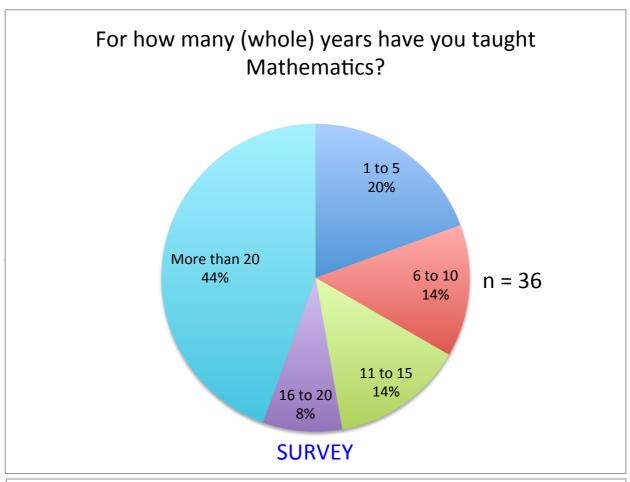
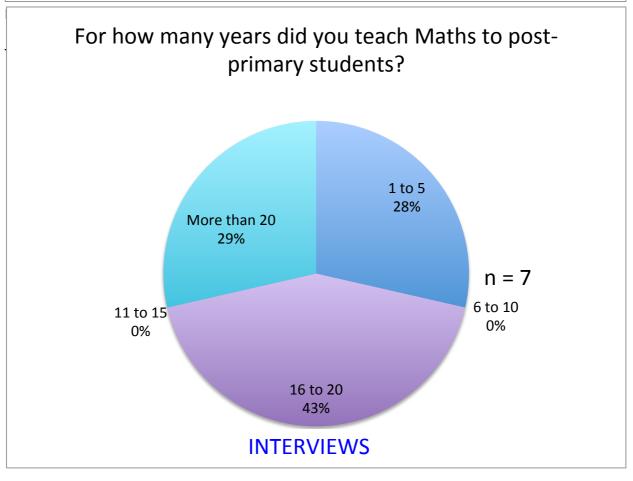
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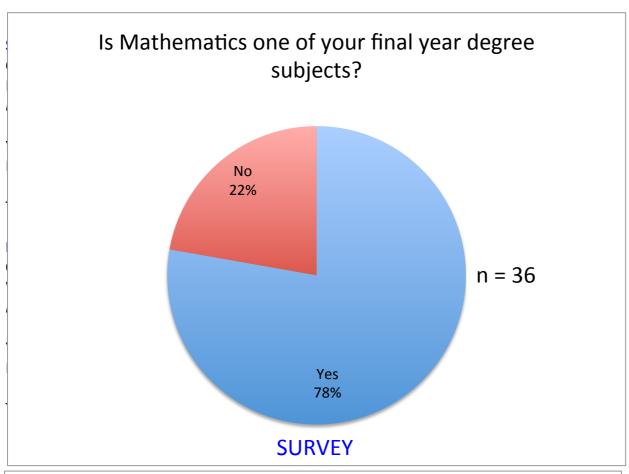
Question 2a		
For how many (whole) years have you taught Mathematics?	TOTALS	%
n = 36		
1 to 5	7	19.4%
6 to 10	5	13.9%
11 to 15	5	13.9%
16 to 20	3	8.3%
More than 20	16	44.4%
Total	36	99.9%
INTERVIEWS		
Question 2.6		
For how many years did you teach Maths to post-primary students?	TOTALS	%
n = 7		
1 to 5	2	28.6%
6 to 10	0	0.0%
11 to 15	0	0.0%
16 to 20	3	42.9%
More than 20	2	28.6%
Total	7	100.1%

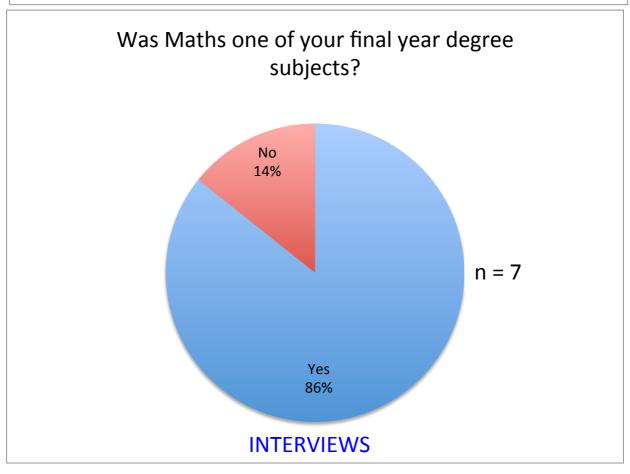




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Question 2c Is Mathematics one of your final year degree subjects?  n = 36	TOTALS	%
Yes No	28 8	77.8% 22.2%
Total	36	100.0%
INTERVIEWS  Question 2.4  Was Maths one of your final year degree subjects?  n = 7	TOTALS	%
Yes No	6 1	85.7% 14.3%
Total	7	100.0%



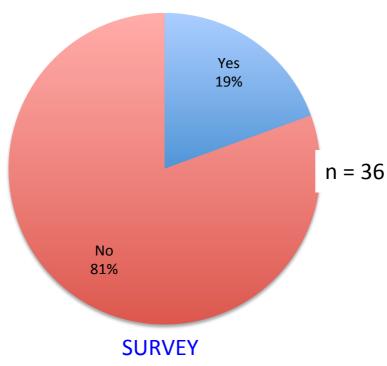


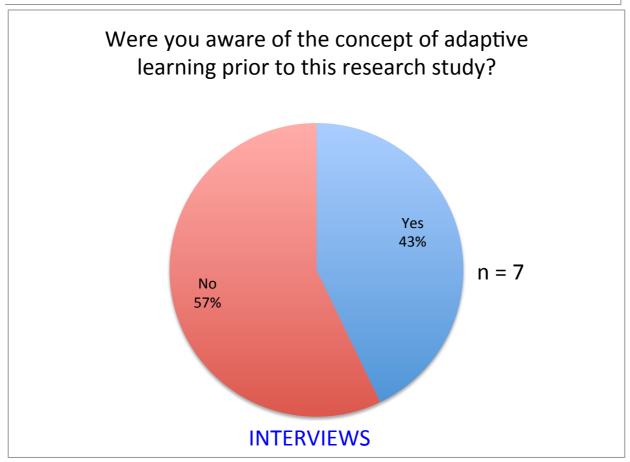
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Question 3a	
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I was aware of the concept of Adaptive Learning prior to this Research Study. $n = 36$	TOTALS	%
Yes	7	19.4%
No	29	80.6%
Total	36	100.0%
INTERVIEWS		
<b>Question 3.1</b> Were you aware of the concept of adaptive learning prior to this		
research study? $n = 7$	TOTALS	%
Voc	2	42.00/
Yes	3	42.9%
No	4	57.1%
Total	7	100.0%

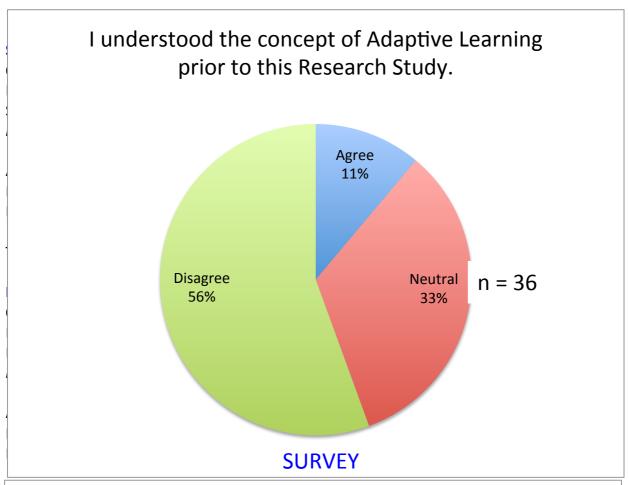
I was aware of the concept of Adaptive Learning prior to this Research Study.

