

WHAT'S CHANGING

The capstone unit opens. One idea must land: 2040 isn't a fantasy — it's already running in prototype, in WA, today. Designers spot what's changing and push it further. This class is about to become designers.

WE ARE LEARNING

How WA's resources industry is already changing — automation, remote operations, new energy — and how designers read change as raw material.

CURRICULUM • VERBATIM

"The concept of innovation and the ways businesses identify and respond to business opportunities" — Y7 HASS Economics (SCSA, implementation 2026) • plus Career Learning.

SPARK THE TIME TRAVELLER'S SUMS + THE REVEAL

- **The sums first — every student computes their own 2040 age.** Land it personally: "you will be 26. This isn't a unit about the industry's future; it's a unit about YOURS." Then the three claims, calls locked, and the reveal: **all three are already true.** Driverless haul trucks and driverless trains run in the Pilbara now; whole operations are controlled from Perth; sites already run partly on solar. Watch the recalibration — the unit's engine starts here.

WARM-UP UGLY DRAWINGS ONLY

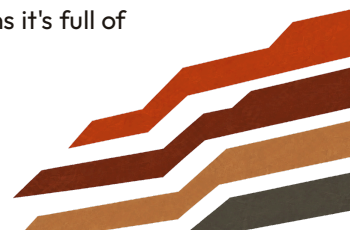
- **Announce the unit rule with ceremony: ugly drawings only.** Neat is slow, and slow loses — designers sketch to think, not to decorate. Two 30-second drills (truck; truck-in-2040 with ONE change) and the pair sentence said aloud in full. The one-change constraint is the quiet masterstroke: it teaches that innovation is usually one deliberate edit, not a fantasy rebuild.

CORE THE PROOF HUNT + THE SITE OF 2040

- **Four-minute hunt:** one WA already-doing-it find per pair, sourced. Harvest three aloud — the sci-fi scale line gets funnier and more pointed as finds stack up.
- **The canvas (the lesson's heart, give it 15+ minutes):** aerial map of their own 2040 site, all four edge-questions answered somewhere in the drawing, everything labelled. Circulate with designer questions, not compliments: "where does the power go at night?" beats "nice trucks."
- **The guided tour protocol runs the talk:** 60-second tours, two "why" questions each way, answers that start with "because." The room should be loud.

LAND IT THE CURVE + THE COLLECTION

- **The prediction graph:** one line, 2025 → 2040, workers on site. No right line — but every line defends its shape aloud in two sentences before it's written. Pairs with opposite shapes: gold; put one such pair on the spot (kindly) for the class.
- **COLLECT THE CANVASES.** Non-negotiable — Lesson 3's problem hunt happens ON these maps. Announce it so it stings a little: "your map is now the property of Lesson 3. It's full of ideas — which means it's full of problems. We'll be back for them."



■ THE REVEAL — YOUR FACTS, KEPT GENERAL ON PURPOSE

Stay at the level of “this exists in WA now”: autonomous haul trucks operate in the Pilbara; driverless iron ore trains run — one of the largest robotic systems on Earth; operations centres in Perth control sites over a thousand kilometres away (the class met one in Unit 4, Lesson 1 — call back to it); large solar farms already power parts of mine sites; electric and hydrogen-powered machines are in trials. If students want numbers, that's the proof hunt's job — live sources beat printed ones, as this program keeps proving.

■ WHY UGLY DRAWINGS — THE PEDAGOGY, IN CASE ANYONE ASKS

Perfectionism is the enemy of ideation, and at 12 it's already well installed. The rule removes the grading of art (nothing visual is ever assessed in this unit — say so), speeds up thinking, and makes the talk the point: the map exists so the tour can happen. If a student freezes, shrink the task: “draw one rectangle. Label it. Now it's a site.”

■ RUNNING THE TALK — KEEPING IT STRUCTURED, NOT JUST LOUD

The tour protocol and the curve defence are the lesson's speaking assessment in embryo — Pitch Day is four lessons away, and every lesson between here and there rehearses explaining-out-loud. Insist on the forms: full sentences in the drills, “because” in the tour answers, two sentences for the curve. Praise specific talk (“you gave a reason without being asked”), not confidence.

■ THE TALK LADDER — POST THESE ON THE BOARD ALL UNIT

Designers talk in patterns, and Pitch Day will reward students who've rehearsed them since today: “**What if...**” · “**It's like _____, but for _____**” · “**The problem with today's way is...**” · “**By 2040 this is normal, because...**” Reward any student caught using one unprompted — loudly.

■ CANVAS LOGISTICS — PROTECT THE ASSET

Names on maps before collection, one class pile, stored flat — these sheets are Lesson 3's raw material and (for many teams) the seed of the Pitch Day poster. A lost map is a lost head start; say exactly that when collecting.

■ DIFFERENTIATION

Support: the canvas's four edge-questions double as a checklist — answer them one at a time; drills can be traced-over rather than free-drawn; tour from notes is fine. **Extend:** add a fifth zone to the map — something nobody's thought of (comms? food? emergency?) — and defend why 2040 needs it. Or: draw the SAME site in 2025 in one corner, and make the tour a then-vs-now story.

■ RUNNING SHORT — THE CUT LINE

The drills can compress to one; the hunt can become a teacher demo. Protect the reveal, the canvas, the tour and the collection — Lesson 3 is built on those maps existing.

■ MISCONCEPTIONS TO WATCH

“2040 means flying cars” (2040 is visible today, in prototype — the reveal does the correcting) · “automation means no jobs” (jobs move and change — ask the Unit 4 question: if the truck drives itself, who's paid, and for what?) · “I can't draw” (correct! Nobody can. That's the rule. Ugly drawings only.)

