

NESA Review of Commerce Years 7-10 Syllabus

Submission to NESA

December 2017

1. Addressing the Decline in the Study of Economics

1.1 The interests of the Reserve Bank of Australia

The review of the New South Wales Commerce syllabus presents an opportunity to embed Economics into this popular elective subject. Raising awareness of Economics among Commerce students increases the possibility that they may choose to study Economics at a later stage. The study of Economics matters for three key reasons. First, there needs to be a talented and diverse pool of economists from which organisations can recruit, particularly those organisations that make public policy decisions. Second, the quality of public discourse is enhanced by economic literacy in the wider community. Third, the analytical skills acquired in the study of Economics are well suited to the changing nature of work.

The Bank has observed a significant decline in the size and diversity of the student population in Economics – both at a secondary and tertiary level. Inclusion of 'Our Economy' as a core topic, rather than an optional topic as is currently the case, in the Commerce Years 7-10 syllabus is an important avenue for raising awareness of Economics as a potential subject choice in later years, as well as for contributing to general economic literacy.

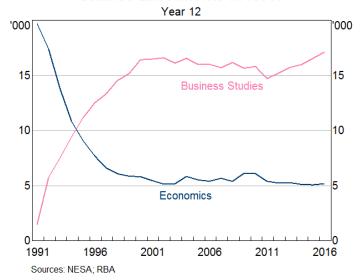
1.2 Trends in Economics enrolments in New South Wales

Graph 1 shows Year 12 Economics enrolments in New South Wales from 1991 to 2016. In 1991 nearly 40 per cent of Year 12 students studied Economics and it was the third most popular subject choice, surpassed only by English and Mathematics. However, the introduction of new subjects in 1991 saw a sharp rise in enrolments in Business Studies (and other vocationally oriented subjects). The displacement of Economics was pronounced. Business Studies expanded steadily throughout the 2000s and, in recent years, there has been renewed interest in it, with Business Studies now the fourth most popular subject choice. In contrast, student demand for Economics is relatively low, and a growing number of schools are considering the feasibility of offering the subject.

Many students do not understand what economics is and how it might be relevant to them. As an analytical subject with a quantitative element, Economics is often perceived as being difficult to learn. It is also often described as difficult to teach — especially given the limited availability of teaching resources with an Australian context and the challenge of incorporating changing economic conditions into lesson plans. In contrast, Business Studies is widely perceived as a more employable subject than Economics, less demanding for students to learn and easier for educators to teach (with fewer concepts to explain and more readily available content). These factors are contributing to Economics being offered at fewer schools through time.

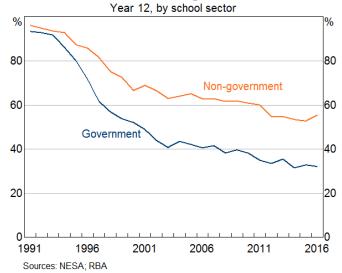
Graph 1

Economics and Business
Studies Enrolments in NSW



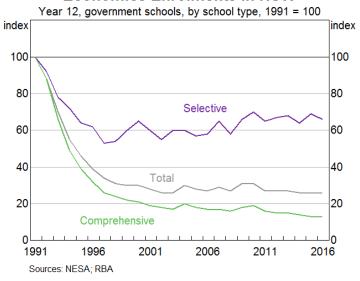
Looking at the types of schools that offer Year 12 Economics, Graph 2 shows that in the early 1990s Economics was taught at over 90 per cent of both government and non-government schools. By 2016, only around 30 per cent of government schools taught Economics, while around 55 per cent of non-government schools taught it.

