**Megan Jeffery** - Welcome, everyone, to the first of two webinars looking at the implementation of the revised new economic study design. It was the consequence of a major review, so they'll still find there's significant change to the studies that you're working with currently, and it's been done and completed over several years. So, there's been a lot of work going to this review, and a group have some out with a study design that perhaps I think looks very contemporary and looks quite different to the one that we were working with previously. I'd like to acknowledge first of all the panel and all the writers of the study design. I think we've produced quite a really good product, and there's been many hours of work that's been put into it. This session is intended to focus only on the study design itself and the content, and there's another one next.

The second webinar will be conducted next Tuesday, which will look more at some of the resources and approaches to pedagogy. Just before I start, I'd like to begin by acknowledging the traditional custodians of the many lands upon which we meet, and for me here in Melbourne, it's the Wiradjuri people of the Kulin nation. I wish to pay my respects to the elders past, present, and emerging, and I extend that respect to the Aboriginal and Torres Strait Islander peoples here today. With that, I'd like to introduce the first of our presenters, and that's Timmee Grinham, who's going to talk a bit about units one and two of the study design. I'll hand it over to Timmee, thank you.

**Timmee Grinham** - Thank you, Megan. It's wonderful to be here, and I'd like to acknowledge also that I'm on the lands of the Wiradjuri people of the Kulin nation out here in Balwyn, and there are a couple of slides on our PowerPoint here that indicate how to ask questions. So, there are the instructions for how to ask a question. My apologies. So, I'm going to start by just talking about some of the key goals of our study design review. We wanted to include a greater opportunity to study contemporary, real-world economic issues and choices through making some applied economics analysis tasks. We wanted to increase the requirement for the application of some higher order skills, that's across the study design, updating the key knowledge to enhance the dynamic nature of the study, and to reflect contemporary economic thinking, realigning some of the technical language and economic processes cited and used within the study to reflect those in current use within industry, and you'll probably notice that most in the unit four curriculum and clarifying the key skills and ensuring that these are distinct from the specific key knowledge points, and we also reordered and resequenced some of the key knowledge and key skills to improve clarity and flow.

So, there's a similar structure to the previous study design. There's still four units, obviously: unit one and two, economic decision making and then economic issues and living standards, and unit three and four, Australia's living standards and managing the economy. Obviously, there's still no prerequisites for undertaking units one to three, and unit three and four still need to be taken as a sequence, as previously, and assessment in units three and four remain 25% for each of the units and 50% for the examination. So, I'm going to talk mostly about units one and two.

Now, you'll hopefully have noticed that there are now three areas of study in unit one. So, we've added in a new area of study. Area of study one is still called thinking like an economist; area of study two is still decision making in markets, but the new area of study is called behavioural economics. So, the key changes. We've separated out behavioural economics as its own area of study, We've removed behavioural economics from area of study one, and we've narrowed down the coverage of what some people refer to as the "biz man" content. So that's some of the stuff around the changing goals of business and made it a narrower economics focus in that section. Some suggested time allocations from the 50 available hours suggested to undertake unit one is around 20 hours of class time on thinking like an economist; about 20 hours on decision making in markets in area of study two, and then 10 hours on behavioural economics.

So, in unit one, area of study one, thinking like an economist, the key content, we've still got the key introductory economic ideas. We removed a lot of the biz man crossover, which I've referred to previously, and now included is the idea of economic agents. So that will be a catchall term to refer to groups that are in that circular flow of economic activity and other key players in our economy in terms of a three-sector model, which would be consumers and households, businesses, and government. Then looking again at the traditional economic viewpoint of the role and behaviour of each of these agents, and again, this was already in the initial, the current study design. Consumers focused on self-interest, utility maximisation, informed decision making, and also looking at incentives and disincentives that influence consumer behaviour. Then business as profit maximisation and how they respond to incentives and disincentives. But we'd added in a consideration of the government and a specific discussion there of the role of the government in maximising living standards and the role in economic stabilisation, efficiency, and redistribution of income. So that's all been brought into that first area of study.

Again, we have the circular flow model of the economy using the three sectors, and also, we've reintroduced how different economic systems may answer the three key economic questions. And there's a sample activity that's very engaging in how to do this in the support materials online, and I'm sure that those presenting next week will talk more about that. As has been explained, behavioural economics has been removed from that area of study and made into its own area of study, area of study three. There are a selection of sample activities for each of the areas of study of the new study design, and those of us who've been teaching for a while would be used to a document called the Advice for Teachers, but this new website is much more interactive.

Everything's brought together, it's all categorised under the different areas, and these activities are in the teaching and learning hub just in case you're wondering what I'm referring to here. And the link to this page is from the economic study design page on the VCAA website. This was one of the things I was just referring to, a research task on different economic systems, the idea that you would allocate students into small groups to research the kind of economic systems from different countries, compare them to other systems, undertake a cost-benefit analysis, and make links to opportunity cost.

So, it's a way of actually integrating so many of those new, introductory economic ideas into a consideration of different economic systems. The key focus of the skills has only adjusted marginally in unit one, area of study one, using economic theory and using economic language to make predictions and communicate economic ideas, gathering and synthesising economic data, assessing the effect of economic decisions on economic agents, constructing and interpreting economic models, and analysing the consequences of economic decisions, identifying trade-offs, discussing costs and benefits, and drawing conclusions based on economic criteria.

So, you'll notice there's a couple of new things in these key skills, new skills that I think many economics teachers already do, but they are in this case clearly elaborated. So, using economic language to make predictions and communicate economic ideas, drawing conclusions based on economic criteria, for example. The outcome has been slightly reworded. On completion of this unit, the students should be able to describe the basis economic problem, discuss the role of consumers, businesses, and government in the economy, and analyse the factors that affect economic decision making. Unit one, area of study two is still decision making in markets. It's very similar to the current study design, area of study two, starting off with the assumptions of a perfectly competitive market system, the use of demand and supply curves, the factors affecting demand and supply, learning to construct demand and supply diagrams and analyse the impact of factors on those market diagrams. And in particular, once again, we're looking at the impact of demand and supply factors on equilibrium prices, quantities, and the role of the market mechanism and relative prices.

So, these are all things that are familiar from the current study design. Market power in various market structures and their effects, again, covered in the current study design. What we've moved into this area of study, it's been taken out of the area of study one and moved into this area of study from the current study design, which is strategies that businesses can use to increase profit including price discrimination, multiple branding, and anti-competitive behaviour.

So all of those ideas should be familiar to you from the current study design, and then this new addition, which is one contemporary example of a market, including the degree of competition in that market, and this is one of those examples where we ask students to reflect again on applying the real-world situations of markets and the effect of competition in that market, and looking at the consequences of the degree of competition in that market and looking at a specific market in that case. So almost, it lends itself perfectly to teachers having students undertake either an individual market case study or a class market case study that explicitly considers the degree of competition in that market and makes an evaluation about the impacts of that.

