Capacity Matrix - Mathematics - Data Interpretation & Representation

Name:

AIM	Capacity	Capacity Breakdown	Information (I have heard of this)	Knowledge (I understand and can explain this) Possible Student Tutorial (i.e. Using Doceri)	Know-how (I can do this on my own)	EVIDENCE Sample 1 Pre-test?	EVIDENCE Sample 2 Maths book page number?	EVIDENCE Sample 3 Post-test? Rich Task Assessment?	Wisdom (I can teach others)	Evidence of Wisdom (I have taught others) Student Name or Hyperlink to Student Tutorial (i.e. Using Doceri)
To plan, gather and analyse data to prove, disprove or improve something.	Planning, Gathering and Analysing Data	Choose simple questions and gather responses (ACMSP262)								
		They ask questions to collect data and draw simple data displays.								
		Identify a question of interest based on one categorical variable. Gather data relevant to the question (ACMSP048)								
		Collect, check and classify data (ACMSP049)								
		Students make sense of collected information.								
		They interpret data in context.								
		Students collect data from relevant questions to create lists, tables and picture graphs with and without the use of digital technology.								
		Identify questions or issues for categorical variables. Identify data sources and plan methods of data collection and recording (ACMSP068)								
		Collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies (ACMSP069)								
		They carry out simple data investigations for categorical variables. Select and trial methods for data collection, including survey questions and recording sheets (ACMSP095)								
		They describe different methods for data collection and representation, and evaluate their effectiveness.								
		Pose questions and collect categorical or numerical data by observation or survey (ACMSP118)								
		Students pose questions to gather data and construct various displays appropriate for the data, with and without the use of digital technology.								
		Interpret secondary data presented in digital media and elsewhere (ACMSP148)								
		They analyse and evaluate data from secondary sources.								
		Identify and investigate issues involving numerical data collected from primary and secondary sources (ACMSP169)								
		Calculate mean, median, mode and range for sets of data. Interpret these statistics in the context of data								
		Students identify issues involving the collection of discrete and continuous data from primary and secondary sources.								
		Students identify or calculate mean, mode, median and range for data sets, using digital technology for larger data sets.								
		They describe the relationship between the median and mean in data displays.								
To make sense of and present data in a suitable manner.	Analysing and Presenting Data	Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays (ACMSP263)								
		Students describe data displays.								
		They ask questions to collect data and draw simple data displays.								
		Create displays of data using lists, table and picture graphs and interpret them (ACMSP050)								
		Students make sense of collected information.								
		They interpret data in context.								
		Students collect data from relevant questions to create lists, tables and picture graphs with and without the use of digital technology.								
		Collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies (ACMSP069)								
		Interpret and compare data displays (ACMSP070)								
		They interpret and compare data displays.								
		Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values (ACMSP096)								
		Evaluate the effectiveness of different displays in illustrating data features including variability (ACMSP097)								
		They construct data displays from given or collected data, with and without the use of digital technology.								
		Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies (ACMSP119)								
		Describe and interpret different data sets in context (ACMSP120)								
		Students compare and interpret different data sets.								
		Students pose questions to gather data and construct various displays appropriate for the data, with and without the use of digital technology.								
		Interpret and compare a range of data displays, including side-by-side column graphs for two categorical variables (ACMSP147)								
		They interpret and compare a variety of data displays, including displays for two categorical variables.								
		Construct and compare a range of data displays including stem and leaf plots and dot plots (ACMSP170)								
		Describe and interpret data displays using median, mean and range (ACMSP172)								
		They construct stem-and-leaf plots and dot plots.								

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