Core Skills Analysis

Design and Technologies

The student examined the Ambleside Online Year 5 curriculum and identified each Design and Technologies outcome listed for that year. They matched the curriculum activities to outcomes such as investigating a design problem, developing specifications, and evaluating prototypes, showing an understanding of the design cycle. By articulating how each activity satisfied a specific outcome, the student practiced applying abstract standards to concrete learning experiences. This process helped them see the relevance of curriculum goals to everyday design tasks.

English / Literacy

The student read the Ambleside Online curriculum documents and extracted key language, using academic vocabulary to summarise each outcome in their own words. They organised the information into clear sentences and headings, demonstrating comprehension and the ability to communicate technical ideas effectively. Through this task, the learner practiced interpreting informational text and producing concise explanatory writing, skills essential for future reports and design briefs.

Critical and Creative Thinking

While aligning activities to outcomes, the student asked probing questions about why each outcome mattered and how it could be demonstrated in a classroom project. They evaluated alternative ways to meet the same outcome, comparing hands-on building versus digital simulation approaches. This reflective inquiry sharpened their ability to think critically about learning goals and to generate creative solutions for meeting them.

Tips

To deepen the student’s grasp of Design and Technologies outcomes, (1) have them design a simple product (e.g., a reusable snack container) and document each stage of the design cycle, linking it back to the specific curriculum codes. (2) Pair the design brief with a peer-review session where classmates critique the specifications using a rubric aligned to the outcomes. (3) Introduce a cross-curricular research project where students explore how a historical invention meets modern Design and Technologies standards, encouraging connections to History and Science. (4) Finish with a reflective journal where the learner records what they learned about each outcome and sets personal goals for future design challenges.

Book Recommendations

- Rosie Revere, Engineer by Andrea Beaty: A spirited tale of a young girl who designs inventions, perfect for showing the excitement of the design process and perseverance.
- The Way Things Work by David Macaulay: Illustrated explanations of everyday mechanisms that help students understand how design choices affect function.
- Girls Who Code: Learn to Code and Change the World by Reshma Saujani: Introduces basic coding concepts and problem-solving, linking digital design to the Australian Curriculum’s Digital Technologies outcomes.

Learning Standards

- ACTDEK018 – Investigate and define a design problem (matched through analysis of curriculum tasks).
- ACTDEK019 – Develop and communicate design specifications (evidenced by student-written summaries).
- ACTDEK020 – Generate, evaluate and communicate design ideas (shown in creative

brainstorming and outcome mapping).
- ACTDEK021 – Select and use appropriate materials, components, tools and equipment (planned in the product-design extension activity).
- ACTDEK022 – Plan, make and evaluate a product (integrated in the suggested prototype project).
- ACELA1546 – Comprehend and interpret informational texts (demonstrated by reading and summarising the curriculum).
- ACHCS098 – Develop and apply inquiry skills to explore and resolve design challenges (applied during outcome evaluation).

Try This Next

- Worksheet: Match each Design and Technologies outcome (e.g., ACTDEK018) to a real-world example the student can build at home.
- Quiz: Multiple-choice questions that ask which stage of the design cycle a given activity represents.
- Drawing Task: Sketch a product idea and label how it satisfies at least three curriculum outcomes.
- Writing Prompt: Create a one-page design brief for a classroom invention, explicitly referencing the relevant ACARA outcome codes.