

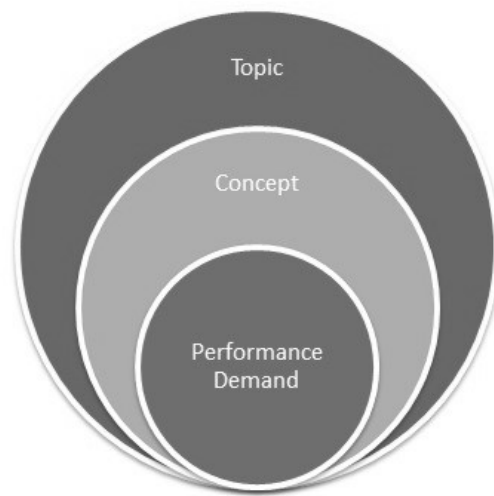


Fig. 1

Delineating Skills to Knowledge Points

Based on MOE SG Primary Science Syllabus
Topic: Heat Energy (lower block)

Learning Outcome	Concept	Performance Demands Considerations
Show an understanding that heat flows from a hotter to a colder object/region/place until both reach the same temperature.	Heat travels from a point of higher temperature to a point of lower temperature, until both points reach the same temperature.	Predict & Explain what happens to its temperature at different points when an object comes in contact with a source of heat at one of the points. Predict / Outline the path of heat travel from a location of higher temperature to one of lower temperature in an object. Identify the state in which heat stops flowing in an object. Design an experiment to measure the rate of conductivity of heat by different materials.
Relate the change in temperature of an object to the gain or loss of heat by the object.	When an object gains heat, its temperature increases; When the same object loses heat, its temperature decreases.	Identify objects that have gained or lost heat, using temperature as an indicator. Predict & Explain the changes in temperature of an object when it is heated or cooled.

