

TECHNICAL AREAS: KNOWLEDGE OF TECHNICAL AREAS

Knowledge of technical areas focuses on understanding the way such areas are applied in different technological fields.

Students draw from their learning in technology generally, and particularly the Nature of Technology and Technological Knowledge components and specialist knowledge and skills, to be able to explain how technical ideas have underpinned past, contemporary and possible future developments in diverse fields of technology.

		LEVEL 6	LEVEL 7	LEVEL 8	
LO	TEACHER GUIDANCE	[NO SPECIALIST LEARNING OBJECTIVES AT LEVELS 6 AND 7]			<i>Demonstrate understanding of the application of technical areas to specific fields</i>
					<p>To support students to understand the application of technical areas to specific fields, at level 8, teachers could:</p> <ul style="list-style-type: none"> • Support students to be aware of a wide range of fields in which applications of technical areas are of key importance. Examples of fields include: medicine, sports, military, communications, entertainment, urban planning, food production. • Provide students with examples of technical areas and support them to explore the technical ideas that have led to the development of these areas and their changes over time. Examples of technical areas include: nano-technology, laser technologies, virtual modelling, robotics, Artificial Intelligence. • Provide students with the opportunity to discuss how and why technical areas have been applied in different fields (or in the same field) at different times, geographical locations and socio-cultural contexts in the past. • Provide students with the opportunity to explore and discuss potential developments in technical areas and debate how these could be applied in fields in the future.
AS	INDICATORS	[NO SPECIALIST LEARNING OBJECTIVES AT LEVELS 6 AND 7]			<p>Students can:</p> <ul style="list-style-type: none"> • explain the technical ideas that have led to the development of technical areas and how these ideas, and the area, have changed over time. • discuss current limitations and opportunities of technical areas in relation to specific fields • debate the feasibility of future developments as related to changes to the technical area and/or to changes to the field in which it is applied.
	AS				[NO SPECIALIST LEARNING OBJECTIVES AT LEVELS 6 AND 7]
<p>Level 3 Technology achievement standards & assessment resources DRAFT</p>					