



BRISBANE BOYS' COLLEGE

Making marks books tell stories: Seeing (Guttman) patterns in your data

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3. Download the **guttmanworkshop** file



Education with a stylus

The blog of Matthew O'Brien, a secondary school educator working at Brisbane Boys' College, Australia. Whilst the focus will be on the impact of stylus technology (especially Tablet PC) on and in education, anything technological is fair game, along with random thoughts and ideas! I was recently accepted as part of the Microsoft Innovative Educator Expert program, so will also focus on some of my learnings and experiences of being in this exciting program.

[ABOUT ME](#) [SWAYS](#) [PRESENTATIONS](#)

Presentations

This section has the slide decks for download and viewing from various presentations I have made.

- **2015** – UNSW Global EAA Assessment in Schools Conference.
Workshop Presenter "Making Marks books tell storied – Seeing (Guttmann) patterns in your data"

- Excel workbook for the workshop – [GuttmanWorkshop](#)

About Brisbane Boys' College

- Established 1902
- Presbyterian and Methodist Schools association (PMSA)
- Independent, Greater Public Schools (GPS)
- Prep to Year 12
 - Located in Toowong in Brisbane's inner western suburbs, Australia
 - Enrolment of 1570 students
 - Boarding available Years 5 to 12



Feedback linked to criteria

YEAR 11/12 CHEMISTRY MARKING SCHEME					
Name:	Yosh	Mendis	Experiment:	Equilibrium	
Communication					
Abstract	A includes all components for an abstract summary	B	C Some components not included, not concise	D	E absent
Introduction	A gives appropriate background information, equations	B	C inappropriate, some omissions	D	E absent
Presentation, spelling and grammar	A scientific terminology correct, error free	B	C organised but untidy, minor errors	D	E Disorganised, untidy, many errors
3- Spelling and grammar free. Review. Correct terms used in report writing. Functions used where appropriate. Report neatly presented. Given format for a scientific report was followed to a high degree. 2- Some errors in spelling, grammar and punctuation. Correct terms used throughout the report. Report presented neatly. Given format for science report has some omissions. 1- Spelling grammar of a very poor standard. Report not in correct genre. Report not presented neatly. Given science report format not followed.					Communication total
Collecting Data					15
Apparatus and Chemicals	A complete	B	C incomplete	D	E incomplete
Procedure	A complete, clear, concise	B	C minor omissions	D	E major omissions
Results	A complete, correct units, consistency of measurements, includes other observations, good format followed	B	C minor flaws	D	E major flaws and omissions
3- All data presented in appropriate format. Tables and graphs used correctly and all relevant information included in them. Detailed observations have also been included. 2- All data presented in appropriate format but some minor omissions and mistakes in formatting. Observations included but lacking in some detail. 1- Some effort made to use appropriate data presentation techniques. Report is not neatly set out. Some effort made to include observations or poor observations.					Collecting Data total
Making Judgements					5.50
Aim and hypothesis	A concise, where appropriate stated as a hypothesis	B	C	D	E absent
Conclusions	A concise, related to the aim	B	C neatly included inappropriate content	D	E omitted
1- Relevant observations and data distinguished from the irrelevant. Conclusions to identify and cite for any errors in measurement that may have been made. Very little effort made to distinguish relevant from irrelevant data. Errors in measurement not identified or referred to.					Making Judgement total
Processing Information					6.83
Analysis	A complete and correct graphs, equations used, inferences made, consistency of results accommodated	B	C some incomplete, minor omissions	D	E major omissions
Discussion	A appropriate concepts utilised or developed, errors explained, modifications to procedures suggested further hypotheses indicated	B	C incomplete	D	E major omissions
3- Trends in data identified and appropriate conclusions drawn. Mathematical analysis carried out at a high standard. Inferences made from the experimental data and predictions made concerning possible future experimentation. Questions answered correctly. 2- Trends in data identified but some mistakes made when drawing conclusions. Minor errors made during calculations and some use of graphs in the discussion made and the predictions concerning possible future experimentation. Most questions answered correctly. 1- Some effort made to identify trends in data. Some major errors present in mathematical analysis. Some effort made to make inferences and predictions concerning possible future experimentation. Most questions answered correctly. 0- Negligible attempt made to analyse results or identify trends. Questions not answered correctly or no attempt made to answer them.					Processing Info total

Assessment FOR learning

Comment:

[Redacted]: The abstract needs to be concise and clear, however you need to be careful not to skip over important information in the quest to be succinct. All necessary equations related to the background theory should be included in the introduction. Some minor errors related to the format for a scientific report are noted. You need to write a paragraph that describes the results and refers to the data tables - the tables are not enough on their own. You need to be precise when referring to variables and scientific terminology. The conclusion should briefly state results or findings. Some incomplete or minor mistakes are noted in the analysis. Your explanation and development of the concepts need to be expanded.

TOTAL	/10	7.63
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Criteria discrimination

Science practical reports criteria based; 120 students; post hoc analysis

	Abstract	Introduction	Presentation, spelling and grammar	Apparatus and Chemicals	Procedure	Results	Aim	Conclusions	Analysis	Discussion
upper A	0.000	0.154	0.000	0.231	0.154	0.077	0.231	0.308	0.154	0.000
upper B	0.769	0.769	1.000	0.769	0.846	0.923	0.385	0.538	0.769	0.923
upper C	0.231	0.077	0.000	0.000	0.000	0.000	0.385	0.154	0.077	0.077
upper D	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
upper E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mid A	0.000	0.000	0.000	0.615	0.000	0.000	0.000	0.000	0.000	0.000
Mid B	0.615	0.769	0.769	0.385	0.769	0.923	0.308	0.385	0.692	0.231
Mid C	0.385	0.231	0.231	0.000	0.231	0.077	0.692	0.615	0.308	0.692
Mid D	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.077
Mid E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Low A	0.000	0.000	0.000	0.538	0.000	0.000	0.000	0.000	0.000	0.000
Low B	0.231	0.154	0.692	0.462	0.846	0.769	0.308	0.077	0.462	0.154
Low C	0.538	0.846	0.308	0.000	0.154	0.154	0.692	0.538	0.385	0.692
Low D	0.231	0.000	0.000	0.000	0.000	0.000	0.000	0.308	0.077	0.154
Low E	0.000	0.000	0.000	0.000	0.000	0.077	0.000	0.077	0.077	0.000