There's, again, a number of activities in the online advice for teachers, teaching and learning activities, demand and supply cards, designing four sets of cards, and then asking students to bring them together and constructing market diagrams showing the impact of demand and supply factors in a particular market. So one example might be that you have 10 demand cards, 10 supply cards, 10 types of goods, and 10 types of services, and students draw from the pack, and then they would actually, so almost like a game in class, which we all know is quite positive for students, to do a little bit of gamification of classroom activities, so that random mixing of the factor and market and asking the students to then draw the impact on the market and compare their results, lots of reiterative practising of the development of that skill of accurately identifying demand and supply factors, and then accurately drawing those diagrams and analysing the impact on the market.

Key changes, as noted, specification that contemporary case studies must be used to establish understanding of the comparison between economic theory and the working of Australian and global markets. The list of options for markets has been updated, and it also includes, as in the past, any other market option. But it includes things like, as you'll see in a moment, financial markets, cryptocurrency markets, markets for utilities, things like that. The higher order scale of synthesis has been added, research and synthesise, bringing together information about a particular market, and analyse the extent of competition in markets by drawing conclusions based on economic criteria. Now, for those of you who aren't aware, the VCAA has recently published a list of definitions of key command terms and questions, so it would be very useful for you to refresh your understanding of those and also use those with your students, to encourage them to develop their skills in synthesising information or analysing.

So, these are opportunities to use those skills. As noted, there are a number of new options for markets: carbon emissions and carbon trading markets, the international education market, cryptocurrency market, but once again, as much flexibility as we could include, just to ensure that anybody anywhere in Victoria who is teaching is going to be able to look at a market that affects in some way or is in evidence in some way in their community. Students will be encouraged, one example in the details of this are provided in significant elaboration on the VCAA website. They undertake a detailed discussion of the operations for a contemporary market, and it can be a choose-your-own by the students or allocated by the teacher.

Unit one, area of study two, outcome two, on completion of the unit, the student should be able to explain the role of relative prices and other non-price factors in the allocation of resources in a market-based economy and analyse the extent of competition in markets. Now, this is very exciting for many of us, that behavioural economics has become its own dedicated area of study in units one and two. And this reflects significant developments in this field across some economic study in the academy and increasing use of the insights of behavioural economics to encourage certain kinds of behaviour by other businesses in relation to consumers, or governments in particular in relation to consumers.

So, this was in response to the popularity of this topic and its capacity to engage students and the recognition I think that many teachers already do spend quite a bit of time on it, but then they find that they're kind of scrimping in other areas. So, by taking out some of that earlier content in unit one, area of study one, and then moving behavioural economics into its own area of study, it actually allowed us to separate out the guidance and provide more key knowledge content direction for teachers and also more information about skills.

So, the key knowledge here in relation to area of study three is the key insights of behavioural economics. So, what has behavioural economics found out, what has it observed, and these include, but are not restricted to, bounded rationality, bounded willpower, and bounded self-interest. Now, for those of you who are familiar with some of the ideas around herd behaviour or status quo bias, all of those actually fit in within these three key areas of the insights. So, something like status quo bias, for example, is an example of bounded rationality being an influence on people's decision making and behaviour.

So, all of those options for unpacking those examples will still be possible within this new area of study and the way it's structured in the key knowledge. Then we're going to ask you to highlight the differences between traditional economics assumptions and insights and behavioural economics. This is where you're setting up that difference between our Homo economicus idea of self-interest-maximizing, consistently rational consumer, and the insights of behavioural economics. And then the effectiveness of strategies used by government to influence consumer behaviours and reflected again about the effectiveness of strategies that producers or businesses use to influence consumer behaviours. Those are the four key knowledge points, and as you'll see, that's much briefer than the other areas of study in terms of content and coverage in recognition of the fact that it is a relatively short area of study. It's a discrete area. It does allow us, though, to have a dedicated assessment for this particular topic that is different from and separate to the assessments of the other outcomes for the other two areas of study.

Some key skills, once again, our old friend, defining key economic concepts and terms and using them appropriately, distinguishing between traditional and behavioural economics, applying economic theory to make predictions and create responses, again, to communicate economic meaning, investigate and/or conduct at least one behavioural economics experiment by gathering, synthesising, and using economic data and information to report on the findings. This is in recognition of the fact that for many, for a lot of schools, students are going to wait to and be very excited about the opportunity to conduct a behavioural economics experiment, but in other schools, that isn't going to be possible.

So, this allows students to investigate an experiment that has already taken place. Then they would still gather information, they would still synthesise that information, and they'd still write a report on what they found or the findings of that. There are plenty of opportunities within behavioural economics to do this, and again, as I'm just flagging for you, there are plenty of examples of the Australian government and other governments intervening, and then ultimately, analysing the effectiveness, so coming to some conclusions about how effective and the impacts of government and business actions that draw on behavioural economics and looking at data and coming to some conclusions supported by economic reasoning.

So, by the conclusion of the unit, the students should be able to explain the role of behavioural economics in complementing traditional understandings of economic decision making and analyse the effects of behavioural economics insights on consumers and other economic agents. A sample activity could just be to prepare a case study on the behavioural economics work, and this would be where you would select a project, investigate it, and this would be the example of investigating a project or an experiment that has been conducted. If you can't conduct an experiment at your school, the other possibility, and I've done this many years now in my school, is plan and execute behavioural economics experiments to nudge students to changing their behaviour in a certain way.

Over the years, that process at my school has been modified, and it's my understanding and the ability of the students to actually conduct effective experiments is developing as I develop my skills as a teacher in terms of explaining to them how one would go ahead conducting these experiments. Heaps of opportunities here for different types of tasks. I won't read through all of those, but we have included obviously as one of the types, task types, that students can investigate and/or conduct and report on a behavioural economics experiment, and I think pretty much all of those others are options that have previously existed. So as someone who tries to use a diversity of tasks in their classroom, I strongly encourage teachers to be thinking about ways that they can be assessing their students at the end of their outcomes, for their outcomes, rather, and with something other than a series of short answer questions under test conditions, particularly in year 11, which is such a potentially exciting and engaging series of topics.

Now, unit two has been quite significantly restructured, where in unit two, we're looking at economic issues and then living standards and the connection between those two. It looks like there's been a significant reduction to the content, but in fact, it's been reduced down to two areas of study, but within the second of those areas of study, students are required to undertake two separate issue studies. So, in fact, it remains three key content ideas. So reduced the two areas of study. Area of study two and three of the current study design, which is equity and efficiency and global economic issues, has been removed, but quite a lot of the content has actually been integrated into area of study two of this new study design.

So, it's not like we've jettisoned those ideas. A lot of that is still considered. In area of study two, students conduct two separate applied economic analyses, and I want to flag for you that the presentations that are going to be happening on teaching activities and assessment ideas next week that Megan has referred to will include a lot of detail on the kinds of activity students can undertake here and also, add a particular approach, a pedagogic approach, to applied economic analyses provided by one of the presenters. The students will look at two out of four possible issues in terms of contemporary economic issues. The four to choose from are listed there: the changing labour market, the economics of international trade, the distribution of income and wealth, and economics and environmental sustainability.

