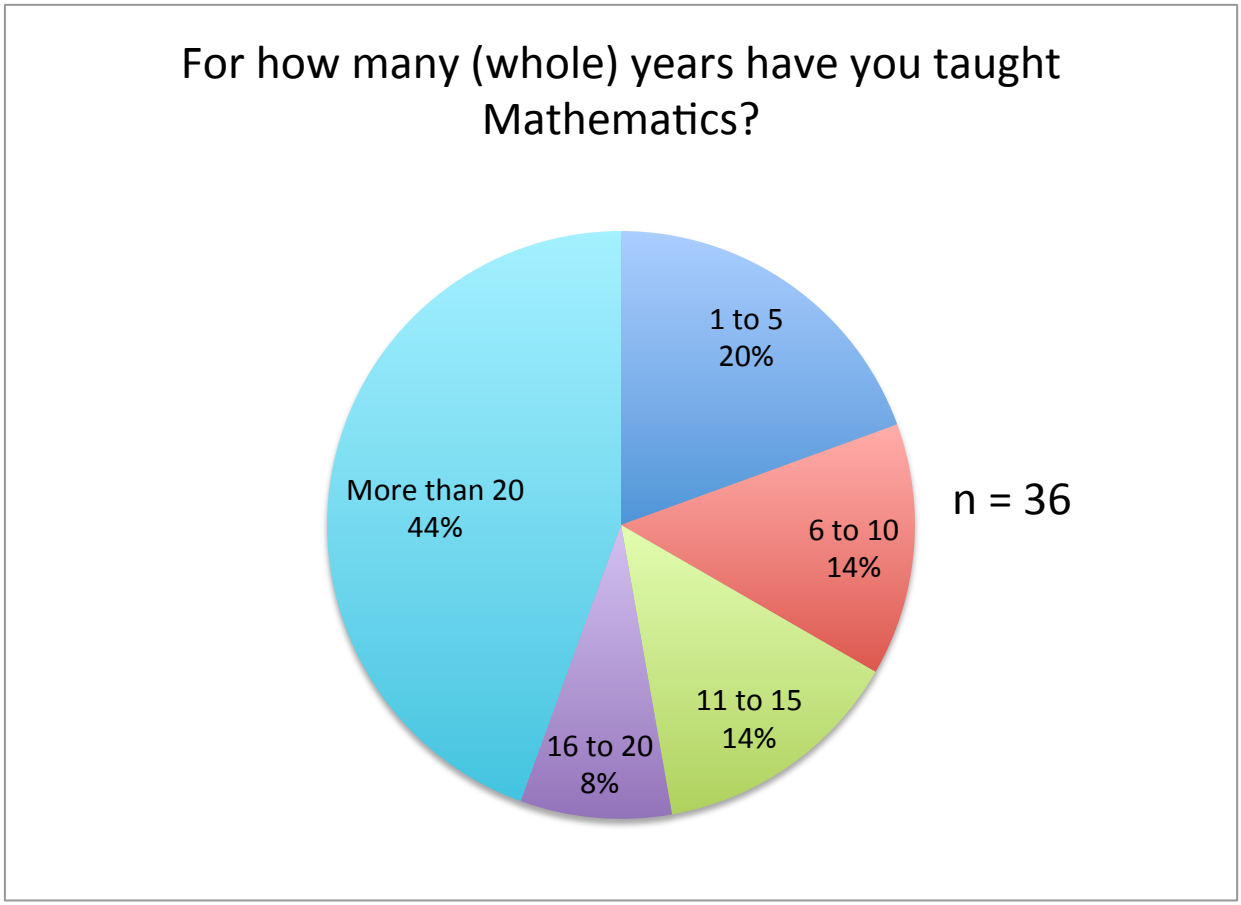
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 2a

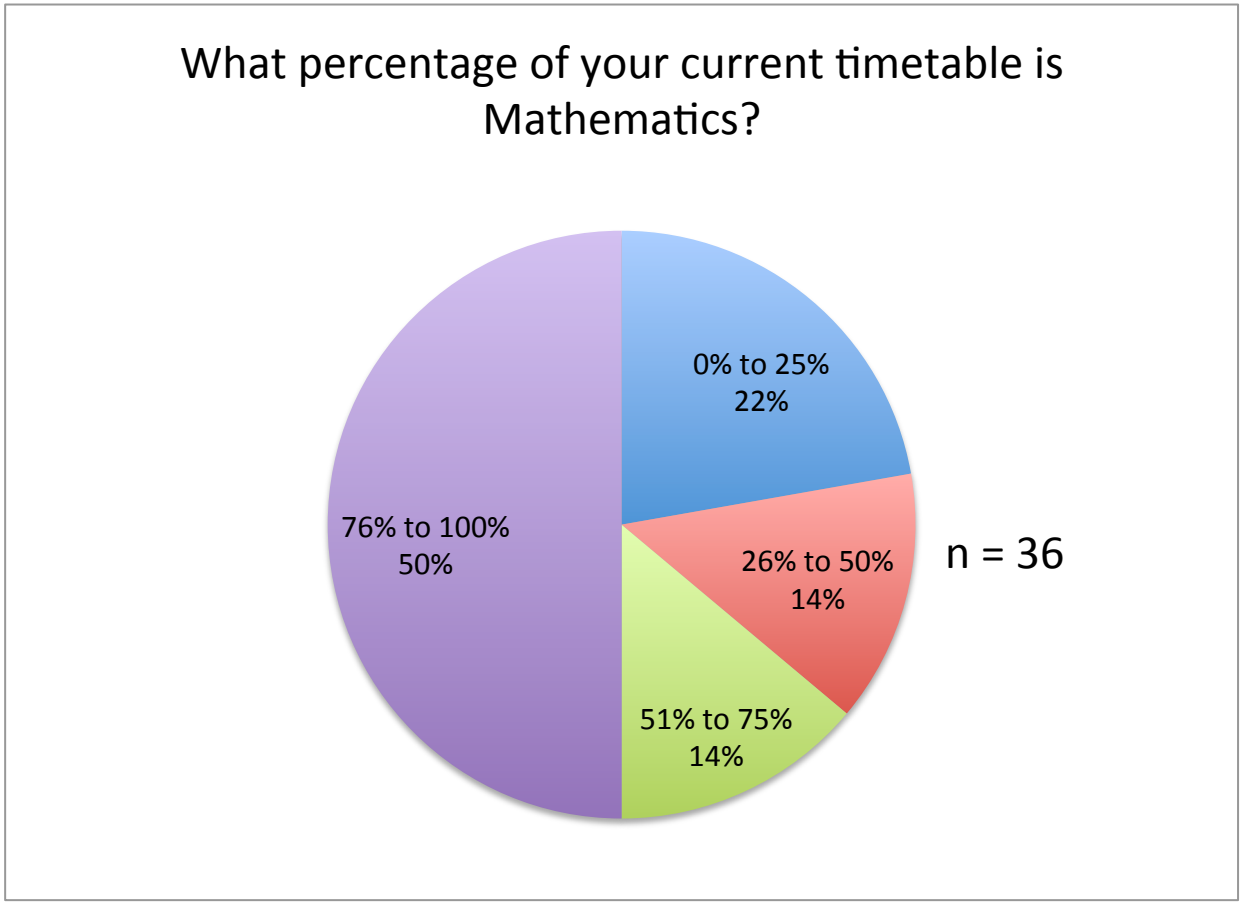
For how many (whole) years have you taught Mathematics? *n = 36*	**TOTALS**	**%**
1 to 5	**7**	**19.4%**
6 to 10	**5**	**13.9%**
11 to 15	**5**	**13.9%**
16 to 20	**3**	**8.3%**
More than 20	**16**	**44.4%**
Total	**36**	**99.9%**



Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 2b

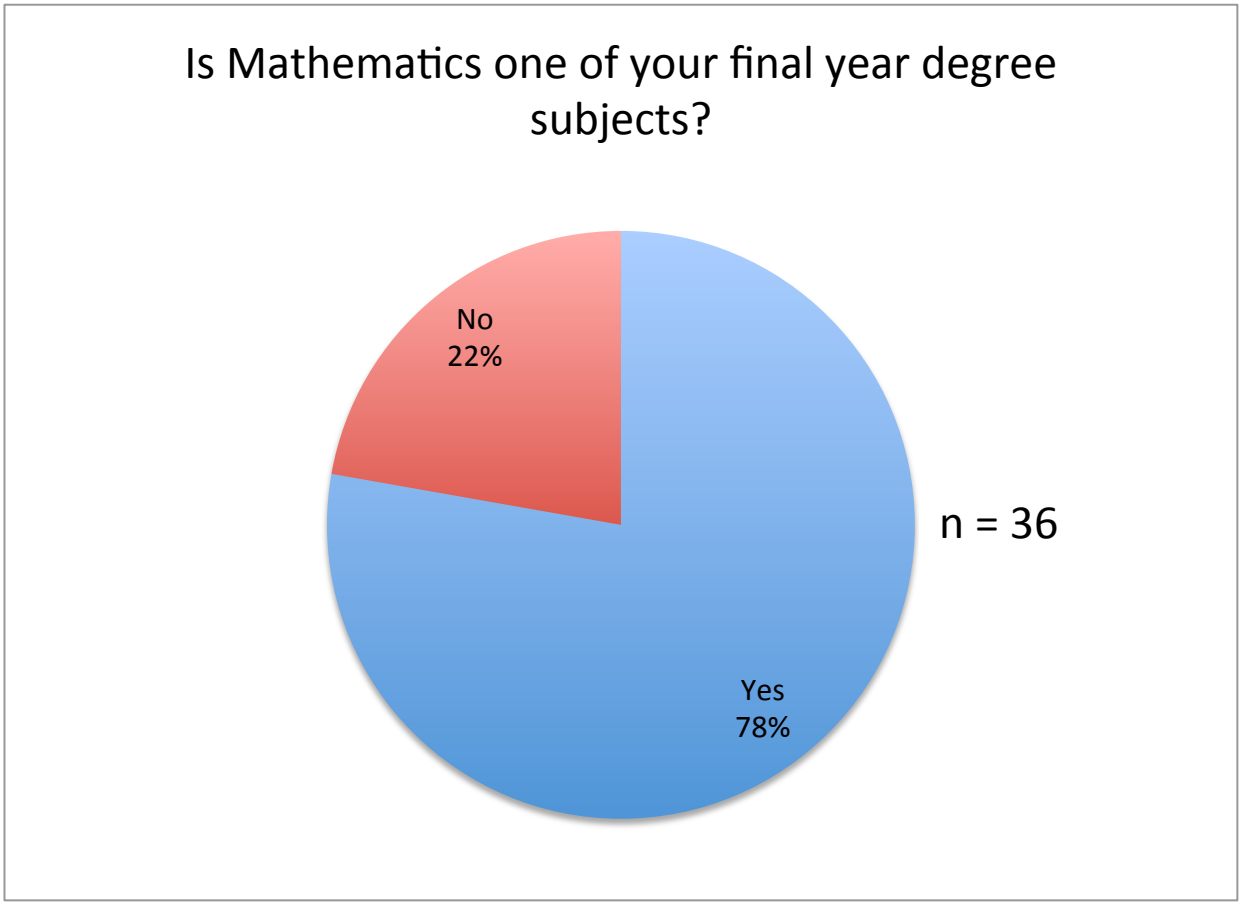
What percentage of your current timetable is Mathematics? *n = 36*	**TOTALS**	**%**
0% to 25%	**8**	**22.2%**
26% to 50%	**5**	**13.9%**
51% to 75%	**5**	**13.9%**
76% to 100%	**18**	**50.0%**
Total	**36**	**100.0%**



Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 2c

Is Mathematics one of your final year degree subjects? *n = 36*	**TOTALS**	**%**
Yes	**28**	**77.8%**
No	**8**	**22.2%**
Total	**36**	**100.0%**



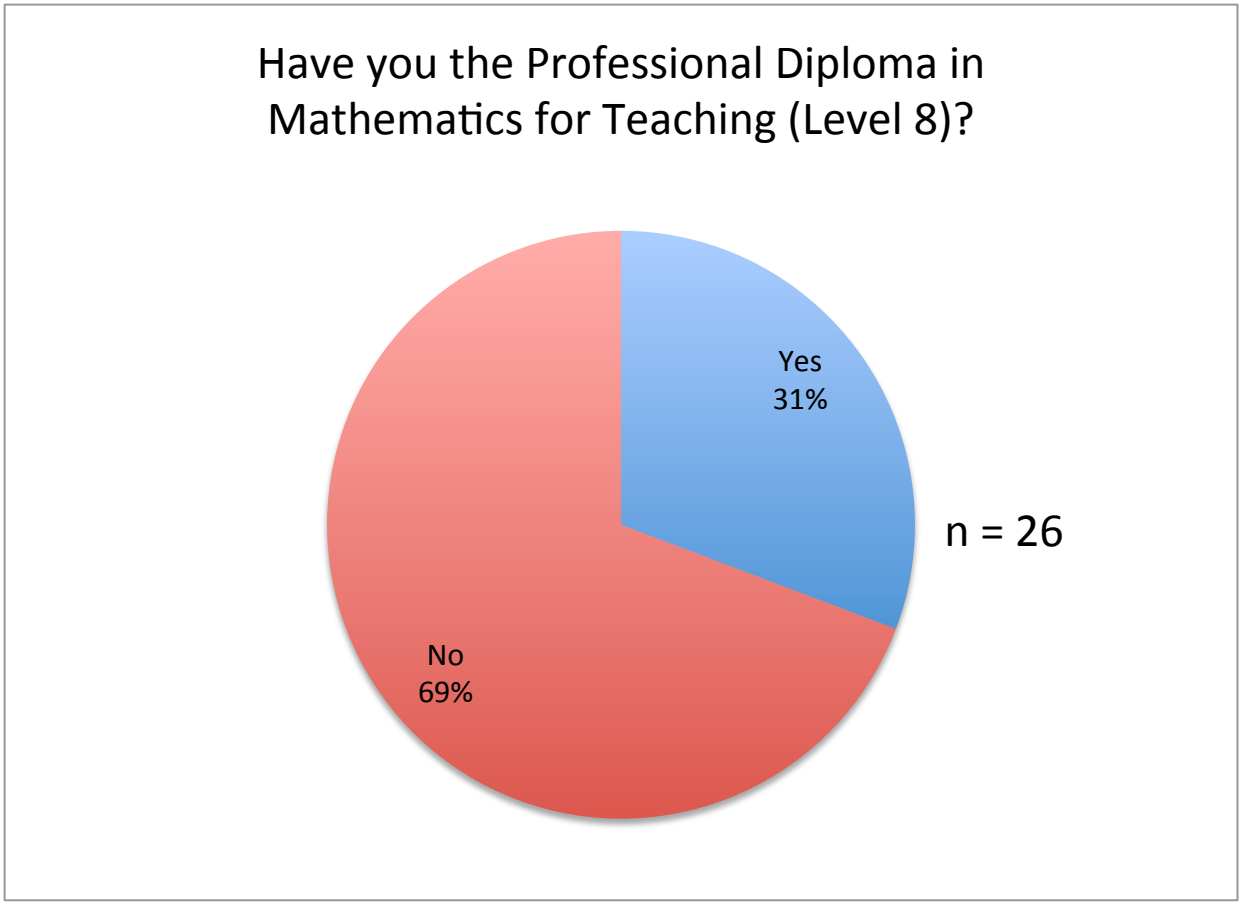
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 2d

Have you the Professional Diploma in Mathematics for Teaching (Level 8)?

