

**Self-Regulated Learning
as a Cross-Curricular Competency**

**The Construction of Instruments in 22 Countries
for the PISA Main Study 2000**

Technical Report

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Introduction

The data were collected in 22 countries, namely USA, Canada (French and English versions), Mexico, Brazil, Australia, New Zealand, Korea, Russian Federation, Austria, Belgium, Czech Republic, Denmark, Finland, Germany, Hungary, Ireland, Italy, Luxembourg, Netherlands, Norway, Sweden, Switzerland (French, Italian and German versions). In total around 27000 students are involved. Since the purpose of the present report is to construct instruments, rather than explaining country differences, the countries are relabeled. For Buttercup and Iris the data could not be included in the latest analyses, though they have been collected.

Table 1: Countries involved

Country	Available¹
Anemone	1
Aster	1
Buttercup	2
Carnation	1
Cornflower	1
Crocus	2
Cuckooflower	2
Daffodil	1
Dahlia	2
Daisy	2
Dandelion	2
Fresia	1
Gladiola	1
Iris	2
Jasmine	1
Lily	1
Poppy	1
Rose	2
Snowdrop	1
Sunflower	2
Orchid	2
Magnolia	2
Tulip	2
Honeysuckle	2
Violet	2
Total	

As described in the Synthesis Report the selection of the scales was primarily done on the data that were available in Wave 1. The relevant descriptive statistics (mean, standard deviation) are presented in Section 2. The reliability values (Chronbachs' alpha) are reproduced in Section 3 and the Loevingers' H value of the IRT analyses in Section 4. On the basis of the Wave 1 data the scales were selected.

When the data from the remaining countries became available (Wave 2) the analyses focussed on the descriptives and the reliability checks for the additional countries. These analyses were undertaken for the relevant subgroups. In Section 5 the descriptive information for all countries is presented; in Section 6 all the reliability estimates are given. In section 7 the correlations of the scales with the Achievement scores in Reading, Math and Science for all 22 countries are calculated. In Section 8 effects of different estimation methods are reported and found to be non-existent.

¹ First wave data were made available by September 1st, second wave data by October 15th

Descriptives (Mean and Standard Deviation) - A: Learning Strategies

	A1 (4)	A1 ^a (3)	A2-1 (4)	A2-2 (4)	A3 (5)
Anemone	10.5 (2.8)	8.0 (2.2)	10.1 (2.8)	9.7 (3.1)	14.0 (3.4)
Aster	9.1 (2.9)	6.4 (2.3)	9.8 (2.9)	9.2 (3.2)	14.2 (2.9)
Buttercup					
Carnation	10.7 (3.0)	7.9 (2.3)	9.9 (3.0)	9.2 (3.1)	14.5 (3.3)
Cornflower	11.5 (3.1)	8.6 (2.4)	10.4 (2.9)	9.7 (3.0)	14.7 (3.3)
Crocus					
Cuckooflower					
Daffodil	8.8 (2.2)	6.7 (1.7)	9.2 (2.3)	7.2 (2.5)	11.7 (2.9)
Dahlia					
Daisy					
Dandelion					
Fresia	7.7 (2.3)	4.9 (1.9)	9.4 (3.1)	10.7 (2.8)	14.6 (2.7)
Gladiola	9.5 (2.6)	6.8 (2.1)	9.2 (2.5)	9.1 (2.5)	12.7 (2.9)
Iris					
Jasmine	9.6 (2.5)	7.1 (1.9)	9.3 (2.6)	9.4 (3.2)	13.5 (2.9)
Lily	10.5 (2.6)	7.9 (2.0)	10.1 (2.6)	9.5 (2.8)	13.9 (3.2)
Poppy	7.6 (2.6)	5.6 (2.0)	9.0 (2.6)	7.4 (2.6)	10.9 (3.0)
Rose					
Snowdrop	10.0 (2.7)	7.5 (2.2)	9.5 (2.7)	8.1 (2.7)	13.1 (3.2)
Sunflower					
Tulip					

Memorising

- A1Q1A01 - When I study, I try to memorise everything that might be covered.
- A1Q1H08 - When I study, I memorise as much as possible.
- A1Q1N14 - When I study, I memorise all new material so that I can recite it.
- A1Q1T20 - When I study, I practice by saying the material to myself over and over.

Elaboration

- A2Q1D04 - When I study, I try to relate new material to things I have learned in other subjects.
- A2Q1K11 - When I study, I figure out how the information might be useful in the real world.
- A2Q1Q17 - When I study, I try to understand the material better by relating it to things I already know.
- A2Q1W23 - When I study, I figure out how the material fits in with what I have learned.

- A2Q1F06 - When I study, I summarise the most important information in my own words.
- A2Q1M13 - When I study, I write a short summary of the most important facts.
- A2Q1S19 - When I study, I go through my notes and make a diagram showing the most important points.
- A2Q1Y25 - When I study, I stop reading to write down the main points of the text.

Control strategies

- A3Q1AA27- When I study, I start by figuring out what, exactly, I need to learn.
- A3Q1B02 - When I study, I force myself to check to see if I remember what I have learned.
- A3Q1I09 - When I study, I try to figure out, as I read, which concepts I still haven't really understood.
- A3Q1P16 - When I study, I make sure that I remember the most important things.
- A3Q1V22 - When I study, and I don't understand something, I look for additional information to clarify the point.

Note: ^a without A1Q1T20

Descriptives (Mean and Standard Deviation) - B: Motivational Preferences

	B2 (3)	B3 (3)	B4 (4)	B4 ^a (3)	B7 math (4)	B7 verb. (4)
Anemone	8.3 (2.7)	6.7 (2.7)	9.3 (2.9)	6.9 (2.4)	9.1 (3.5)	11.8 (3.5)
Aster	9.0 (2.4)	5.6 (2.5)	8.6 (2.6)	6.2 (2.1)	6.8 (2.7)	10.9 (3.7)
Buttercup						
Carnation	7.7 (2.7)	6.4 (2.6)	8.7 (2.8)	6.3 (2.2)	9.5 (3.4)	11.9 (3.7)
Cornflower	9.2 (2.6)	5.9 (2.5)	9.0 (3.0)	6.8 (2.4)	8.5 (3.1)	10.6 (3.9)
Crocus						
Cuckooflower						
Daffodil	8.6 (2.1)	5.1 (2.1)	8.4 (2.1)	6.1 (1.7)	7.8 (3.2)	10.2 (3.6)
Dahlia						
Daisy						
Dandelion						
Fresia	8.7 (2.6)	5.2 (2.5)	9.0 (2.8)	6.6 (2.3)	8.6 (3.1)	11.7 (3.2)
Gladiola	8.0 (2.4)	6.1 (2.2)	8.1 (2.3)	6.1 (2.0)	10.5 (3.3)	11.9 (2.8)
Iris						
Jasmine	8.6 (2.4)	4.7 (2.2)	8.4 (2.2)	6.1 (2.0)	8.5 (3.3)	11.2 (4.0)
Lily	8.6 (2.6)	6.8 (2.5)	9.6 (2.8)	7.1 (2.3)	9.4 (3.3)	11.7 (3.6)
Poppy	8.4 (2.4)	5.7 (2.5)	8.3 (2.6)	6.1 (2.1)	8.5 (3.6)	11.3 (3.7)
Rose						
Snowdrop	9.6 (2.3)	6.1 (2.5)	8.6 (2.5)	6.3 (2.0)	8.0 (3.4)	10.6 (3.2)
Sunflower						
Tulip						

Instrumental motivation

- B2Q1C03 - I study to increase my job opportunities.
 B2Q1J10 - I study to ensure that my future will be financially secure.
 B2Q1R18 - I study to get a good job.

Competitive motivation

- B3Q1G07 - I study because I want to be one of the best.
 B3Q1O15 - I study because I want to show that I'm smarter than others.
 B3Q1X24 - I study because I want to perform better than others.

Interest-based motivation

- B4Q1E05 - When I study, I don't notice the time passing.
 B4Q1L12 - I study because the subject matter is very important to me.
 B4Q1U21 - I study because I am very interested in the subject matter.
 B4Q1Z26 - I study because working on the subject matter is fun.

Interest (subject-related)

- B7Q2B29 - I do math in my spare time.
 B7Q2E32 - When I do math, I sometimes get totally absorbed.
 B7Q2G34 - Math is important to me personally.
 B7Q2J37 - Because doing math is fun, I wouldn't want to give it up.

- B7Q2A28 - Reading is important to me personally.
 B7Q2D31 - Because reading is fun, I wouldn't want to give it up.
 B7Q2F33 - I read in my spare time.
 B7Q2I36 - When I read, I sometimes get totally absorbed.