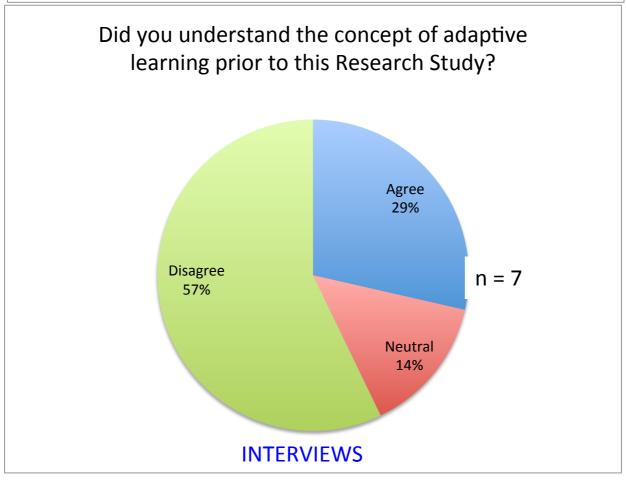




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Question 3b I understood the concept of Adaptive Learning prior to this Research		
Study.	TOTALS	%
n = 36		
Agree	4	11.1%
Neutral	12	33.3%
Disagree	20	55.6%
Total	36	100.0%
INTERVIEWS		
Question 3.2  Did you understand the concept of adaptive learning prior to this		
Research Study?  n = 7	TOTALS	%
Agree	2	28.6%
Neutral	1	14.3%
Disagree	4	57.1%
Total	7	100.0%

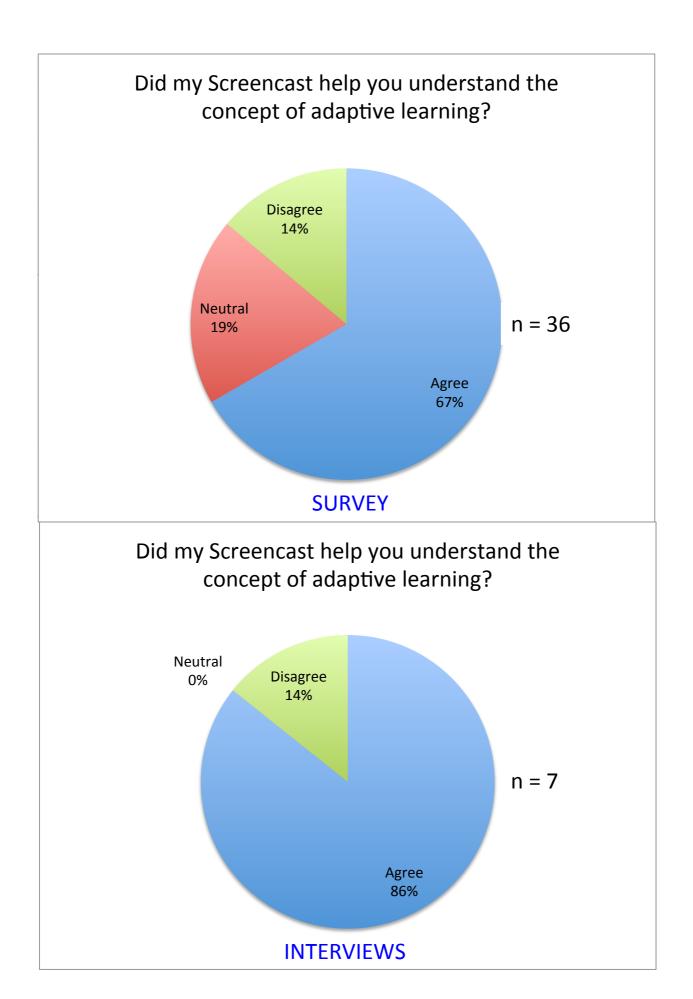




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Question 3c I understand the concept of Adaptive Learning having watched		
Screencast (Part 1 of 3).	TOTALS	%
n = 36		
Agree	24	66.7%
Neutral	7	19.4%
Disagree	5	13.9%
Total	36	100.0%
INTERVIEWS		

Question 3.3		
Did my Screencast help you understand the concept of adaptive		
learning?	TOTALS	%
n = 7		
Agree	6	85.7%
Neutral	0	0.0%
Disagree	1	14.3%
Total	7	100.0%



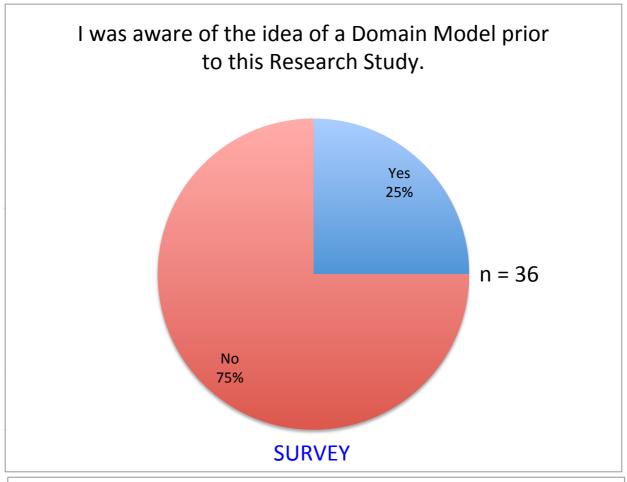
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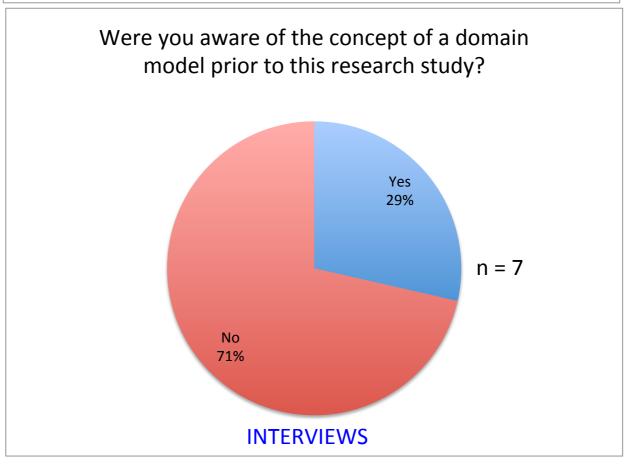
Total

SURVEY  Question 4a		
I was aware of the idea of a Domain Model prior to this Research Study. $n = 36$	TOTALS	%
Yes No	9 <b>27</b>	25.0% 75.0%
Total	36	100.0%
INTERVIEWS  Question 4.1  Were you aware of the concept of a domain model prior to this research study?  n = 7	TOTALS	%
Yes No	2 5	28.6% 71.4%