So, area of study one is quite similar to area of study one of the existing study design, but it has narrowed down slightly with the removal of detailed coverage of the trade-off with environmental sustainability, because that's been moved to a separate topic in unit two, area of study two. So, this area of study now has almost exclusive, well, not exclusive, but it has a very detailed focus on economic growth and living standards and evaluating costs and benefits of continued economic growth, which is a debate that is currently happening in Australia and all over the world and also has been happening for quite a number of years now, and also, how we measure living standards.

So key knowledge, economic activity and living standards: students explicitly study the five-sector model and the business cycle; they look specifically at AD and AS factors, and they consider how we measure economic growth, the benefits and cost of economic growth, the limitations of GDP or real GDP per capita as a measure of our wellbeing or our living standards, and then alternative measures. The outcome has changed slightly. On completion of this unit, the student should be able to explain the purpose of economic activity, the distinction between material and non-material living standards, the factors that may affect levels of economic activity and growth, discuss the costs and benefits of economic growth, and examine the impact of economic activity on living standards using alternative measures.

Now, area of study two is, as I've already explained, an applied economic analysis of local, national, and international economic issues. There's a major change here. In effect, it's a choose-your-own-adventure with four issues to choose from. Teachers and students can choose two of those issues, and the structure for the investigation is provided in the study design. So, that is a generic structure which simply explains the general context that each of those coverages of issues and topics that will be undertaken, the structure of the investigation for the issues in general. But there are very detailed elaborations of the content, key knowledge content, for each issue and issue investigation in those support materials that I flagged at the start of this presentation and that are available on the VCAA website.

That information has been provided to the textbook publishers, so it should result in detailed and consistent content coverage in the textbooks and, I would hope, that coverage of all four of those possible issues that students and teachers can choose from. Anita Forsyth and Margaret Wilson, who will be unpacking the details of potential activities and learning tasks and that advice for teachers section of the website will actually provide a lot of detail in the next website. But as I said that elaboration of content for each issue is provided in those support materials. I'm going to talk about those elaborations for two of the issues today.

So, what was the overarching idea behind this unit two, area of study two? Well, an applied economics analysis involves students applying the insights of economic theory and key economic skills to analyse these economic issues. So, we wanted them to use tools of data collection, analysis, synthesis, and evaluation to examine the issue through an economics lens. We wanted them to examine the economic factors that influence the issue and why it's important at a local, national, and international scale, and the extent to which you prioritise the local, the national, or the international is ultimately up to you as a teacher. But I think for some topics, there's going to be a great deal of interest at a local level for you and your community, particularly, perhaps you're in a regional community where there's an industry that is being particularly affected by a particular issue, and you can look very much at the impact on your local community. This kind of approach allows that, and then looking at it from a national lens and at an international scale.

Also, considering the perspectives of the relevant economic agents, so that idea of trying to point of view each of these issues, considering who's impacted and what they might think about each of these issues. Then evaluating the validity and effectiveness of individual and collective response to the issue, so looking at how effective those responses have been, whatever the issue is. So each of the issue investigations actually has the same structure: the definition of the selected economic issue, relevant measures, statistical indicators, the economic factors influencing, the extent of the issue, the reasons why the issue is important at a local, national, and international level, the different perspectives of households, businesses, government, and other relevant economic agents regarding the issue and economic responses undertaken by relevant economic agents and a local, national, international level, to address the issue, and that can include government policies.

And as I explained, Anita will unpack the methodology for undertaking an applied economic analysis inquiry investigation in a presentation next week. At the end of the area of study, students should be able to explain the factors that affect two of those issues at a local, national, and international level and evaluate actions to address the issues. So, as I've already said, there are four key topics: changing labour market, the economics of international trade and globalisation, the distribution of income and wealth, and that's where quite a lot of that equity and efficiency topic comes back and economics and environmental sustainability, which again captures some of what's been taken out of that area of study one in the current study design of unit two.

A suggested time allocation is that you spend about 18 of your 50 available hours on area of study one, and then about 16 of your 50 available hours on each of the issues, the two issues that have been selected from the four available issues. Now, as I've already said, and I will say it again, 'cause it bears repeating, the implementation page of support materials on the economics webpage, which those of us who've been teaching for a while will probably think of as the advice for teachers, has a detailed elaboration of each of the issues, and it also includes significant sample teaching and learning activities. At this stage on that page, there are actually only sample teaching and learning activities for two of the four issues, but please don't let that put you off doing the other issues.

I know for a fact from my own experience that this content is covered in the textbooks, and I'm also going to talk about some ideas here today. It provides a guide to the key knowledge content of each issue, and you can find it there on the link. You can also expect that the VCTA's Compact 2023 will provide significant support materials in 2023. Once again, there's flagging of the areas of the website to look for. So, under study design for implementation 2023, under support materials, under planning is the elaborations for each of those issues for unit two area of study two, and under teaching and learning are the sample activities.

So, I'm going to talk in a little bit more detail about the changing labour market today, because that's one of the areas where there's fewer resources available. So, in that first part, the definition of the selected economics issue, including relevant measures and statistical data, the employment, unemployment, paid and unpaid work, measures of the labour market, causes and types of unemployment, overview of trends in the size, distribution, and composition of Australia's population and its implications for the labour market. For those of us who've taught economics for 20 years or more now, you may remember looking at population pyramids here. I certainly will be going back to population pyramids when I'm looking at trends in the size, distribution, and composition of our population and the implications for the labour market. The reason why this issue is important, so the economic consequences of employment and unemployment in specific contexts, and again, this allows you to look at any issues around unemployment or employment in your local community as well as at a national and international level. Economic consequences of changing employment patterns and labour market casualization, which is an increasingly significant issue.

So of course, that's going to be something that'll be good for students to be considering. The economic consequences of demographic change, including the possible impact on a nation's living standards. So again, these are looking back, and that sort of content has been included in study designs in the past; it just hasn't been really considered in recent iterations. Under the content indicator of economic factors influencing the extent of the selected issue, the content there would be things like factors that may affect the demand for and supply of labour, the changing labour market including casualization and the ageing population, the gig economy, pay inequality, migration. Economic opportunities and outcomes for First Nations Australians.

Very important that we start talking about those issues in our economics classrooms, economic causes of the changing labour market, including technological change, international migration, demographic change, remote work, and discrimination. And again, these are prompts for you to start developing ideas around teaching in your classroom. In terms of the different perspectives, looking at the experience and perspectives of households, businesses, and other economic agents in relation to changing labour market conditions and population. Under economic responses, looking at things like labour market policies, population policies, changing levels of unionisation, the role of minimum wages, and policies relating to the provision of a universal basic income. Now there are increasing numbers of discussions around the interface between changing technology and the importance of the introduction of a universal basic income. So those kinds of debates and discussions can also be had in your economics classroom now.