Note: ^a without B4Q1E05

Descriptives (Mean and Standard Deviation) - C: Goal Orientation

	C1 (5)	C2 (4)
Anemone	15.9 (2.5)	11.5 (2.9)
Aster	14.8 (2.8)	10.1 (2.9)
Buttercup		
Carnation	15.8 (2.7)	11.1 (2.8)
Cornflower	15.7 (2.9)	11.4 (3.1)
Crocus		
Cuckooflower		
Daffodil	15.3 (2.7)	11.6 (2.8)
Dahlia		
Daisy		
Dandelion		
Fresia	16.6 (2.4)	12.8 (3.0)
Gladiola	15.4 (2.6)	12.1 (2.6)
Iris		
Jasmine	15.3 (2.8)	11.5 (2.9)
Lily	15.7 (2.7)	11.2 (2.8)
Poppy	15.5 (3.1)	11.2 (3.4)
Rose		
Snowdrop	14.9 (3.1)	11.5 (3.1)
Sunflower		
Tulip		

Task orientation

- C1Q3B02 - I feel most successful if what I have learned really makes sense to me.
- C1Q3G07 - I feel most successful if I discover a new approach to solving a problem.
- C1Q3L12 - I feel most successful if a class makes me think about things.
- C1Q3Q17 - I feel most successful if something I studied makes me want to find out more.
- C1Q3T20 - I feel most successful if I finally master a complex problem.

Ego orientation

- C2Q3D04 - I feel most successful if I can demonstrate that I'm smart.
- C2Q3I09 - I feel most successful if I get better grades than the others.
- C2Q3O15 - I feel most successful if I'm the only one who knows the right answer.
- C2Q3U21 - I feel most successful if I know more than the others.

Descriptives (Mean and Standard Deviation) – D (part one): Self-Related Cognitions

	D1 (5)	D2 (15)	D2-1 (3)	D2-2 (4)	D2-3 (8)	D2-3 ^a (4)
Anemone	14.4 (3.1)	39.7 (8.9)	7.5 (2.2)	10.9 (2.7)	21.4 (4.9)	10.3 (2.6)
Aster	12.9 (3.0)	38.8 (8.3)	7.1 (2.1)	10.8 (2.6)	20.8 (4.6)	10.0 (2.5)
Buttercup						
Carnation	14.5 (3.4)	42.2 (9.5)	8.0 (2.4)	11.8 (2.8)	22.4 (5.2)	10.9 (2.8)
Cornflower	14.2 (3.2)	42.5 (9.4)	7.6 (2.2)	11.5 (2.8)	23.4 (5.3)	11.3 (2.8)
Crocus						
Cuckooflower						
Daffodil	13.8 (3.1)	39.3 (9.2)	7.3 (2.2)	10.7 (2.7)	21.3 (5.0)	10.1 (2.6)
Dahlia						
Daisy						
Dandelion						
Fresia	14.2 (2.7)	40.7 (7.1)	7.7 (1.9)	11.4 (2.4)	21.5 (4.1)	10.4 (2.3)
Gladiola	12.2 (3.4)	35.6 (8.8)	5.8 (1.9)	10.7 (2.9)	19.0 (5.4)	8.9 (2.7)
Iris						
Jasmine	13.2 (3.0)	39.0 (8.4)	7.2 (2.1)	10.5 (2.5)	21.1 (4.6)	10.1 (2.4)
Lily	14.1 (3.0)	39.2 (8.0)	7.0 (1.9)	11.1 (2.6)	21.3 (4.5)	10.2 (2.4)
Poppy	14.1 (3.3)	41.2 (9.2)	7.7 (2.3)	11.9 (2.6)	21.2 (5.4)	10.4 (2.8)
Rose						
Snowdrop	14.4 (3.0)	40.4 (9.2)	7.9 (2.2)	11.2 (2.8)	21.2 (5.2)	10.0 (2.7)
Sunflower						
Tulip						

Agency beliefs: effort

- D1Q4A23 - I can really pay attention when I'm trying to learn something.
D1Q4B24 - It's not hard for me to really put in enough effort in school.
D1Q4D26 - When it comes down to learning, I can really work hard.
D1Q4F28 - Making myself listen carefully to my teachers is easy.
D1Q4H30 - If I decide to, I can listen very carefully.

Agency beliefs: ability

- D2Q4C25 - I can learn the things I need to learn pretty fast, without really trying a lot.
D2Q4E27 - I'm pretty smart-even without working very hard.
D2Q4G29 - When it comes to learning, I'm pretty smart.

Control expectation

- D2Q4I31 - When I sit myself down to learn something really hard, I can learn it.
D2Q4J32 - If I decide not to get any bad grades, I can really do it.
D2Q4K33 - If I decide not to get any problems wrong, I can really do it.
D2Q4L34 - If I want to learn something well, I can.

Self efficacy

- D2Q4M35 - I believe I will receive excellent grades.
D2Q4N36 - I'm certain I can understand the most difficult material presented in readings.
D2Q4O37 - I'm confident I can understand the basic concepts taught.
D2Q4P38 - I'm confident I can understand the most complex material presented by the teacher.
D2Q4Q39 - I'm confident I can do an excellent job on assignments and tests.
D2Q4R40 - When studying, I expect to do well.
D2Q4S41 - I'm certain I can master the skills being taught.
D2Q4T42 - Considering the difficulty of the subject matter, the teacher, and my skills, I think I will do well.

Descriptives (Mean and Standard Deviation) – D (part two): Self-Related Cognitions

	D3 (3)	D4 (3)	D5 (3)	D6 (4)
Anemone	9.1 (2.2)	7.7 (2.8)	8.8 (2.0)	12.0 (2.2)
Aster	8.9 (2.2)	7.1 (2.7)	8.4 (1.9)	12.9 (1.8)
Buttercup				
Carnation	9.5 (2.1)	8.1 (2.9)	9.1 (2.2)	14.0 (1.9)
Cornflower	8.4 (2.5)	8.4 (2.9)	9.6 (1.9)	13.7 (2.0)
Crocus				
Cuckooflower				
Daffodil	8.7 (2.3)	7.1 (3.2)	8.3 (2.4)	12.5 (2.2)
Dahlia				
Daisy				
Dandelion				
Fresia	9.6 (2.1)	7.3 (3.1)	8.5 (2.2)	13.2 (1.8)
Gladiola	7.2 (2.3)	6.4 (2.8)	6.9 (2.0)	11.5 (2.2)
Iris				
Jasmine	8.8 (2.4)	6.8 (3.1)	8.8 (2.1)	13.0 (2.0)
Lily	9.0 (2.2)	7.7 (2.8)	8.9 (2.0)	13.3 (2.0)
Poppy	9.0 (2.3)	6.8 (3.3)	8.5 (2.5)	12.6 (2.5)
Rose				
Snowdrop	9.4 (2.2)	7.1 (2.9)	8.7 (2.4)	12.8 (2.2)
Sunflower				
Tulip				

Self-concept verbal

- D3Q3A01 - I'm hopeless in English classes (R).
- D3Q3J10 - I learn things quickly in English classes.
- D3Q3R18 - I get good marks in English.

Self-concept math

- D4Q3F06 - I get good marks in mathematics.
- D4Q3K11 - Mathematics is one of my best subjects.
- D4Q3P16 - I have always done well in mathematics.

Self-concept academic

- D5Q3E05 - I learn things quickly in most school subjects.
- D5Q3N14 - I do well in tests in most school subjects.
- D5Q3V22 - I'm good at most school subjects.

Self-concept general

- D6Q3C03 - Overall, I have a lot to be proud of.
- D6Q3H08 - Overall, I'm a failure (R).
- D6Q3M13 - Most things I do, I do well.
- D6Q3S19 - If I really try, I can do almost anything I want to do.

Descriptives (Mean and Standard Deviation) - E: Action Control: Effort and Persistence

	E1 (4)	E2 math (3)	E2 verb. (3)
Anemone	11.6 (2.8)	8.9 (2.3)	9.2 (2.0)
Aster	11.7 (2.7)	7.7 (2.4)	7.4 (2.1)
Buttercup			
Carnation	10.9 (3.0)	8.8 (2.3)	8.8 (2.2)
Cornflower	11.6 (2.9)	9.4 (1.9)	8.7 (2.0)
Crocus			
Cuckooflower			
Daffodil	11.1 (2.8)	8.1 (2.5)	7.8 (2.1)
Dahlia			
Daisy			
Dandelion			
Fresia	11.0 (2.7)	7.8 (2.5)	8.4 (2.0)
Gladiola	10.2 (2.8)	7.6 (2.5)	7.6 (2.2)
Iris			
Jasmine	10.9 (2.5)	8.3 (2.1)	8.2 (1.7)
Lily	11.2 (2.7)	9.0 (2.4)	8.9 (1.9)
Poppy	11.0 (3.0)	7.9 (2.6)	7.9 (2.1)
Rose			
Snowdrop	11.1 (2.9)	8.1 (2.1)	8.2 (2.1)
Sunflower			
Tulip			

Effort and Persistence in learning: general

- E1Q5C03 - When studying, I work as hard as possible.
- E1Q5E05 - When studying, I keep working even if the material is difficult.
- E1Q5G07 - When studying, I try to do my best to acquire the knowledge and skills taught.
- E1Q5I09 - When studying, I put forth my best effort.