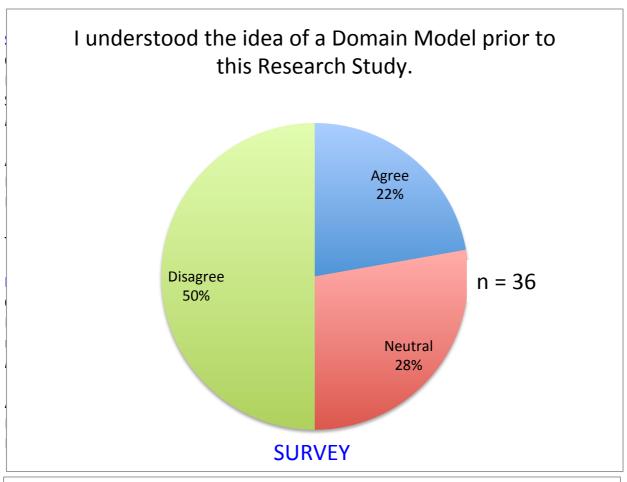
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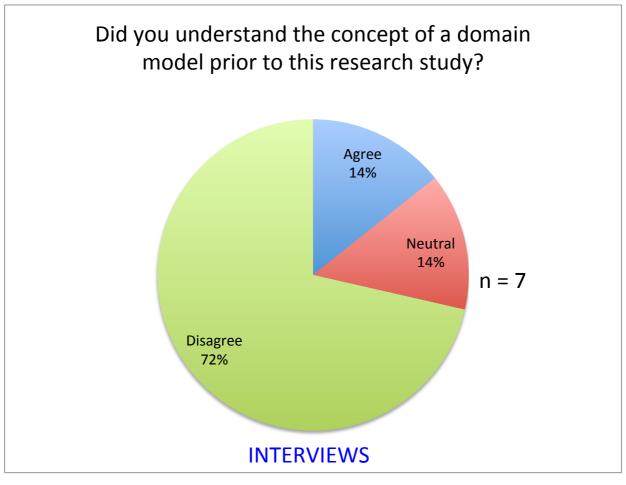
100.0%





Question 4b I understood the idea of a Domain Model prior to this Research		
Study.	TOTALS	%
n = 36		
Agree	8	22.2%
Neutral	10	27.8%
Disagree	18	50.0%
Total	36	100.0%
INTERVIEWS		
Question 4.2		
Did you understand the concept of a domain model prior to this		
research study? n = 7	TOTALS	%
Agree	1	14.3%
Neutral	1	14.3%
Disagree	5	71.4%
Total	7	100.0%





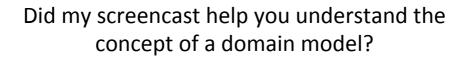
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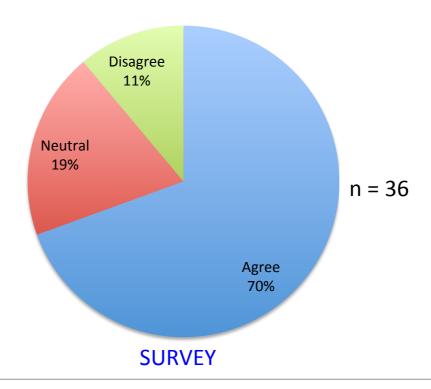
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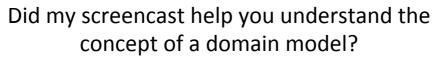
Question 4c		
I understand the idea of a Domain Model having watched Screencast		
(Part 1 of 3).	<b>TOTALS</b>	%
n = 36		
Agree	25	69.4%
Neutral	7	19.4%
Disagree	4	11.1%
Total	36	99.9%
INTERVIEWS		
Question 4.3		
Did my screencast help you understand the concept of a domain		
model? n = 7	TOTALS	%
Agree	6	85.7%
Neutral	1	14.3%
Disagree	0	0.0%
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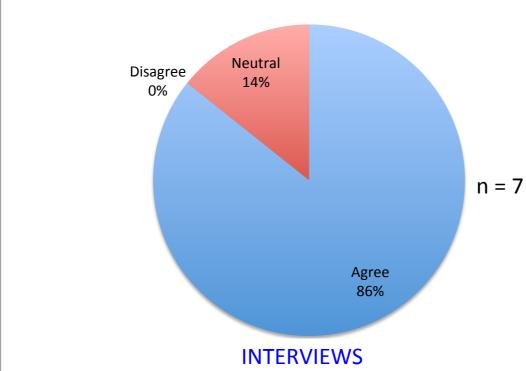
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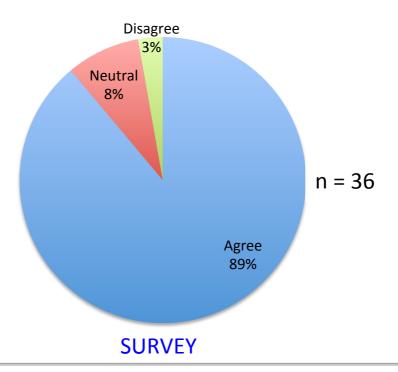


### **SURVEY**

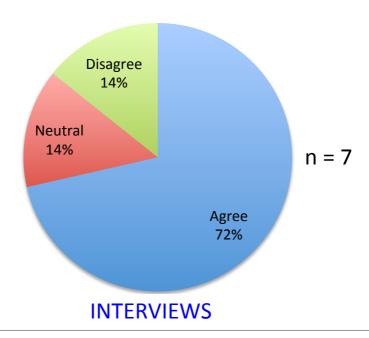
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The Learning Outcomes in the Mathematics Syllabus should be the main data source for a Domain Model. $n = 36$	TOTALS	%
Agree Neutral Disagree	32 3 1	88.9% 8.3% 2.8%
Total	36	100.0%
INTERVIEWS Question 5.1 Do you think that the learning outcomes in the mathematics syllabus should be the principal data source for a domain model? $n = 7$	TOTALS	%
Agree Neutral Disagree	5 1 1	71.4% 14.3% 14.3%
Total	7	100.0%

The Learning Outcomes in the Mathematics Syllabus should be the main data source for a Domain Model.



Do you think that the learning outcomes in the mathematics syllabus should be the principal data source for a domain model?



Total

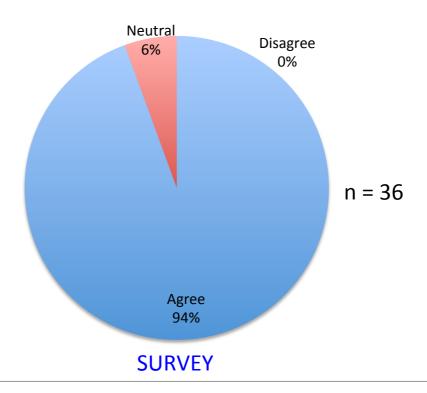
Question 5b	Q	ues	tio	n	5k
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I understand the unpacking process from 6 to 45 Learning Outcomes having watched Screencast (Part 2 of 3).	TOTALS	%
n = 36	TOTALS	70
Agree	34	94.4%
Neutral	2	5.6%
Disagree	0	0.0%
Total	36	100.0%
INTERVIEWS		
Question 5.3		
Having watched the screencast, did you understand the unpacking		
process from the 8 learning outcomes in the Draft Specification to the		
45 learning outcomes created by me?	TOTALS	%
n = 7		
Agree	7	100.0%
Neutral	0	0.0%
Disagree	0	0.0%

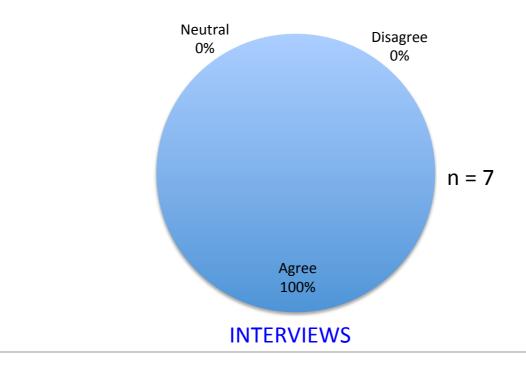
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100.0%

I understand the unpacking process from 6 to 45 Learning Outcomes having watched Screencast (Part 2 of 3).