So, one of the sample activities here that you might consider using, and the reason I'm going to elaborate these now is 'cause these are not up on the VCAA website, but I'm happy to provide them if that's something that is of interest. On the Reserve Bank of Australia website, there's an unemployment explainer, and you can use that to unpack the different measures of the labour market. There's also a video of teaching ideas on their education website. There's also opportunities to look at types of unemployment. So, you might come up with a series of scenarios for people in different parts of the labour market or without jobs and have students classifying types of unemployment. It also would be getting you to, encouraging you to have students read and respond to media articles on the consequences of unemployment and underemployment and casualization and discrimination or any of those other issues, writing blog entries on various topics around the issues.

And investigating how COVID-19 and technology has changed work could be another area. So, I'm actually learning how to read population pyramids on changing demographics. So, one example that I've just referred to is the idea that you could show your students a diagram that shows classifications in the labour force, for example, and could say to them, you know, are you employed, unemployed, or not in the labour force, and ask them to justify their response. You could give them a series of scenarios of different people and ask them to classify whether they are employed or unemployed or not in the labour force, and again, justify that person's classification. And again, types of unemployment and a classification task, because the so unemployment could easily be considered. I'm a single dad with two children. I'd love to work, but I can't leave my kids. I'm a representative rugby player. I've had COVID for a while, and I can't get a new contract.

So, asking students to classify those types of unemployment. When I was doing a bit of research for this presentation, I came across a report from McKinsey, one of the consultancy firms, on the impact of COVID-19 pandemic on work and future work. There were some fantastic diagrams there around how quickly year on year growth of e-commerce had changed, basically in response to the pandemic. And you can see on this diagram that in the United Kingdom, it was growing by that 1.3% per annum, and now it's growing at about 5.7% per annum since the beginning of the pandemic. So, they are making propositions around COVID propelling faster adoption of automation and AI especially in work areas with high physical proximity.

So that could be a prompt for you in your classroom to start talking about the impacts of COVID on the labour market, the future of work, the nature of the structure of businesses, all sort of opportunities. There's some great graphs. Ask them to critically consider the limitations of some of these predictions. So this graph here, for example, this chart, shows a mix of occupations and what this company, McKinsey, this consultancy company, is assuming will happen in each of these occupation areas between now and 2030 as a result effectively of COVID-19 and the changes, and they're estimating obviously that health and tech and care workers and STEM professionals are likely to grow rapidly, but things like office support, production, and warehousing, agriculture, customer service and sales are all very likely to actually shrink in terms of the mix of occupations.

And now teaching them these skills of analysing data can be very valuable in terms of skilling them up to understand the implications of data, but also to allow them to engage with real-world data. Another example could be asking them to engage with the nature of gig employment and the Uberization of jobs. So, consider options for government regulations, collect some data, write a report. They could look at the ABS release on working arrangements and how those have changed over time and read some articles about the implications of precarious work for various groups.

Maybe do a plus/minute interest or a cost-benefit analysis on what some people refer to as the development of the gig economy or the Uberization of work and how governments might have intervened and what might be some future implications. There was actually an article a couple of years ago in Compak on the universal basic income, which is another great resource. Heaps of activities, very easy to update. I'm going to skip through the economics of international trade and globalisation, because Anita and Margaret will unpack those. Another one of the issues is economics and environmental sustainability. And again, here I've unpacked some of the key knowledge content for this topic, for this issue topic as part of area of study two.

So, looking at key environmental economics concepts around renewable versus non-renewable, economic prosperity, carrying capacity and the tragedy of the commons, some of the current environmental challenges that have been created for past and current economic decisions, current environmental performance of Australia, in terms of biodiversity, deforestation, those other measures. The impact of environmental damage on Australia's economy and living standards, the impact of environmental damage on the international economy and living standards, the meaning of intergenerational equity, the potential trade-off between economic growth and economic prosperity and living standards for future generations. Then looking at the concept of market failure, how economic growth can negatively impact the environment, environmental consequences of market failure, and potential compatibility between economic growth and environmental sustainability.

So, if we're going to consider a trade-off, we also have to look at potential compatibility. Different perspectives, so looking at the potential impact on different economic agents of the issue, and also some of the responses that have been undertaken. So, some of the key economic responses, market-based approaches, regulation, quotas, taxes, subsidies, and the concept of a circular economy, which is gaining increasing traction in economic circles and environmental circles and evidence of the impact of economic responses and policies used to address them, address those issues, looking at the cost benefits of the policy response, and the role of international organisations in responding to global environmental issues.

So, I'll just quickly go through a couple more sample activities for this particular issue topic. Tragedy of the commons, for those of you who are unfamiliar, it relates specifically to the concept of the depletion of common-access resources. So, I got this idea from another teacher, which is that students create a fishing company, and they compete to be the most successful, leading to the inevitable collapse of the fish population, is the background story here. You can use anything you can get lots of but will ultimately be limited. So, you could use paperclips, or you could use, you can't really use something students can eat, but you could use something. The students are scrambling to get a hold of the resources, until all of the resources are gone.

Then you ask students to unpack ideas around what happens when there's no private ownership of these shared resources that aren't controlled by any individual, and it allows you to unpack the idea of those limited resources and the implication of overusing them at a rate which is greater than their ability to replenish themselves. It could be adjusted to a climate change scenario as well, you know, the idea of an atmosphere. That is one possible action activity. Another sample activity is a class forum on the Paris Agreement targets. This would actually allow you to consider both elaboration D and elaboration E of this particular issue.

So, students would undertake different roles in relation to the targets for fulfilling our obligations under the Paris Agreement. They could research their designated person's perspective on the issue of increasing the targets; for example, someone living in a bushfire-affected area, member of the Greens, a member of the Labour party, a coal miner; there are so many different options. Then research and present to the class, have a class forum, and then the students write their own individual reflection. There was an article in Compak in 2017 that included an activity with the details of this in relation to Adani coal mine, and I'll probably rewrite it and republish it next year specifically in relation to the Paris Agreement targets with those particular scenarios available.

Students could have a look at the recently released State of the Environment report, and they could consider the fact that for the first time in history, this massive and very important document had an indigenous co-authorship model. They could investigate what that means and how that had affected the management of the environment and the suggestions. There's also 12 Environmental Themes fact sheets available, and this report was released very recently, so it's very topical at the moment. So, it might be something worth downloading if you haven't, at the moment.

Other examples are looking at the increasing number of people displaced by disasters linked to climate change and look at the economic implications for Australia and globally. And again, I'm also going to skip through the distribution of income and wealth, because they will be considered in detail by Anita and Margaret in next week's presentation. There are many options here, including this final one on this PowerPoint, which is economic simulation activity. So, this could be, for example, running the class forum Paris forum, based on different perspectives and students researching and then asking students to respond to that through something like blog entries or some kind of report, a structured report or some structured questions. So that brings me to the end of my presentation. I'm not going to call for questions now, but I'm going to hand over to Chris, who will take you through the units three and four study design. Thanks for your attention!