✓ B ? X X X T ✓ T ✓

Criteria and skills mapped to common scale

[illegible]

GPA calculator and target setting

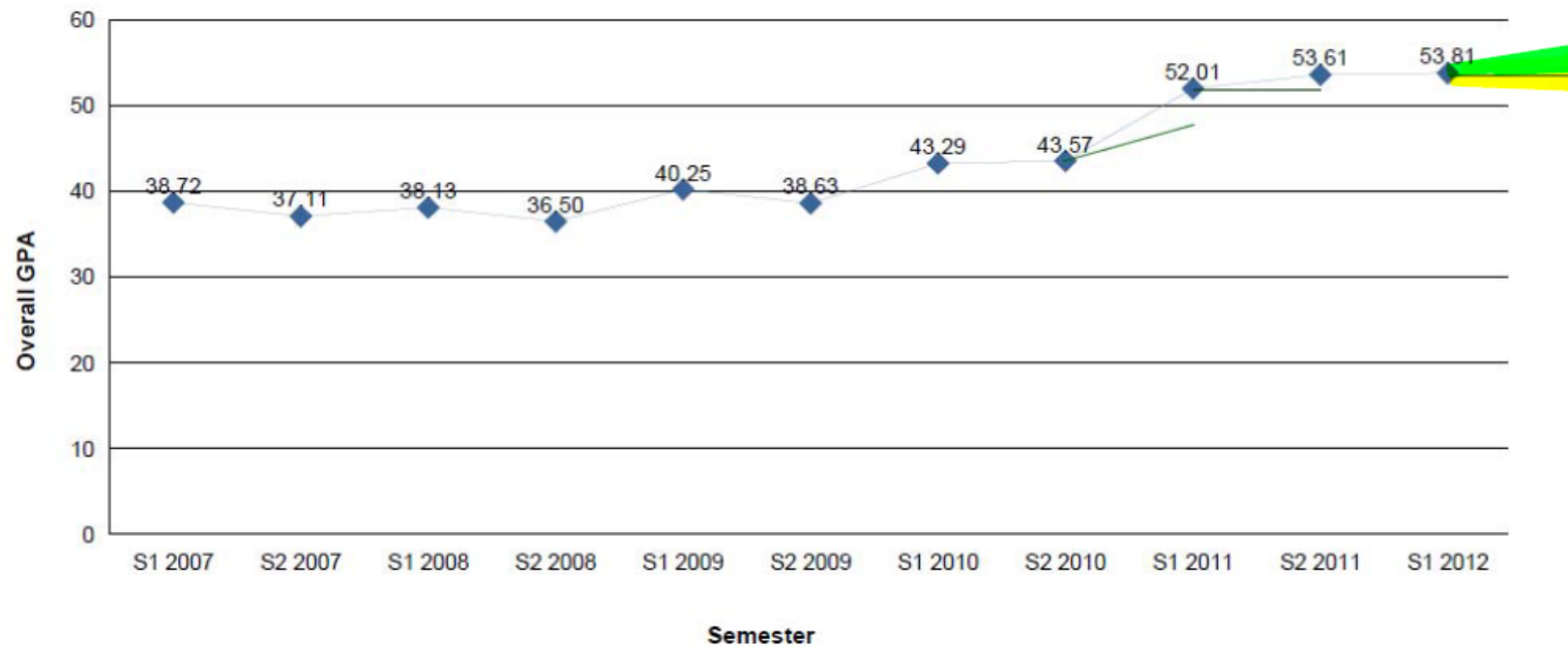
Year 11 & 12 GPA Calculator - Target Setting 2012								
Name	XXXXXXXXXX	St Num	XXXXXXX	Save this file as studentnumber.xlsx, e.g. 12345.xlsx				
Year 11 & 12	Subject name	Periods	GPA weight (W)	Target Grade (A+ to E-)	2011 Grade (A+ to E-)	How are you going to reach this goal?	Weighted score (W x S)	1-15 GPA Score
English	English	5	0.16666667	B+	B	Revise genre carefully before the next written assessment	8.66666667	12
Mathematics	Mathematics	5	0.16666667	B	C+	Focus on MAPS as this is my weakest criteria	8.5	11
Elective 1	Biology	5	0.16666667	A	A	Keep doing the same	9	14
Elective 2	Chemistry	5	0.16666667	A-	B+	Learn the equations and how to use for exams	8.83333333	13
Elective 3	Music	5	0.16666667	B	B-	Practice!!!!!!!	8.5	11
Elective 4	Physical Education	5	0.16666667	B+	B	Ensure I do the written part of the course, not just the exercise bit	8.66666667	12
TOTAL		30	1				52.17	12.17

Note: Life & Belief, Rec, House Period, Study Period, Assembly and Assembly Study Curriculum Period have contact time but are not graded so are not included in the GPA calculation.