Effort and Persistence: subject related

- E2Q5B02 - I am ambitious in trying to achieve good grades in math.
- E2Q5F06 - I work hard in my math class.
- E2Q5J10 - I persist when I have to cope with a math problem.

- E2Q5A01 - I work hard in my English class.
- E2Q5D04 - I persist when I have to cope with a difficult or long text.
- E2Q5H08 - I am ambitious in trying to achieve good grades in English.

Descriptives (Mean and Standard Deviation) - F: Learning Preferences

	F1 (4)	F2 (4)
Anemone	13.5 (2.2)	11.5 (3.0)
Aster	13.0 (2.2)	10.1 (2.9)
Buttercup		
Carnation	13.5 (2.4)	11.4 (3.1)
Cornflower	13.7 (2.1)	11.6 (3.0)
Crocus		
Cuckooflower		
Daffodil	14.0 (1.9)	10.2 (3.0)
Dahlia		
Daisy		
Dandelion		
Fresia	12.7 (2.4)	11.2 (3.3)
Gladiola	12.9 (1.9)	13.9 (1.9)
Iris		
Jasmine	13.9 (2.1)	10.4 (3.2)
Lily	13.3 (2.2)	11.4 (2.8)
Poppy	13.4 (2.2)	11.1 (3.2)
Rose		
Snowdrop	13.3 (2.1)	11.2 (2.9)
Sunflower		
Tulip		

Cooperative learning

- F1Q6A11 - Working in a group now helps me work with other people later.
- F1Q6D14 - I do not like working with other people (R).
- F1Q6G17 - Working in a group scares me (R).
- F1Q6J20 - We get the work done faster if we all work together.

Competitive learning

- F2Q6C13 - I like to try to be better than other students.
- F2Q6F16 - Trying to be better than others makes me work well.
- F2Q6H18 - I would like to be the best at something.
- F2Q6K21 - I learn faster if I'm trying to do better than the others.

Descriptives (Mean and Standard Deviation) - G – Implicit Theories of Learning

	G1 (3)	G2 (4)	G2 ^a (3)	G3 (4)	G3 ^b (3)	G (11)
Anemone	6.4 (1.7)	12.5 (2.4)	9.6 (1.8)	11.3 (3.0)	8.6 (2.5)	30.3 (4.6)
Aster	6.8 (2.0)	12.0 (2.7)	9.1 (2.1)	9.0 (2.7)	6.7 (2.3)	27.9 (4.8)
Buttercup						
Carnation	6.4 (1.8)	12.2 (2.6)	9.3 (2.0)	11.4 (3.1)	8.4 (2.6)	30.0 (5.0)
Cornflower	6.6 (2.0)	12.1 (2.5)	9.4 (1.9)	10.7 (3.0)	8.2 (2.5)	29.3 (5.2)
Crocus						
Cuckooflower						
Daffodil	6.7 (1.9)	12.2 (2.3)	9.3 (1.9)	9.0 (2.5)	6.8 (2.1)	27.8 (4.1)
Dahlia						
Daisy						
Dandelion						
Fresia	7.1 (2.2)	13.6 (2.2)	10.4 (1.8)	10.5 (3.3)	7.9 (2.7)	31.3 (5.4)
Gladiola	7.1 (2.2)	13.8 (2.3)	10.6 (1.7)	11.4 (2.8)	8.6 (2.2)	32.3 (5.3)
Iris						
Jasmine	6.3 (2.1)	12.2 (2.6)	9.6 (2.0)	9.2 (2.9)	6.7 (2.5)	27.7 (4.8)
Lily	6.6 (1.7)	12.5 (2.3)	9.6 (1.8)	11.4 (3.0)	8.6 (2.5)	30.7 (4.4)
Poppy	5.8 (2.1)	12.6 (2.5)	9.6 (2.1)	10.4 (3.0)	7.6 (2.4)	28.9 (4.7)
Rose						
Snowdrop	6.1 (1.8)	12.0 (2.6)	9.0 (2.1)	9.9 (2.7)	7.0 (2.3)	28.1 (4.6)
Sunflower						
Tulip						

- G1Q6B12 - Natural ability determines how fast one can learn (R).
 G1Q6E15 - There are natural individual differences in learning potential (R).
 G1Q6I19 - No matter how hard some students try, they will never become good learners (R).

- G2Q6L22 - I believe that studying hard is the main factor in learning.
 G2Q6M23 - I believe that effort is the main factor determining my academic performance.
 G2Q6N24 - I feel that my academic performance is determined by my effort.
 G2Q6O25 - I believe that if I fail, it is because I do not study hard enough.

- G3Q6P26 - Intelligence cannot be changed (R).
 G3Q6Q27 - The smarter you are, the less time you need to study (R).
 G3Q6R28 - Geniuses are born, not made (R).
 G3Q6S29 - You don't need to try very hard to get good grades if you are smart (R).

Note:

- ^a without G2Q6O25
^b without G3Q6P26

Reliability analysis - A: Learning Strategies

	A1 (4)	A1 ^a (3)	A2-1 (4)	A2-2 (4)	A3 (5)
Anemone	0.77	0.75	0.78	0.78	0.81
Aster	0.72	0.70	0.77	0.75	0.62
Buttercup					
Carnation	0.78	0.75	0.80	0.77	0.80
Cornflower	0.83	0.80	0.76	0.74	0.77
Crocus					
Cuckooflower					
Daffodil	0.70	0.63	0.77	0.81	0.78
Dahlia					
Daisy					
Dandelion					
Fresia	0.60	0.75	0.81	0.64	0.62
Gladiola	0.67	0.70	0.71	0.64	0.71
Iris					
Jasmine	0.66	0.58	0.73	0.81	0.70
Lily	0.69	0.67	0.76	0.76	0.79
Poppy	0.79	0.77	0.77	0.77	0.73
Rose					
Snowdrop	0.75	0.75	0.81	0.73	0.75
Sunflower					
Tulip					

Memorising

- A1Q1A01 - When I study, I try to memorise everything that might be covered.
- A1Q1H08 - When I study, I memorise as much as possible.
- A1Q1N14 - When I study, I memorise all new material so that I can recite it.
- A1Q1T20 - When I study, I practice by saying the material to myself over and over.

Elaboration

- A2Q1D04 - When I study, I try to relate new material to things I have learned in other subjects.
- A2Q1K11 - When I study, I figure out how the information might be useful in the real world.
- A2Q1Q17 - When I study, I try to understand the material better by relating it to things I already know.
- A2Q1W23 - When I study, I figure out how the material fits in with what I have learned.

- A2Q1F06 - When I study, I summarise the most important information in my own words.
- A2Q1M13 - When I study, I write a short summary of the most important facts.
- A2Q1S19 - When I study, I go through my notes and make a diagram showing the most important points.
- A2Q1Y25 - When I study, I stop reading to write down the main points of the text.

Control strategies

- A3Q1AA27- When I study, I start by figuring out what, exactly, I need to learn.
- A3Q1B02 - When I study, I force myself to check to see if I remember what I have learned.
- A3Q1I09 - When I study, I try to figure out, as I read, which concepts I still haven't really understood.
- A3Q1P16 - When I study, I make sure that I remember the most important things.
- A3Q1V22 - When I study, and I don't understand something, I look for additional information to clarify the point.

Note: ^a without A1Q1T20

Reliability analysis - B: Motivational Preferences

	B2 (3)	B3 (3)	B4 (4)	B4 ^a (3)	B7 math (4)	B7 verb. (4)
Anemone	0.84	0.81	0.78	0.84	0.86	0.86
Aster	0.77	0.81	0.65	0.69	0.80	0.89
Buttercup						
Carnation	0.84	0.77	0.76	0.80	0.84	0.89
Cornflower	0.86	0.80	0.81	0.82	0.82	0.90
Crocus						
Cuckooflower						
Daffodil	0.80	0.82	0.59	0.67	0.87	0.87
Dahlia						
Daisy						
Dandelion						
Fresia	0.83	0.86	0.66	0.75	0.73	0.79
Gladiola	0.67	0.63	0.67	0.66	0.82	0.80
Iris						
Jasmine	0.78	0.84	0.66	0.73	0.81	0.88
Lily	0.86	0.81	0.75	0.77	0.83	0.87
Poppy	0.80	0.85	0.71	0.77	0.84	0.85
Rose						
Snowdrop	0.83	0.83	0.67	0.76	0.84	0.78
Sunflower						
Tulip						

Instrumental motivation

- B2Q1C03 - I study to increase my job opportunities.
 B2Q1J10 - I study to ensure that my future will be financially secure.
 B2Q1R18 - I study to get a good job.