Fig. 2

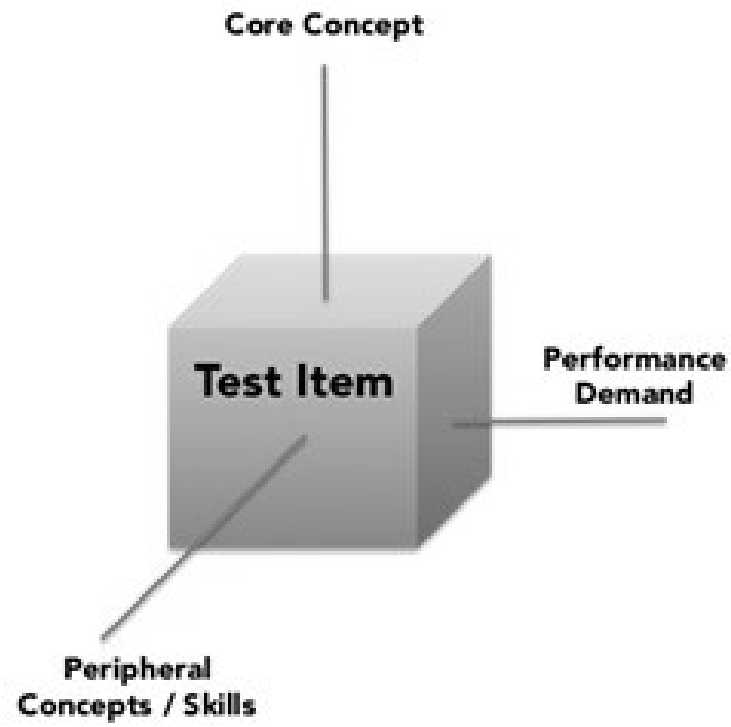


Fig. 3

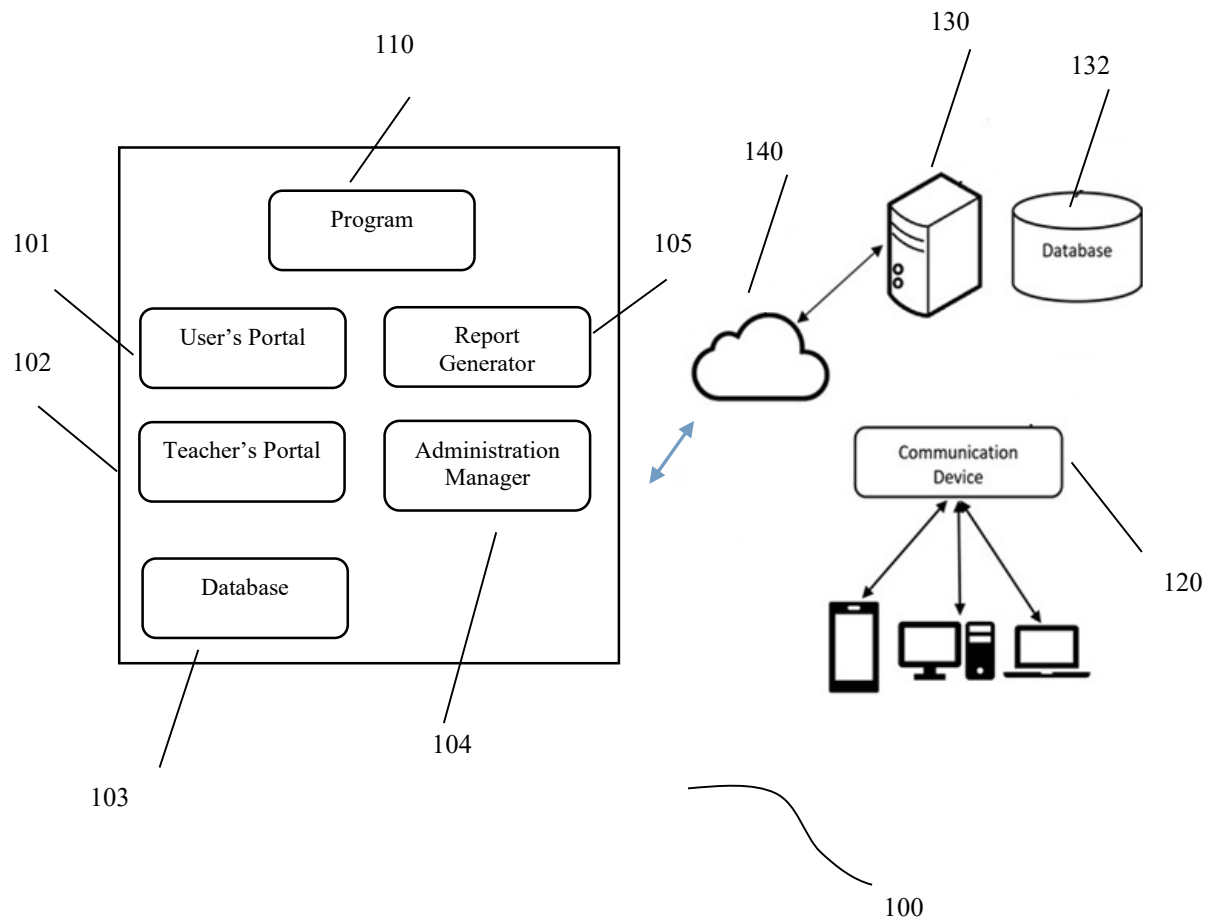


Fig. 4

Lesson Delivery Mode (Learn Mode 1) Sequence

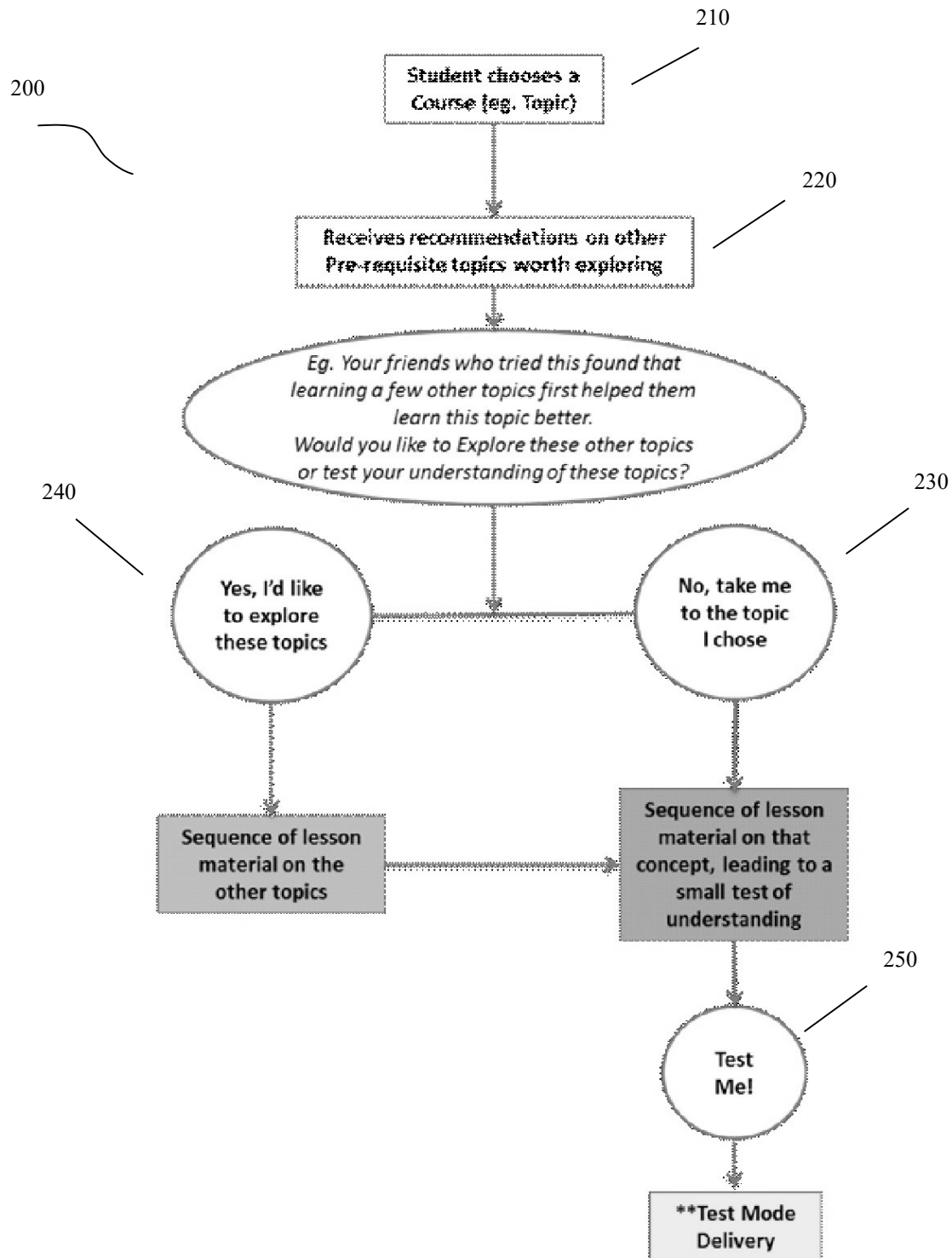


