Is this the Best Way to Teach Economics?", The Region, December, Federal Reserve Bank of Minneapolis Economic Literacy Project, <http://minneapolisfed.org/pubs/region/98-12/wirtz.html>.