Differentiation strategies – Primary Science & Technology example

Lesson component	Description
Differentiation element(s)	**Process** and **Product**
Stage	Stage 2
Subject	Science and Technology
Outcomes	**A student:** • identifies ways heat is produced and that heat moves from one object to another ST2-6PW • investigates their questions and predictions by analysing collected data, suggesting explanations for their findings, and communicating and reflecting on the process undertaken ST2-4WS.
Content statement	Heat can be produced in many ways and can move from one object to another (ACSSU049) • identify in their environment some different ways in which heat is produced e.g. by electricity, burning (chemical) and friction (motion) • question and predict by using curiosity, prior knowledge, experiences and scientific information with guidance, identifying questions in familiar contexts that can be investigated scientifically (ACSIS053, ACSIS064).
Purpose of lesson	To construct a databank of understandings about forms of heat and how it is generated. This databank will provide the basis for further investigations about heat.
Strategy(ies)	**Differentiation strategies** Students will: • work in small, mixed ability groups with allocated roles • use prior knowledge, online and other available research to identify and predict different ways heat can be produced • contribute ideas to the group • record responses and examples using labelled diagrams, text, digital/multimodal illustrations, physical demonstration • discuss and classify responses according to the ways the heat is generated e.g. chemical, such as burning, or motion, such as friction • collate the classified responses into a data bank using collaborative software such as Padlet or Pinterest. This databank must be accessible to all students for use as a resource to plan for further investigation into heat. Investigations will include: • the ways heat can move from one object to another • using scientific knowledge to control the movement of heat by insulation • further questions that students may wish to explore. Group work: suggested roles include Manager, Timer, Recorder, Reporter, Questioner, Researcher, Organiser, Clarifier; reciprocal teaching roles, cooperative learning structures.