n = 26

	TOTALS	%
Yes	**8**	**30.8%**
No	**18**	**69.2%**
Total	**26**	**100.0%**

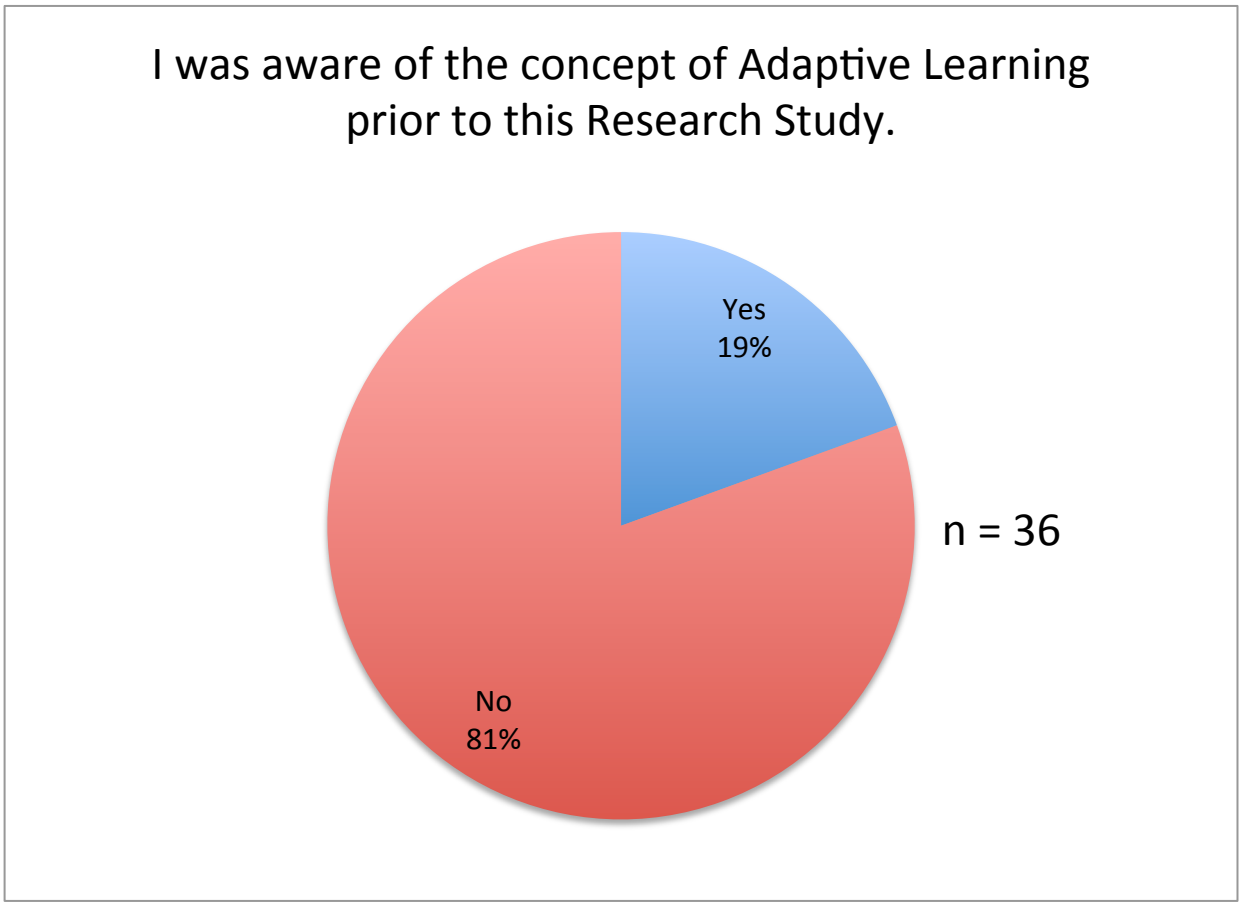


Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 3a

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%**



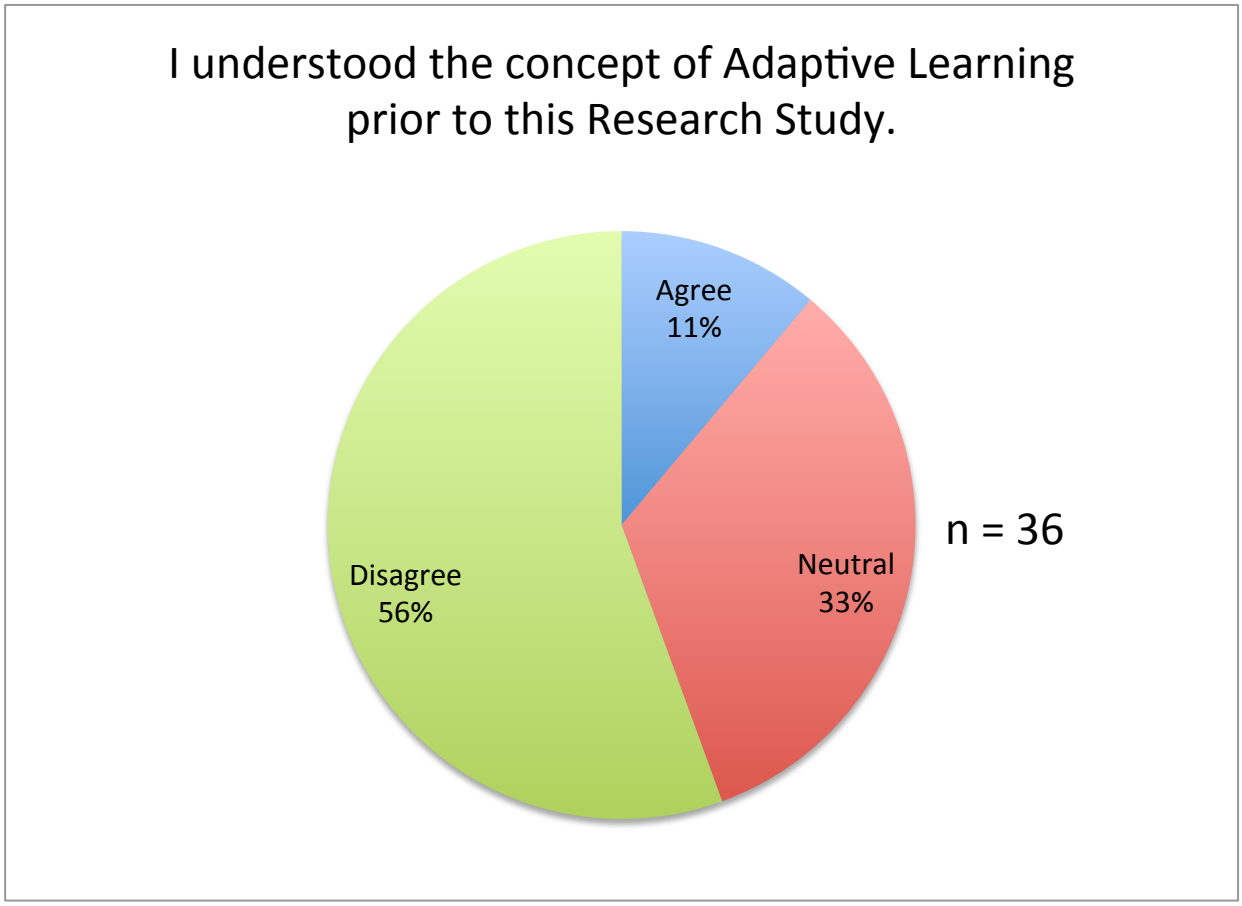
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 3b

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

n = 36

	TOTALS	%
Agree	**4**	**11.1%**
Neutral	**12**	**33.3%**
Disagree	**20**	**55.6%**
Total	**36**	**100.0%**



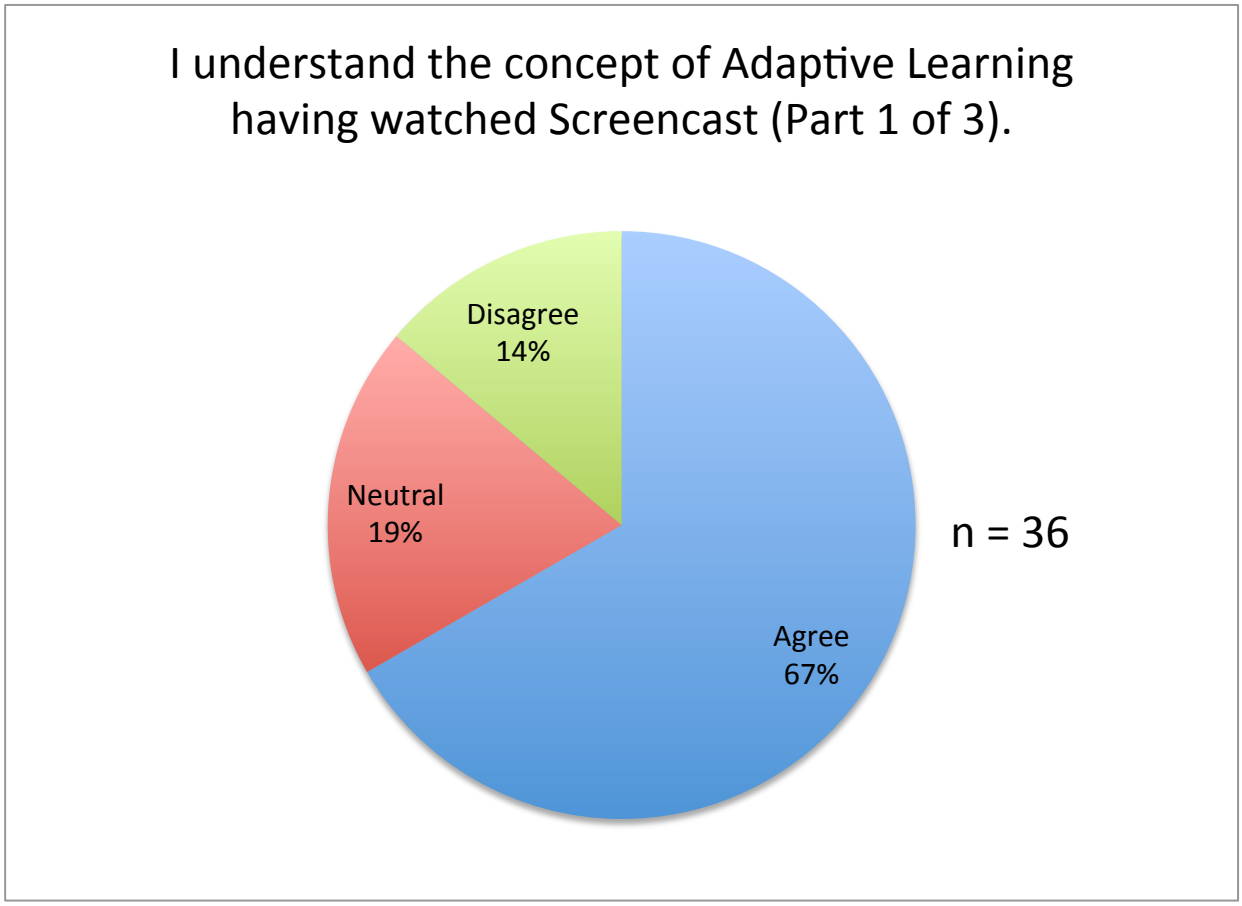
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 3c

I understand the concept of Adaptive Learning having watched Screencast (Part 1 of 3).

n = 36

	TOTALS	%
Agree	**24**	**66.7%**
Neutral	**7**	**19.4%**
Disagree	**5**	**13.9%**
Total	**36**	**100.0%**



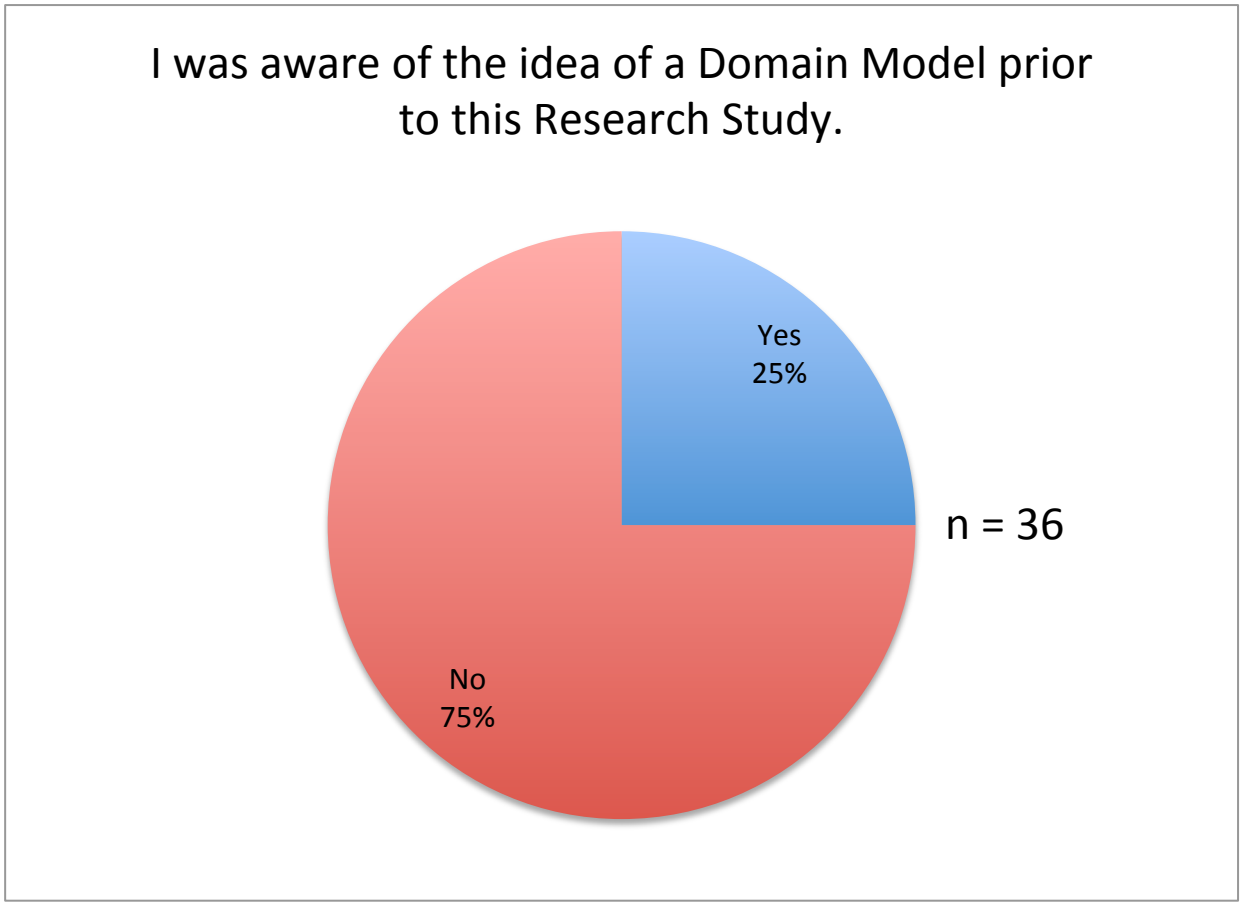
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 4a

I was aware of the idea of a Domain Model prior to this Research Study.

n = 36

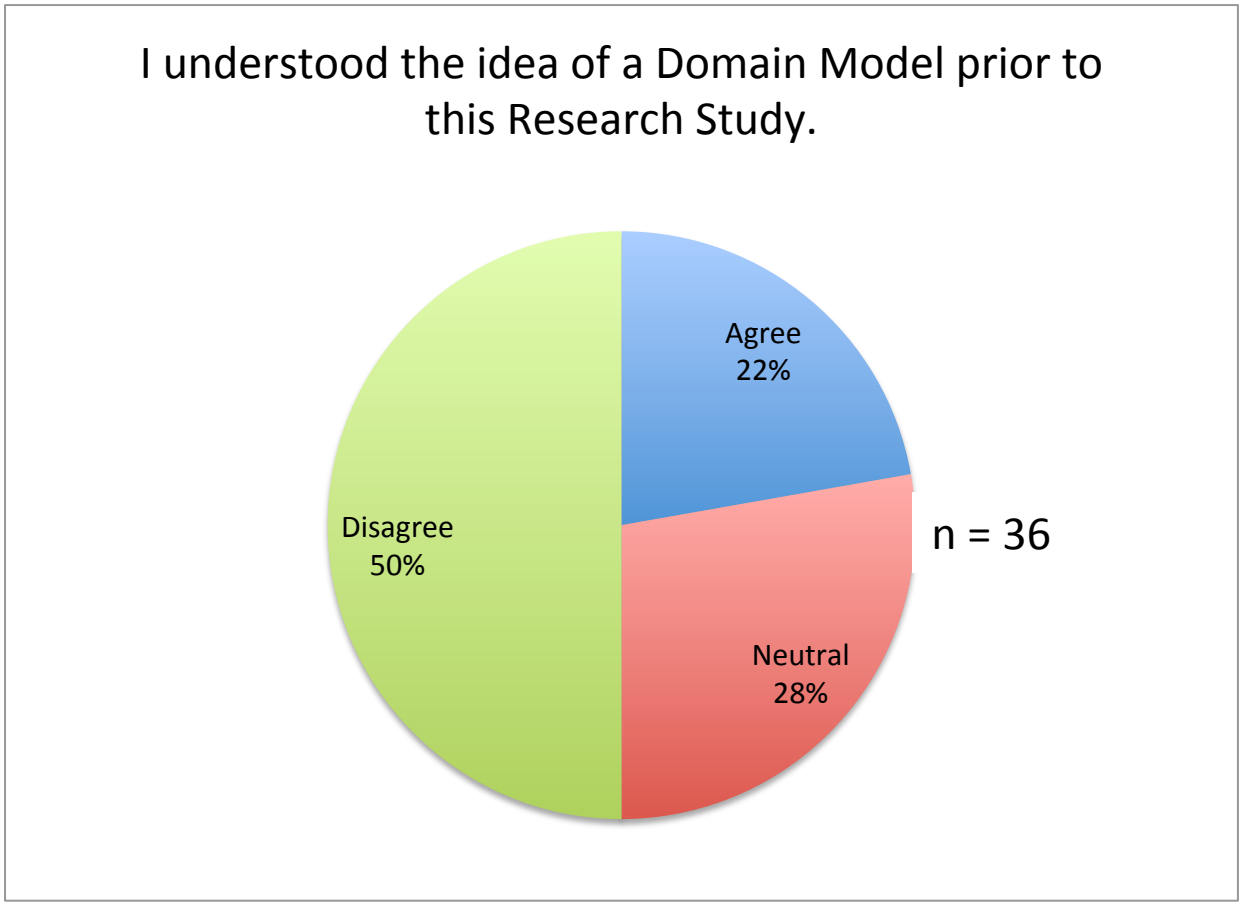
	TOTALS	%
Yes	**9**	**25.0%**
No	**27**	**75.0%**
Total	**36**	**100.0%**



Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 4b

I understood the idea of a Domain Model prior to this Research Study. *n = 36*	**TOTALS**	**%**
Agree	**8**	**22.2%**
Neutral	**10**	**27.8%**
Disagree	**18**	**50.0%**
Total	**36**	**100.0%**



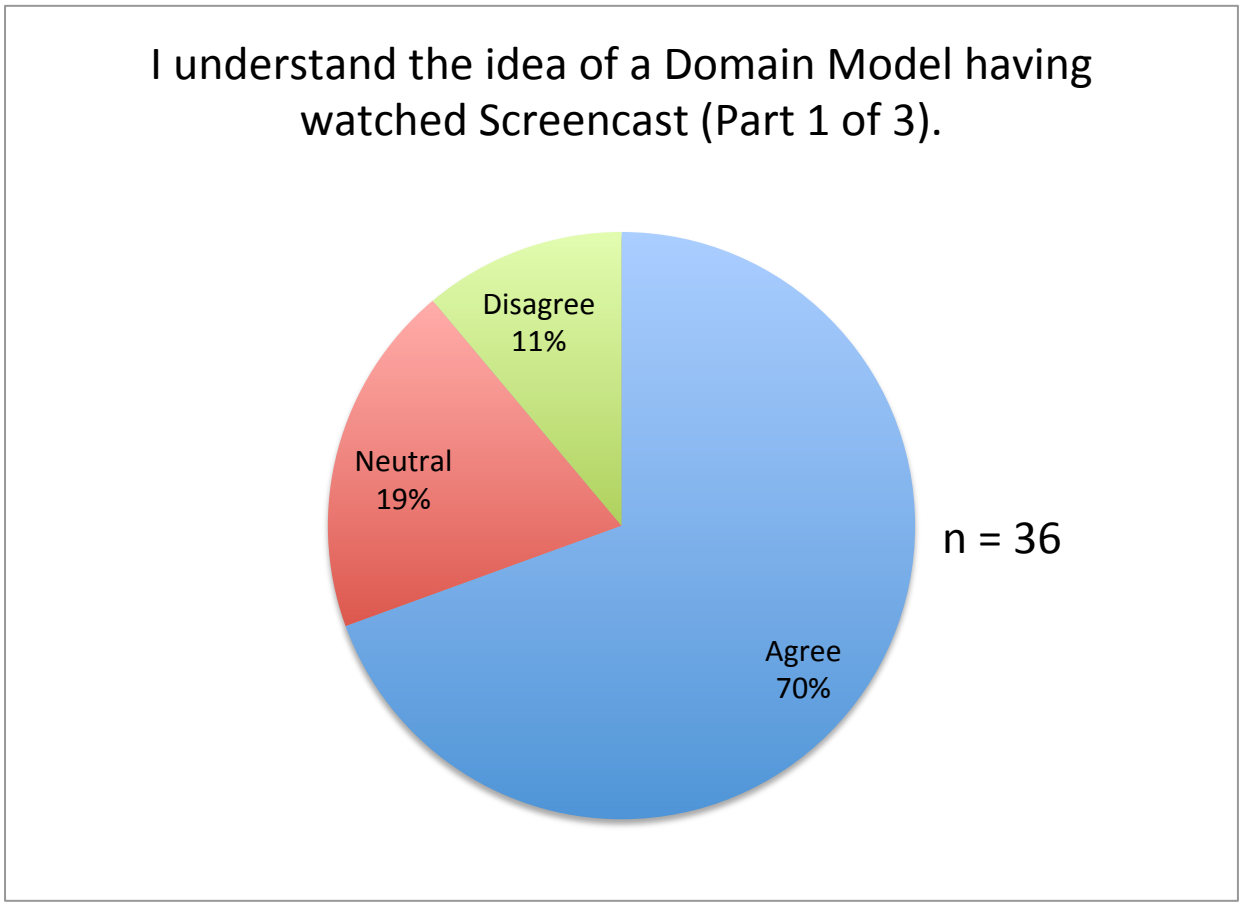
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 4c

I understand the idea of a Domain Model having watched Screencast (Part 1 of 3).

n = 36

	TOTALS	%
Agree	**25**	**69.4%**
Neutral	**7**	**19.4%**
Disagree	**4**	**11.1%**
Total	**36**	**99.9%**



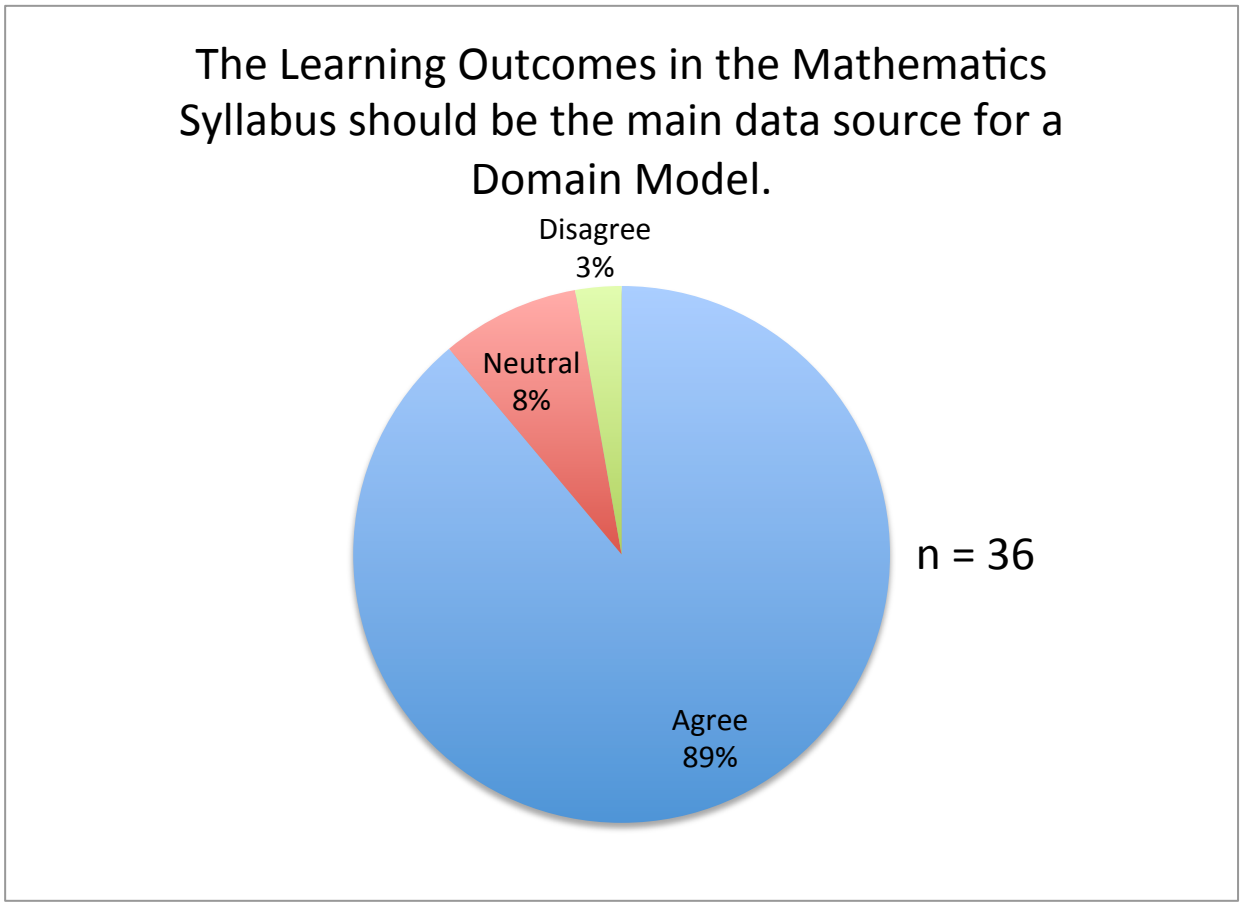
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 5a

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

n = 36

	TOTALS	%
Agree	**32**	**88.9%**
Neutral	**3**	**8.3%**
Disagree	**1**	**2.8%**
Total	**36**	**100.0%**

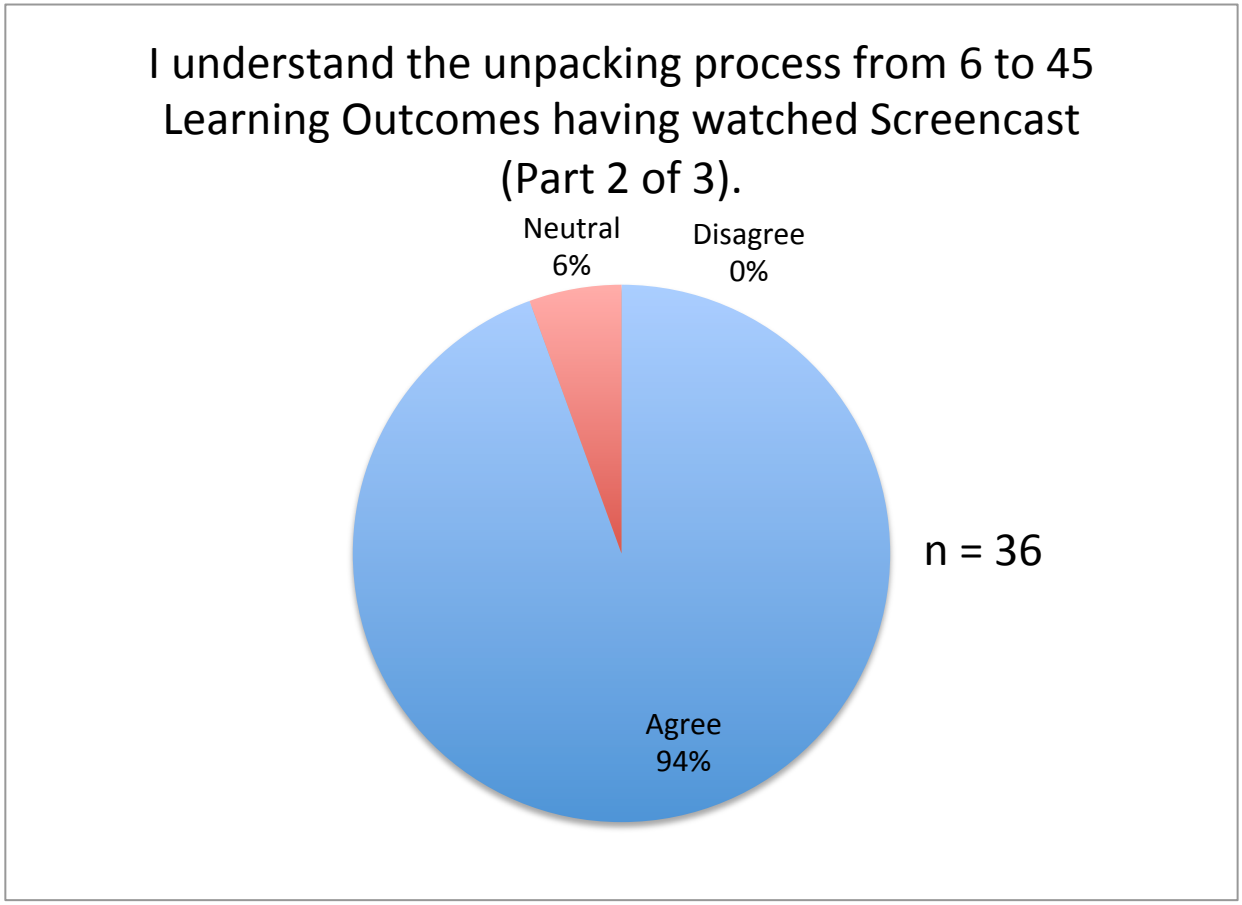


Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 5b

I understand the unpacking process from 6 to 45 Learning Outcomes having watched Screencast (Part 2 of 3).
n = 36

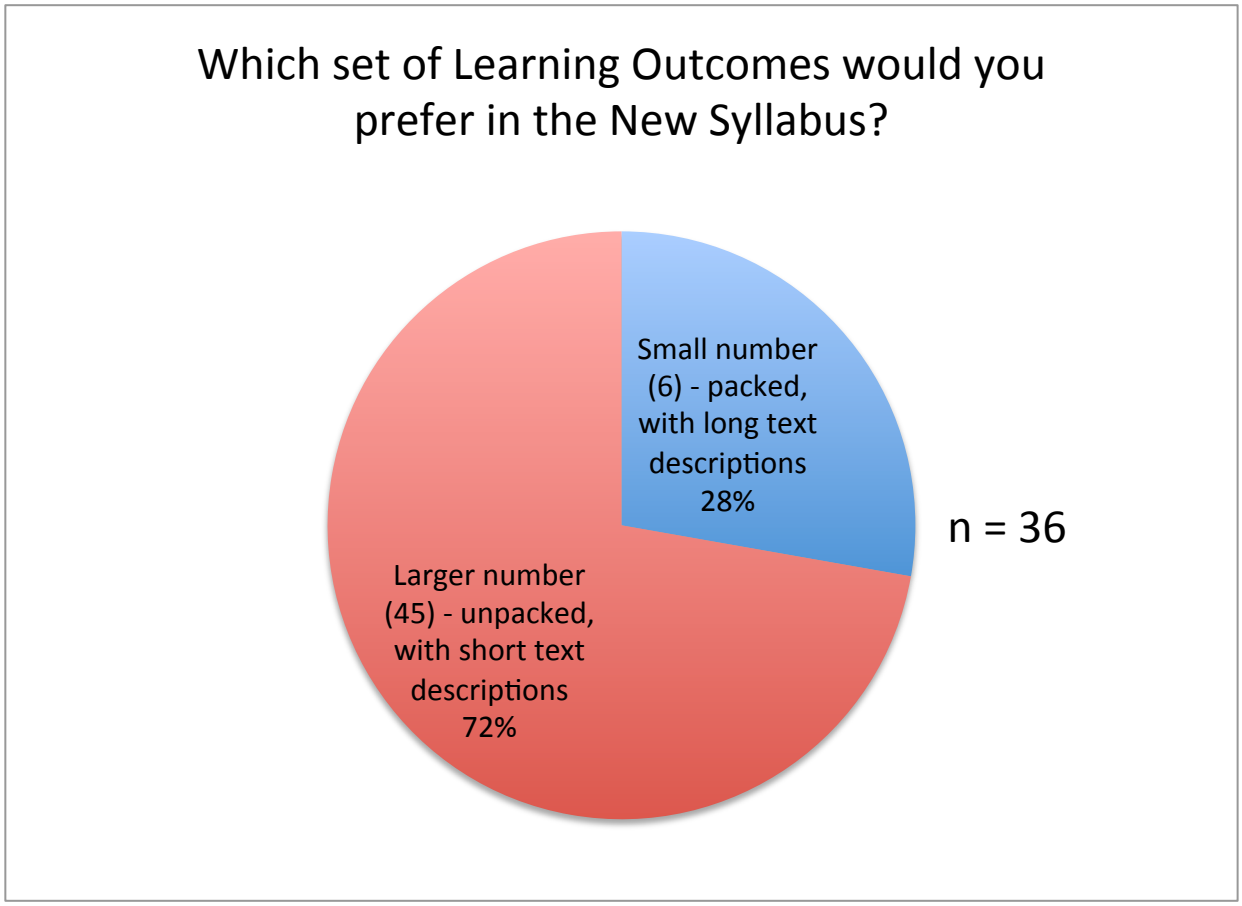
	TOTALS	**%**
Agree	**34**	**94.4%**
Neutral	**2**	**5.6%**
Disagree	**0**	**0.0%**
Total	**36**	**100.0%**



Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

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	**10**	**27.8%**
Larger number (45) - unpacked, with short text descriptions	**26**	**72.2%**
Total	**36**	**100.0%**



