Sample virtual program: Stage 4 Technology mandatory

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| Guiding question |  |
| What are your students going to learn? (Objectives) | Students:   * evaluate the suitability of hardware with particular performance characteristics against the needs of different users, for example: (ACTDIK023) Information and communication technology capability icon   + high-powered systems for gaming and computation   + energy-efficient systems for travel and productivity   + small and light systems for health monitoring |
| How are they going to learn it? (Resources and Strategies) | Students choose one of the biographies listed below or provided by the teacher and identify the type of computing technology they would need to complete their work. Consider how they work and their needs in terms of the performance characteristics of the devices. Evaluate the overall suitability of a potential device or devices.  Students research different types of computers and their associated hardware specifications, analyse the needs of the person they have chosen and use the combined information to propose a suitable device, justifying their choices. |
| Target date for completion | 2 weeks |
| How are you going to know that they learned it? (Success criteria) | Specific tasks:   * Students analyse the chosen biography to identify the needs of the individual in question. They can do this by highlighting the key words and phrases from the text that will have an effect on the decisions being made. * Students research the key ancillaries for a computer, identifying peripherals:   + monitors   + docks   + keyboards   + graphics tablets   + stylus/pens   + mice. * Students carry out further research into the key components that make up the computer:   + processors   + memory   + storage   + graphics card   + power supply   + modem.   identifying the different specifications for each and demonstrating how those differences effect the overall performance.   * Students apply this knowledge to the needs they have previously identified in order to develop a recommendation for the type of technology their individual would find most beneficial. Students provide justification of their choices and where possible, costings for that technology. |
| Collecting evidence of student learning (Verification) | Students submit the report on their recommendations for the most suitable technology, including the relevant research carried out and demonstrating that they were able to identify the individual’s needs, research and justify their choices to meet those needs. This can be submitted to the teacher by the due date electronically (email or through an online learning platform) or printed and handed in. |
| Feedback (Evaluation) | Format to be communicated clearly by teacher, whether it is by emailing comments or annotations on documents, upload of media/audio via online platforms or a blended approach. |
| Communication | Teachers are able to gauge the progress of the tasks via the schools online platform. Submission dates for each task may be useful as opposed to one final due date.  Students can pose questions/clarifications directly to teacher via email or online platform  Scaffolds for each task may be posted by the teacher to help clarify specific requirements for each activity. |

## Sample biographies

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| Name | Biography |
| Dante | Dante is a graphic designer in Melbourne. He regularly travels for his work, meeting clients and consulting on advertising campaigns in both traditional and online media. Dante needs a mobile solution that can handle the memory hungry graphic design software he uses, but that will also allow him to interface with larger displays at his home and office. |
| Diana | Diana is a freelance journalist who is constantly on the go and needs her device to be ready all day long, while not slowing her down. She needs access to dictation, word processing and basic photo editing software, but as she saves everything to the cloud, storage is not an issue. |
| Doug | Doug is a commodities trader who spends most of his day behind his desk buying and selling, while monitoring the economic markets. He needs a fast connection to be able to stay up to date and plenty of screen space to allow him to keep watch of multiple trades in different locations. Doug needs multiple redundancies to ensure that he can stay on top of his trades no matter what happens. |

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| Peripherals | Information |
| Monitors/screen types |  |
| Docks |  |
| Keyboards |  |
| Graphics tablets |  |
| Pens/stylus’ |  |
| Mice |  |

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| Components | Information |
| Processor |  |
| Memory |  |
| Storage |  |
| Graphics card |  |
| Power supply |  |
| Modem |  |

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| Tasks | Information and justification |
| Identify the key word and phrases from the biography |  |
| What are the needs you can identify from those words and phrases? |  |
| Based on your research what technology do you recommend for the person in your biography?  Make sure you justify your selections. |  |