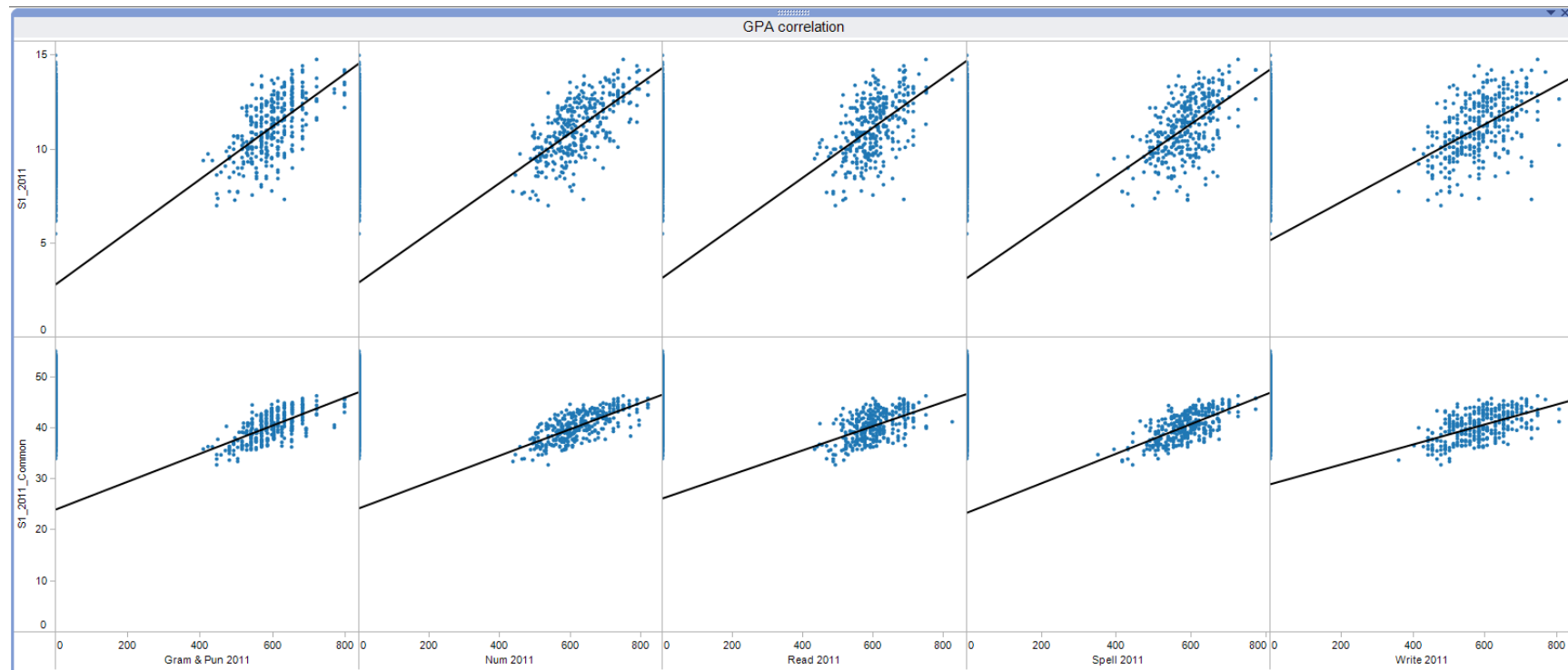
[Go and show the survey results](#)
(opens in Excel)

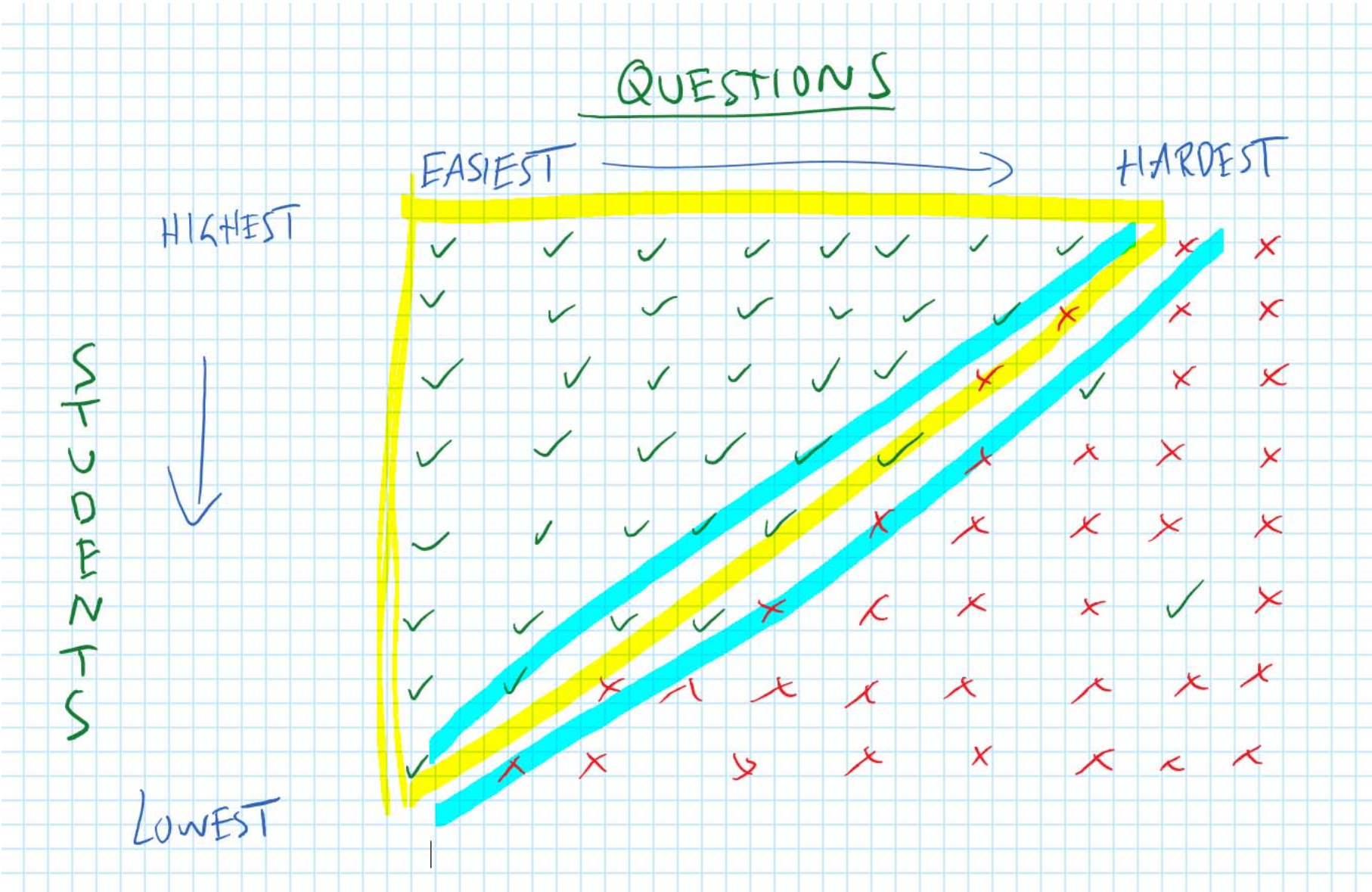
GPA - Forecasting

Common Scale Grade Point Average Record



GPA:NAPLAN correlation





11MA01 – 2008 (2007 data)