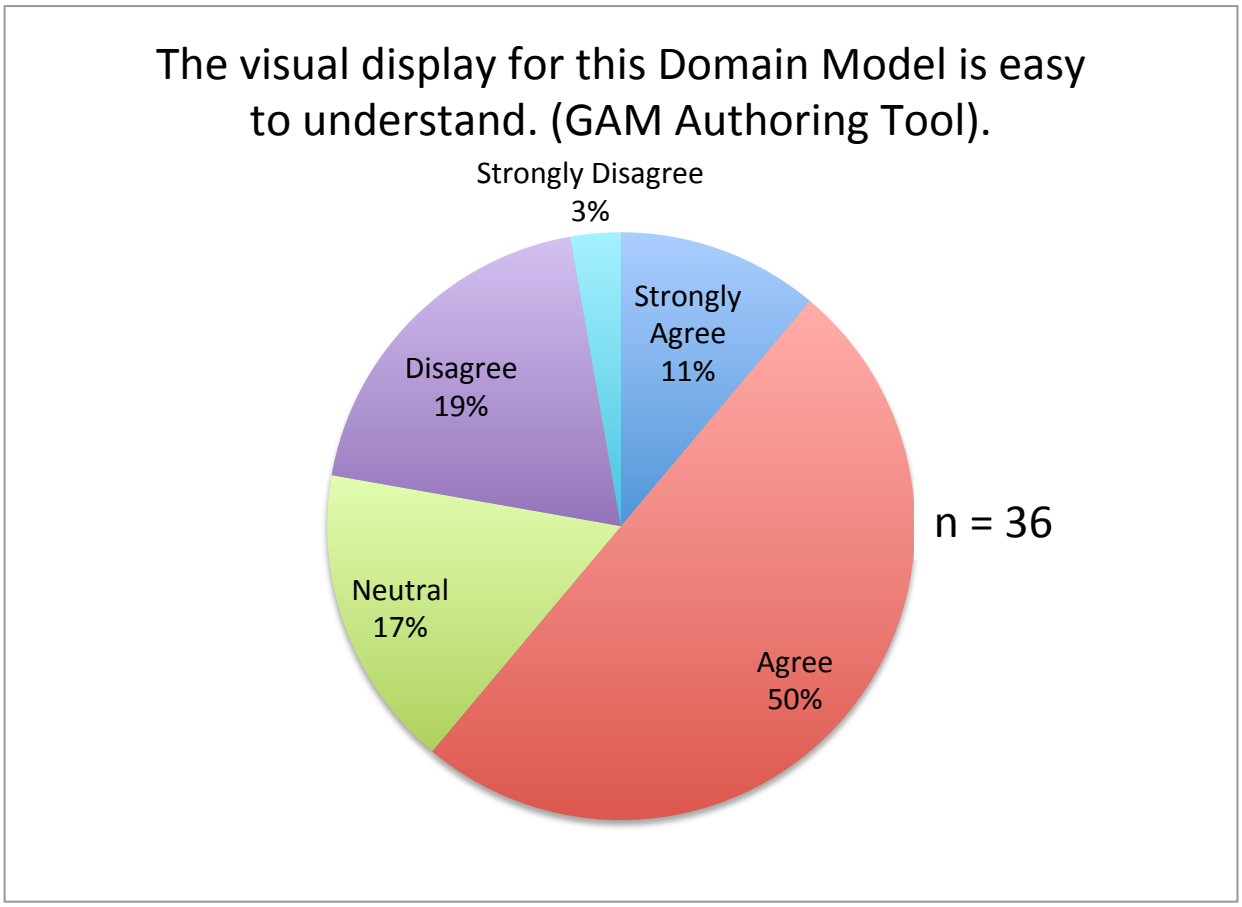
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

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%**



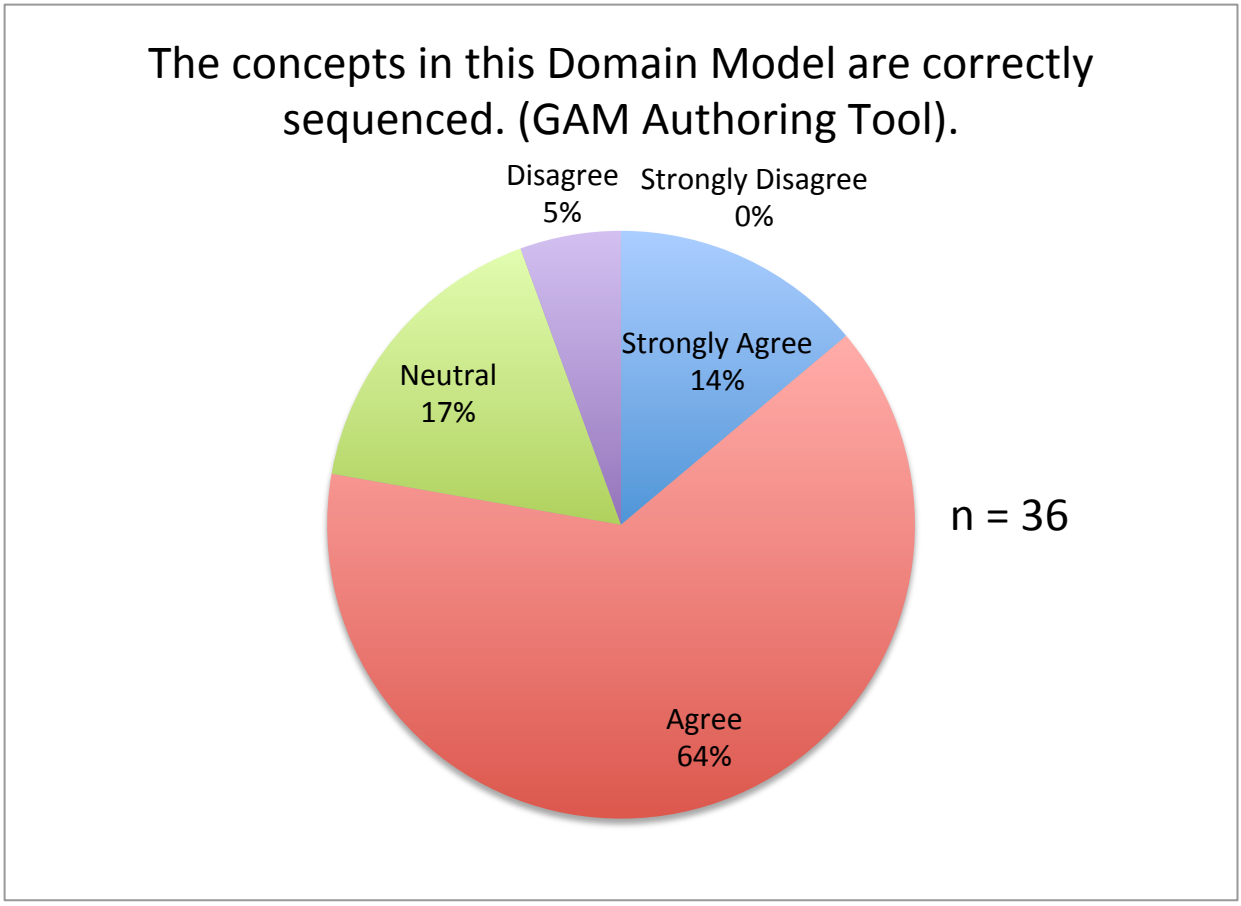
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 6b

The concepts in this Domain Model are correctly sequenced. (GAM Authoring Tool).

n = 36

	TOTALS	%
Strongly Agree	**5**	**13.9%**
Agree	**23**	**63.9%**
Neutral	**6**	**16.7%**
Disagree	**2**	**5.6%**
Strongly Disagree	**0**	**0.0%**
Total	**36**	**100.1%**



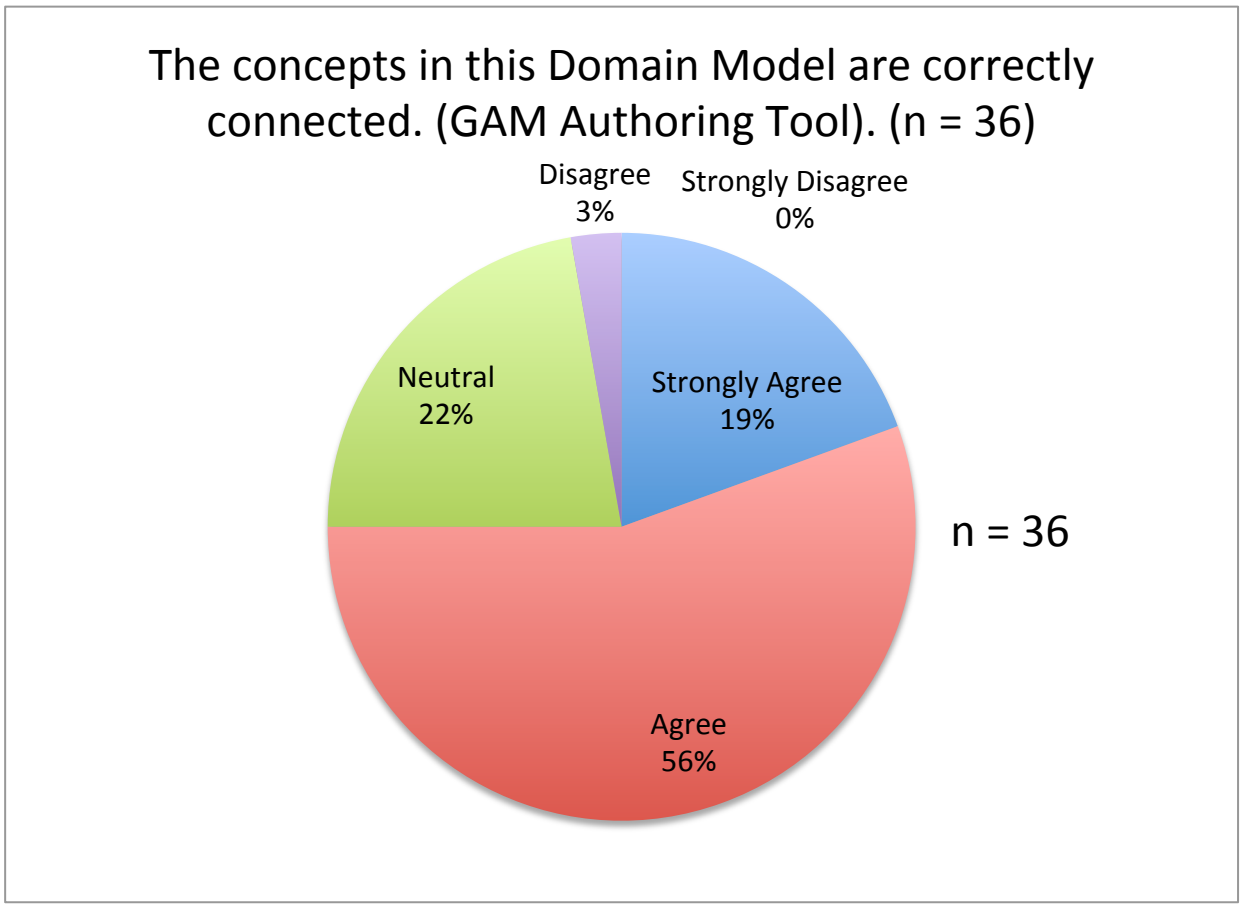
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 6c

The concepts in this Domain Model are correctly connected. (GAM Authoring Tool).

n = 36

	TOTALS	%
Strongly Agree	**7**	**19.4%**
Agree	**20**	**55.6%**
Neutral	**8**	**22.2%**
Disagree	**1**	**2.8%**
Strongly Disagree	**0**	**0.0%**
Total	**36**	**100.0%**



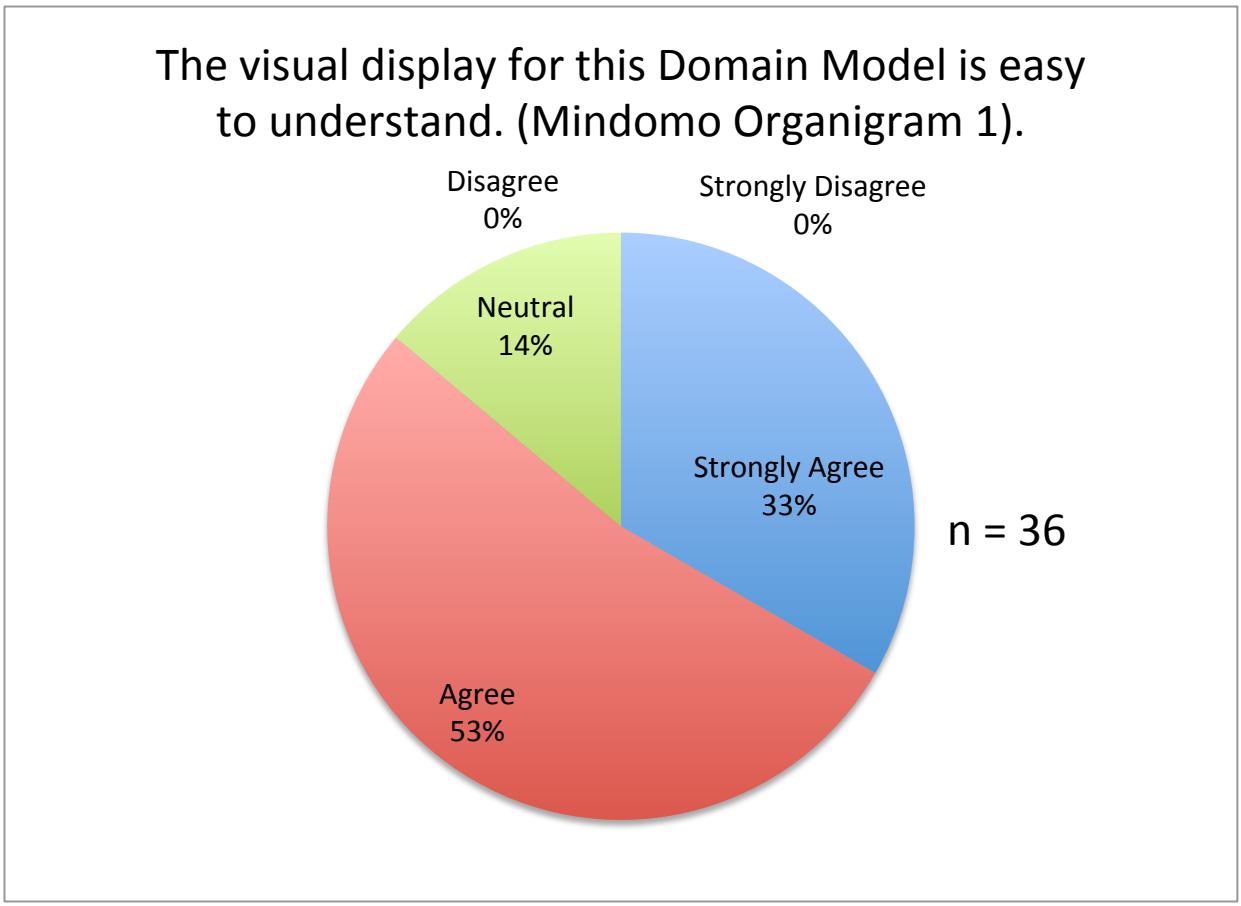
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 7a

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

n = 36

	TOTALS	%
Strongly Agree	**12**	**33.3%**
Agree	**19**	**52.8%**
Neutral	**5**	**13.9%**
Disagree	**0**	**0.0%**
Strongly Disagree	**0**	**0.0%**
Total	**36**	**100.0%**



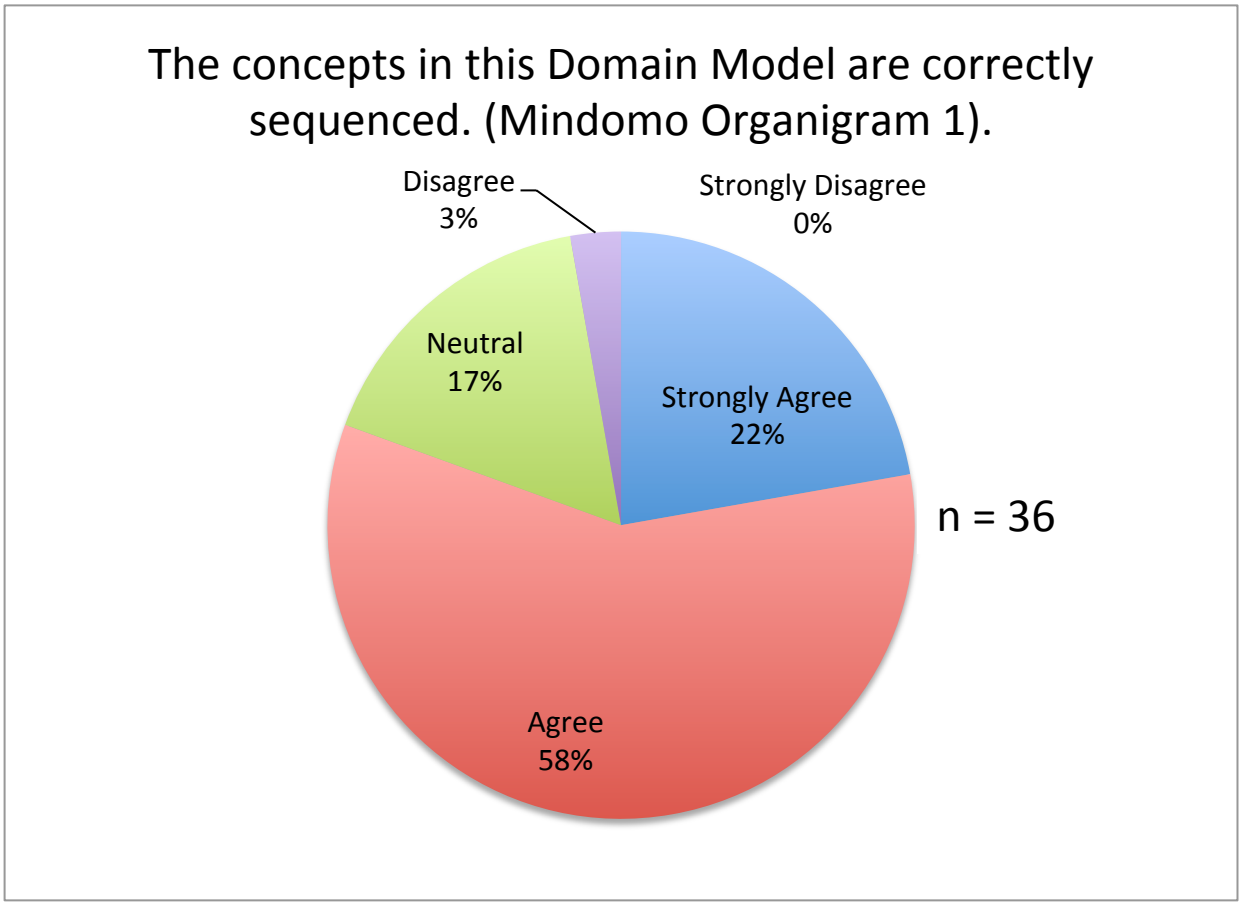
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 7b