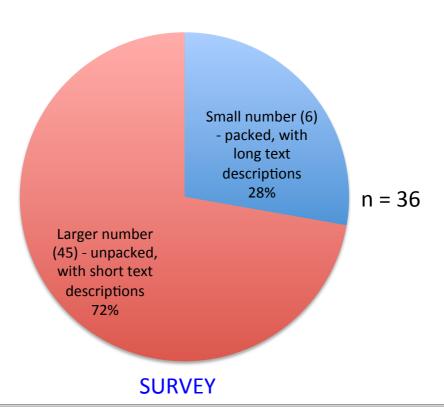
Having watched the screencast, did you understand the unpacking process from the 8 learning outcomes in the Draft Specification to the 45 learning outcomes created by me?



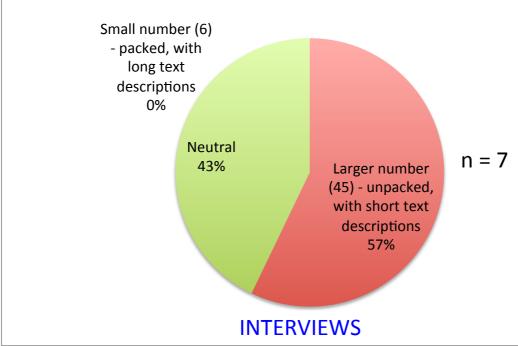
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Question 5c		
Which set of Learning Outcomes would you prefer in the New Syllabus? $n = 36$	TOTALS	%
Small number (6) - packed, with long text descriptions Larger number (45) - unpacked, with short text descriptions	10 26	27.8% 72.2%
Total	36	100.0%
INTERVIEWS Question 5.4 Which set of learning outcomes do you think will be more beneficial for the teaching, learning and assessment of Junior Cycle Mathematics?  n = 7	TOTALS	%
Small number (6) - packed, with long text descriptions Larger number (45) - unpacked, with short text descriptions Neutral	0 4 3	0.0% 57.1% 42.9%
Total	7	100.0%





Which set of learning outcomes do you think will be more beneficial for the teaching, learning and assessment of Junior Cycle Mathematics?



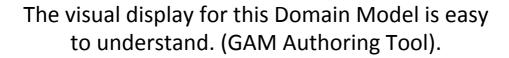
Question 6a	
The visual display for this Domain Model is easy to understand. (GAM	]

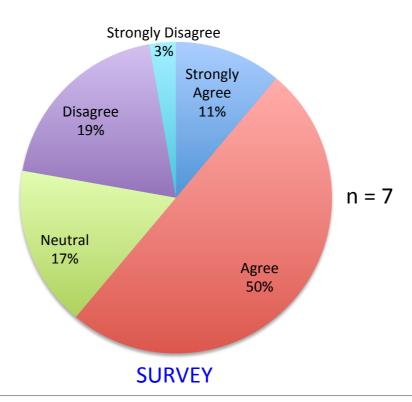
Authoring Tool).  n = 36	TOTALS	%
Strongly Agree	4	11.1%
Agree	18	50.0%
Neutral	6	16.7%
Disagree	7	19.4%
Strongly Disagree	1	2.8%
Total	36	100.0%

#### **INTERVIEWS**

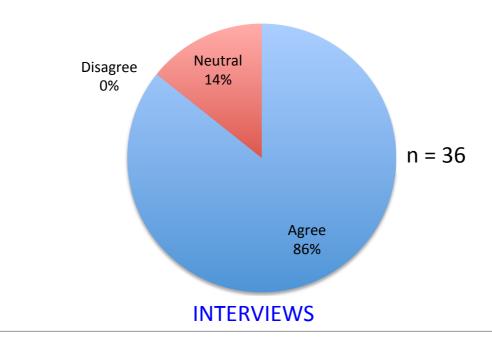
#### Question 6.1

Do you think that the visual display for this version of the domain model is easy to understand? (GAM Authoring Tool). $n = 7$	TOTALS	%
Agree	6	85.7%
Neutral	1	14.3%
Disagree	0	0.0%
Total	7	100.0%





Do you think that the visual display for this version of the domain model is easy to understand? (GAM Authoring Tool).



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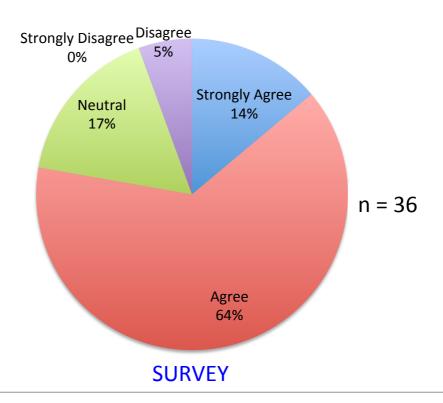
Question 6	5b
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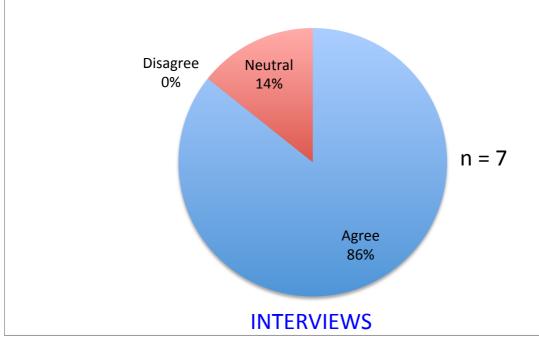
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Do you think that the concepts in this version of the domain model are correctly sequenced? (GAM Authoring Tool).

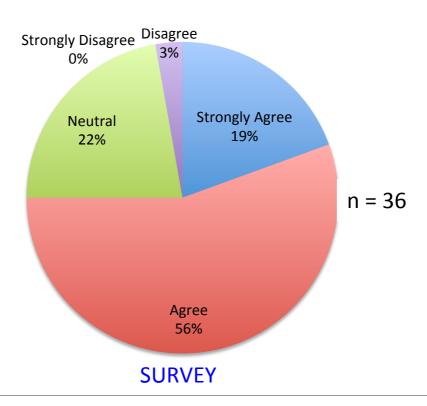


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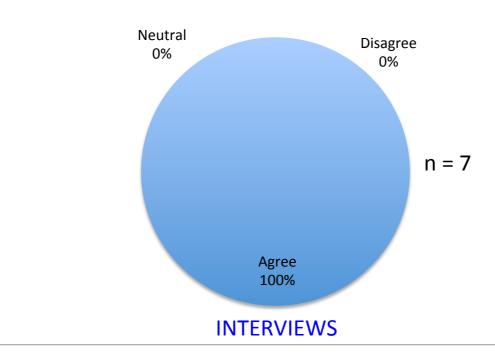
Question 6	Sc
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The concepts in this Domain Model are correctly connected. (GAM Authoring Tool). $n = 36$	TOTALS	%
Strongly Agree Agree Neutral Disagree Strongly Disagree	7 20 8 1 0	19.4% 55.6% 22.2% 2.8% 0.0%
Total	36	100.0%
INTERVIEWS  Question 6.3  Do you think that the concepts in this version of the domain model are correctly connected? (GAM Authoring Tool). $n = 7$	TOTALS	%
Agree Neutral Disagree	7 0 0	100.0% 0.0% 0.0%
Total	7	100.0%





Do you think that the concepts in this version of the domain model are correctly connected? (GAM Authoring Tool).