**Christopher Christies** - Good afternoon, everyone. My name's Christopher Christies. I will be presenting on units three and four and the changes that have been made in this phase. Though I guess to begin, one thing that's worth noting about units three and four is the changes have been more evolutionary rather than revolutionary. So, for those of you that have already had an opportunity to look at the study design for 2023-'27, you've probably very much picked up on that idea.

Okay, so let's have a look at this first slide here. So here we've got Australia's living standards. That's the name of unit three, and we've got the name of unit four there, which is managing the economy. So, there's been a slight sort of tweaking in the names, at least the first unit, which is unit three. We just felt that the previous name for unit three, which was Australia's economic prosperity, we just sort of thought that that was a bit vague, so we thought that we'd just tighten up the language by referring to it as Australia's living standards, because that is very much the thread or the thing that runs through all three areas of study that form part of unit three. Just a couple of points about I guess units three and four, the preambles provide a strong sense of the nature of each unit and each area of study.

So, there's a really strong alignment between the preambles and also the key knowledge and the key skills in all of the areas of study. One thing that we have removed from units three and four is reference to the term "nature." There was a feeling amongst the study design review panel that the word "nature" was a bit vague and a bit open to interpretation, so we just tightened up the language a little bit. So, you won't see reference to that term "nature" anymore in units three and four. And one thing that we have decided to maintain is the focus on the past two years, so that's something that carries over from the current study design. Okay, so let's now move onto unit three specifically.

So, unit three, as I mentioned, it's referred to as Australia's living standards. It begins with, or it consists of three areas of study: area of study one, an introduction to microeconomics, the market system, resource allocation, and government intervention; area of study two, domestic macroeconomic goals; and area of study three, Australia and the international economy. So, this should all be very familiar to us because I guess this is what we've currently got. Now, in terms of name changes, there's been a slight name change to area of study three. In the past, it was called Australia and the world economy; now we refer to that area of study as Australia and the international economy. One thing that you will note, though, is the weighting attached to each outcome for each of those three areas of study has changed.

So, outcome one is now worth 35% rather than 40%, outcome two has increased from 30 to 40%, and outcome three has reduced slightly in terms of its weighting from 30% to 25%. As before, unit three coursework will contribute 25% to the final study score. Okay, let's have a look at assessment tasks. Look, these assessment tasks, or SACS, the assessment tasks that you can use for the schools as coursework. These should all be very familiar to us. In the current study design, these are the sorts of things that appear.

So, folio of applied exercise, extended response, an essay, report, data analysis, et cetera. I guess one thing that has been specified which is a little bit different to the past is that schools now must do two or more of the following. Look, I guess most schools run with structured questions for all three sets of all three outcomes. Now there's an expectation that schools choose at least two different modes of assessment. So, I guess you could do structured questions for two of the outcomes, but then maybe you'll have to choose something else for the remaining outcome, perhaps a report, an essay, data analysis, whatever it happens to be.

But I'm sure as the year gets underway that there'll be plenty of examples of different types of assessment tasks that will be published in Compak, and I'm sure a lot of the commercial organisations will also be publishing various examples of assessment tasks to help teachers implement the new study design. Let's now move onto unit four, managing the economy. Two areas of study as before: aggregate demand policies and domestic economic stability, but also, the secondary study there, aggregate supply policies. So, no real change from what we've currently got. So, it's pretty much steady as she goes, but there are some important changes.

As I said, the changes are very much evolutionary rather than revolutionary. So, there's still a lot of stuff that is very familiar to us as teachers of economics. In terms of the weightings of each of the outcomes, the outcome weightings are intact; they're the same. So, 60% for outcome one and 40% for outcome two, and obviously, unit four school-assessed coursework, that will contribute 25% of the final study score. As before, there is an expectation that students' performance will be assessed using two or more of the following. So, as I said, structured questions, they're the most popular mode of assessment, but if you do structured questions, you can really only do them for one of the outcomes. You do need to pick something else for the three outcome.

Okay, in terms of external assessment, the end of year exam will contribute 50% to the study score. All the key knowledge and key skills that underpin outcomes in units three and four are examinable. There's no change there. That's something that we're all very familiar with. Duration of the exam has not changed. It's still two hours, and the format has not changed. So, section A will continue to be 15 multiple choice questions worth one mark each, and section B will consist of short answer and extended response questions, including questions with multiple parts. The number of questions may vary from year to year. Obviously with section B, that will continue to account for 65 marks. So, all of the exams will be worth 80 marks, and as I said, it will contribute 50% to the final study score. Look, I guess in most exams, we've gone with the four short answer, extended response questions, the structured questions, but that may vary from year to year. But probably you can expect something similar to four questions per year.

Okay, let's have a look at outcome one. Outcome one, it says there, on completion of this unit, the student should be able to analyse how markets operate and allocate resources and evaluate the role of markets and government intervention in achieving efficient outcomes. And as Timmee alluded to before, the VCAA has published a list of cognitive command terms or cognitive verbs, analyse, evaluate, et cetera. So, it's probably a really good idea to begin to familiarise yourself with that document, because that gives us, I guess a little bit more direction as teachers with respect to the expectations around the type of thinking that's required by those different demand terms of cognitive verbs.

Okay, so let's have a look at this next slide here, changes to key knowledge. So, one thing that is being introduced to area of study one is the production possibility frontier. That is now specified, using the PPF to demonstrate the various types of economic efficiencies. Now, in terms of those abbreviations that appear after "economic efficiencies," they're just my abbreviations for allocated efficiency, productive dynamic, and intertemporal efficiency. Another thing that's required in area of study one which is new is the three basic economic questions, so in other words, what and how much to produce, how to produce, and for whom to produce, so those two allocative questions and the distributive question. That forms part of the content which is now assessable.

Another thing that is new is the theory behind the law of demand. Up until now, we've really only expected students to understand the concept of the law of demand; that is, when prices increase, the quantity demanded decreases, and vice versa. Now students are expected to know the theory behind that. So, students need to understand the income effect. So, for example, when the price of a good increases, it reduces the purchasing power of individuals, so they're likely to demand smaller quantities of that particular good and vice versa. Similarly, when the price of a good increases, substitute products become more attractive to the consumer, so they're less likely to demand the product which has experienced an increase in price in the same quantities, so really sort of fleshing out that theory behind the law of demand. We also need to flesh out the theory behind the law of supply, and that's essentially the profit motive. Now, in terms of the non-price demand factors and supply factors that affect the position of the demand and supply curve, they're pretty much as-is.

So, there haven't really been any changes there, except with one addition: number of supplies has been added as one of the non-price factors that affects supply and position of the supply curve. But just be mindful of that. It is in the study design, so it is in addition to cost of production, productivity, technology, climatic conditions, et cetera. So, we've now added number of supplies. Okay, so the next thing is changes to key knowledge. So, the role of relative prices in the allocation of resources, that still forms part of the study design, but we have removed the effect on living standards. So that's no longer there.

In terms of the role of free and competitive markets in promoting an efficient allocation of resources and improved living standards, that's something that now comes into area of study one. So that now forms part of the study design, and we've also made a change. We've tweaked that key knowledge point about how government intervention can unintentionally lead to an inefficient allocation of resources. We're now far more, I guess, specific or prescriptive. Students are required to understand one example and how that's impacted one type of efficiency, whether that be allocative, productive, dynamic, or intertemporal.