Competitive motivation

- B3Q1G07 - I study because I want to be one of the best.
 B3Q1O15 - I study because I want to show that I'm smarter than others.
 B3Q1X24 - I study because I want to perform better than others.

Interest-based motivation

- B4Q1E05 - When I study, I don't notice the time passing.
 B4Q1L12 - I study because the subject matter is very important to me.
 B4Q1U21 - I study because I am very interested in the subject matter.
 B4Q1Z26 - I study because working on the subject matter is fun.

Interest (subject-related)

- B7Q2B29 - I do math in my spare time.
 B7Q2E32 - When I do math, I sometimes get totally absorbed.
 B7Q2G34 - Math is important to me personally.
 B7Q2J37 - Because doing math is fun, I wouldn't want to give it up.
- B7Q2A28 - Reading is important to me personally.
 B7Q2D31 - Because reading is fun, I wouldn't want to give it up.
 B7Q2F33 - I read in my spare time.
 B7Q2I36 - When I read, I sometimes get totally absorbed.

Note: ^a without B4Q1E05

Reliability analysis - C: Goal Orientation

	C1 (5)	C2 (4)
Anemone	0.67	0.80
Aster	0.68	0.78
Buttercup		
Carnation	0.66	0.67
Cornflower	0.71	0.83
Crocus		
Cuckooflower		
Daffodil	0.75	0.81
Dahlia		
Daisy		
Dandelion		
Fresia	0.62	0.81
Gladiola	0.67	0.75
Iris		
Jasmine	0.64	0.78
Lily	0.71	0.76
Poppy	0.78	0.85
Rose		
Snowdrop	0.74	0.79
Sunflower		
Tulip		

Task orientation

- C1Q3B02 - I feel most successful if what I have learned really makes sense to me.
- C1Q3G07 - I feel most successful if I discover a new approach to solving a problem.
- C1Q3L12 - I feel most successful if a class makes me think about things.
- C1Q3Q17 - I feel most successful if something I studied makes me want to find out more.
- C1Q3T20 - I feel most successful if I finally master a complex problem.

Ego orientation

- C2Q3D04 - I feel most successful if I can demonstrate that I'm smart.
- C2Q3I09 - I feel most successful if I get better grades than the others.
- C2Q3O15 - I feel most successful if I'm the only one who knows the right answer.
- C2Q3U21 - I feel most successful if I know more than the others.

Reliability analysis – D (part one): Self-Related Cognitions

	D1 (5)	D2 (15)	D2-1 (3)	D2-2 (4)	D2-3 (8)	D2-3 ^a (4)
Anemone	0.80	0.93	0.81	0.83	0.89	0.81
Aster	0.70	0.91	0.73	0.77	0.86	0.78
Buttercup						
Carnation	0.82	0.94	0.84	0.84	0.90	0.82
Cornflower	0.76	0.93	0.63	0.81	0.91	0.83
Crocus						
Cuckooflower						
Daffodil	0.81	0.95	0.81	0.84	0.92	0.84
Dahlia						
Daisy						
Dandelion						
Fresia	0.67	0.85	0.58	0.69	0.77	0.67
Gladiola	0.84	0.92	0.66	0.83	0.90	0.78
Iris						
Jasmine	0.73	0.92	0.77	0.75	0.88	0.79
Lily	0.79	0.92	0.79	0.80	0.88	0.80
Poppy	0.78	0.93	0.79	0.78	0.91	0.83
Rose						
Snowdrop	0.72	0.93	0.78	0.84	0.89	0.83
Sunflower						
Tulip						

Agency beliefs: effort

- D1Q4A23 - I can really pay attention when I'm trying to learn something.
- D1Q4B24 - It's not hard for me to really put in enough effort in school.
- D1Q4D26 - When it comes down to learning, I can really work hard.
- D1Q4F28 - Making myself listen carefully to my teachers is easy.
- D1Q4H30 - If I decide to, I can listen very carefully.

Agency beliefs: ability

- D2Q4C25 - I can learn the things I need to learn pretty fast, without really trying a lot.
- D2Q4E27 - I'm pretty smart-even without working very hard.
- D2Q4G29 - When it comes to learning, I'm pretty smart.

Control expectation

- D2Q4I31 - When I sit myself down to learn something really hard, I can learn it.
- D2Q4J32 - If I decide not to get any bad grades, I can really do it.
- D2Q4K33 - If I decide not to get any problems wrong, I can really do it.
- D2Q4L34 - If I want to learn something well, I can.

Self efficacy

- D2Q4M35 - I believe I will receive excellent grades.
- D2Q4N36 - I'm certain I can understand the most difficult material presented in readings.
- D2Q4O37 - I'm confident I can understand the basic concepts taught.
- D2Q4P38 - I'm confident I can understand the most complex material presented by the teacher.
- D2Q4Q39 - I'm confident I can do an excellent job on assignments and tests.
- D2Q4R40 - When studying, I expect to do well.
- D2Q4S41 - I'm certain I can master the skills being taught.
- D2Q4T42 - Considering the difficulty of the subject matter, the teacher, and my skills, I think I will do well.

Reliability analysis – D (part two): Self-Related Cognitions

	D3 (3)	D4 (3)	D5 (3)	D6 (4)
Anemone	0.81	0.88	0.76	0.67
Aster	0.82	0.88	0.78	0.55
Buttercup				
Carnation	0.76	0.84	0.77	0.66
Cornflower	0.84	0.90	0.84	0.67
Crocus				
Cuckooflower				
Daffodil	0.84	0.95	0.87	0.69
Dahlia				
Daisy				
Dandelion				
Fresia	0.80	0.88	0.77	0.51
Gladiola	0.75	0.90	0.77	0.59
Iris				
Jasmine	0.82	0.90	0.77	0.47
Lily	0.82	0.87	0.76	0.67
Poppy	0.76	0.93	0.83	0.65
Rose				
Snowdrop	0.80	0.88	0.82	0.61
Sunflower				
Tulip				

Self-concept verbal

- D3Q3A01 - I'm hopeless in English classes (R).
- D3Q3J10 - I learn things quickly in English classes.
- D3Q3R18 - I get good marks in English.

Self-concept math

- D4Q3F06 - I get good marks in mathematics.
- D4Q3K11 - Mathematics is one of my best subjects.
- D4Q3P16 - I have always done well in mathematics.

Self-concept academic

- D5Q3E05 - I learn things quickly in most school subjects.
- D5Q3N14 - I do well in tests in most school subjects.
- D5Q3V22 - I'm good at most school subjects.

Self-concept general

- D6Q3C03 - Overall, I have a lot to be proud of.
- D6Q3H08 - Overall, I'm a failure (R).
- D6Q3M13 - Most things I do, I do well.
- D6Q3S19 - If I really try, I can do almost anything I want to do.

Reliability analysis - E: Action Control: Effort and Persistence

	E1 (4)	E2 math (3)	E2 verb. (3)
Anemone	0.86	0.83	0.74
Aster	0.77	0.74	0.61
Buttercup			
Carnation	0.87	0.81	0.77
Cornflower	0.86	0.68	0.66
Crocus			
Cuckooflower			
Daffodil	0.82	0.87	0.75
Dahlia			
Daisy			
Dandelion			
Fresia	0.76	0.80	0.68
Gladiola	0.82	0.83	0.74
Iris			
Jasmine	0.80	0.70	0.59
Lily	0.84	0.85	0.71
Poppy	0.87	0.84	0.70
Rose			
Snowdrop	0.84	0.59	0.62
Sunflower			
Tulip			

Effort and Persistence in learning: general

- E1Q5C03 - When studying, I work as hard as possible.
- E1Q5E05 - When studying, I keep working even if the material is difficult.
- E1Q5G07 - When studying, I try to do my best to acquire the knowledge and skills taught.
- E1Q5I09 - When studying, I put forth my best effort.

Effort and Persistence: subject related

- E2Q5B02 - I am ambitious in trying to achieve good grades in math.
- E2Q5F06 - I work hard in my math class.
- E2Q5J10 - I persist when I have to cope with a math problem.

- E2Q5A01 - I work hard in my English class.
- E2Q5D04 - I persist when I have to cope with a difficult or long text.
- E2Q5H08 - I am ambitious in trying to achieve good grades in English.