2007 International Competitions and Assessments

Mathematics - Year 10 -

Close

Print Year 10

Summary Skill Areas Questions **Students** School

Student Result In Difficulty Order

The table below shows the answer for each student in order of question difficulty.

Clas	First Name	Last Name	Score	1	5	3	8	4	6	1	1	1	1	1	1	2	3	1	2	2	3	1	3	2	2	1	2	3	2	2	3	3	1	3	3	3	2	4	3	2
	DANE JOHN		30	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	DOUGLAS		28	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	MATTHEW		27	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	PATRICK LEONARD		26	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	MATTHEW		25	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	THOMAS		24	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TRISTAN		24	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CHARLES DAVE		16	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	ARIE		15	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	JACK		15	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	BLAINE		12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	EWAN		10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	HARRY		9	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Mark Book - traditional

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1																									
2				Type	Assign	Assign	Assign	Exam	Exam	Exam	Exam	Exam													
3				Weight	10	10	20	30	10	10	5	5													
4				Difficulty	2	5	4	6	7	1	8	2	Overall			Science Inquiry Skills (SIS)			Scientific Understanding (SU)			Communication			
5		Name	St Code	Criteria	SU - recall & explanation	SIS - display data	SIS - exp design	SU - recall, explanation	SU - maths	SIS display-interpret data	SIS - exp design, review	Comm	Total weighted	Total avg	Overall grade	SIS weighted	SIS avg	SIS grade	SU weighted	SU avg	SU grade	com weighted	Com avg	Com Grade	
6		Student 1	10001		7	6	11	7	3	15	10	12	850	9	C+	480	11	B	310	6	D+	60	12	B+	
7		Student 2	10002		10	9	11	11	6	11	14	14	1050	11	B	490	11	B	490	10	B-	70	14	A	
8		Student 3	10003		6	8	9	8	5	14	6	8	820	8	C	430	10	B-	350	7	C-	40	8	C	
9		Student 4	10004		12	11	12	8	8	12	6	14	1010	10	B-	500	11	B	440	9	C+	70	14	A	
10		Student 5	10005		11	9	1	9	6	10	6	12	740	7	C-	240	5	D	440	9	C+	60	12	B+	
11		Student 6	10006		5	4	5	7	10	9	6	5	645	6	D+	260	6	D+	360	7	C-	25	5	D	
12		Student 7	10007		13	8	9	6	8	13	6	12	870	9	C+	420	9	C+	390	8	C	60	12	B+	
13		Student 8	10008		8	7	8	6	7	6	4	8	680	7	C-	310	7	C-	330	7	C-	40	8	C	
14		Student 9	10009		0	6	9	9	5	9	8	6	720	7	C-	370	8	C	320	6	D+	30	6	D+	
15		Student 10	10010		3	3	6	6	6	9	5	6	565	6	D+	265	6	D+	270	5	D	30	6	D+	
16		Student 11	10011		12	12	13	11	14	13	4	0	1120	11	B	530	12	B+	590	12	B+	0	0	E-	
17		Student 12	10012		8	8	7	6	5	11	6	15	745	7	C-	360	8	C	310	6	D+	75	15	A+	
18		Student 13	10013		11	6	7	8	9	9	9	8	815	8	C	335	7	C-	440	9	C+	40	8	C	
19		Student 14	10014		12	12	13	10	8	7	3	8	1005	10	B-	465	10	B-	500	10	B-	40	8	C	
20		Student 15	10015		14	11	9	8	4	11	6	12	910	9	C+	430	10	B-	420	8	C	60	12	B+	
21		Student 16	10016		2	6	3	8	4	3	3	6	495	5	D	165	4	D-	300	6	D+	30	6	D+	
22		Student 17	10017		8	6	10	5	4	8	6	8	680	7	C-	370	8	C	270	5	D	40	8	C	
23		Student 18	10018		7	5	7	7	6	11	9	12	745	7	C-	345	8	C	340	7	C-	60	12	B+	
24		Student 19	10019		14	11	11	10	12	14	6	8	1100	11	B	500	11	B	560	11	B	40	8	C	
25		Student 20	10020		14	14	14	7	12	14	1	5	1060	11	B	565	13	A-	470	9	C+	25	5	D	
26		Student 21	10021		11	8	11	9	9	12	6	14	990	10	B-	450	10	B-	470	9	C+	70	14	A	
27		Student 22	10022		11	9	9	11	14	11	5	6	1015	10	B-	405	9	C+	580	12	B+	30	6	D+	
28																									
29				Count	22	22	22	22	22	22	22	22	22	22		22	22		22	22		22	22		
30				Average	9.05	8.14	8.86	8.05	7.50	10.55	6.14	9.05	846.82	8.45		394.77	8.82		406.82	8.09		45.23	9.05		
31				St Dev	4.01	2.83	3.24	1.79	3.25	2.92	2.71	3.85	179.94	1.87		103.37	2.34		98.87	2.09		19.24	3.85		
32				Median	10.5	8	9	8	6.5	11	6	8	835	8.5		412.5	9		405	8		40	8		
33																									
34																									
35																									
		MarkBook	MarkBook - Gutman	gradelookup																					