The concepts in this Domain Model are correctly sequenced. (Mindomo Organigram 1).

n = 36

	TOTALS	%
Strongly Agree	**8**	**22.2%**
Agree	**21**	**58.3%**
Neutral	**6**	**16.7%**
Disagree	**1**	**2.8%**
Strongly Disagree	**0**	**0.0%**
Total	**36**	**100.0%**



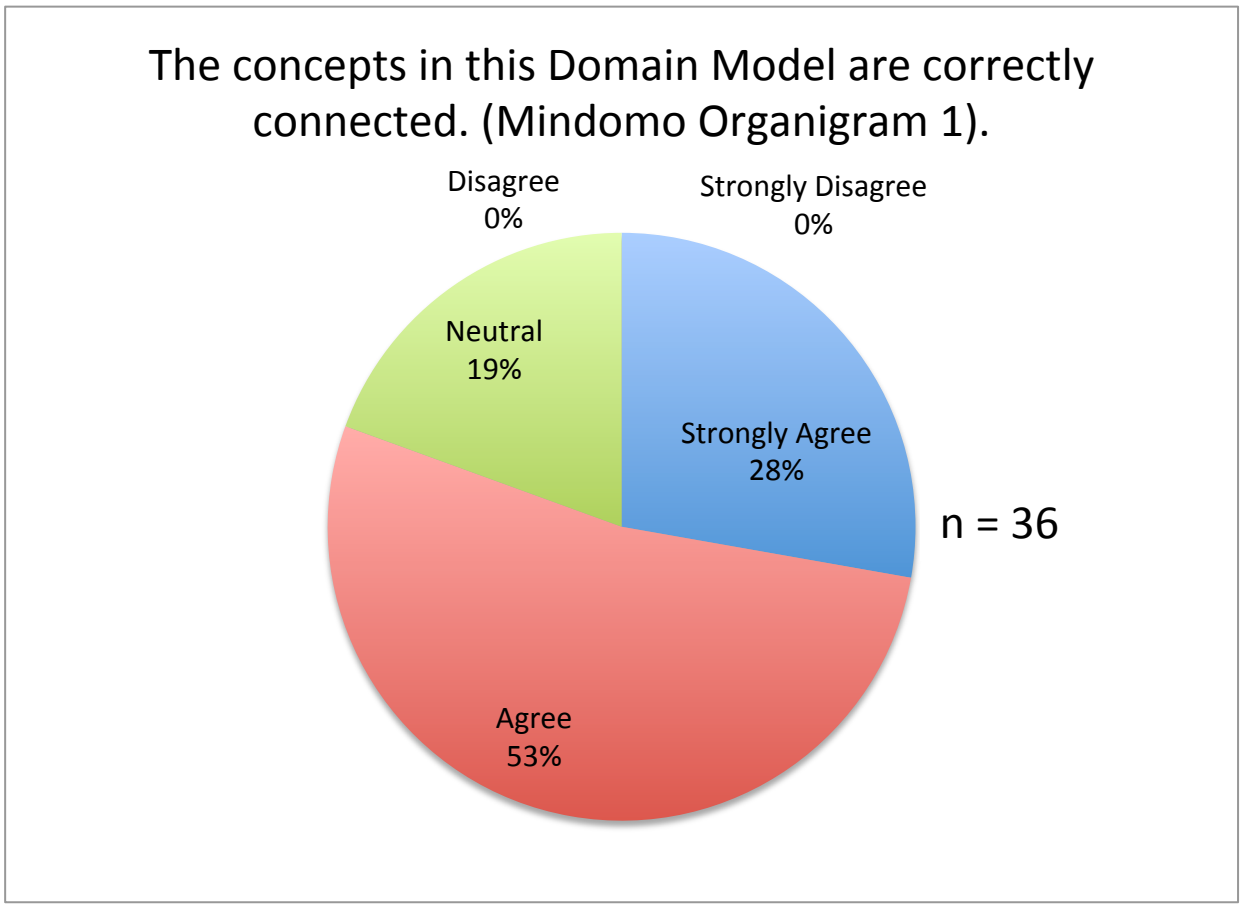
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 7c

The concepts in this Domain Model are correctly connected. (Mindomo Organigram 1).

n = 36

	TOTALS	%
Strongly Agree	**10**	**27.8%**
Agree	**19**	**52.8%**
Neutral	**7**	**19.4%**
Disagree	**0**	**0.0%**
Strongly Disagree	**0**	**0.0%**
Total	**36**	**100.0%**



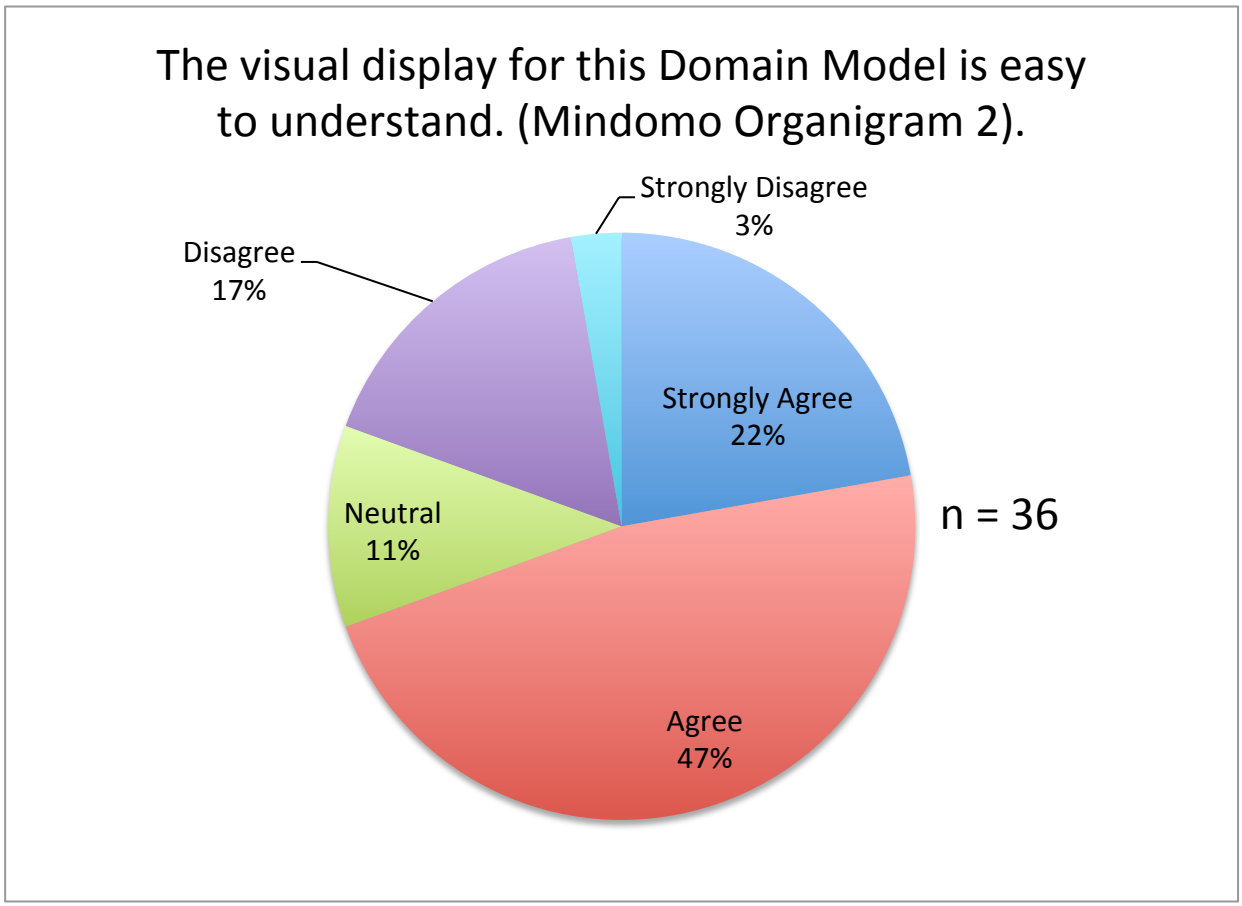
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 8a

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

n = 36

	TOTALS	%
Strongly Agree	**8**	**22.2%**
Agree	**17**	**47.2%**
Neutral	**4**	**11.1%**
Disagree	**6**	**16.7%**
Strongly Disagree	**1**	**2.8%**
Total	**36**	**100.0%**

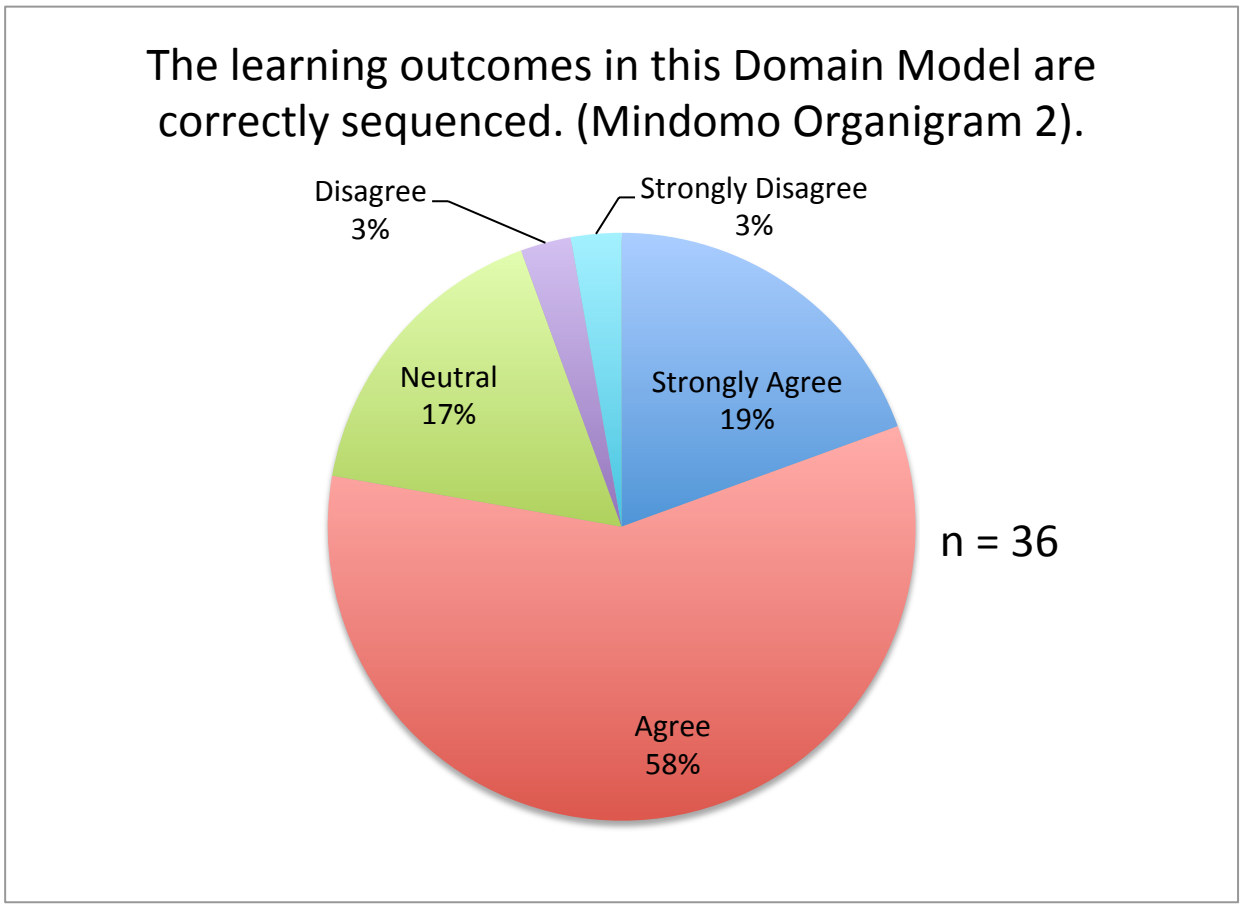


Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 8b

The learning outcomes in this Domain Model are correctly sequenced. (Mindomo Organigram 2).
n = 36

	TOTALS	%
Strongly Agree	**7**	**19.4%**
Agree	**21**	**58.3%**
Neutral	**6**	**16.7%**
Disagree	**1**	**2.8%**
Strongly Disagree	**1**	**2.8%**
Total	**36**	**100.0%**



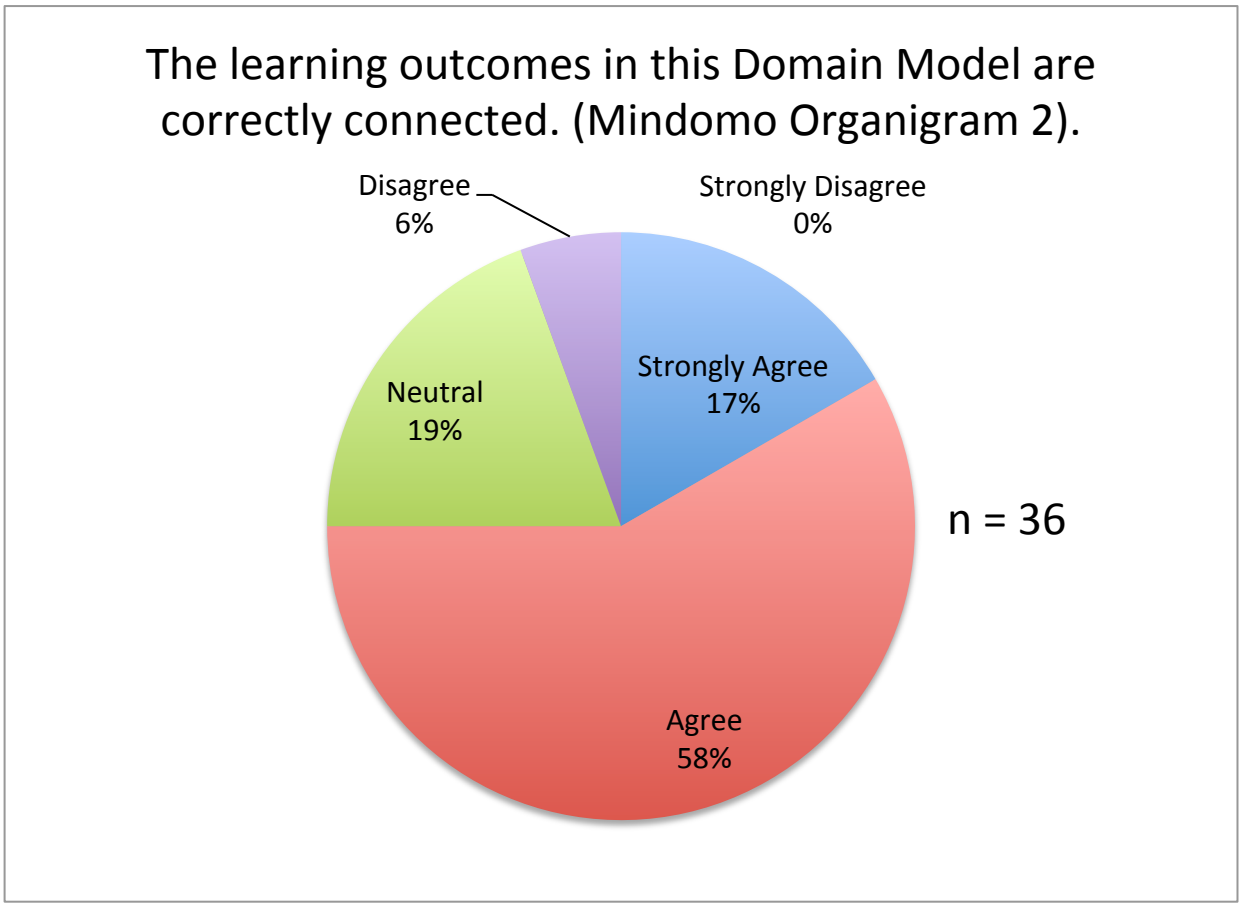
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 8c