Fig. 5

Test Delivery Mode (Test Mode) Sequence

Starting Point A

(for Concepts with a wide range of Difficulty Affordance Levels in PDs)

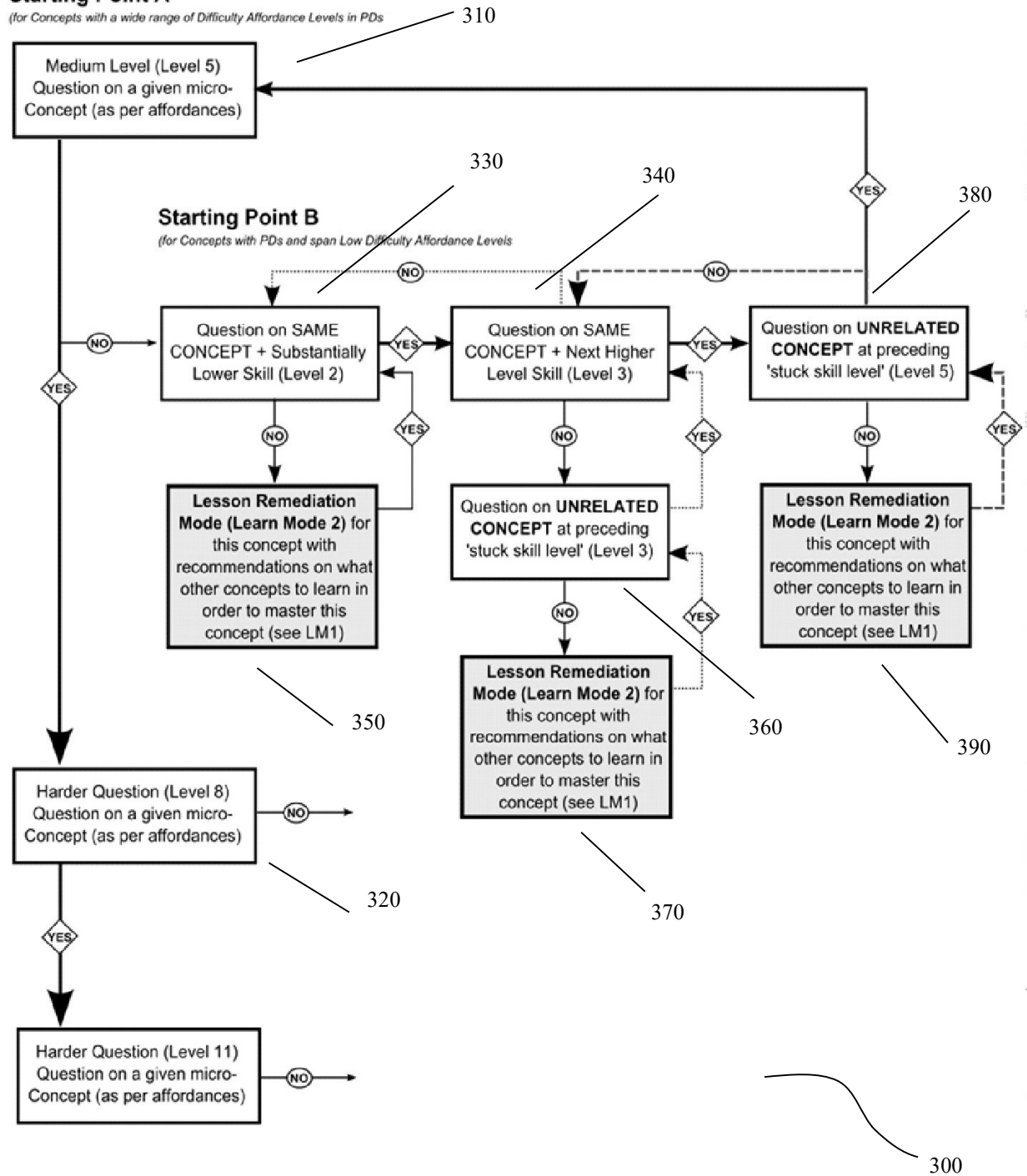


Fig. 6