Mark Book – Guttman

		Type	Exam	Assign	Assign	Exam	Assign	Exam	Exam	Exam												
		Weight	10	10	20	5	10	30	10	5												
		Difficulty	1	2	3	4	5	6	7	8 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>												
			Overall									Science Inquiry Skills (SIS)			Scientific Understanding (SU)			Communication				
Name	St Code	Criteria	SIS display-interpret data	SU - recall & explanation	SIS - exp design	Comm	SIS - display data	SU - recall, explanation	SU - maths	SIS - exp design, review	Total weighted	Total avg	Overall grade	SIS weighted	SIS avg	SIS grade	SU weighted	SU avg	SU grade	com weighted	Com avg	Com Grade
Student 11	10011		13	12	13	0	12	11	14	4	1120	11	B	530	12	B+	590	12	B+	0	0	E-
Student 19	10019		14	14	11	8	11	10	12	6	1100	11	B	500	11	B	560	11	B	40	8	C
Student 20	10020		14	14	14	5	14	7	12	1	1060	11	B	565	13	A-	470	9	C+	25	5	D
Student 2	10002		11	10	11	14	9	11	6	14	1050	11	B	490	11	B	490	10	B-	70	14	A
Student 22	10022		11	11	9	6	9	11	14	5	1015	10	B-	405	9	C+	580	12	B+	30	6	D+
Student 4	10004		12	12	12	14	11	8	8	6	1010	10	B-	500	11	B	440	9	C+	70	14	A
Student 14	10014		7	12	13	8	12	10	8	3	1005	10	B-	465	10	B-	500	10	B-	40	8	C
Student 21	10021		12	11	11	14	8	9	9	6	990	10	B-	450	10	B-	470	9	C+	70	14	A
Student 15	10015		11	14	9	12	11	8	4	6	910	9	C+	430	10	B-	420	8	C	60	12	B+
Student 7	10007		13	13	9	12	8	6	8	6	870	9	C+	420	9	C+	390	8	C	60	12	B+
Student 1	10001		15	7	11	12	6	7	3	10	850	9	C+	480	11	B	310	6	D+	60	12	B+
Student 13	10013		9	11	7	8	6	8	9	9	815	8	C	335	7	C-	440	9	C+	40	8	C
Student 3	10003		14	6	9	8	8	8	5	6	820	8	C	430	10	B-	350	7	C-	40	8	C
Student 12	10012		11	8	7	15	8	6	5	6	745	7	C-	360	8	C	310	6	D+	75	15	A+
Student 18	10018		11	7	7	12	5	7	6	9	745	7	C-	345	8	C	340	7	C-	60	12	B+
Student 5	10005		10	11	1	12	9	9	6	6	740	7	C-	240	5	D	440	9	C+	60	12	B+
Student 9	10009		9	0	9	6	6	9	5	8	720	7	C-	370	8	C	320	6	D+	30	6	D+
Student 8	10008		6	8	8	8	7	6	7	4	680	7	C-	310	7	C-	330	7	C-	40	8	C
Student 17	10017		8	8	10	8	6	5	4	6	680	7	C-	370	8	C	270	5	D	40	8	C
Student 6	10006		9	5	5	5	4	7	10	6	645	6	D+	260	6	D+	360	7	C-	25	5	D
Student 10	10010		9	3	6	6	3	6	6	5	565	6	D+	265	6	D+	270	5	D	30	6	D+
Student 16	10016		3	2	3	6	6	8	4	3	495	5	D	165	4	D-	300	6	D+	30	6	D+
		Count	22	22	22	22	22	22	22	22	22	22		22	22		22	22		22	22	
		Average	10.55	9.05	8.86	9.05	8.14	8.05	7.50	6.14	846.82	8.45		394.77	8.82		406.82	8.09		45.23	9.05	
		St Dev	2.92	4.01	3.24	3.85	2.83	1.79	3.25	2.71	179.94	1.87		103.37	2.34		98.87	2.09		19.24	3.85	
		Median	11	10.5	9	8	8	8	6.5	6	835	8.5		412.5	9		405	8		40	8	

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ABOUT ME SWA S PRESENTATIONS

Presentations

This section has the slide decks for download and viewing from various presentations I have made.

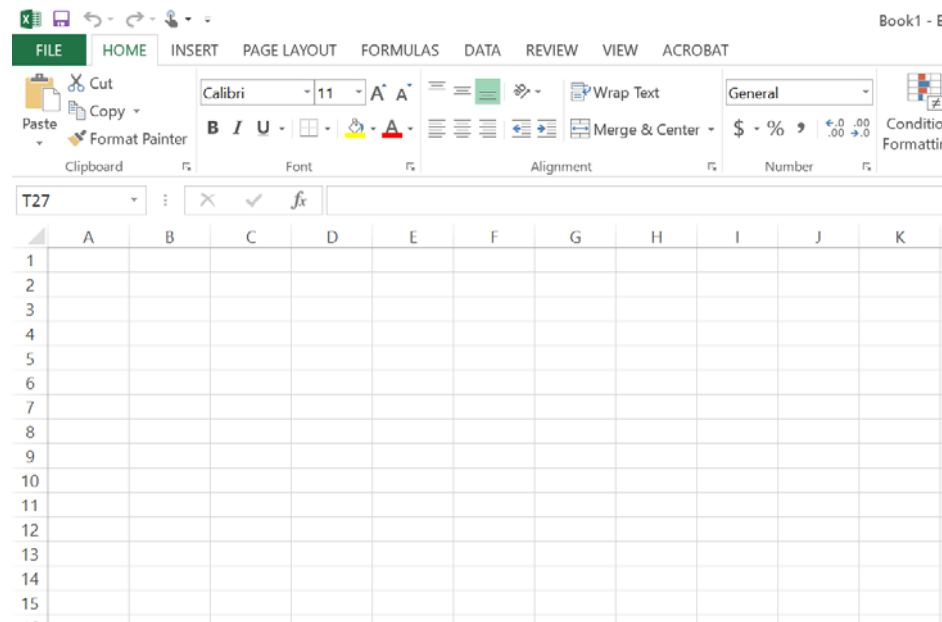
- 2015 – UNSW Global EAA Assessment in Schools Conference.
Workshop Presenter "Making Marks books tell storied – Seeing (Guttmann) patterns in your data"