Graph 2
Share of Schools Teaching Economics in NSW



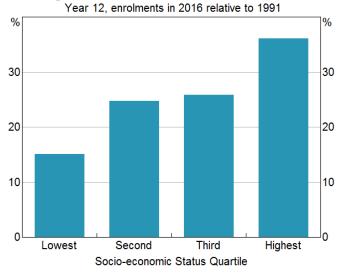
The fall in Economics enrolments is a particular feature of the comprehensive public schools that most students attend (Graph 3). In contrast, having declined in the early 1990s, the level of Economics enrolments in the state's selective schools has remained fairly steady, consistent with Economics being an analytical subject.

Graph 3
Economics Enrolments in NSW



The changing patterns of enrolments by school type are associated with changes in the socio-economic profile of the Economics student population. Looking at each secondary school in New South Wales according to their socio-economic status (SES), enrolments have fallen most in those schools with a low SES rank, where they are now only around 15 per cent of their level in 1991 (Graph 4).

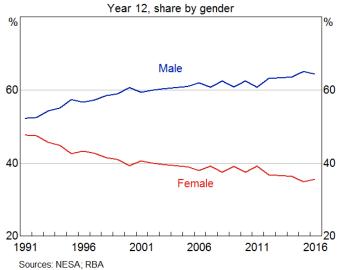
Graph 4
Change in Economics Enrolments in NSW



Sources: NESA; RBA

Turning to gender, there is a declining share of female students who are enrolled in Year 12 Economics. Whereas in the early 1990s, the proportion of male and female students was approximately equal (with the share of female students only marginally less than that for males), by 2016 there were more than two male students for every female student (Graph 5).

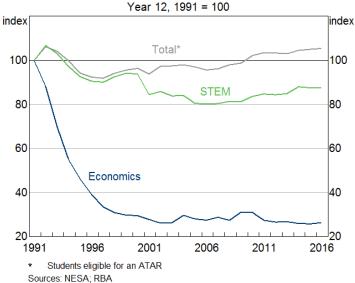
Graph 5
Economics Enrolments in NSW



1.3 Comparisons with STEM

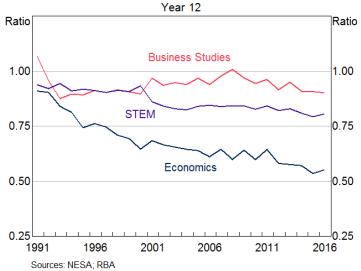
It is instructive to compare the decline in the size and diversity of the Economics student population with that for STEM subjects (Science, Technology, Engineering and Mathematics). As shown in Graph 6, the fall in Year 12 Economics enrolments since 1991 has been much more pronounced than for Year 12 STEM subjects.

Graph 6
Economics and STEM Enrolments in NSW



Furthermore, among Year 12 students, female participation in Economics has fallen by more than that in STEM subjects, while female participation in Business Studies has remained relatively high and stable (Graph 7).

Graph 7
Female to Male Ratios of Subjects in NSW



The fall in STEM participation, particularly by female students, was considered to warrant a policy response. There are currently numerous initiatives and a large commitment of resources from both public and private sectors to address the issue. This is because competency in STEM is a prerequisite to many fields of study and productive activities. Economics at school is not a prerequisite for any field of study (including Economics at university). However, it is an analytical subject and the skills learned in the study of Economics have applications in many fields of study and areas of work. Furthermore, analytical skill is important for equipping youth for the changing nature of work. Consequently, the fall in the size and diversity of the Economics student population at secondary schools (and university) warrants a response.

The Reserve Bank of Australia is devoting resources in support of Economics educators and students and has established a Public Access & Education team to make economic information that relates to the Bank's responsibilities more accessible to educators, students and the community. A summary of the program can be found in the Appendix. However, in addition to offering these practical measures of support, the Bank sees benefit in ensuring that syllabi (at both secondary schools and universities) support the longer-term health of the Economics student body. The review of the secondary school Commerce syllabus in New South Wales provides scope for increasing students' engagement with Economics.