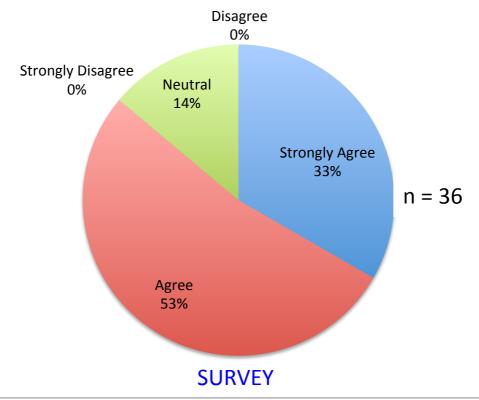


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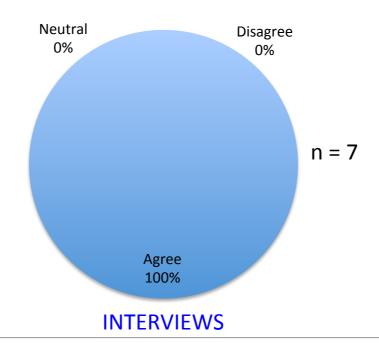
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The visual display for this Domain Model is easy to understand. (Mindomo Organigram 1). $n = 36$	TOTALS	%
Strongly Agree Agree Neutral Disagree Strongly Disagree	12 19 5 0	33.3% 52.8% 13.9% 0.0% 0.0%
Total	36	100.0%
INTERVIEWS Question 8.1 Do you think that the visual display for this version of the domain model is easy to understand? (Mindomo Organigram 1). $n = 7$	TOTALS	%
Agree Neutral Disagree	7 0 0	100.0% 0.0% 0.0%
Total	7	100.0%

# The visual display for this Domain Model is easy to understand. (Mindomo Organigram 1).

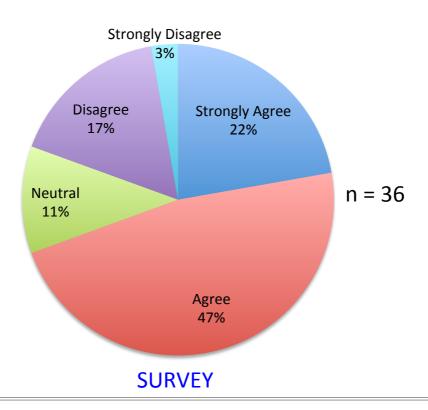


Do you think that the visual display for this version of the domain model is easy to understand? (Mindomo Organigram 1).

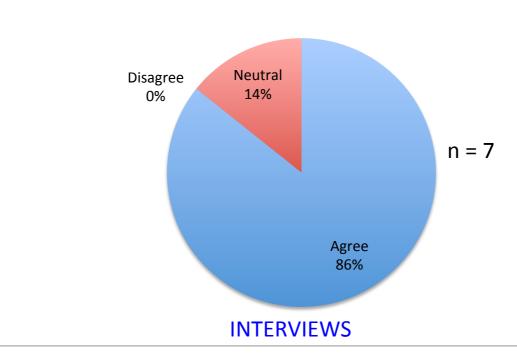


Question 8a The visual display for this Domain Model is easy to understand. (Mindo $n = 36$	TOTALS	%
Strongly Agree Agree	8 17	22.2% 47.2%
Neutral Disagree Strongly Disagree	4 6 1	11.1% 16.7% 2.8%
Total	36	100.0%
INTERVIEWS Question 7.1b Do you think that the visual display for this version of the domain model is easy to understand? (Mindomo Organigram 2). $n = 7$	TOTALS	%
Agree Neutral Disagree	6 1 0	85.7% 14.3% 0.0%
Total	7	100.0%

# The visual display for this Domain Model is easy to understand. (Mindomo Organigram 2).



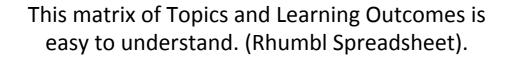
Do you think that the visual display for this version of the domain model is easy to understand? (Mindomo Organigram 2).

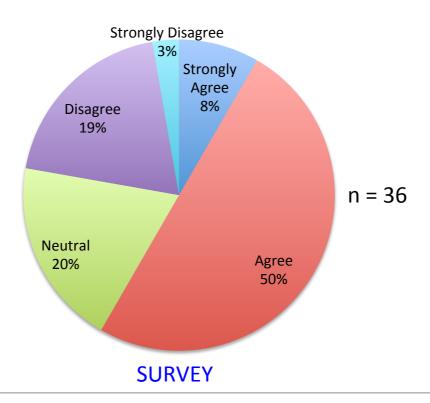


### **SURVEY**

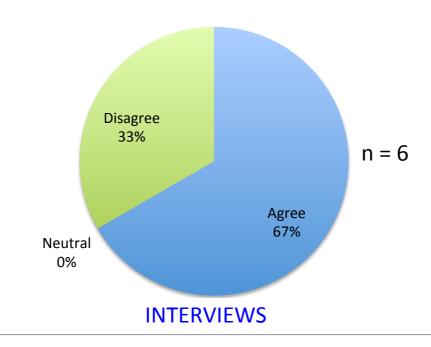
Question 9a	
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This matrix of Topics and Learning Outcomes is easy to understand. (Rhumbl Spreadsheet). $n = 36$	TOTALS	%
Strongly Agree Agree Neutral Disagree Strongly Disagree	3 18 7 7 1	8.3% 50.0% 19.4% 19.4% 2.8%
Total	36	99.9%
INTERVIEWS Question 9.1 Do you think that the matrix of Topics and Learning Outcomes is easy to understand? (Rhumbl Spreadsheet). $n = 6$	TOTALS	%
Agree	4	66.7%
Neutral	0	0.0%
Disagree	2	33.3%
Total	6	100.0%





Do you think that the matrix of Topics and Learning Outcomes is easy to understand? (Rhumbl Spreadsheet).



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Question 9
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The Topics and Learning Outcomes are correctly connected. (Rhumbl Spreadsheet). $n = 36$	TOTALS	%
Strongly Agree	2	5.6%
Agree	22	61.1%
Neutral	10	27.8%
Disagree	2	5.6%
Strongly Disagree	0	0.0%
Total	36	100.1%

#### **INTERVIEWS**

#### Question 9.2

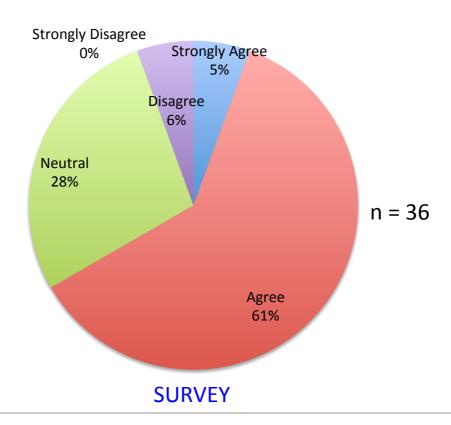
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Do you think that the topics and learning outcomes are correctly connected using the digit 1 to indicate a connection? (Rhumbl Spreadsheet). TOTALS % n=6Agree 5 83.3% Neutral 0 0.0% Disagree 1 16.7%

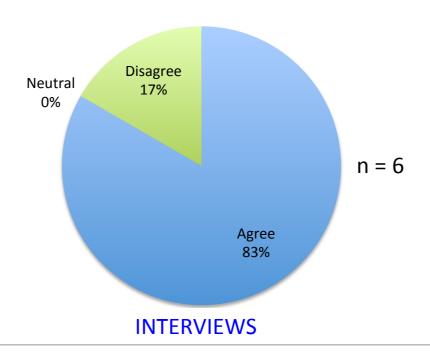
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## The Topics and Learning Outcomes are correctly connected. (Rhumbl Spreadsheet).