- Excel workbook for the workshop – [GuttmanWorkshop](#)

Workshop file

<

- Letter/number based co-ordinate system for excel
 - Letters for columns
 - Numbers for rows
 - End up with a letter:number co-ordinate
 - such as G12



About Excel

Name	Description	Formula	Example
Sum	"Sums" all the cells in the range	=SUM(cell_range)	=SUM(E6:E27)
Count	"Counts" how many values there are in a range of cells	=COUNT(cell_range)	=COUNT(E6:E27)
Average	Returns the mean value from a range of cells	=AVERAGE(cell_range)	=AVERAGE(E6:E27)
Standard Deviation (St Dev)	Returns the standard deviation from a range of cells	=STDEV(cell_range)	=STDEV(E6:E27)
Median	Returns the median value from a range of cells	=MEDIAN(cell_range)	=MEDIAN(E6:E27)
Rank	Returns the position in the rank order of a cell value from within a range	=RANK(cell,cell_range)	=RANK(E30,\$E\$30:\$L\$30)

Note: the "\$" symbol in a cell range forces the cell range reference to stay the same when copied to other cells – it means that a dynamic formula can be dragged through a cell range, but the cell range reference stay the same.

Exercise 1a: Totals and sort

Excel ribbon: FILE, HOME, INSERT, PAGE LAYOUT, FORMULAS, DATA, REVIEW, VIEW, ACROBAT, PENS

Sort & Filter: Sort, Filter, Clear, Reapply, Advanced

Data Tools: Text to Columns, Flash Fill, Remove Duplicates, Data Validation, Consolidate, What-If Analysis, Relationships, Group, Ungroup, Subtotal

Sort dialog box:

- 1: My data has headers (checked)
- 2: Sort by: Class %
- 3: Sort On: Values
- 4: Order: Largest to Smallest

Formula bar: =SUM(C2:X2)

Formula bar: =SUM(C2:C31)

Question	out of	Sam	Joe	Sue	Matt	Angela	Dianne	Max	Bill	Susan	Tracey	Jon	Neil	Isabelle	Rosie	Alex	Barry	Peter	Lucy	Andrea	Nicole	Sean	Kyle	Class %
1	1	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	1	1	1	8
2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	1	1	0	1	0	1	0	0	0	1	1	0	1	0	1	1	1	1	1	1	1	0	0	1
4	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1
5	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1
6	1	1	1	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	1	1	1	0	1	1
7	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	0	1	1	1	0	0	1	1
8	2	2	2	2	2	1.5	1.75	2	1.5	2	1.75	2	1	1.5	2	1.5	1.5	2	2	1.75	0	2	2	2
9a	2	2	2	2	0	0.5	1	1.5	1	1	0.5	0	1	1	1.5	2	1.5	1.5	2	2	2	0	2	2
9b	2	1.5	0	1	0	2	0	0	1	1	2	2	1	2	2	1	0	1	1	1	2	0	2	2
10	3	3	3	3	3	0	3	1.5	1	3	3	3	1.5	3	2.5	1.5	2	3	3	3	1.5	2	2	2
11	3	1	1	1	0.5	3	0	0	1	3	0.5	1	1	2	0.5	1	1	0.5	1	0.5	1.5	0.5	1	1
12	2	1	2	2	0.5	0	0	1	2	0.5	1	0	1	1	1	2	2	0	2	0.5	1	1.5	0.5	2
13	2	2	2	2	0	1.5	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
14	3	3	1.5	1.5	2.5	0	3	2.5	2.5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
15	2	2	1.5	0	1.5	0.5	2	1.5	1.5	0.5	2	2	2	2	2	2	2	2	2	2	2	2	2	2
16	2	2	1	2	1.5	1	0.5	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17a	1	1	0.5	1	1	0	0.5	0.5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17b	1	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
18a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
18b	2	2	2	2	2	0	0.5	0	0	2	1.5	2	2	2	2	2	2	2	2	2	2	2	2	2
18c	2	1	0	1	0	0	0.5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18d	2	1	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18e	3	0.5	1	3	3	0	1	1	1	1	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
19a	1	1	1	1	0	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19b	3	3	2.5	1.5	1	0.5	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
20a	1	1	0	1	1	1	1	0.5	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20b	1	0	0	1	0.5	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20c	1	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20d	3	2.5	0	2	0	0	0.5	0.5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	53	42.5	31.5	42.5	27.5	20	21.75	23.5	29	31	25.75	26	22.5	31.5	34	34.5	26	31	42.5	29.75	29	26.5	42.5	27

Exercise 1b: Copy Transpose

1

2

3

preview before paste.

		C	D	E	F	G	H
		2	3	4	5	6	7
1		1	1	1	1	1	1
1		1	1	1	1	1	1
0		1	0	1	1	1	1
1		1	1	1	1	1	1
0		1	0	1	1	1	1
0		1	1	1	1	0	
0		1	0	1	0	0	
0		1	0	1	1	1	
0		1	0	0	1	1	
0		1	1	0	1	1	
0		1	1	1	0	1	
0		0	0	1	1	1	

