Innovation and Technology

**Sarah:** [00:00:04] Hi, my name's Sarah. I'm here to talk to you today about Unit 3 area study one Innovation and Solutions. This unit looks at innovation and solutions to challenges within the food and fibre industries within Australia.

**Sarah:** [00:00:18] This study looks at the rates of change and the challenges that are faced in agriculture and horticulture and the ever increasing rate of innovation and technology that we use within the industry to overcome these challenges. Students inquire into new and emerging tools, applications or research projects within the agriculture and horticulture industry. They also need to look into past responses to challenges, contemporary responses to challenges and how successful those responses were and if they help to overcome the challenges. The aim is to get students to describe, apply and analyse contemporary new and emerging innovations within the agriculture and horticultural industries.

**Sarah:** [00:01:02] There is a new framework for what qualifies as a new and emerging technology. The technology must fall within the timeframe of six years previous to the study. But we need to ensure that technologies and solutions we're choosing are contemporary. These technologies and solutions could be currently being used on farm or they could be in research facilities, but we do need to make sure that they have been developed within the six years of the study.

**Sarah:** [00:01:34] So, some examples you could use with these students in the classroom could be digital or precision agriculture such as GPS or satellite or sensors gathering data. You could look into biotechnology or you could also look into automation such as robotics or machine learning.

**Sarah:** [00:01:54] An important part of this unit is to ensure that students can apply and analyse the impacts of the chosen technology or innovation that they're study. It is really important to note that we are now asking students to evaluate the impact of the particular technology rather than just describing the technology itself. So how might this look in the classroom? Teachers might choose. A number of technologies and get students to describe the technology and its role within the industry. They need to analyse that technology and look at any unforeseen consequences and make sure you look at how that technology is applied in the industry.

**Sarah:** [00:02:34] An option for a student extension or breadth would be to allow your students to research their own new and emerging technologies and analyse those technologies that they discover.

**Sarah:** [00:02:45] I hope this helps with your delivery of the subject. Thanks.

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