The learning outcomes in this Domain Model are correctly connected. (Mindomo Organigram 2).

n = 36

	TOTALS	%
Strongly Agree	**6**	**16.7%**
Agree	**21**	**58.3%**
Neutral	**7**	**19.4%**
Disagree	**2**	**5.6%**
Strongly Disagree	**0**	**0.0%**
Total	**36**	**100.0%**



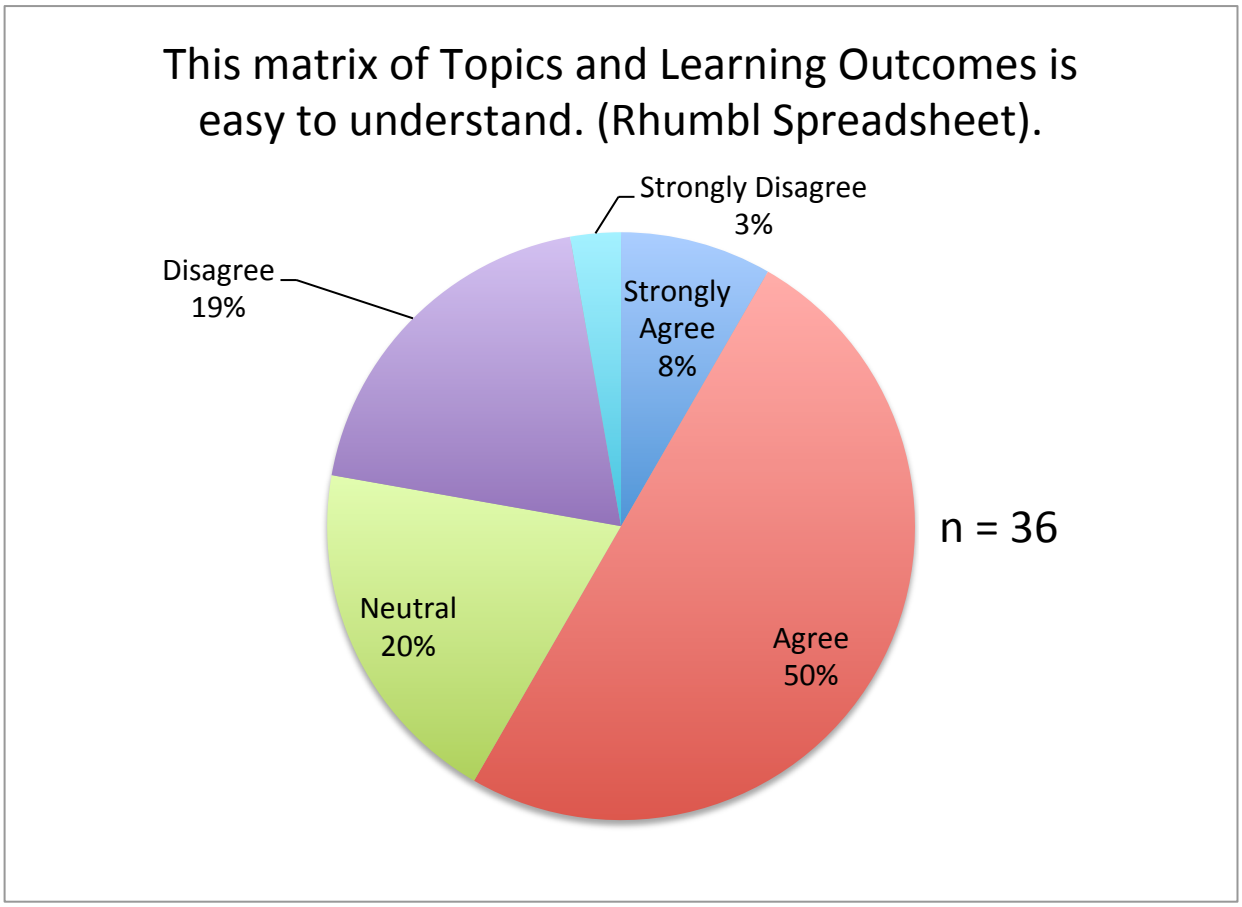
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 9a

This matrix of Topics and Learning Outcomes is easy to understand. (Rhumbl Spreadsheet).

n = 36

	TOTALS	%
Strongly Agree	**3**	**8.3%**
Agree	**18**	**50.0%**
Neutral	**7**	**19.4%**
Disagree	**7**	**19.4%**
Strongly Disagree	**1**	**2.8%**
Total	**36**	**99.9%**



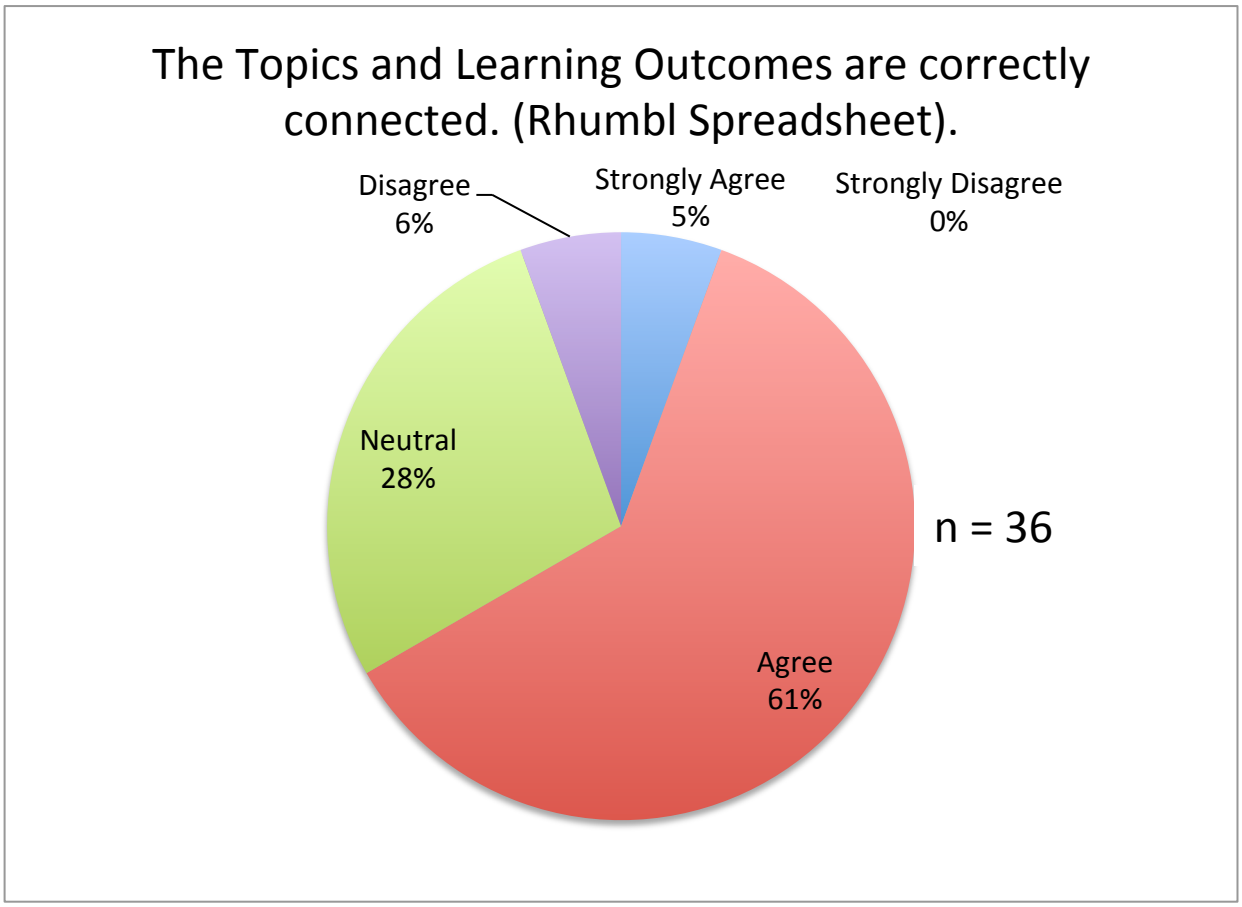
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 9b

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%**



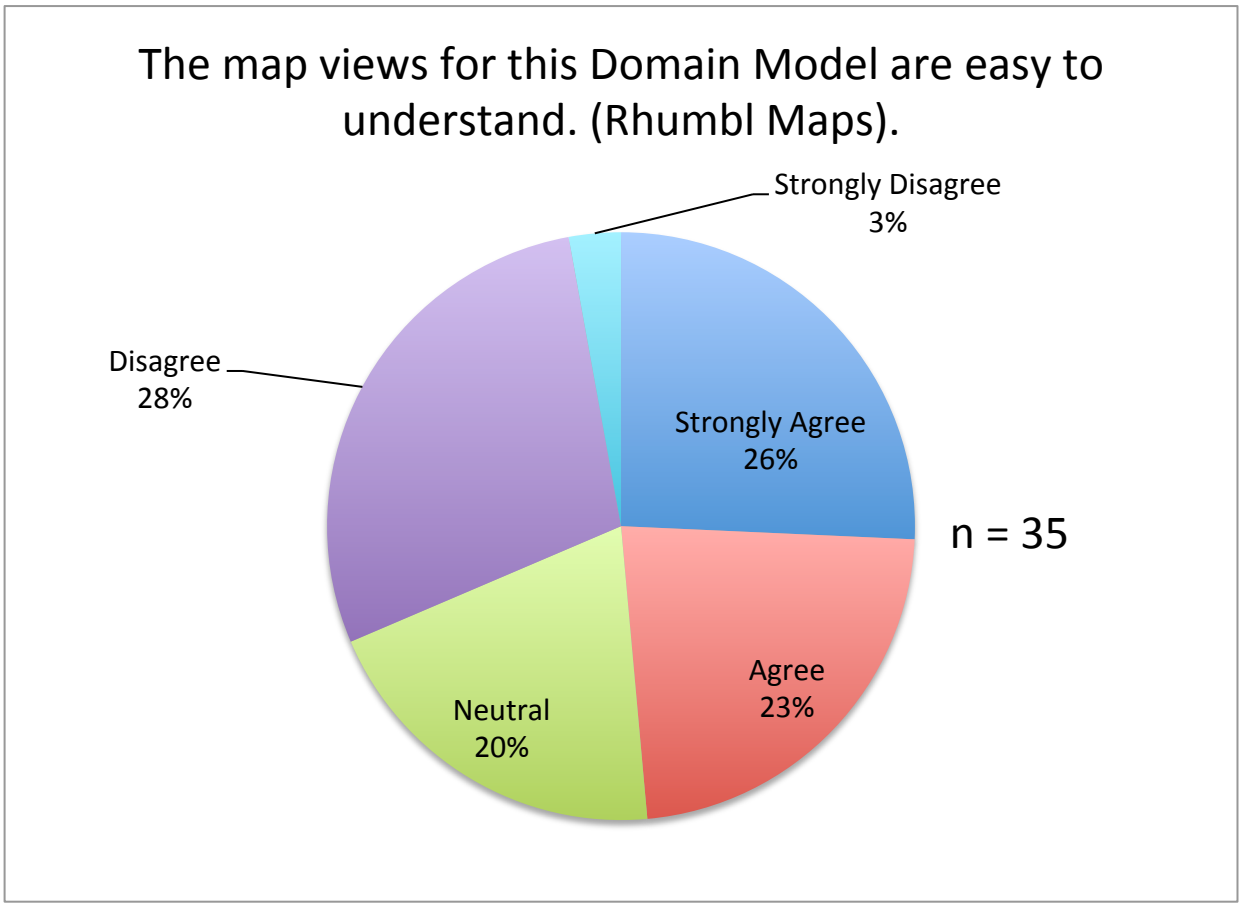
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 10a

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%**



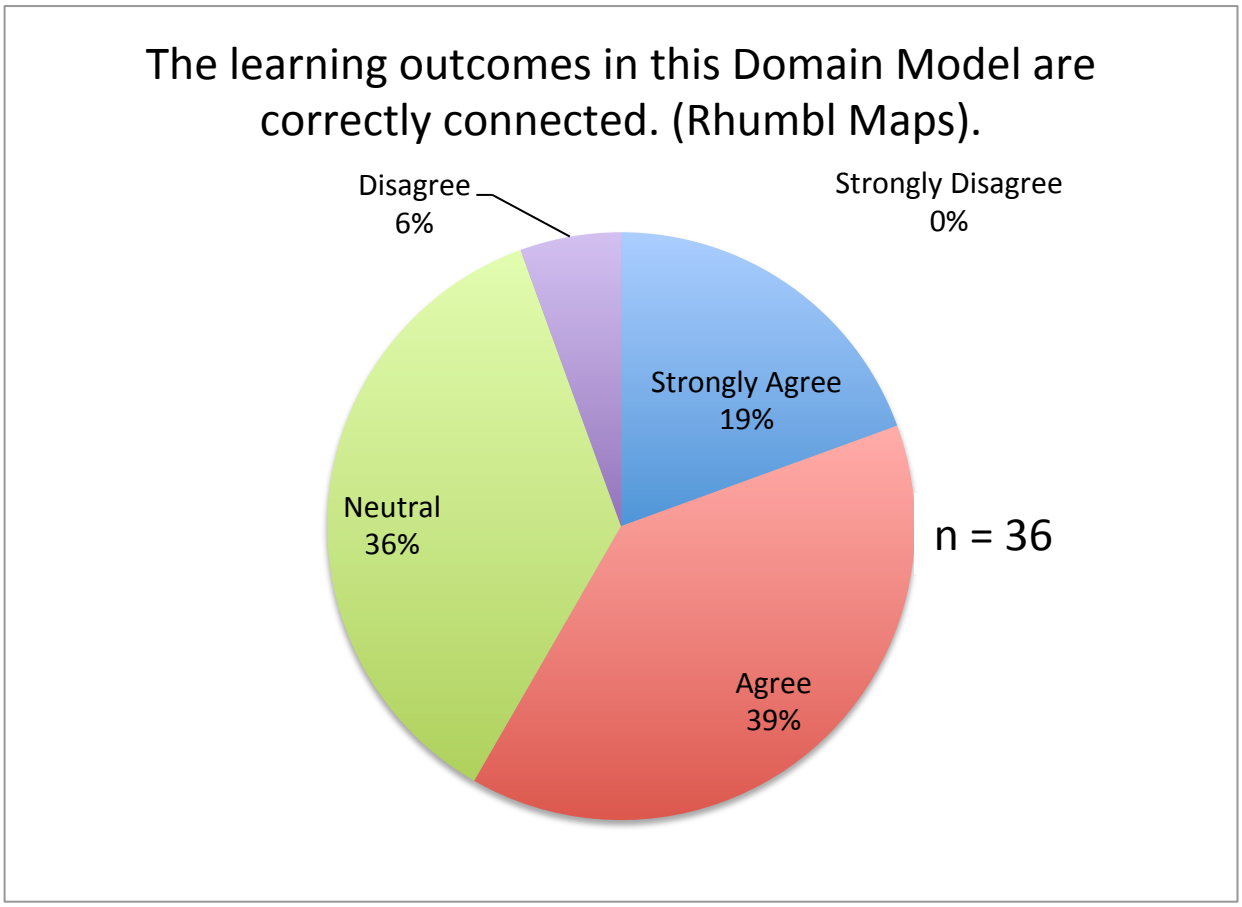
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 10b

The learning outcomes in this Domain Model are correctly connected. (Rhumbl Maps).