So, there's a bit more sort of clarity, I guess. We've sharpened that a little bit. Okay, so in terms of changes to skills for unit three area of study one, these are some new skills that have come into the area of study: construct and interpret the PPF model. So, we know that the PPF model is now part of the key knowledge, that it now also is one of the key skills. So, it's conceivable that on an exam at the end of the year, the students would be perhaps given some data and expected to construct a PPF model and interpret that model. So, in terms of interpreting that model, it could be, for example, using the model to demonstrate the concept of opportunity costs or using the model to demonstrate, say, an increase in the productive capacity of the economy. It could be, who knows what the exam setting panel may ask, but you definitely need to be able to, the students need to be able to construct and interpret the PPF model. Analyse how the forces of demand and supply affect equilibrium price and quantity traded and analyse the responsiveness of the quantity demanded and the quantity supplied to change in price.

So, some skills there around shifting demand/supply curves, manipulating those demand/supply diagrams, and also some analysis work around how responsive quantity demanded, and quantity of supply is to a change in price. So, some skills there around elasticity. In terms of changes to skills continued, so there's a little bit more with respect to the change in skills. One of the skills there will be to evaluate the role of free and competitive markets in achieving an efficient allocation of resources. So just let's flesh this out a little bit. Free obviously implies an absence of government intervention. Competitive essentially implies the characteristics of a perfectly competitive market. So many buyers, sellers, homogeneous or identical products, ease of entry/exit to the market, high resource mobility, and perfect information. And we know that the implications of that are that sellers are price takers, there's a complete absence of market power, and consumer sovereignty prevails.

So, I guess economists talk about free and competitive markets as being the most efficient way an economy can allocate resources between competing needs and wants, that essentially, it's consumers casting their dollar votes, exercising consumer sovereignty, and profit-motivated businesses responding to those dollar votes cast by consumers. So, we tend to argue that free competitive markets allocate resources in the most efficient manner possible, in a manner that actually leads to the maximisation of the satisfaction of society's needs and wants. However, with this particular skill, there is a requirement to evaluate, and we know that markets do fail.

So, an evaluation question would be a question that actually required students to look at both sides, to acknowledge that yes, markets can be a very efficient mechanism for allocating resources between competing uses, but also, to recognise that markets do have their shortcomings, and those shortcomings can be linked to the concept of market failure. So obviously with an evaluate type question, we're looking at the strengths and weaknesses of markets. Yes, on the one hand, markets are a very efficient mechanism for allocating resources, because resources are being allocated to production of those goods and services that consumers want, et cetera; however, we do have that issue of market failure. In some instances, markets don't function efficiently, and they lead to sub-optimal outcomes, and then providing an opinion on that. So that's an important key change to take note of. Let's now move onto unit three, outcome two.

So, this is how the outcome statement reads, and remember, whenever you're writing a SAC, the intention is that the SAC reflects the outcome statement. So, the outcome statement is, on completion of this unit, the student should be able to analyse key contemporary factors that may have affected domestic macroeconomic goals over the past two years, so once again, that two-year focus, and evaluate the extent to which the goals have been achieved and discuss the effects on living standards. So, there's no real sort of change there. Well, there is a little bit of change there, that idea of evaluating the extent to which the goals have been achieved. That is something which is substantially new.

So, let's have a look at some of the specific changes for area of study two with respect to the key knowledge. One thing that's been added to the list of aggregate supply factors is other events, including government regulations and disruptions to international supply chains. So, I guess this is very contemporary. We've all lived through COVID-19 very recently, past two years. COVID-19 is still exerting some lingering effects on the economy. There's often just discussion about disruptions to supply chains and supply issues and those sorts of things. So, this is something that has been included in the study design, so this idea of disruptions to international supply chains and also government regulations.

One thing that has been removed, in the current study design, students were expected to have the knowledge of the aggregate demand curve and the aggregate supply curve. This was removed to essentially free up time, because I think the feedback from quite a few teachers was that it was particularly sort of time-consuming looking at aggregate demand, aggregate supply diagrams, looking at different conceptions of the aggregate demand, aggregate supply curve, plus all the Keynesian et cetera, and I think it caused a little bit of angst, and it also I guess, you know, it was potentially really time-consuming in a course that is pretty sort of jam-packed. So, it does free up time.

Now, with respect to AD/AS curves, the teachers can still use them if they want to use them as a teaching tool, but they're not examinable. Okay, so changes, continued. So, let's have a look at, and by the way, the three macroeconomic goals haven't changed. So, we're still looking at strong, sustainable growth, we're still looking at full employment, and we're still looking at low and stable inflation. But let's just start with strong, sustainable growth. So, one thing that has changed with respect to that, we no longer will talk about the reasons for pursuing economic growth. What we're going to be talking about with our students and what might feature on the end-of-year exam are the consequences of not achieving the macroeconomic goal of strong, sustainable growth and its effect on living standards. And the study design is quite specific. It actually talks about, or it actually documents the consequences of when economic growth is too high.

So, some of the things that are mentioned there, environmental degradation, external pressures, inflationary pressures and so on, and the consequences of economic growth being too low, so for example, rising unemployment. So no longer talking about the reasons for pursuing, but what are the consequences if growth is too high? What are the consequences if growth is too low? Moving on to full employment, an important change there is explicit knowledge of the NAIRU, the natural rate of unemployment, is required in relation to the meaning of the macroeconomic goal of full employment. So that has been specified in the study design. If it's in black and white in the study design, we know that it is non-negotiable material. We need to teach it. It could be examinable. And look, I know that many of us do teach the NAIRU anyway, but now it's explicitly mentioned in the study design. And to align things with the previous macroeconomic goal of strong, sustainable growth, we look at the consequences of not achieving full employment.

So, what happens when, you know, for example, when we have very low unemployment? One consequence of very low unemployment could be inflation. That's that classic NAIRU as demonstrated by the Phillips curve, that trade-off between inflation and unemployment. And what happens when unemployment is too high? Then there's obviously an adverse impact on GDP or growth and tax revenues. Let's move onto the next one, which is looking at full employment a little bit further. So, in terms of full employment, the study design specifies the hidden unemployed, long-term unemployed, and frictional unemployed. They're all added as classifications in the labour market. The difference between cyclical and structural unemployed, seasonal and hardcore unemployment have been removed from the study design. Now, the next and final macroeconomic goal is low and stable inflation or price stability. You'll see that there's a subtle change in the language. Up until now, we've referred to it as low inflation, but now the language has changed a little bit. It's low and stable inflation.