2. Opportunities in the Commerce Syllabus

2.1 Embedding Economics into other subjects

There are opportunities to embed Economics into a range of subjects. Economics can assist with the understanding of another discipline (e.g. Economics can provide insights into aspects of Commerce, Modern History and Environmental Studies). Economics can also be interpreted from the viewpoint of another discipline (e.g. economic relationships can be a worked example of Mathematics). Of the opportunities to incorporate Economics topics or modules into another field of study, Commerce is one of the most complementary fields.

In undertaking the 'Our Economy' option 'Students learn to assess changes in our economy, how these changes relate to existing trends in the economic cycle, and to explain the implications of these changes for consumers and businesses'. Including 'Our Economy' as part of the core content of the Commerce Years 7-10 syllabus would have a number of advantages. First, at an early stage of secondary schooling, students will be exposed to ideas that are the 'economics of the everyday'. They will observe and investigate economic events and variables that are in their daily lives. Second, by Year 10, students will have acquired a deeper understanding of these events and variables and may seek to learn more about them – either at school or university.

At the conclusion of Year 10, students discontinue Commerce but may choose one of the curriculum specialisations they were exposed to in the Commerce syllabus to pursue in Years 11-12. These specialisations include Legal Studies, Business Studies and Economics. The current focus of the core units in Commerce provides clearer exposure and a more direct continuum of learning to Business Studies and Legal Studies than to Economics. Unless there is meaningful exposure to economic ideas, concepts and understandings in Commerce for all students selecting it, the likelihood of students subsequently choosing to study Economics falls. Given the evidence in Section 1 that Economics has been substantially displaced by Business Studies, the 'Our Economy' option has the potential to increase engagement with economic ideas, introduce relatable economic concepts and motivate more students to choose Economics. Increased student engagement, combined with the requirement to deliver Economics as part of the core Commerce content, may also encourage greater teacher engagement with Economics and ultimately give teachers more confidence in the delivery of Economics material.

2.2 The pool of potential Economics students studying Commerce

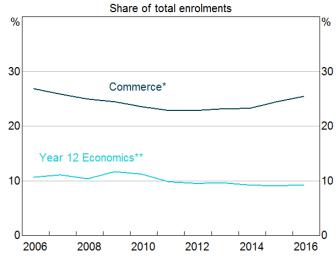
The population of students studying Commerce (Years 7-10 syllabus) is significantly larger than that studying Year 12 Economics. Consequently, Commerce students comprise a larger share of total enrolments than do Economics students, with around one-quarter of students studying Commerce compared with one-tenth who study Economics (Graph 8). This creates a sizeable pool of potential Economics students, should Economics content be made a core component of Commerce in the junior secondary years.

While in the time frame of this consultation period it has not been practical to obtain unpublished data on enrolments by school type (corresponding to the analysis in Section 1), liaison with educators indicates that Commerce is readily available as a subject choice in most school types. Consequently, Commerce has not experienced the same fall in diversity of student population that has occurred in Economics. Furthermore, there has been an approximately even gender balance in the Commerce student population that is supportive of diversity (Graph 9). As such, helping to establish a continuum

of learning from Commerce to the study of Economics is one mechanism for helping to address the falling diversity of the Economics student population.

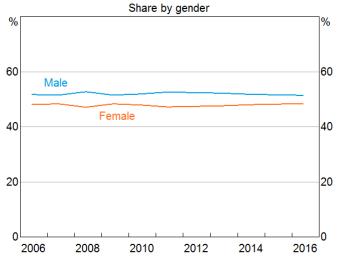
Graph 8

Commerce and Economics Enrolments in NSW



- 200-hour plus 100-hour commerce enrolments as a share of students who completed one or more stage 5 courses. 'Stage 5' from 2012 onwards, 'School certificate' prior.
- ** As a share of students eligible for an ATAR Sources: NESA; RBA

Graph 9
Commerce Enrolments in NSW*



 200-hour plus 100-hour commerce enrolments. 'Stage 5' from 2011 onwards, 'School certificate' prior.