Do you think that the topics and learning outcomes are correctly connected using the digit 1 to indicate a connection? (Rhumbl Spreadsheet).

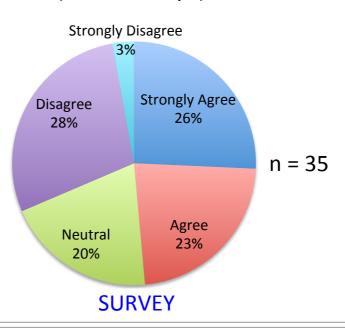


#### **SURVEY**

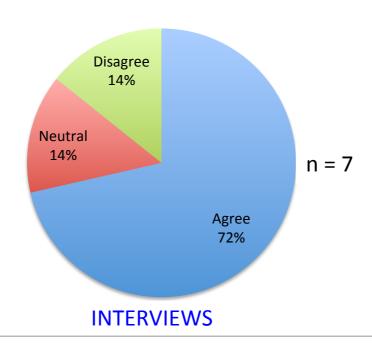
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The map views for this Domain Model are easy to understand. (Rhumbl Maps). $n = 35$	TOTALS	%
Strongly Agree	9	25.7%
Agree	8	22.9%
Neutral	7	20.0%
Disagree	10	28.6%
Strongly Disagree	1	2.9%
Total	35	100.1%
INTERVIEWS  Question 10.1  Do you think that the map views for this version of the domain model are easy to understand? (Rhumbl Maps).	TOTALS	%
n = 7		
Agree	5	71.4%
Neutral	1	14.3%
Disagree	1	14.3%
Total	7	100.0%

The map views for this Domain Model are easy to understand. (Rhumbl Maps). The map views for this Domain Model are easy to understand. (Rhumbl Maps).



Do you think that the map views for this version of the domain model are easy to understand? (Rhumbl Maps).



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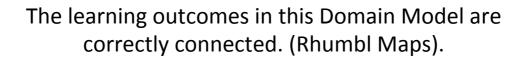
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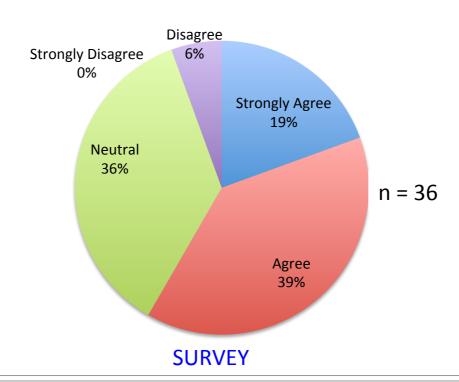
The learning outcomes in this Domain Model are correctly connected. (Rhumbl Maps). $n = 36$	TOTALS	%
Strongly Agree	7	19.4%
Agree	14	38.9%
Neutral	13	36.1%
Disagree	2	5.6%
Strongly Disagree	0	0.0%
Total	36	100.0%

#### **INTERVIEWS**

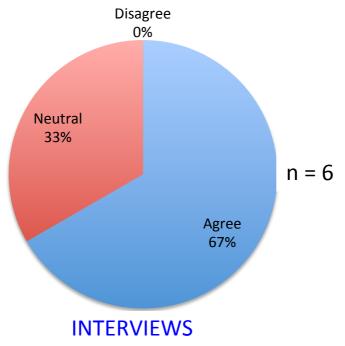
#### Question 10.2

Do you think that the learning outcomes in this version of the dome model are correctly connected to the topics? (Rhumbl Maps). $n = 6$	ain TOTALS	%
Agree	4	66.7%
Neutral	2	33.3%
Disagree	0	0.0%
Total	6	100.0%



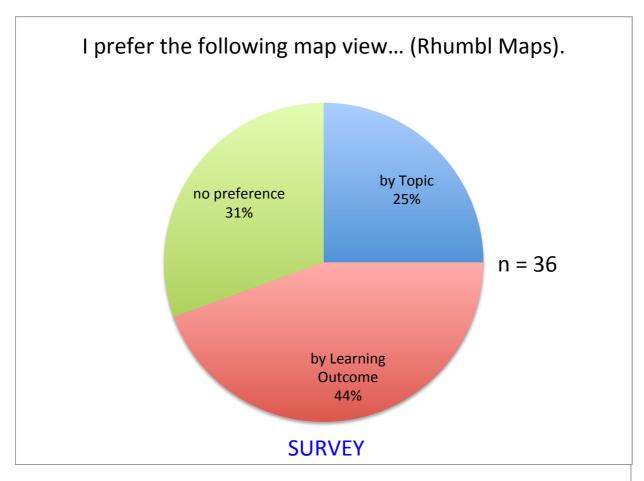


Do you think that the learning outcomes in this version of the domain model are correctly connected to the topics? (Rhumbl Maps).

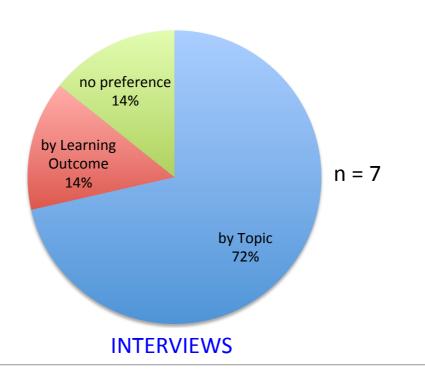


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Question 10c I prefer the following map view (Rhumbl Maps). n = 36	TOTALS	%
by Topic by Learning Outcome no preference	9 16 11	25.0% 44.4% 30.6%
Total	36	100.0%
INTERVIEWS  Question 10.3  Which of the two map views do you prefer: by topic or by learning outcome? (Rhumbl Maps). $n = 7$	TOTALS	%
by Topic by Learning Outcome no preference	5 1 1	71.4% 14.3% 14.3%
Total	7	100.0%



Which of the two map views do you prefer: by topic or by learning outcome? (Rhumbl Maps).



