

Descriptive Functions

Introducing Rates of Change – Senior Cycle Maths

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Overview of the Topic

Students are learning about the relationship between dependant variables. It is an introduction to calculus and rates of change, a senior cycle topic.

Overview of the Lessons

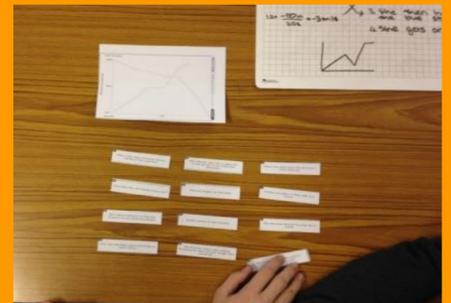
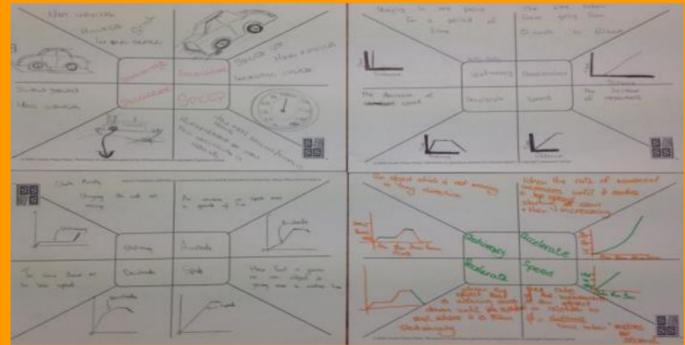
- Introduction to the concept of related variables using investigatory approach. Students will recognise various interpretations for slope. "Filling the Bath Graph."
- Using a graph to represent a relationship between two variables. "Walking to School Graph."
- Think-Pair-Share Exercise – Given a graph of a journey to college, describe the actions of the student based on the relationship of two variables.
- To consolidate students understanding of a two variable relationship we will use a graphic organiser.
- House Swap story. Students will be given a graph with two functions and a list of statements. They will determine which part of the function the statements match based on their recently acquired knowledge of rates of change and slopes.
- Matching Exercise – Students will watch a geogebra file on rates of change and participate in a matching activity to reinforce their understanding of rates of change.

Learning Outcomes

- Represent a relationship between two variables on a graph
- Describe a relationship between two variables in their own words
- Make a connection between rates of change and the slope

Resources

- Active Learning Boards, markers, dusters
- Graphic Organisers
- Geogebra file
- Powerpoint
- Matching Cards for students activities



Student Feedback

"It was enjoyable, very interactive and we had some laughs."

"I think it was a good idea because while one teacher was with one student the other could have helped someone else."

"The class goes faster with two teachers and you can ask more questions."

"Having two teachers made it easier to get personal help."

"The class work is enjoyable and easy and we do learn a lot more."

Teacher Reflection

Students enjoyed the lesson and expressed an interest in having more classes co-taught.

We thought the planning process was productive and we both benefitted from the ideas and experiences the other teacher contributed.

While the experience of co-teaching was positive both teachers recognised time for planning as a challenge.