Sources: NESA; RBA

2.3 Recommendation

As specified in the Stage 6 Economics syllabus, 'By understanding economics, students can make informed judgements about issues and policies and participate responsibly in decision-making'. This is an important reason to study Economics. This articulation by NESA accords with the views of the Reserve Bank regarding the importance of Economics.

In its review of the Years 7-10 Commerce syllabus, NESA is encouraged to consider opportunities for supporting a continuum of learning to subsequent study of each of the subjects introduced to students while studying Commerce – including Economics.

The Reserve Bank, as one of the nation's premiere economics agencies, would welcome opportunities to participate in consultation on the revised economics content of the Years 7-10 Commerce curriculum.

While revision of the Years 7-10 Commerce syllabus provides a near-term opportunity to strengthen the currency and relevance of its economic content, the implementation of the Australian Curriculum in Economics and Business Education will provide a much more significant opportunity for a continuum of learning in Economics for all school students in New South Wales, including from primary school.

Recommendation:

Ensure that all students selecting Commerce as an elective subject in Years 7-10 are provided with an opportunity to strengthen their knowledge and understanding of 'Our Economy', including basic economic principles and concepts.

There are several ways to achieve this outcome. NESA, drawing on its wide ranging expertise in curriculum design, could consider the following options:

- Move the 'Our Economy' option into the core of the syllabus that is studied by Commerce students.
- 2. Revise the content of the current core Commerce topics to identify opportunities to extend students' knowledge and understanding of basic economic principles and concepts.

Option 1 is the Reserve Bank's preferred option, as it would be the most effective way to establish a clear continuum of learning from Years 7-10 Commerce to Years 11-12 Economics.

Appendix: The Reserve Bank's Public Education Program

The Reserve Bank has recognised the importance of supporting Economics educators and students, as well as the general public. The Public Access & Education team coordinates a program that includes the elements listed below.

Educators Advisory Panel

The Reserve Bank has established a group of external education experts to provide feedback and guidance on the Bank's initiatives in support of Economics education. The <u>Panel</u> comprises presidents of the national and state associations for Economics educators, the president of the national careers advisory body, two academics and two 'best practice' teachers.

Professional Development

Professional development activities for Economics educators have been provided, with plans to become an endorsed provider of registered professional development. A <u>Teacher Immersion event</u> has been held, and forms part of an annual Teacher Immersion series to be hosted by the Bank.

Ambassador Program

An Ambassador Program has been established, with a group of Reserve Bank economists being equipped to <u>deliver talks</u> to teachers and students and act as advocates for economics who exemplify what an economist does.

Educational Talks

The Reserve Bank Ambassadors give talks to students and educators on economic concepts, economic conditions and the roles and functions of the Bank. These talks are delivered at the Bank, large forums and conferences, lectures at universities and include incursions to schools.

Resources

Curriculum-relevant content is being developed to meet the needs of Economics educators and students. It is available on the Education section of the Bank's website. Current content includes:

• Explainers, In a Nutshell, Snapshots – various short guides that contain information with different levels of detail. They cover key economic concepts, economic developments, economic statistics and responsibilities of the Reserve Bank.

- Chart pack graphs summarising macroeconomic and financial market trends in Australia (updated monthly).
- Standard presentations Slide presentations on the Bank's roles and functions, monetary policy formation and recent economic trends in Australia.
- Videos videos that explain what economics is and its relevance. In one video entitled <u>What is Economics?</u>, Bank economists explain what economics is, the skills that economists use and the issues to which they are applied. In another entitled <u>The Future of Work</u>, a senior Bank economist talks about the changing nature of the Australian workforce and the skills that will be highly valued in the future.

Scholarship

The Reserve Bank sponsors a Premiers' Teaching Scholarship devoted to developing a more inclusive approach to teaching Economics to women and girls.

Reserve Bank of Australia 15 December 2017