

Unit: Creating a Successful TV Show or Film Using Data

Target age: 11+

Topic 2: Planning a solution

Recommended Teaching hours: 1-2

Lesson Objective: Understand that data can take many forms and how that data can help you create a suitable, data driven solution

Lesson Overview & Outcomes (*Linked to Scottish curriculum for Excellence Numeracy & Mathematics and Technologies: experiences and outcomes – Third/Fourth level*)

This topic allows pupils to work in project teams to determine the best approach to their solution. They will understand what data is and the varying forms it can take.

Numeracy & Mathematics: MNU 3-03b, MTH 3-15a, MTH 3-20b, MNU 3-20a, MNU 4-09b, MTH 4-12a, MTH 4-20b

Technologies: TCH 3-01a, TCH 3-02a, TCH 3-03a, TCH 3-05a, TCH 3-08a, TCH 4-01a, TCH 4-02a

Key words: Quantitative, Qualitative, Project, Data, Information

Suggested software/Resources: Internet Web Browser (Google Chrome, Internet Explorer etc), Word processing package, Spreadsheet software. See “Tools to support delivery” section for more information.

Please refer to project overview and medium term plan for additional support and guidance

Lesson Structure:

(Based on 1 hour lesson)

Introduction:

Time (minutes)	Activities	Challenge/Support (Differentiation)	Assessment Strategies & Outcomes
10	Slide 2: Collect homework or ask pupils to come and place their item on a large piece of paper/notice board. Ask students to consider some of the art work used on these items and what makes the memorable, this will support pupils today in considering the type of films/shows they need to investigate. This will also be useful for the latter part of the project in their design work and serve as inspiration throughout	Some students may begin to note down ideas from the mood board for their own potential idea(s)	Students will have collectively produced a mood board and used this to discuss/write down potential ideas for the project solution

Main Content:

Time	Activities	Challenge/Support (Differentiation)	Assessment Strategies & Outcomes
20	<p>2.1 Slide 3: Help pupils understand the difference between data and information, quantitative and qualitative data</p> <p>Show them this video if you want that helps explain the different data types - https://www.youtube.com/watch?v=dwFsRZv4oHA</p> <p>Ask them to consider some other examples and write them down, this can be done as a sole activity or in pairs</p> <p>Then ask them to produce a list of data and information that they will need to collect for this project, e.g. best rated films, top grossing films, critics reviews</p> <p>Complete worksheet 2</p>	<p>This may be difficult for some pupils to grasp so spend as much time on this section as you need. If you feel this may be too difficult for all pupils, then you can skip the quantitative and qualitative definitions for now and ask them to think about the data they need to collect for this project</p> <p>HA – can support other pupils in the group when developing the data sets they will be looking for</p>	<p>Pupils will be able to distinguish between quantitative and qualitative data.</p> <p>They will be able to create a list of data and information they will be looking for to analyse in their project</p>
25	<p>2.2 Slides 4-5: Allocate pupils into mixed ability groups. Here they will determine their approach to data analysis in the next lesson and begin to collect some data. Once allocated into groups pupils should choose or be allocated a group role (these can be rotated throughout the project if needed):</p> <ul style="list-style-type: none"> ▶ The Translator ▶ The Engineer ▶ The Analyst <p>Before the groups begin to collect data ask them to consider:</p>	<p>The make-up of the groups should offer differentiation within the groups and encourage peer support. Provide pupils with the definitions of each role and help them determine what they need to consider and how they can agree on these actions</p> <p>Pupils can decide to use standard spreadsheet software such as MS Excel to store the data they begin to collect or a more</p>	<p>Pupils will create a list of jobs that they need to carry out and sign a project contract, this can form homework for the remaining weeks of the project</p> <p>Pupils will produce a design of their table that will be used to collect data, it will include</p>

	<ul style="list-style-type: none"> ▶ What is being done - this can be things like collecting the data, storing the data, the design of the solution, data quality checks, implementing the solution ▶ By whom - Each job can be completed individually or shared. ▶ When by - This will be determined by the time-frame for the delivery of the project ▶ Where and how the data be stored, and what are the risks <p>It might be helpful to get pupils to sign a project contract, accepting responsibility for their roles in the project. You may also want them to start considering a sources table here rather than in topic 3</p> <p>2.3 Slide 6: At this point pupils can decide on whether they will be looking to create a film OR TV show and what they will be looking to put as headings in their data collection document, Genre, Rating etc. Show pupils dataset to help them</p> <p>2.4 Slide 7: Ask pupils to consider where they will save their work. This could be as simple as creating a folder on their computer, but you may wish to talk about cloud storage or the use of encrypted storage devices</p> <p>Slide 8: Clarify with pupils what they are expected to have done today</p>	advanced option(s) of your/their choice from the “Tools for Delivery” section	suitable headings that can be populated. This can be hand drawn or computer based
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Concluding the lesson:

Time	Activities	Challenge/Support (Differentiation)	Assessment Strategies & Outcomes
5	Slide 9: Check project contracts are all signed and question students on each of their roles either as The Translator, The Engineer or The Analyst	Directed questioning can help the wider group develop their understanding and expectations	Check the contract jobs allocated

Homework:

Let the project groups determine and agree with you the homework for this week based on their roles as The Translator, The Engineer or The Analyst. This could mean that homework will be on a rota basis for each role.

Evaluation:

- ▶ What went well in the lesson?
- ▶ What needs addressing/revisiting?
- ▶ What might you do differently for next time?