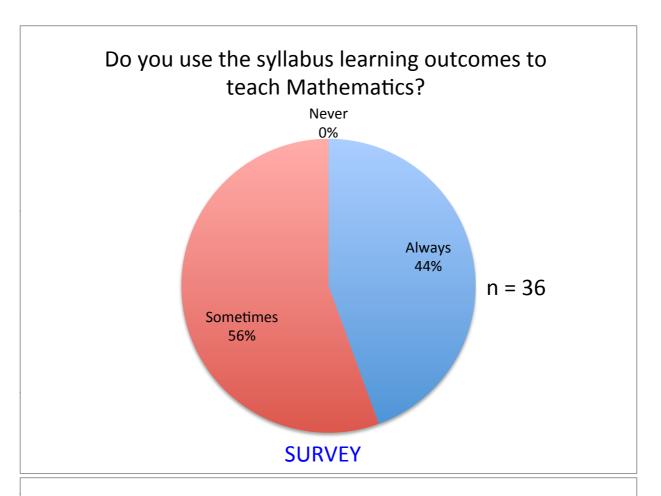
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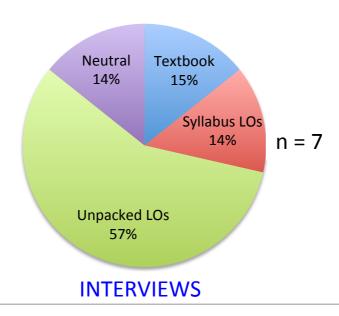
Question 11a Do you use the syllabus learning outcomes to teach Mathematics?  n = 36	TOTALS	%
Always Sometimes Never	16 20 0	44.4% 55.6% 0.0%
Total	36	100.0%
INTERVIEWS Question 11.1 What do you think teachers should use as the main framework to teach the new Junior Cycle Maths course that commences in September 2018? (Textbook, Syllabus LOs, Unpacked LOs). $n = 7$	TOTALS	%
Textbook Syllabus LOs Unpacked LOs Neutral	1 1 4 1	14.3% 14.3% 57.1% 14.3%

7

100.0%



What do you think teachers should use as the main framework to teach the new Junior Cycle Maths course that commences in September 2018? (Textbook, Syllabus LOs, Unpacked LOs).



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Total

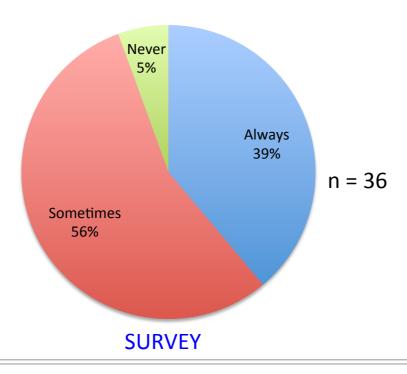
Question	11b
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Do you use textbook topics (chapters) and sub-topics (sections) to teach Mathematics?	TOTALS	%
n = 36		
Always	14	38.9%
Sometimes	20	55.6%
Never	2	5.6%
Total	36	100.1%
INTERVIEWS		
Question 11.2		
What do you think students should use to frame their learning for the		
new Junior Cycle Maths course that commences in September 2018?		
(Textbook, Syllabus LOs, Unpacked LOs). $n = 7$	TOTALS	%
Textbook	3	42.9%
Syllabus LOs	0	0.0%
Unpacked LOs	2	28.6%
Neutral	2	28.6%

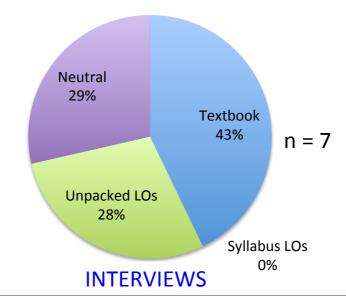
7

100.1%

Do you use textbook topics (chapters) and subtopics (sections) to teach Mathematics?



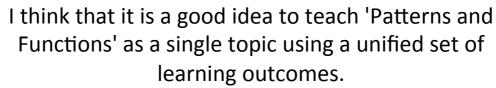
What do you think students should use to frame their learning for the new Junior Cycle Maths course that commences in September 2018? (Textbook, Syllabus LOs, Unpacked LOs).

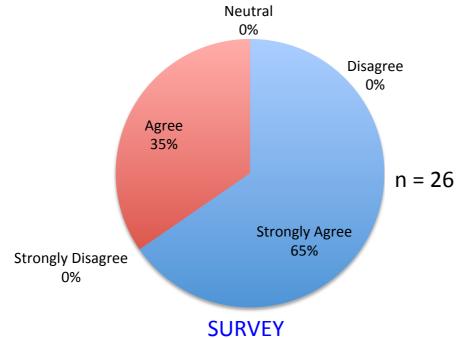


#### **SURVEY**

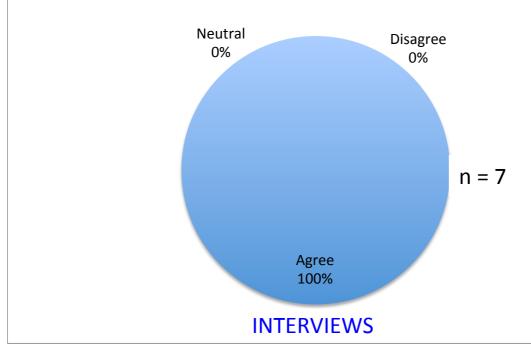
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Que	estio	n 12b

I think that it is a good idea to teach 'Patterns and Functions' as a single topic using a unified set of learning outcomes. $n = 26$	TOTALS	%
Strongly Agree	17	65.4%
Agree	9	34.6%
Neutral	0	0.0%
Disagree	0	0.0%
Strongly Disagree	0	0.0%
Total	26	100.0%
INTERVIEWS  Question 12.1  Do you think that teachers should present 'Patterns and Functions' as a single topic using a unified set of learning outcomes? $n = 7$	TOTALS	%
	_	100.00/
Agree	7	100.0%
Neutral	0	0.0%
Disagree	0	0.0%
Total	7	100.0%





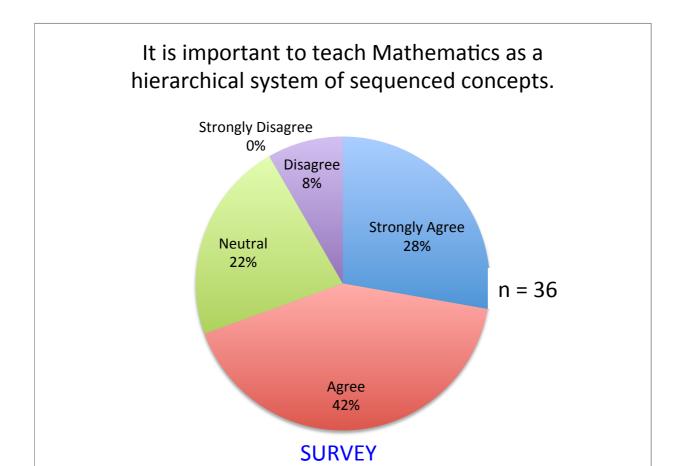
Do you think that teachers should present 'Patterns and Functions' as a single topic using a unified set of learning outcomes?



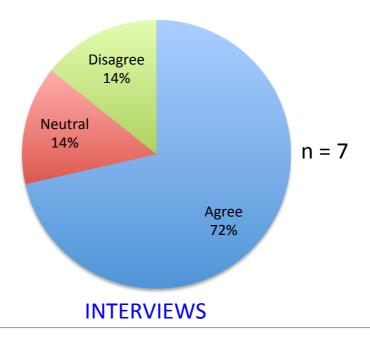
#### **SURVEY**

Question	13a
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It is important to teach Mathematics as a hierarchical system of sequenced concepts. $n = 36$	TOTALS	%
Strongly Agree Agree Neutral Disagree Strongly Disagree	10 15 8 3 0	27.8% 41.7% 22.2% 8.3% 0.0%
Total	36	100.0%
INTERVIEWS Question 13.1 Do you think Junior Cycle Mathematics should be taught and learned as a hierarchical system of sequenced concepts?  n = 7	TOTALS	%
Agree Neutral Disagree	5 1 1	71.4% 14.3% 14.3%
Total	7	100.0%



Do you think Junior Cycle Mathematics should be taught and learned as a hierarchical system of sequenced concepts?