8 Dianne

9 Max

10 Bill

11 Susan

12 Tracey

13 John

14 Neil

Part B – Now sort from largest to smallest by the Total for each student

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG		
1	Question	5	8	18a	14	10	20a	4	6	7	20b	2	15	3	9a	16	20c	17a	9b	18b	12	13	19a	17b	18e	20d	19b	1	11	11	18c	18d		Total	
2	out of		1	2	2	3	3	1	1	1	1	1	2	1	2	2	1	1	2	2	2	2	2	1	1	3	3	3	1	1	3	2	2		53
3	Sam		1	2	2	3	3	1	1	1	1	0	1	2	1	2	2	1	1	1.5	2	1	2	1	0	0.5	2.5	3	1	1	1	1	1		42.5
4	Sue		1	2	2	1.5	3	1	1	1	1	1	0	1	2	2	1	1	1	2	2	2	2	1	0.5	3	2	1.5	1	1	1	2		42.5	
5	Lucy		1	2	2	3	3	1	1	1	1	1	2	1	2	1.5	1	1	1	2	2	2	2	1	0.5	2.5	2	0	1	1	1	1		42.5	
6	Kyle		1	2	2	3	2	1	1	1	1	1	2	1	2	2	1	1	2	2	0.5	2	1	1	1	2.5	0.5	1	1	1	1	2		42.5	
7	Alex		1	1.5	2	3	1.5	1	1	0	1	1	1	1.5	1	2	2	1	0.5	1	0	2	1	1	0	1	3	2.5	0	1	0	0		34.5	
8	Rosie		1	2	2	2.5	2.5	1	1	1	1	1	1	1.5	1	1.5	0.5	1	0.5	2	1.5	1	0	0	0	3	2.5	1	0	0.5	0.5	0		34	
9	Joe		1	2	2	1.5	3	0	1	1	1	0	1	1.5	0	2	1	1	0.5	0	2	2	2	1	0.5	1	0	2.5	0	1	0	0		31.5	
10	Isabelle		1	1.5	1.5	3	3	1	1	1	1	0	0	0	1	1	1.5	1	0.5	2	1	1	0	0	0.5	3	1	1	0	2	1	0		31.5	
11	Susan		1	2	2	3	3	1	1	0	1	1	1	0.5	1	1	1	0	1	1	2	0.5	0	1	0.5	0.5	0	2	0	3	0	0		31	
12	Peter		1	2	2	3	3	1	1	1	1	1	1.5	1	1.5	1.5	0	1	1	2	0	1	0	1	1	0	0	0	0.5	1	0		31		
13	Andrea		1	1.75	0	3	3	1	0	1	1	1	0	1.5	1	2	1	1	1	1	0	0.5	1.5	1	0.5	0.5	3	1	0	0.5	0	0		29.8	
14	Bill		1	1.5	2	2.5	1	0	1	1	1	0	0	1.5	1	1	1	1	0	1	0	2	1	0	0.5	1	1	1	1	1	1	2		29	
15	Nicole		0	0	2	1.5	3	0	1	0	0	1	1	0	0	2	2	1	1	2	2	1	0	0	0.5	1.5	1	2	1	1.5	0	1		29	
16	Matt		1	2	2	2.5	3	1	1	1	1	0.5	1	1.5	0	0	1.5	0	1	0	2	0.5	0	0	0.5	3	0	1	0	0.5	0	0		27.5	
17	Sean		1	2	2	1.5	1.5	1	0	1	0	1	0	2	0	0	1	1	0.5	0	0	1.5	2	1	0.5	1	2.5	1	1	0.5	0	0		26.5	
18	John		1	2	0.5	1.5	3	1	0	1	1	1	1.5	1	0	1.5	1	0.5	2	0	0	0	0	0	1	1.5	0	1	1	1	1	0		26	
19	Barry		1	1.5	2	2.5	2	1	0	1	0	1	0	1.5	1	1.5	0	0	0.5	0	1	2	2	0	0	1	0.5	1	0	1	1	0		26	
20	Tracey		1	1.75	2	3	3	1	0	1	0	1	1	2	0	0.5	1	0	0	2	1.5	1	0	1	0.5	0	0	1	0	0.5	0	0		25.8	
21	Max		1	2	1	2.5	1.5	0.5	1	1	1	1	1.5	0	1.5	0.5	0	0.5	0	0	1	2	0	0.5	1	0.5	1	0	0	0	0	0		23.5	
22	Neil		1	1	0.5	3	1.5	0	1	1	1	0	2	0	1	2	1	0	1	0	1	0	0	0.5	1	1	0	0	1	0	0	0		22.5	
23	Dianne		0	1.75	2	3	3	1	1	0	0	1	1	2	0	1	0.5	0	0.5	0	0.5	0	0	0	0.5	1	0.5	1	0	0	0.5	0		21.8	
24	Angela		1	1.5	2	0	0	1	1	0	1	0	1	0.5	1	0.5	1	0	0	2	0	0	1.5	1	0.5	0	0	0.5	0	3	0	0		20	
25																																			
26	Class %	0.91	0.86	0.85	0.8	0.8	0.8	0.77	0.77	0.77	0.75	0.73	0.68	0.64	0.64	0.64	0.64	0.61	0.53	0.53	0.51	0.5	0.5	0.43	0.43	0.41	0.37	0.36	0.34	0.23	0.2				
27																																			

What do we see?