Reliability analysis - F: Learning Preferences

	F1 (4)	F2 (4)
Anemone	0.59	0.81
Aster	0.50	0.75
Buttercup		
Carnation	0.64	0.79
Cornflower	0.61	0.79
Crocus		
Cuckooflower		
Daffodil	0.57	0.79
Dahlia		
Daisy		
Dandelion		
Fresia	0.52	0.75
Gladiola	0.42	0.56
Iris		
Jasmine	0.51	0.75
Lily	0.65	0.76
Poppy	0.46	0.81
Rose		
Snowdrop	0.52	0.74
Sunflower		
Tulip		

Cooperative learning

- F1Q6A11 - Working in a group now helps me work with other people later.
- F1Q6D14 - I do not like working with other people (R).
- F1Q6G17 - Working in a group scares me (R).
- F1Q6J20 - We get the work done faster if we all work together.

Competitive learning

- F2Q6C13 - I like to try to be better than other students.
- F2Q6F16 - Trying to be better than others makes me work well.
- F2Q6H18 - I would like to be the best at something.
- F2Q6K21 - I learn faster if I'm trying to do better than the others.

Reliability analysis - G – Implicit Theories of Learning

	G1 (3)	G2 (4)	G2 ^a (3)	G3 (4)	G3 ^b (3)	G (11)
Anemone	0.35	0.68	0.70	0.73	0.76	0.63
Aster	0.50	0.73	0.73	0.64	0.72	0.64
Buttercup						
Carnation	0.41	0.72	0.70	0.74	0.75	0.67
Cornflower	0.52	0.66	0.66	0.64	0.68	0.67
Crocus						
Cuckooflower						
Daffodil	0.60	0.70	0.72	0.60	0.64	0.57
Dahlia						
Daisy						
Dandelion						
Fresia	0.54	0.65	0.70	0.67	0.68	0.70
Gladiola	0.55	0.74	0.78	0.69	0.66	0.74
Iris						
Jasmine	0.55	0.61	0.65	0.62	0.67	0.57
Lily	0.33	0.64	0.67	0.71	0.70	0.57
Poppy	0.59	0.72	0.74	0.69	0.66	0.61
Rose						
Snowdrop	0.42	0.72	0.74	0.64	0.67	0.63
Sunflower						
Tulip						

- G1Q6B12 - Natural ability determines how fast one can learn (R).
 G1Q6E15 - There are natural individual differences in learning potential (R).
 G1Q6I19 - No matter how hard some students try, they will never become good learners (R).

- G2Q6L22 - I believe that studying hard is the main factor in learning.
 G2Q6M23 - I believe that effort is the main factor determining my academic performance.
 G2Q6N24 - I feel that my academic performance is determined by my effort.
 G2Q6O25 - I believe that if I fail, it is because I do not study hard enough.

- G3Q6P26 - Intelligence cannot be changed (R).
 G3Q6Q27 - The smarter you are, the less time you need to study (R).
 G3Q6R28 - Geniuses are born, not made (R).
 G3Q6S29 - You don't need to try very hard to get good grades if you are smart (R).

Note:

^a without G2Q6O25

^b without G3Q6P26

MSP analysis - A: Learning Strategies

	A1 (4)	A1 ^a (3)	A2-1 (4)	A2-2 (4)	A3 (5)
Anemone	0.46	0.54	0.50	0.50	0.50
Aster	0.36	0.39	0.50	0.48	0.27
Buttercup					
Carnation	0.47	0.52	0.55	0.50	0.49
Cornflower	0.58	0.63	0.49	0.46	0.45
Crocus					
Cuckooflower					
Daffodil	0.41	0.42	0.35	0.50	0.48
Dahlia					
Daisy					
Dandelion					
Fresia	0.34	0.57	0.41	0.25	0.28
Gladiola	0.37	0.48	0.43	0.35	0.37
Iris					
Jasmine	0.37	0.36	0.45	0.57	0.36
Lily	0.41	0.47	0.41	0.53	0.47
Poppy	0.56	0.61	0.60	0.56	0.40
Rose					
Snowdrop	0.46	0.54	0.54	0.48	0.42
Sunflower					
Tulip					

Memorising

- A1Q1A01 - When I study, I try to memorise everything that might be covered.
- A1Q1H08 - When I study, I memorise as much as possible.
- A1Q1N14 - When I study, I memorise all new material so that I can recite it.
- A1Q1T20 - When I study, I practice by saying the material to myself over and over.

Elaboration

- A2Q1D04 - When I study, I try to relate new material to things I have learned in other subjects.
- A2Q1K11 - When I study, I figure out how the information might be useful in the real world.
- A2Q1Q17 - When I study, I try to understand the material better by relating it to things I already know.
- A2Q1W23 - When I study, I figure out how the material fits in with what I have learned.

- A2Q1F06 - When I study, I summarise the most important information in my own words.
- A2Q1M13 - When I study, I write a short summary of the most important facts.
- A2Q1S19 - When I study, I go through my notes and make a diagram showing the most important points.
- A2Q1Y25 - When I study, I stop reading to write down the main points of the text.

Control strategies

- A3Q1AA27- When I study, I start by figuring out what, exactly, I need to learn.
- A3Q1B02 - When I study, I force myself to check to see if I remember what I have learned.
- A3Q1I09 - When I study, I try to figure out, as I read, which concepts I still haven't really understood.
- A3Q1P16 - When I study, I make sure that I remember the most important things.
- A3Q1V22 - When I study, and I don't understand something, I look for additional information to clarify the point.

Note: ^a without A1Q1T20

MSP analysis - B: Motivational Preferences

	B2 (3)	B3 (3)	B4 (4)	B4 ^a (3)	B7 math (4)	B7 verb. (4)
Anemone	0.70	0.54	0.53	0.73	0.69	0.67
Aster	0.55	0.37	0.30	0.39	0.57	0.70
Buttercup						
Carnation	0.66	0.40	0.40	0.51	0.71	0.73
Cornflower	0.73	0.64	0.46	0.61	0.75	0.82
Crocus						
Cuckooflower						
Daffodil	0.65	0.69	0.31	0.49	0.69	0.69
Dahlia						
Daisy						
Dandelion						
Fresia	0.63	0.75	0.38	0.60	0.46	0.56
Gladiola	0.41	0.38	0.39	0.50	0.60	0.58
Iris						
Jasmine	0.56	0.66	0.38	0.57	0.57	0.70
Lily	0.72	0.66	0.48	0.61	0.61	0.70
Poppy	0.62	0.74	0.43	0.60	0.59	0.64
Rose						
Snowdrop	0.62	0.53	0.50	0.62	0.49	0.38
Sunflower						
Tulip						

Instrumental motivation

- B2Q1C03 - I study to increase my job opportunities.
 B2Q1J10 - I study to ensure that my future will be financially secure.
 B2Q1R18 - I study to get a good job.

Competitive motivation

- B3Q1G07 - I study because I want to be one of the best.
 B3Q1O15 - I study because I want to show that I'm smarter than others.
 B3Q1X24 - I study because I want to perform better than others.

Interest-based motivation

- B4Q1E05 - When I study, I don't notice the time passing.
 B4Q1L12 - I study because the subject matter is very important to me.
 B4Q1U21 - I study because I am very interested in the subject matter.
 B4Q1Z26 - I study because working on the subject matter is fun.

Interest (subject-related)

- B7Q2B29 - I do math in my spare time.
 B7Q2E32 - When I do math, I sometimes get totally absorbed.
 B7Q2G34 - Math is important to me personally.
 B7Q2J37 - Because doing math is fun, I wouldn't want to give it up.

 B7Q2A28 - Reading is important to me personally.
 B7Q2D31 - Because reading is fun, I wouldn't want to give it up.
 B7Q2F33 - I read in my spare time.
 B7Q2I36 - When I read, I sometimes get totally absorbed.

Note:

^a without B4Q1E05

MSP analysis - C: Goal Orientation

	C1 (5)	C2 (4)
Anemone	0.34	0.55
Aster	0.36	0.50
Buttercup		
Carnation	0.33	0.40
Cornflower	0.38	0.62
Crocus		
Cuckooflower		
Daffodil	0.44	0.54
Dahlia		
Daisy		
Dandelion		
Fresia	0.29	0.60
Gladiola	0.37	0.50
Iris		
Jasmine	0.33	0.52
Lily	0.38	0.49
Poppy	0.49	0.63
Rose		
Snowdrop	0.41	0.54
Sunflower		
Tulip		

Task orientation

- C1Q3B02 - I feel most successful if what I have learned really makes sense to me.
- C1Q3G07 - I feel most successful if I discover a new approach to solving a problem.
- C1Q3L12 - I feel most successful if a class makes me think about things.
- C1Q3Q17 - I feel most successful if something I studied makes me want to find out more.
- C1Q3T20 - I feel most successful if I finally master a complex problem.