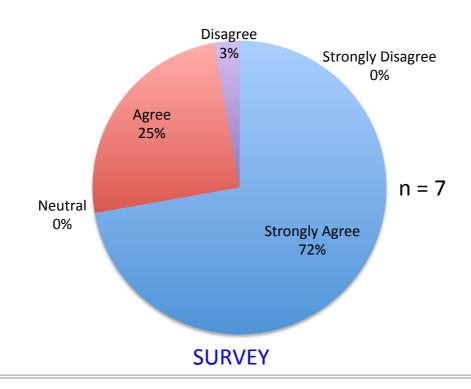


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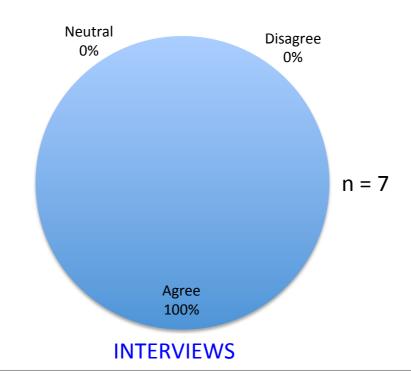
Out	estion	12h
Que	เรนเบเ	ιтэй

It is important to teach Mathematics as a system of connected concepts.	TOTALS	%
n = 36		
Strongly Agree	26	72.2%
Agree	9	25.0%
Neutral	0	0.0%
Disagree	1	2.8%
Strongly Disagree	0	0.0%
Total	36	100.0%
INTERVIEWS		
Question 13.4		
Do you think Junior Cycle Mathematics should be taught as a system	TOTALS	%
of connected concepts?  n = 7	TOTALS	70
Agree	7	100.0%
Neutral	0	0.0%
Disagree	0	0.0%
Total	7	100.0%

# It is important to teach Mathematics as a system of connected concepts.



# Do you think Junior Cycle Mathematics should be taught as a system of connected concepts?



#### **SURVEY**

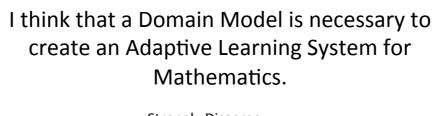
Question 14a
I think that a Domain Model is necessary to create an Adaptive
Lagraing Custom for Mathematics

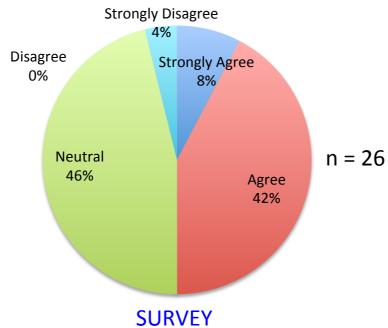
Learning System for Mathematics.  n = 26	TOTALS	%
Strongly Agree	2	7.7%
Agree	11	42.3%
Neutral	12	46.2%
Disagree	0	0.0%
Strongly Disagree	1	3.8%
Total	26	100.0%

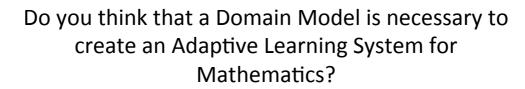
#### **INTERVIEWS**

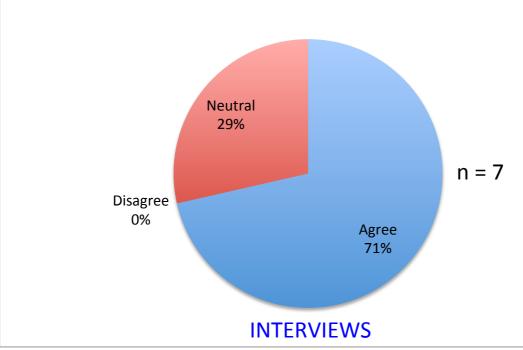
#### Question 14.1

Do you think that a Domain Model is necessary to create an Adaptive Learning System for Mathematics? $n = 7$	TOTALS	%
Agree	5	71.4%
Neutral	2	28.6%
Disagree	0	0.0%
Total	7	100.0%







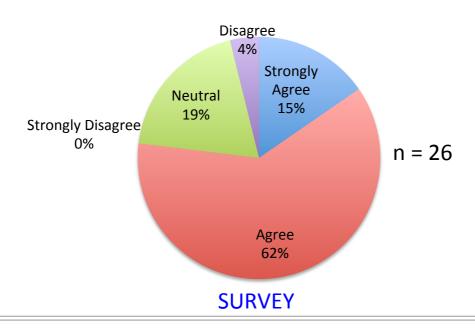


#### **SURVEY**

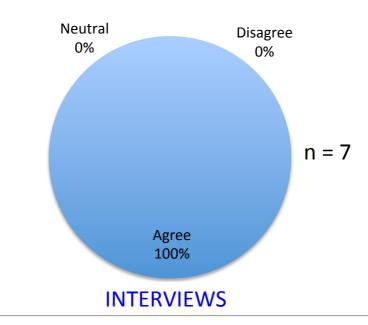
Question	14b
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I think that an Adaptive Learning System, with a core Domain Model, could enhance the teaching and learning of Junior Cycle and Leaving Certificate Mathematics. $n = 26$	TOTALS	%
Strongly Agree	4	15.4%
Agree	16	61.5%
Neutral	5	19.2%
Disagree	1	3.8%
Strongly Disagree	0	0.0%
Total	26	99.9%
INTERVIEWS		
Question 14.2		
Do you think that an Adaptive Learning System, with a core Domain		
Model, could enhance the teaching and learning of Junior Cycle and	TOTALS	0/
Leaving Certificate Mathematics?  n = 7	TOTALS	%
11 – 7		
Agree	7	100.0%
Neutral	0	0.0%
Disagree	0	0.0%
Total	7	100.0%

I think that an Adaptive Learning System, with a core Domain Model, could enhance the teaching and learning of Junior Cycle and Leaving Certificate Mathematics.



Do you think that an Adaptive Learning System, with a core Domain Model, could enhance the teaching and learning of Junior Cycle and Leaving Certificate Mathematics?

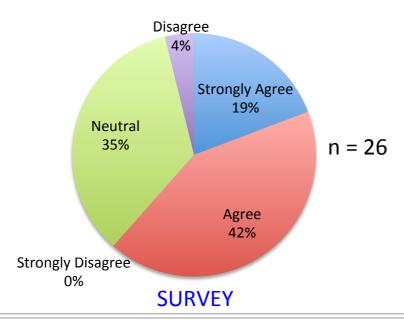


#### **SURVEY**

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Qu	esti	on	Τ,	4C

I think that an Adaptive Learning System would be a more effective tool than a textbook for teaching Mathematics as a system of		
connected concepts.  n = 26	TOTALS	%
Strongly Agree	5	19.2%
Agree	11	42.3%
Neutral	9	34.6%
Disagree	1	3.8%
Strongly Disagree	0	0.0%
Total	26	99.9%
INTERVIEWS		
Question 14.3		
Do you think that an Adaptive Learning System would be a more		
effective tool than a textbook for teaching Mathematics as a system		
of connected concepts? n = 7	TOTALS	%
Agree	6	85.7%
Neutral	1	14.3%
Disagree	0	0.0%
2.345.66	ŭ	0.070
Total	7	100.0%

I think that an Adaptive Learning System would be a more effective tool than a textbook for teaching Mathematics as a system of connected concepts.



Do you think that an Adaptive Learning System would be a more effective tool than a textbook for teaching Mathematics as a system of connected concepts?