n = 36

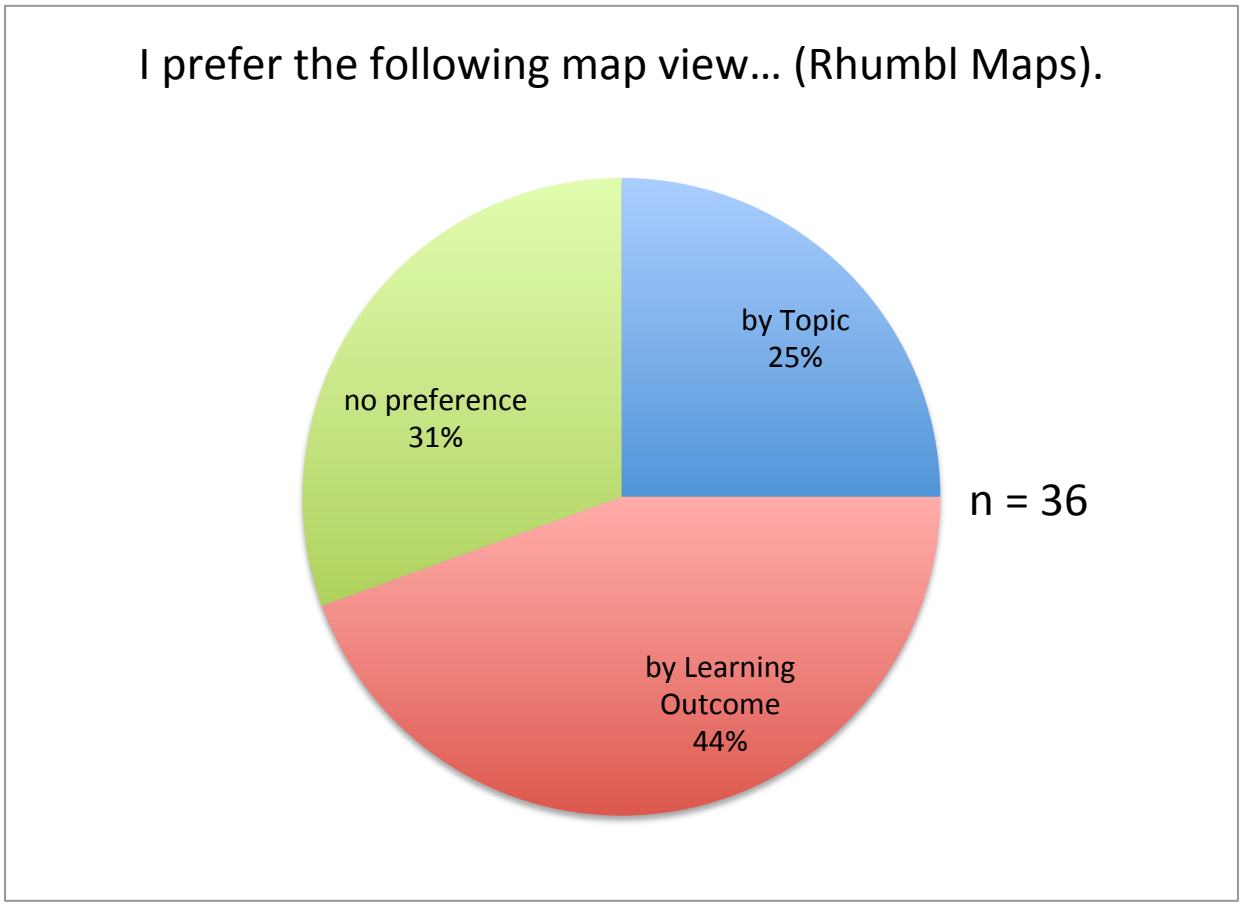
	TOTALS	%
Strongly Agree	**7**	**19.4%**
Agree	**14**	**38.9%**
Neutral	**13**	**36.1%**
Disagree	**2**	**5.6%**
Strongly Disagree	**0**	**0.0%**
Total	**36**	**100.0%**



Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 10c

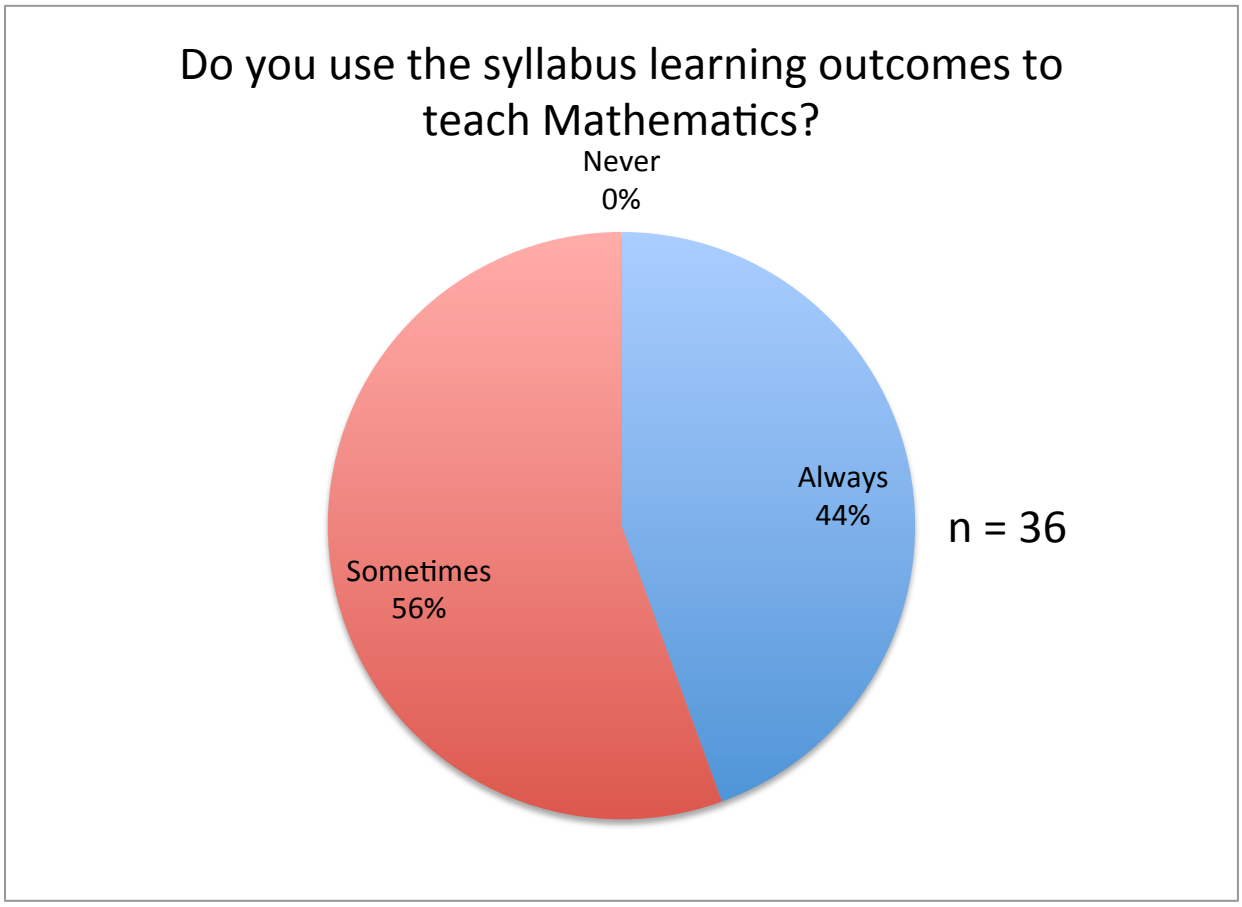
I prefer the following map view… (Rhumbl Maps). *n = 36*	**TOTALS**	**%**
by Topic	**9**	**25.0%**
by Learning Outcome	**16**	**44.4%**
no preference	**11**	**30.6%**
Total	**36**	**100.0%**



Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 11a

Do you use the syllabus learning outcomes to teach Mathematics? *n = 36*	**TOTALS**	**%**
Always	**16**	**44.4%**
Sometimes	**20**	**55.6%**
Never	**0**	**0.0%**
Total	**36**	**100.0%**

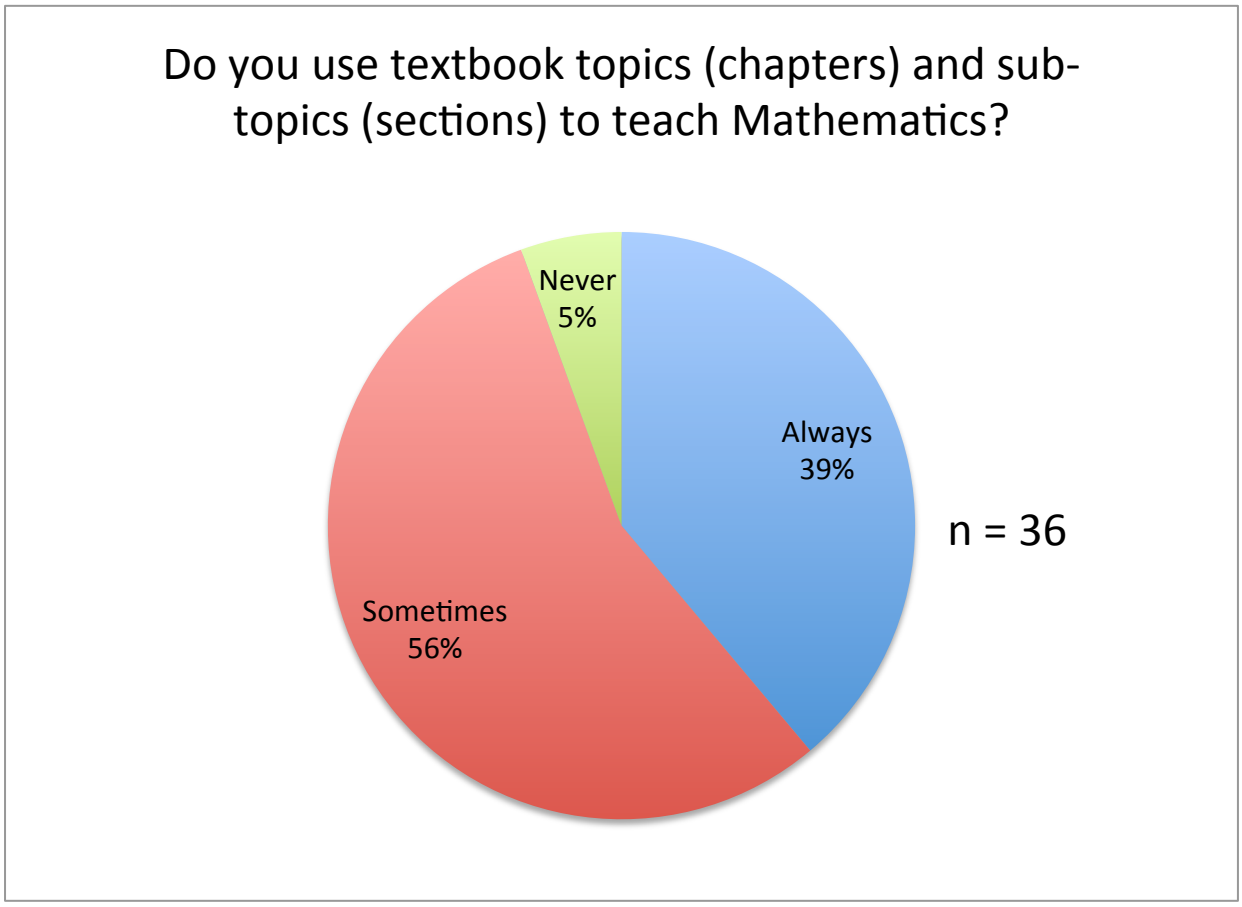


Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 11b

Do you use textbook topics (chapters) and sub-topics (sections) to teach Mathematics?
n = 36

	TOTALS	%
Always	**14**	**38.9%**
Sometimes	**20**	**55.6%**
Never	**2**	**5.6%**
Total	**36**	**100.1%**



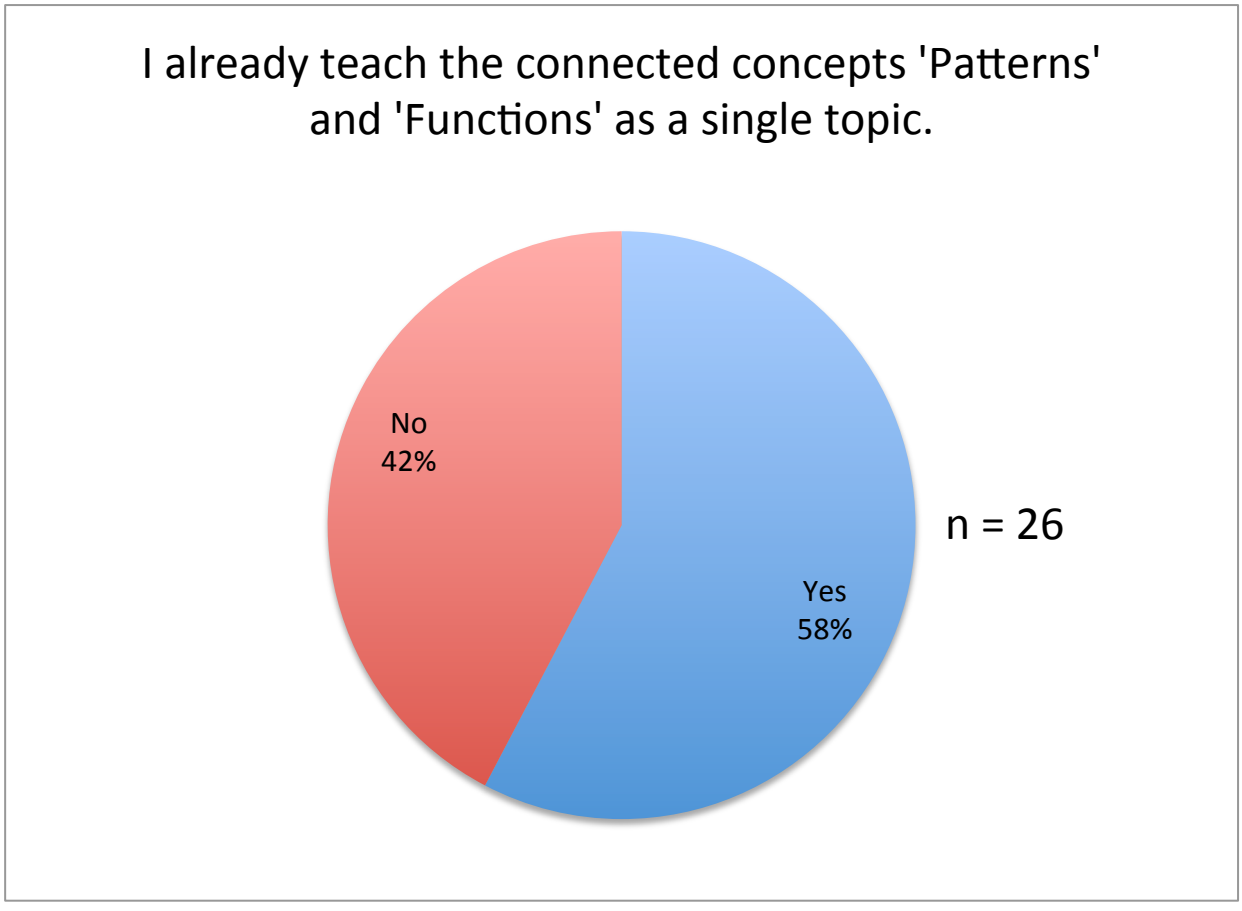
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 12a

I already teach the connected concepts 'Patterns' and 'Functions' as a single topic.

n = 26

	TOTALS	%
Yes	**15**	**57.7%**
No	**11**	**42.3%**
Total	**26**	**100.0%**

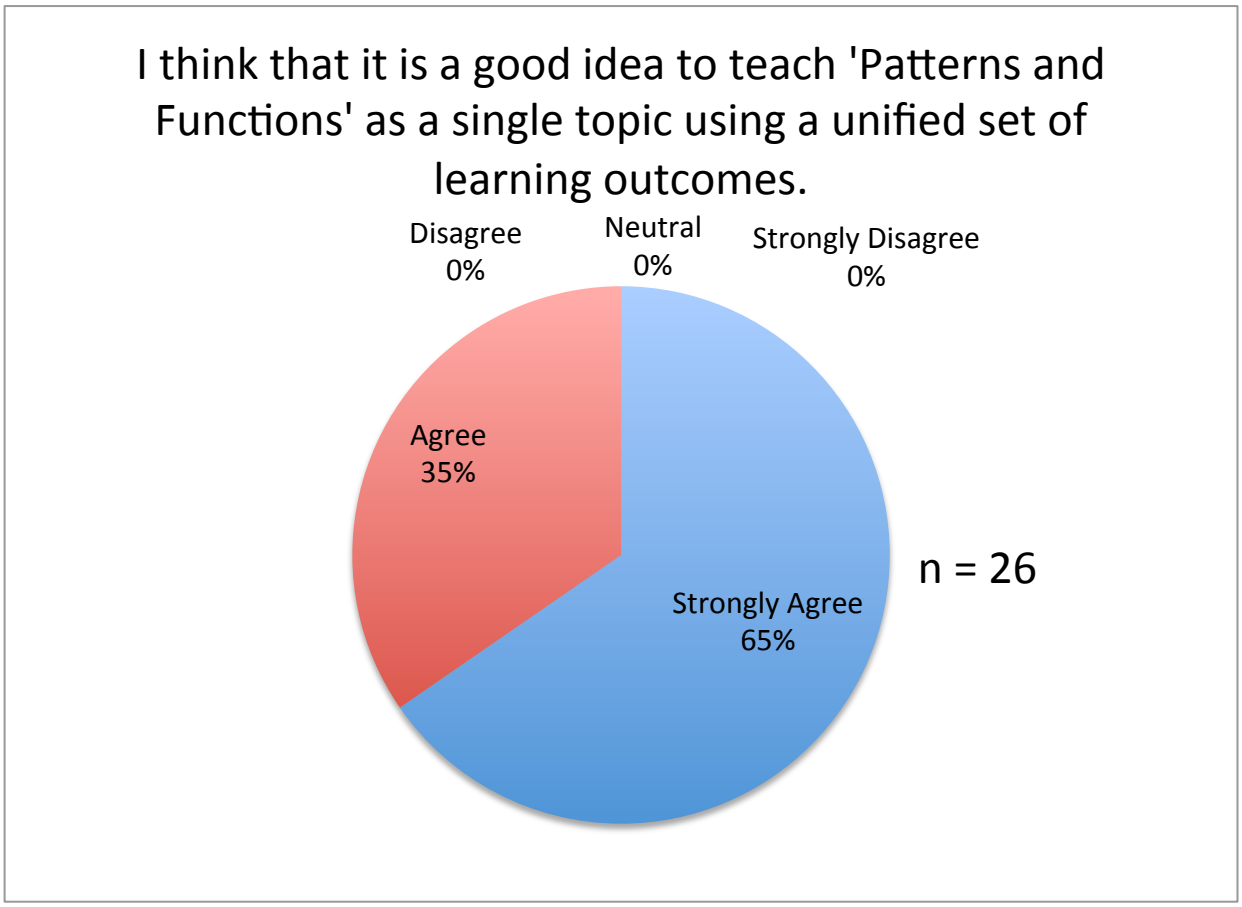


Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 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%**