Ego orientation

- C2Q3D04 - I feel most successful if I can demonstrate that I'm smart.
- C2Q3I09 - I feel most successful if I get better grades than the others.
- C2Q3O15 - I feel most successful if I'm the only one who knows the right answer.
- C2Q3U21 - I feel most successful if I know more than the others.

MSP analysis – D (part one): Self-Related Cognitions

	D1 (5)	D2 (15)	D2-1 (3)	D2-2 (4)	D2-3 (8)	D2-3 ^a (4)
Anemone	0.50	0.54	0.63	0.63	0.67	0.59
Aster	0.36	0.45	0.39	0.40	0.33	0.54
Buttercup						
Carnation	0.53	0.56	0.72	0.72	0.63	0.60
Cornflower	0.45	0.54	0.50	0.69	0.69	0.64
Crocus						
Cuckooflower						
Daffodil	0.53	0.62	0.67	0.55	0.71	0.68
Dahlia						
Daisy						
Dandelion						
Fresia	0.34	0.32	0.28	0.42	0.22	0.41
Gladiola	0.59	0.48	0.40	0.53	0.54	0.56
Iris						
Jasmine	0.40	0.50	0.81	0.69	0.71	0.61
Lily	0.50	0.51	0.74	0.74	0.79	0.61
Poppy	0.48	0.54	0.63	0.73	0.73	0.60
Rose						
Snowdrop	0.38	0.54	0.48	0.54	0.53	0.65
Sunflower						
Tulip						

Agency beliefs: effort

- D1Q4A23 - I can really pay attention when I'm trying to learn something.
D1Q4B24 - It's not hard for me to really put in enough effort in school.
D1Q4D26 - When it comes down to learning, I can really work hard.
D1Q4F28 - Making myself listen carefully to my teachers is easy.
D1Q4H30 - If I decide to, I can listen very carefully.

Agency beliefs: ability

- D2Q4C25 - I can learn the things I need to learn pretty fast, without really trying a lot.
D2Q4E27 - I'm pretty smart-even without working very hard.
D2Q4G29 - When it comes to learning, I'm pretty smart.

Control expectation

- D2Q4I31 - When I sit myself down to learn something really hard, I can learn it.
D2Q4J32 - If I decide not to get any bad grades, I can really do it.
D2Q4K33 - If I decide not to get any problems wrong, I can really do it.
D2Q4L34 - If I want to learn something well, I can.

Self efficacy

- D2Q4M35 - I believe I will receive excellent grades.
D2Q4N36 - I'm certain I can understand the most difficult material presented in readings.
D2Q4O37 - I'm confident I can understand the basic concepts taught.
D2Q4P38 - I'm confident I can understand the most complex material presented by the teacher.
D2Q4Q39 - I'm confident I can do an excellent job on assignments and tests.
D2Q4R40 - When studying, I expect to do well.
D2Q4S41 - I'm certain I can master the skills being taught.
D2Q4T42 - Considering the difficulty of the subject matter, the teacher, and my skills,
I think I will do well

MSP analysis – D (part two): Self-Related Cognitions

	D3 (3)	D4 (3)	D5 (3)	D6 (4)
Anemone	0.66	0.77	0.59	0.41
Aster	0.69	0.77	0.59	0.38
Buttercup				
Carnation	0.58	0.77	0.59	0.42
Cornflower	0.66	0.65	0.73	0.40
Crocus				
Cuckooflower				
Daffodil	0.72	0.91	0.74	0.40
Dahlia				
Daisy				
Dandelion				
Fresia	0.62	0.76	0.59	0.26
Gladiola	0.56	0.79	0.58	0.31
Iris				
Jasmine	0.66	0.82	0.77	0.22
Lily	0.68	0.74	0.56	0.43
Poppy	0.57	0.87	0.64	0.36
Rose				
Snowdrop	0.64	0.76	0.63	0.34
Sunflower				
Tulip				

Self-concept verbal

- D3Q3A01 - I'm hopeless in English classes (R).
- D3Q3J10 - I learn things quickly in English classes.
- D3Q3R18 - I get good marks in English.

Self-concept math

- D4Q3F06 - I get good marks in mathematics.
- D4Q3K11 - Mathematics is one of my best subjects.
- D4Q3P16 - I have always done well in mathematics.

Self-concept academic

- D5Q3E05 - I learn things quickly in most school subjects.
- D5Q3N14 - I do well in tests in most school subjects.
- D5Q3V22 - I'm good at most school subjects.

Self-concept general

- D6Q3C03 - Overall, I have a lot to be proud of.
- D6Q3H08 - Overall, I'm a failure (R).
- D6Q3M13 - Most things I do, I do well.
- D6Q3S19 - If I really try, I can do almost anything I want to do.

MSP analysis - E: Action Control: Effort and Persistence

	E1 (4)	E2 math (3)	E2 verb. (3)
Anemone	0.68	0.71	0.56
Aster	0.51	0.60	0.34
Buttercup			
Carnation	0.69	0.80	0.80
Cornflower	0.68	0.46	0.40
Crocus			
Cuckooflower			
Daffodil	0.60	0.72	0.56
Dahlia			
Daisy			
Dandelion			
Fresia	0.49	0.48	0.64
Gladiola	0.60	0.62	0.49
Iris			
Jasmine	0.59	0.51	0.39
Lily	0.66	0.70	0.53
Poppy	0.68	0.70	0.50
Rose			
Snowdrop	0.60	0.17	0.36
Sunflower			
Tulip			

Effort and Persistence in learning: general

- E1Q5C03 - When studying, I work as hard as possible.
- E1Q5E05 - When studying, I keep working even if the material is difficult.
- E1Q5G07 - When studying, I try to do my best to acquire the knowledge and skills taught.
- E1Q5I09 - When studying, I put forth my best effort.

Effort and Persistence: subject related

- E2Q5B02 - I am ambitious in trying to achieve good grades in math.
- E2Q5F06 - I work hard in my math class.
- E2Q5J10 - I persist when I have to cope with a math problem.

- E2Q5A01 - I work hard in my English class.
- E2Q5D04 - I persist when I have to cope with a difficult or long text.
- E2Q5H08 - I am ambitious in trying to achieve good grades in English.

MSP analysis - F: Learning Preferences

	F1 (4)	F2 (4)
Anemone	0.53	0.67
Aster	0.28	0.38
Buttercup		
Carnation	0.43	0.51
Cornflower	0.46	0.58
Crocus		
Cuckooflower		
Daffodil	0.29	0.53
Dahlia		
Daisy		
Dandelion		
Fresia	0.27	0.47
Gladiola	0.12	0.22
Iris		
Jasmine	0.22	0.46
Lily	0.35	0.52
Poppy	0.21	0.56
Rose		
Snowdrop	0.23	0.40
Sunflower		
Tulip		

Cooperative learning

- F1Q6A11 - Working in a group now helps me work with other people later.
- F1Q6D14 - I do not like working with other people (R).
- F1Q6G17 - Working in a group scares me (R).
- F1Q6J20 - We get the work done faster if we all work together.

Competitive learning

- F2Q6C13 - I like to try to be better than other students.
- F2Q6F16 - Trying to be better than others makes me work well.
- F2Q6H18 - I would like to be the best at something.
- F2Q6K21 - I learn faster if I'm trying to do better than the others.

MSP analysis - G – Implicit Theories of Learning

	G1 (3)	G2 (4)	G2 ^a (3)	G3 (4)	G3 ^b (3)	G (11)
Anemone	0.59	0.58	0.63	0.55	0.64	0.47
Aster	0.38	0.39	0.39	0.41	0.56	0.22
Buttercup						
Carnation	0.38	0.48	0.50	0.48	0.58	0.29
Cornflower	0.40	0.47	0.55	0.51	0.59	0.32
Crocus						
Cuckooflower						
Daffodil	0.39	0.42	0.50	0.29	0.39	0.13
Dahlia						
Daisy						
Dandelion						
Fresia	0.31	0.34	0.46	0.36	0.44	0.21
Gladiola	0.24	0.38	0.42	0.39	0.45	0.22
Iris						
Jasmine	0.35	0.33	0.45	0.31	0.44	0.13
Lily	0.17	0.36	0.48	0.41	0.46	0.13
Poppy	0.35	0.44	0.55	0.39	0.44	0.15
Rose						
Snowdrop	0.21	0.39	0.45	0.27	0.29	0.18
Sunflower						
Tulip						

- G1Q6B12 - Natural ability determines how fast one can learn (R).
 G1Q6E15 - There are natural individual differences in learning potential (R).
 G1Q6I19 - No matter how hard some students try, they will never become good learners (R).

- G2Q6L22 - I believe that studying hard is the main factor in learning.
 G2Q6M23 - I believe that effort is the main factor determining my academic performance.
 G2Q6N24 - I feel that my academic performance is determined by my effort.
 G2Q6O25 - I believe that if I fail, it is because I do not study hard enough.