In terms of new content, students now need to know the distinction between inflation, disinflation, and deflation. That's something which is substantially new. And obviously, as for the two previous macroeconomic goals, students need to be aware of the consequences of not achieving the macroeconomic goal of low and stable inflation and its potential impact on living standards. So once again, as specified, what happens when inflation is too high? We have erosion of purchasing power, the potential for a wage-price spiral to emerge, distortion of spending and investment decisions, lower returns on investment, loss of international competitiveness. And interestingly, what happens when inflation is too low, perhaps below that two to three percent band, or perhaps, what's the consequence of deflation?

So, things such as delayed consumption and unemployment. So yeah, we need to have that really full understanding of what occurs when inflation is too high, what occurs when inflation is too low, and that sort of helps to ground that idea that we need to achieve a rate of inflation somewhere within the vicinity of two to three percent. That's considered to be a good outcome. In terms of the key skills, there are some new key skills in area of study two. Students are now required to construct, interpret, and apply economic models, including the five-sector circular flow model of income and the business cycle, apply economic concepts to analyse economic relationships and make predictions, and evaluate the extent to which the economy has achieved the domestic macroeconomic goals of the past two years and the effect of this on living standards.

So, in terms of evaluating the extent, it might be a case of just comparing the various targets, whether official or unofficial, and whether or not our growth figures, our inflation figures, our unemployment figures fall within those targets. And it could also involve looking at other relevant data. So, I can imagine, in terms of evaluating our performance with respect to the goal of full employment, it might also involve, say, a consideration of the labour force underutilization rate and the extent to which there's underemployment in the economy and those sorts of things. So, in terms of evaluate, it's very much about making a judgement using the goals, using the relevant benchmarks, and comparing that to the data that's available. And once again, the focus is over the past two years.

Okay, let's move onto outcome three. Now, outcome three, completion of this unit, the student should be able to analyse the factors that may affect the exchange rate, terms of trade, and Australia's international competitiveness and discuss the impact on Australia's international transactions and the achievement of the domestic macroeconomic goals and living standards. Now, let's start having a look at some of the changes to the key knowledge. Gains from trade replaces the relationship between trade and living standards. So that's a slight change, but it's essentially the same. The relationship between the current account and the capital and financial account has been removed; however, it's kind of implied in the key knowledge, the balance of payments and its components. So just be mindful of that.

Also, factors affecting the exchange rate, capital flows has been replaced by foreign investment, and credit ratings and speculation have been added. Terms of trade has been changed to commodity prices and the terms of trade. I think this provides teachers with greater clarity, and I guess it recognises that commodity prices are the key driver of Australia's terms of trade, given the nature of our economy. We're a very large resource economy. 50, 60% of our exports consist of commodities. Australia a price taker in global commodity markets. So, in terms of our terms of trade, very much driven by what's happening in global commodity markets and how that's impacting the prices of iron ore and coal and those sorts of things.

So, I think there's some greater clarity there. And the factors affecting the terms of trade have been specified. So, commodity price is obviously a key driver of the export price index, the numerator in our terms of trade, and production costs and trading partners, obviously a really big influence over the import price index, so the denominator in our terms of trade. I think there's far more clarity there for teachers. In terms of the terms of trade, we need to understand the effects of movements in the terms of trade and the exchange rate and changes in international competitiveness on the domestic macroeconomic goals and living standards.

So, we need to understand the factors that influence the exchange rate, terms of trade, international competitiveness, but also very importantly, how changes in these variables, how changes in the exchange rate, changes in the terms of trade, changes in international competitiveness, can affect those domestic macroeconomic goals and living standards. Trade liberalisation has been moved out of area of study three, unit three and placed into unit four, area of study two. And really, this is very much about freeing up time, because I guess the feedback that we got when we’re working on the study design was that unit three was just very chock-a-block, and it became a real sort of challenge to cover the content in the requisite detail in the time that we had.

So hopefully, this takes a little bit of pressure off. Let's move to unit four, outcome one. Students should be able to discuss the operation of aggregate demand policies and analyse their intended effects on the achievement of the domestic macroeconomic goals and living standards. And I think that's a really important statement there, because often what we're doing as economics teachers, we're looking at the most recent budget or the past two budgets or changes to monetary policy over the past year or two, and really, what we want the students to do is, you know, given the changes in monetary policy, given the changes in budgetary policy, what do we think the impact might be on the economy? Because often, we don't know the impact on the economy for some time. So essentially, what we're wanting the students to do is look at the changes to monetary policy. Look at the changes to budgetary policy. Given these changes, what is going to be the likely impact of these changes on the goals on living standards? So, make some predictions drawing upon your well of knowledge, theory about policy.

So, in terms of key changes to the key knowledge, a bit of a change in the order. So monetary policy first, budgetary policy second. I know some teachers at some schools do it that way anyway, but in terms of study design, that's the way it's being presented. So monetary policy first, budgetary policy second, and I guess what this does is it allows teachers the necessary time to unpack the most recent budget, because typically, the budget is handed down in May. We're in the thick of things in unit three, term two, and we don't really sort of have the time that we need to unpack that budget.

So, I guess starting with monetary policy might give us the holidays as an opportunity to really sort of pick apart the budget and then introduce the budget first day back at term three. So that's part of the reason for change. Conventional monetary policy, the cash rate target and how it affects interest rates replaces the role of open market operations in altering interest rates. So that's to make I guess the study design more contemporary. And look, the Reserve Bank of Australia, they've produced outstanding resources about the cash rate target and the policy interest rate corridors and all of those concepts. So, it's just really to contemporize, if you like, our study design and to better reflect how the RBA changes the cash rate.

Also, in area of study one, something which is new is one example of the operation of an unconventional monetary policy tool from the past two years. Now, this is to better reflect changes in monetary policy in recent times. You have quantitative easing, forward guidance, term funding facilities, negative interest rates, et cetera. We've all heard these terms banded about. We've all tried to explain these concepts to our students, and it really reflects I guess what's happened over the period of COVID. When the cash rate got to rock bottom of 0.1%, and then the RBA basin had nowhere else to go with respect to the cash rate, which is the conventional monetary policy tool and had to start using some of these unconventional monetary policy tools. But look, it does say there from the past two years.

So, when this study comes into effect next year, if there have been no unconventional monetary policy tools used over the past 10 years, it's kind of redundant knowledge. Look, in a way, never say never, you know? You don't really know what's around the corner. In terms of the transmission mechanisms, availability of credit has been removed as a transmission mechanism. So, we now only have four instead of five transmission mechanisms, and this is basically to reflect the RBA's educational resources. The RBA basically talks about four monetary policy transmission mechanisms. So once again, it's about making our study design contemporary in line with what the policy people at the RBA say, how monetary policy affects the economy, how it transmits effects on the economy.

Also, some further changes: progressive, proportional, and regressive taxes have been added, but there's still no requirement to look at the goal of equity in distribution of income, but we've just included this point just to, I guess, illustrate to students that different sorts of taxes have different effects when it comes to people, in terms of the distribution of income and so on. The underlying cash balance, including as a proportion of GDP, that has even specified. So, we know there's numerous ways of reporting the budget outcome, but there's only one specified in the study design. So that's the one that students need to know, the underlying cash balance.