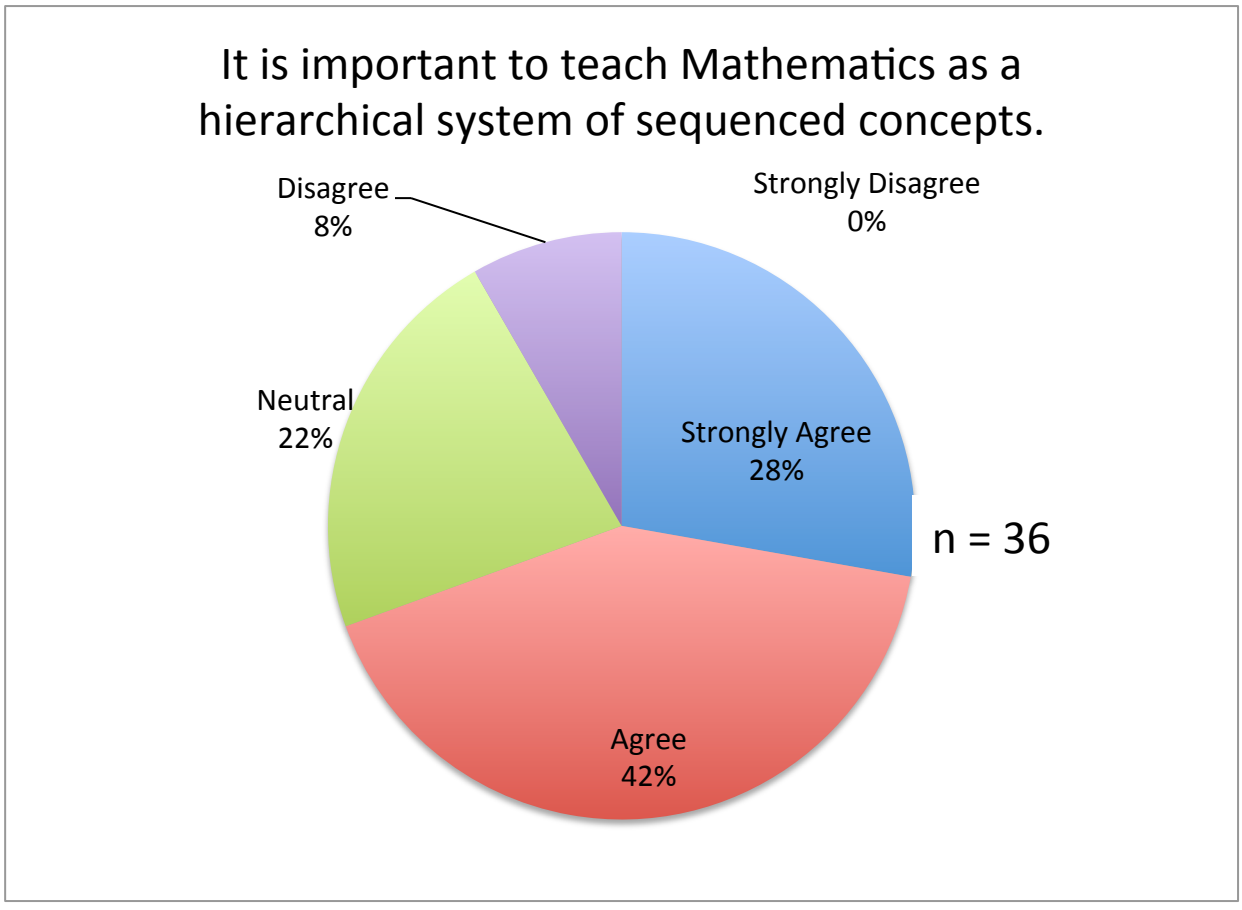
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 13a

It is important to teach Mathematics as a hierarchical system of sequenced concepts.

n = 36

	TOTALS	%
Strongly Agree	**10**	**27.8%**
Agree	**15**	**41.7%**
Neutral	**8**	**22.2%**
Disagree	**3**	**8.3%**
Strongly Disagree	**0**	**0.0%**
Total	**36**	**100.0%**



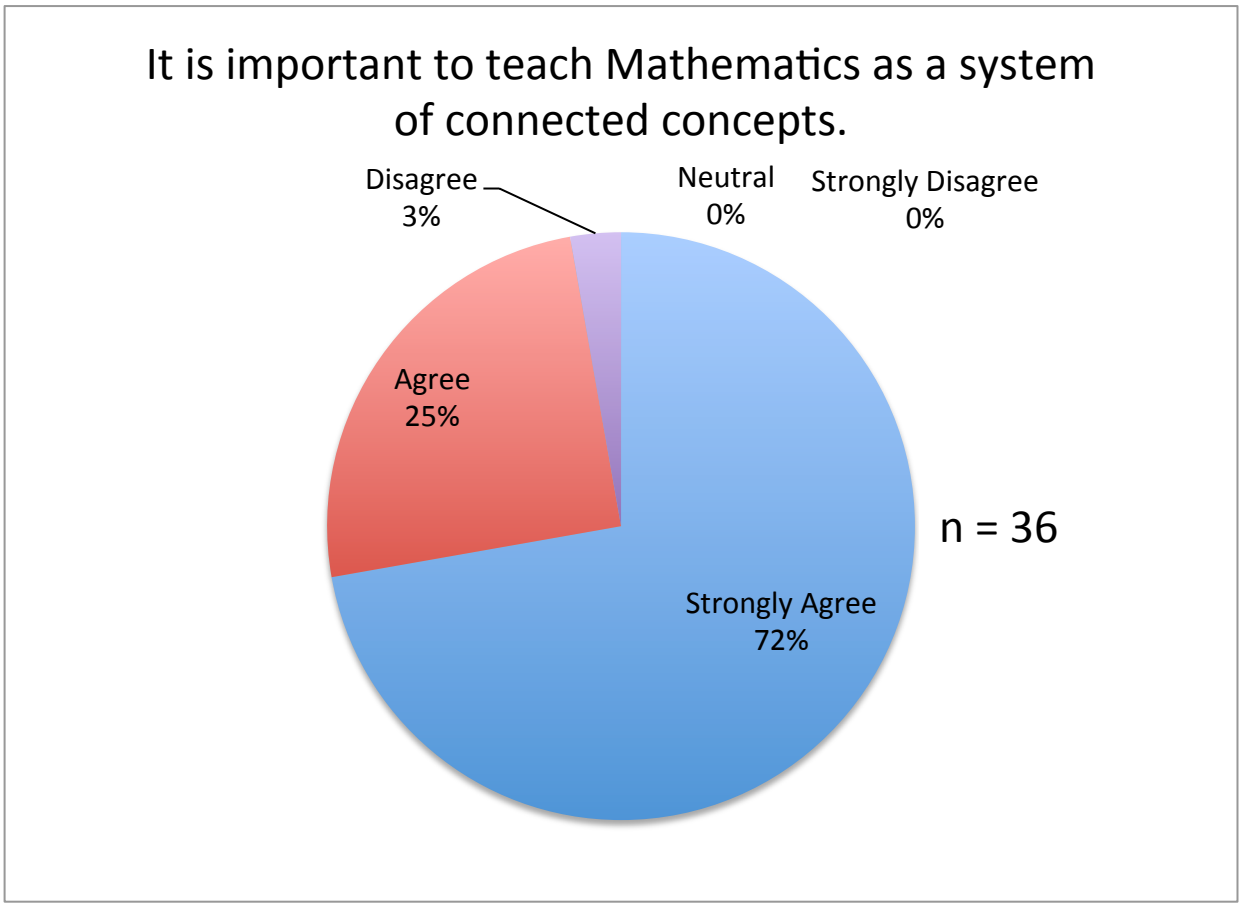
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 13b

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

n = 36

	TOTALS	%
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%**



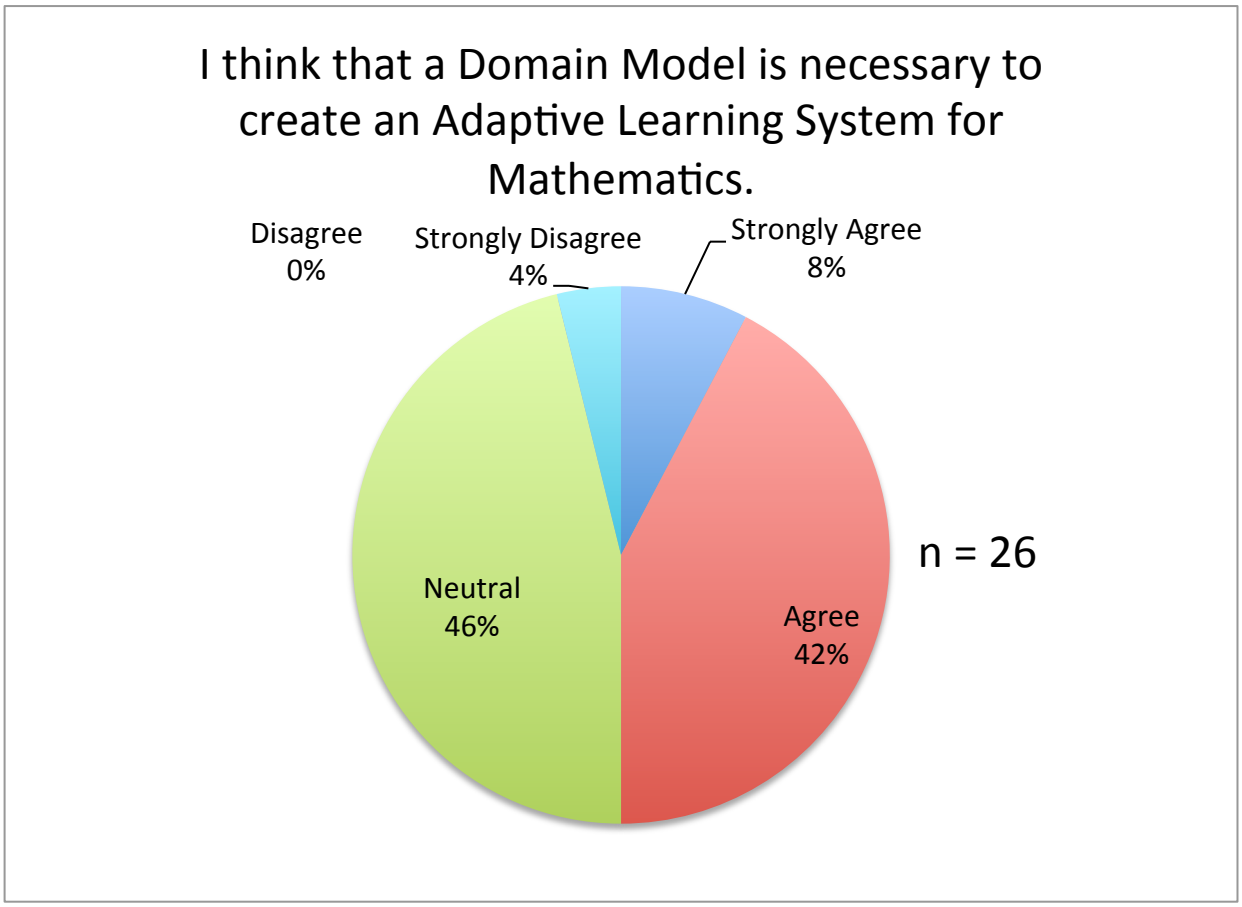
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 14a

I think that a Domain Model is necessary to create an Adaptive 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%**



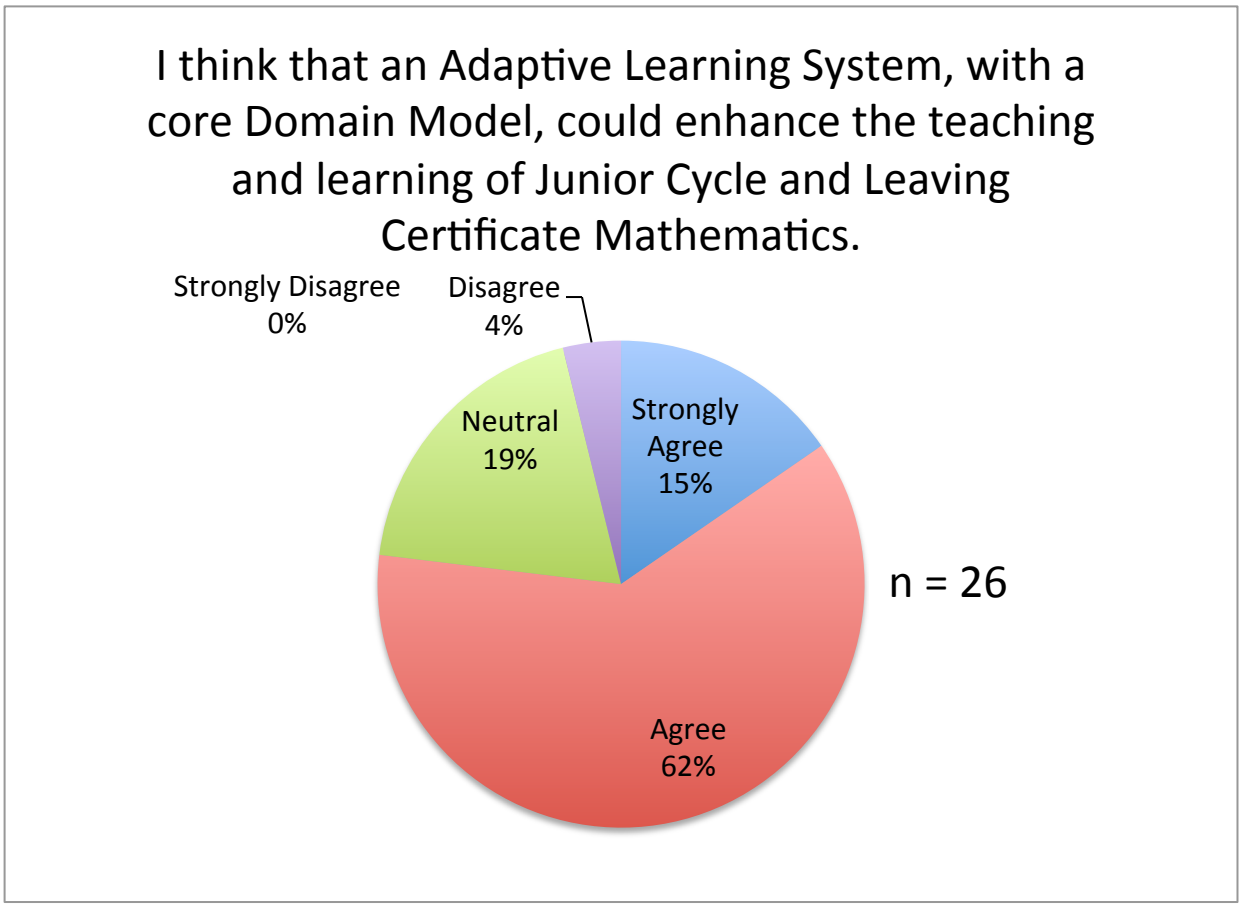
Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 14b

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%**



Research Study: Adaptive Learning Domain Model for Post-Primary Mathematics

Question 14c

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%**