- G3Q6P26 - Intelligence cannot be changed (R).
 G3Q6Q27 - The smarter you are, the less time you need to study (R).
 G3Q6R28 - Geniuses are born, not made (R).
 G3Q6S29 - You don't need to try very hard to get good grades if you are smart (R).

Note:

^a without G2Q6O25

^b without G3Q6P26

Descriptives: A1 (Memorising)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	10.5 (2.8)	10.2 (2.9)	10.7 (2.7)	9.1 (2.7)**	10.6 (2.8)	10.8 (2.7)
Aster	9.1 (2.9)	8.8 (2.9)	9.4 (2.8)	9.5 (3.1)*	9.0 (2.7)	8.6 (2.9)*
Buttercup						
Carnation	10.7 (3.0)	10.4 (3.2)	11.0 (2.8)	11.2 (3.3)	10.6 (3.0)	10.8 (3.2)*
Cornflower	11.5 (3.1)	10.4 (2.9)	12.5 (3.0)	11.8 (3.1)**	11.6 (3.1)	11.0 (3.1)
Crocus	9.5 (2.6)	9.0 (2.7)	9.9 (2.5)	10.3 (2.8)	9.6 (2.5)	8.7 (3.3)*
Cuckooflower	10.0 (2.3)	10.0 (2.4)	10.0 (2.1)	10.2 (2.5)	10.1 (2.6)	10.0 (2.1)*
Daffodil	8.8 (2.2)	8.6 (2.3)	9.0 (2.0)	8.6 (2.1)	9.0 (2.1)	8.5 (2.6)
Dahlia	9.6 (2.3)	9.2 (3.2)	10.0 (3.0)	---	---	---
Daisy	10.1 (2.3)	---	---	---	---	---
Dandelion	10.9 (3.0)	10.5 (3.0)	11.5 (2.7)	11.0 (3.3)	11.1 (2.9)	10.4 (2.8)*
Fresia	7.7 (2.3)	7.7 (2.3)	7.6 (2.2)	8.7 (3.2)**	7.5 (2.2)	7.4 (2.3)**
Gladiola	9.5 (2.6)	8.7 (2.6)	9.4 (2.5)	9.7 (2.5)	9.5 (2.7)	9.7 (2.3)
Iris						
Jasmine	9.6 (2.5)	9.7 (2.5)	9.5 (2.5)	10.3 (1.7)**	9.6 (2.6)	9.8 (2.4)
Lily	10.5 (2.6)	10.4 (2.5)	10.6 (2.6)	11.1 (2.5)	10.4 (2.7)	10.0 (2.3)*
Poppy	7.6 (2.6)	7.8 (2.8)	7.4 (2.4)	7.8 (2.1)**	7.5 (2.5)	8.0 (2.9)
Rose	11.2 (2.7)	11.2 (2.7)**	11.2 (2.8)**	---	---	---
Snowdrop	10.0 (2.7)	10.1 (2.8)	9.8 (2.6)	---	---	---
Sunflower	8.8 (2.6)	8.7 (2.3)	8.9 (2.8)	---	---	---
Orchid	10.9 (2.5)	10.9 (2.5)	11.0 (2.6)	---	---	---
Magnolia	9.8 (2.7)	9.5 (3.0)	10.0 (2.4)	---	---	---
Tulip	10.8 (3.0)	10.6 (3.2)	10.9 (2.8)	---	---	---
Honeysuckle	10.1 (2.8)	10.1 (2.7)	10.1 (2.9)	---	---	---
Violet	11.3 (2.5)	11.2 (2.5)	11.4 (2.5)	11.4 (2.4)	11.3 (2.6)	11.4 (2.6)

Memorising

- A1Q1A01 - When I study, I try to memorise everything that might be covered.
- A1Q1H08 - When I study, I memorise as much as possible.
- A1Q1N14 - When I study, I memorise all new material so that I can recite it.
- A1Q1T20 - When I study, I practice by saying the material to myself over and over.

Note:

- * #cases less than 50
- ** #cases less than 30

Descriptives A2-1 (Elaboration)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	10.1 (2.8)	10.1 (2.9)	10.1 (2.7)	9.1 (3.0)**	10.1 (2.8)	10.5 (2.7)*
Aster	9.8 (2.9)	10.0 (2.8)	9.6 (3.0)	9.9 (2.4)*	9.8 (2.9)	9.4 (2.8)*
Buttercup						
Carnation	9.9 (3.0)	9.9 (3.1)	9.8 (2.8)	9.7 (3.2)	9.8 (3.0)	10.1 (3.0)
Cornflower	10.4 (2.9)	10.1 (2.9)	10.7 (2.9)	9.8 (2.9)**	10.6 (3.0)	10.5 (2.6)*
Crocus	10.1 (2.7)	9.9 (2.8)	10.2 (2.6)	9.8 (3.2)**	10.2 (2.6)	10.3 (3.0)*
Cuckooflower	9.5 (2.6)	9.6 (2.8)	9.4 (2.6)	9.3 (2.6)	9.6 (2.6)	10.0 (2.6)
Daffodil	9.2 (2.3)	9.0 (2.4)	9.5 (2.2)	8.7 (2.2)	9.5 (2.2)	9.2 (2.9)*
Dahlia	9.7 (2.7)	9.7 (2.8)	9.6 (2.7)	---	---	---
Daisy	10.0 (2.5)	---	---	---	---	---
Dandelion	10.1 (2.9)	10.1 (3.0)	10.1 (2.9)	9.9 (3.0)**	9.9 (3.1)	10.7 (2.7)*
Fresia	9.4 (3.1)	9.7 (3.1)	9.2 (3.1)	8.2 (3.5)**	9.2 (2.9)	9.5 (2.9)**
Gladiola	9.2 (2.5)	9.2 (2.5)	9.1 (2.5)	8.6 (2.4)	9.3 (2.5)	9.4 (2.4)
Iris						
Jasmine	9.3 (2.6)	9.4 (2.3)	9.2 (2.7)	8.5 (1.9)**	9.1 (2.5)	10.2 (2.8)
Lily	10.1 (2.6)	10.4 (2.7)	9.8 (2.5)	10.6 (2.6)	10.1 (2.7)	9.8 (2.5)*
Poppy	9.0 (2.6)	9.2 (2.6)	8.7 (2.5)	9.6 (2.3)**	8.7 (2.5)	9.6 (2.5)
Rose	10.4 (2.7)*	10.4 (3.1)**	10.5 (2.0)**	---	---	---
Snowdrop	9.5 (2.7)	9.8 (2.8)	9.1 (2.7)	---	---	---
Sunflower	9.7 (2.7)	9.7 (2.7)	9.6 (2.6)	---	---	---
Orchid	10.0 (2.6)	10.3 (2.5)	9.7 (2.7)	---	---	---
Magnolia	9.5 (2.9)	9.9 (3.1)	8.9 (2.5)	---	---	---
Tulip	10.6 (3.1)	10.5 (3.3)	10.8 (3.0)	---	---	---
Honeysuckle	10.3 (2.6)	10.1 (2.6)	10.4 (2.6)	---	---	---
Violet	11.4 (2.4)	11.3 (2.6)	11.5 (2.2)	11.1 (2.4)	11.5 (2.3)	11.4 (2.7)

Elaboration

- A2Q1D04 - When I study, I try to relate new material to things I have learned in other subjects.
A2Q1K11 - When I study, I figure out how the information might be useful in the real world.
A2Q1Q17 - When I study, I try to understand the material better by relating it to things I already know.
A2Q1W23 - When I study, I figure out how the material fits in with what I have learned.