So, it basically gives us teachers greater clarity about the reporting of budget outcomes. What we need to impress upon our students is the underlying cash balance. This is how it's calculated, and this is why it's seen as the best measure of the government's finances. And another point, the effect of the budgetary policy stance and budgetary policy initiatives over the past two years and their likely effect on the achievement of the goals. So, this essentially just two key knowledge points rolled into one. I think in the previous study design, they were two sort of discrete points that have now been collapsed into the one point. With respect to the skills, analyse the effect of current factors on the setting of aggregate demand policies and living standards, very similar to the current study design.

So, I guess students need to know why the policy settings are the way they are, and we know that policy is very much dictated by current economic circumstances or factors. For example, in this most recent budget, it's been very much about relieving cost of living pressures, halving of the fuel excise for six months, so obviously inflation's a big consideration with respect to some of the budgetary policy settings, the one-off $250 cash payments to welfare recipients to ease the cost-of-living pressures and so on. And then predict the impact of changes in aggregate demand policies on the goal.

So once again, looking at the policies, looking at the stance, looking at the changes, looking at the specific measures announced, for example, in the budget, and then sort of making a prediction how they're likely to affect the macroeconomic goals. And this is really a better reflection of what students really need to be able to do: analyse the strengths and weaknesses of aggregate demand policies in achieving the domestic macroeconomic goals and living standards. Prior to the current study design, it talks about evaluation, reaching an opinion, forming an opinion, reaching a conclusion; no longer required. It's been replaced with analyse. So, look into the various strengths and weaknesses of the policy and how they may sort of I guess hinder or support the achievement of the goals. Unit four, changes to the key skills.

Next, actually, yeah, unit four, outcome two. So, this is the final area of study. Students should be able to discuss the operation of aggregate supply policies and analyse the effect of these policies on the domestic macroeconomic goals and living standards. Let's have a look at some of the changes here. So, first change, the use of aggregate supply policies to complement aggregate demand policies in promoting non-inflationary economic growth over time. This key knowledge point was introduced to highlight the complementary nature of aggregate demand and aggregate supply policies in the policy mix. We know that aggregate supply policies have a really important role in terms of expanding the economy's productive capacity, increasing its speed limit, if you like, or the pace at which it can grow.

So, sort of appreciating that these policies are part of the package, so they work together. The aggregate demand policies very much work in the short- to medium-term. These aggregate supply policies very much work over the longer term, but we mostly need both sets of policies. You can't run an economy just purely relying on aggregate demand policies or aggregate supply policies. Both are required. Both work together to support the right sorts of outcomes. The operation of aggregate supply policies in improving supply-side conditions through their impact on the quantity and quality of the factors of production, cost of production, productivity, effects on competitiveness, productive capacity, and aggregate supply. This pretty much brings this in line with the language used in area of study two from unit three, aggregate supply factors.

So, it's just sort of carrying over similar language from that particular area of study over into unit four, just to sort of have that consistency between units three and four. Now, in terms of budgetary policy as in aggregate supply policy, teachers need to choose one of the policies, just the one policy. So, looking at one aspect of budgetary policy as an aggregate supply policy. And the list is there: training and ed, R&D, subsidies, infrastructure, tax reform. Welfare reform is gone, and as I said, students only need to look at one aspect of budgetary policy as an aggregate supply policy. So, this basically frees up some time, which is always a pressing issue. In terms of, just next, yep, in terms of changes to key knowledge, one thing that you'll notice when you look at the new study design, the effect of Australia's skilled immigration policy on population, productivity, participation, and its effect on productive capacity, et cetera, et cetera, the macroeconomic goals.

Now, this idea of the three P's: population, productivity, and participation, this basically reflects what the bureaucrats, the economists, the treasury talk about when they're talking about skilled immigration. They very much talk about the benefits of the three P's and the focus is purely on skilled immigration, given that we are looking at an economics course. Now, as I said before, trade liberalisation has moved into area of study two, and students need to know the short-term and long-term effects of trade liberalisation on international competitiveness, the allocation of resources, aggregate supply, the goals and living standards.

So, this is now part of unit four. It's still compulsory, and there's some good links back to an efficient allocation of resources from unit three area of study one. So, there's some nice connections back to what we do very early on in the piece, very early on in the year. Now, in terms of one thing that's actually come back into the study design, so this is a bit of history repeating, is environmental policy. In terms of the consultation, in terms of the feedback, there was a strong feeling that environmental policy should be part of the year 12 course.

So, we've now specified one market-based environmental policy and its short-term and long-term effects on aggregate supply, intertemporal efficiency, and living standards. So, it's just the one policy. So, there's freedom there in terms of what you choose to do. You could do an ETS, a carbon tax, or subsidies. It could be a policy that has been implemented. It could be a policy that's being discussed for possible implementation and so on. And once again, there's some nice links back to unit three, a nice link back to intertemporal efficiency. You'll see that the focus of this policy is on aggregate supply, intertemporal efficiency, and living standards rather than the domestic macroeconomic goals. So that's something worth noting.

And in terms of strengths and weaknesses of using aggregate supply policies, that's actually been removed. Look, it's always, as you know with economics, it's always a case of trade-offs and opportunity costs. We basically needed to let something go in order to accommodate other things that we wanted to do. So that is no longer part of the course. And just finally, in terms of the changes to the key skills, it's very much about analysing the effect of these policies on aggregate supply, on international competitiveness, on the domestic macroeconomic goals and living standards, and with respect to environmental policy, it's very much about aggregate supply and living standards over time. Skills very much articulate what students need to do with the key knowledge. So, I think it's some really good changes there, so I'm really sort of thrilled. I'm really excited to be able to implement this study design next year. Thanks very much for listening.

**Megan Jeffery** - Okay, thank you very much, Christopher and Timmee. That was quite enlightening. Now, there's been several questions were asked during the process, which have been sort of semi-answered in the chat. But is there anyone else who would like a question, to put a question to either of the two presenters? Could they type it into the chat, and I'll read it out and have it answered? Doesn't look like anyone. What you could do, if something comes to mind, or if there's a question that comes up, please email it to me, or I can then send it and convey it to the presenters or to someone that can answer it. So certainly, I'm always available to actually take questions and get them answered for you, via email or via a phone call. But I think that there doesn't seem to be anything else coming through.

So, it is right on six o'clock, well, two minutes past, which is actually fantastic timing. So, what we'll do then is probably we'll leave now and say thank you very much for everyone for attending. Best of luck with your implementation of the new study design in 2023. The VCAA and myself in particular is always here to actually offer advice, assistance, or purvey questions. I'll just check, I think something just came through.

"Would the slides, video recording "be available to review in the future?" Yes, certainly this session has been recorded, and it will be posted online, and we'll put out a notice when it is actually done so everyone can go back to it and refer to things and look at it.

With that, we might sort of take it from there and bid you a good night and thank everyone for attending and listening, and have a good night, everyone, thank you.

[Copyright Victorian Curriculum and Assessment Authority](https://www.vcaa.vic.edu.au/Footer/Pages/Copyright.aspx) 2022