Question	5	8	18a	14	10	20a	4	6	7	20b	2	15	3	9a	16	20c	17a	9b	18b	12	13	19a	17b	18e	20d	19b	1	11	18c	18d		Total
<i>out of</i>	1	2	2	3	3	1	1	1	1	1	1	2	1	2	2	1	1	2	2	2	2	1	1	3	3	3	1	3	2	2		53
Sam	1	2	2	3	3	1	1	1	1	0	1	2	1	2	2	1	1	1.5	2	1	2	1	0	0.5	2.5	3	1	1	1	1		42.5
Sue	1	2	2	1.5	3	1	1	1	1	1	1	0	1	2	2	1	1	1	2	2	2	1	0.5	3	2	1.5	1	1	1	2		42.5
Lucy	1	2	2	3	3	1	1	1	1	1	1	2	1	2	1.5	1	1	1	2	2	2	1	0.5	2.5	2	0	1	1	1	1		42.5
Kyle	1	2	2	3	2	1	1	1	1	1	1	2	1	2	2	1	1	2	2	0.5	2	1	1	1	2.5	0.5	1	1	1	2		42.5
Alex	1	1.5	2	3	1.5	1	1	0	1	1	1	1.5	1	2	2	1	0.5	1	0	2	1	1	0	1	3	2.5	0	1	0	0		34.5
Rosie	1	2	2	2.5	2.5	1	1	1	1	1	1	1.5	1	1.5	0.5	1	0.5	2	1.5	1	0	0	0	3	2.5	1	0	0.5	0.5	0		34
Joe	1	2	2	1.5	3	0	1	1	1	0	1	1.5	0	2	1	1	0.5	0	2	2	2	1	0.5	1	0	2.5	0	1	0	0		31.5
Isabelle	1	1.5	1.5	3	3	1	1	1	1	0	0	0	1	1	1.5	1	0.5	2	1	1	0	0	0.5	3	1	1	0	2	1	0		31.5
Susan	1	2	2	3	3	1	1	0	1	1	1	0.5	1	1	1	0	1	1	2	0.5	0	1	0.5	0.5	0	2	0	3	0	0		31
Peter	1	2	2	3	3	1	1	1	1	1	1	1.5	1	1.5	1.5	0	1	1	2	0	1	0	1	1	0	0	0	0.5	1	0		31
Andrea	1	1.8	0	3	3	1	0	1	1	1	0	1.5	1	2	1	1	1	1	0	0.5	1.5	1	0.5	0.5	3	1	0	0.5	0	0		29.8
Bill	1	1.5	2	2.5	1	0	1	1	1	0	0	1.5	1	1	1	1	0	1	0	2	1	0	0.5	1	1	1	1	1	1	2		29
Nicole	0	0	2	1.5	3	0	1	0	0	1	1	0	0	2	2	1	1	2	2	1	0	0	0.5	1.5	1	2	1	1.5	0	1		29
Matt	1	2	2	2.5	3	1	1	1	1	0.5	1	1.5	0	0	1.5	0	1	0	2	0.5	0	0	0.5	3	0	1	0	0.5	0	0		27.5
Sean	1	2	2	1.5	1.5	1	0	1	0	1	0	2	0	0	1	1	0.5	0	0	1.5	2	1	0.5	1	2.5	1	1	0.5	0	0		26.5
John	1	2	0.5	1.5	3	1	0	1	1	1	1	1.5	1	0	1.5	1	0.5	2	0	0	0	0	0	1	1.5	0	1	1	1	0		26
Barry	1	1.5	2	2.5	2	1	0	1	0	1	0	1.5	1	1.5	0	0	0.5	0	1	2	2	0	0	1	0.5	1	0	1	1	0		26
Tracey	1	1.8	2	3	3	1	0	1	0	1	1	2	0	0.5	1	0	0	2	1.5	1	0	1	0.5	0	0	1	0	0.5	0	0		25.8
Max	1	2	1	2.5	1.5	0.5	1	1	1	1	1	1.5	0	1.5	0.5	0	0.5	0	0	1	2	0	0.5	1	0.5	1	0	0	0	0		23.5
Neil	1	1	0.5	3	1.5	0	1	1	1	1	0	2	0	1	2	1	0	1	0	1	0	0	0.5	1	1	0	0	1	0	0		22.5
Dianne	0	1.8	2	3	3	1	1	0	0	1	1	2	0	1	0.5	0	0.5	0	0.5	0	0	0	0.5	1	0.5	1	0	0	0.5	0		21.8
Angela	1	1.5	2	0	0	1	1	0	1	0	1	0.5	1	0.5	1	0	0	2	0	0	1.5	1	0.5	0	0	0.5	0	3	0	0		20
Class %	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.2		

Exercise 3a: Mark book summaries

guttmanworkshop - Excel

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2			Type	Assign	Assign	Assign	Exam	Exam	Exam	Exam	Exam				
3			Weight	10	20	10	30	10	10	10	5	5			
4			Difficulty												
5		Name	St Code	Criteria	SU - recall & explanation	SIS - exp design	SIS - display data	SU - recall, explanation	SU - maths	SIS display-interpret data	SIS - exp design, review	Comm	Total	Weighted Total	
6		Student 11	10011		12	13	12	11	14	13	4	0			
7		Student 19	10019		14	11	11	10	12	14	6	8			
8		Student 20	10020		14	14	14	7	12	14	1	5			
9		Student 2	10002		10	11	9	11	6	11	14	14			
10		Student 22	10022		11	9	9	11	14	11	5	6			
11		Student 4	10004		12	12	11	8	8	12	6	14			
12		Student 14	10014		12	13	12	10	8	7	3	8			
13		Student 21	10021		11	11	8	9	9	12	6	14			
14		Student 15	10015		14	9	11	8	4	11	6	12			
15		Student 7	10007		13	9	8	6	8	13	6	12			
16		Student 1	10001		7	11	6	7	3	15	10	12			
17		Student 13	10013		11	7	6	8	9	9	9	8			
18		Student 3	10003		6	9	8	8	5	14	6	8			
19		Student 12	10012		8	7	8	6	5	11	6	15			
20		Student 18	10018		7	7	5	7	6	11	9	12			
21		Student 5	10005		11	1	9	9	6	10	6	12			
22		Student 9	10009		0	9	6	9	5	9	8	6			
23		Student 8	10008		8	8	7	6	7	6	4	8			
24		Student 17	10017		8	10	6	5	4	8	6	8			
25		Student 6	10006		5	5	4	7	10	9	6	5			
26		Student 10	10010		3	6	3	6	6	9	5	6			
27		Student 16	10016		2	3	6	8	4	3	3	6			
29			Count												
30			Average												
31			St Dev												
32			Median												

"Answers" on the next sheet



Exercise 3b: Sorting the mark book

- Data → Sort
 - Remember the headers
 - What sort order?
- Paste → Transpose
 - Select the data
 - Make a new sheet
 - Paste special, transpose

REDUCED SCAFFOLDING
FROM HERE
ON 😊

BUT step by step
article on the
website – search
for "Gutman".

- Select the cells
- Home → Conditional formatting
 - Colour scales
 - Green:white:red

Exercise 3d: Grade vlookup

=VLOOKUP(O5,gradelookup!\$A\$1:\$B\$16,2,FALSE)



BRISBANE BOYS' COLLEGE

Barry Dean – *Head of Teaching and Learning*
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