Note:

* #cases less than 50

** #cases less than 30

Descriptives A3 (Control strategies)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	14.0 (3.4)	13.4 (3.2)	14.6 (3.4)	12.5 (3.6)**	14.1 (3.6)	14.6 (3.0)
Aster	14.2 (2.9)	13.9 (3.1)	14.4 (2.8)	14.7 (3.5)*	14.2 (2.8)	13.7 (3.7)*
Buttercup						
Carnation	14.5 (3.3)	13.9 (3.5)	14.9 (3.1)	14.7 (3.6)	14.3 (3.4)	15.2 (3.0)
Cornflower	14.7 (3.3)	13.4 (3.2)	15.9 (2.9)	14.8 (3.5)**	14.7 (3.5)	14.6 (2.9)*
Crocus	13.9 (3.2)	13.0 (3.3)	14.7 (2.8)	11.9 (3.7)**	13.9 (3.0)	13.8 (4.3)*
Cuckooflower	12.3 (2.7)	12.1 (2.8)	12.6 (2.7)	11.7 (2.5)	12.4 (3.0)	12.8 (2.5)
Daffodil	11.7 (2.9)	11.1 (2.9)	12.3 (2.8)	11.5 (3.3)	11.9 (2.7)	12.1 (3.3)*
Dahlia	14.3 (3.1)	13.9 (3.2)	14.6 (3.0)	---	---	---
Daisy	14.0 (2.7)	---	---	---	---	---
Dandelion	14.3 (3.5)	13.8 (3.3)	15.1 (3.6)	13.4 (3.3)**	14.7 (3.5)	14.6 (3.2)*
Fresia	14.6 (2.7)	14.3 (2.9)	15.1 (2.5)	15.7 (2.9)**	14.5 (2.7)	14.3 (2.7)**
Gladiola	12.7 (2.9)	12.6 (3.0)	12.8 (2.8)	12.3 (2.6)	12.8 (2.9)	12.9 (3.0)
Iris						
Jasmine	13.5 (2.9)	13.0 (2.9)	14.0 (2.7)	12.8 (2.0)**	13.5 (2.9)	14.2 (3.0)
Lily	13.9 (3.2)	13.5 (3.3)	14.3 (3.1)	14.1 (3.4)	13.9 (3.2)	14.2 (3.2)*
Poppy	10.9 (3.0)	10.9 (3.2)	10.8 (2.7)	11.5 (2.5)**	10.6 (2.9)	11.6 (3.0)
Rose	13.9 (3.2)*	14.3 (3.1)**	13.5 (3.3)**	---	---	---
Snowdrop	13.1 (3.2)	13.0 (3.3)	13.2 (3.0)	---	---	---
Sunflower	13.6 (3.1)	13.4 (2.8)	13.7 (3.4)	---	---	---
Orchid	13.9 (3.1)	13.6 (3.0)	14.1 (3.1)	---	---	---
Magnolia	13.3 (3.3)	13.3 (3.6)	13.3 (3.0)	---	---	---
Tulip	14.3 (3.6)	13.7 (3.9)	14.8 (3.2)	---	---	---
Honeysuckle	13.7 (3.2)	13.3 (3.3)	14.0 (3.0)	---	---	---
Violet	14.4 (2.7)	14.2 (2.9)	14.6 (2.6)	14.7 (2.6)	14.4 (2.8)	14.8 (2.6)

Control strategies

- A3Q1AA27- When I study, I start by figuring out what, exactly, I need to learn.
- A3Q1B02 - When I study, I force myself to check to see if I remember what I have learned.
- A3Q1I09 - When I study, I try to figure out, as I read, which concepts I still haven't really understood.
- A3Q1P16 - When I study, I make sure that I remember the most important things.
- A3Q1V22 - When I study, and I don't understand something, I look for additional information to clarify the point.

Note:

- * #cases less than 50
- ** #cases less than 30

Descriptives B2 (Instrumental motivation)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	8.3 (2.7)	8.5 (2.5)	8.2 (2.9)	7.1 (2.8)**	8.5 (2.7)	8.2 (2.7)
Aster	9.0 (2.4)	9.1 (2.3)	8.9 (2.5)	9.5 (1.8)*	9.0 (2.4)	8.7 (2.8)*
Buttercup						
Carnation	7.7 (2.7)	7.7 (2.6)	7.7 (2.7)	7.8 (2.9)	7.6 (2.6)	8.1 (2.7)
Cornflower	9.2 (2.6)	9.1 (2.6)	9.4 (2.6)	9.9 (2.4)**	9.1 (2.8)	9.0 (2.6)**
Crocus	8.8 (2.4)	8.5 (2.5)	9.0 (2.3)	9.5 (2.4)**	8.7 (2.3)	9.2 (2.9)*
Cuckooflower	8.9 (2.3)	9.0 (2.3)	8.8 (2.3)	8.4 (2.5)	9.1 (2.3)	9.1 (2.3)
Daffodil	8.6 (2.1)	8.3 (2.1)	9.0 (2.0)	8.7 (2.0)	8.7 (2.0)	8.6 (2.4)*
Dahlia	9.1 (2.5)	9.0 (2.5)	9.1 (2.5)	---	---	---
Daisy	9.9 (2.1)	---	---	---	---	---
Dandelion	8.5 (2.8)	8.4 (2.9)	8.7 (2.8)	8.0 (2.5)*	8.5 (3.0)	8.9 (2.9)*
Fresia	8.7 (2.6)	9.1 (2.5)	8.2 (2.7)	8.7 (3.0)**	8.5 (2.6)	9.3 (2.4)**
Gladiola	8.0 (2.4)	7.9 (2.4)	8.0 (2.3)	7.9 (2.3)	8.0 (2.3)	8.1 (2.5)
Iris						
Jasmine	8.6 (2.4)	8.7 (2.2)	8.5 (2.5)	7.3 (1.7)**	8.6 (2.3)	8.9 (2.5)
Lily	8.6 (2.6)	8.7 (2.5)	8.5 (2.7)	8.9 (2.4)	8.6 (2.7)	8.3 (2.7)*
Poppy	8.4 (2.4)	8.6 (2.6)	8.2 (2.2)	8.5 (2.4)**	8.5 (2.4)	8.3 (2.5)
Rose						
Snowdrop	9.6 (2.3)	9.6 (2.3)	9.6 (2.2)	---	---	---
Sunflower	8.5 (2.4)	8.6 (2.4)	8.4 (2.5)	---	---	---
Orchid	9.1 (2.3)	9.1 (2.3)	9.1 (2.3)	---	---	---
Magnolia	8.0 (2.3)	8.1 (2.6)	7.9 (1.9)	---	---	---
Tulip	8.3 (2.6)	8.1 (2.7)	8.5 (2.6)	---	---	---
Honeysuckle	8.8 (2.6)	9.0 (2.6)	8.6 (2.5)	---	---	---
Violet	9.7 (1.8)	9.8 (2.0)	9.7 (1.7)	9.7 (1.7)	9.8 (1.7)	9.8 (2.0)

Instrumental motivation

B2Q1C03 - I study to increase my job opportunities.

B2Q1J10 - I study to ensure that my future will be financially secure.

B2Q1R18 - I study to get a good job.

Note:

* #cases less than 50

** #cases less than 30

Descriptives B7 Math (Interest subject-related)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	7.1 (2.8)	7.4 (2.6)	6.9 (2.8)	6.4 (2.6)**	7.0 (2.7)	7.2 (2.7)
Aster	5.2 (2.2)	5.7 (2.1)	4.9 (2.2)	5.7 (2.3)*	5.1 (2.2)	5.0 (2.1)*
Buttercup						
Carnation	7.5 (2.7)	8.0 (2.7)	7.1 (2.7)	7.5 (2.6)	7.4 (2.8)	8.0 (2.8)
Cornflower	6.8 (2.6)	7.1 (2.7)	6.5 (2.4)	6.6 (2.4)**	7.1 (2.7)	6.5 (2.4)*
Crocus	6.2 (2.5)	6.6 (2.7)	5.8 (2.4)	5.3 (2.2)**	6.3 (2.5)	5.7 (2.6)*
Cuckooflower	7.6 (2.9)	8.0 (2.8)	7.2 (3.0)	7.3 (2.8)	7.8 (3.0)	7.9 (2.7)
Daffodil	6.2 (2.5)	6.4 (2.7)	6.0 (2.4)	6.0 (2.5)	6.3 (2.5)	6.7 (3.0)*
Dahlia	6.2 (2.7)	6.6 (2.7)	5.8 (2.7)	---	---	---
Daisy	6.2 (2.6)	---	---	---	---	---
Dandelion	6.8 (2.8)	7.0 (2.8)	6.3 (2.7)	6.4 (2.2)**	6.6 (2.8)	6.9 (3.2)*
Fresia	7.0 (2.6)	7.3 (2.6)	6.7 (2.4)	5.8 (2.1)**	6.9 (2.5)	7.4 (2.8)**
Gladiola	8.1 (2.6)	7.8 (2.6)	8.5 (2.6)	7.7 (2.5)	8.2 (2.6)	8.4 (2.7)
Iris						
Jasmine	6.6 (2.7)	7.0 (2.7)	6.2 (2.7)	5.9 (2.3)**	6.7 (2.8)	6.6 (2.6)
Lily	7.3 (2.6)	7.7 (2.5)	7.0 (2.6)	7.0 (2.7)	7.4 (2.6)	7.6 (2.3)*
Poppy	6.5 (2.8)	7.1 (2.9)	5.9 (2.6)	6.1 (2.6)**	6.4 (2.8)	6.9 (2.9)
Rose	6.0 (2.7)*	5.9 (3.0)**	6.1 (2.2)**	---	---	---
Snowdrop	6.2 (2.7)	6.8 (2.7)	5.6 (2.4)	---	---	---
Sunflower	6.2 (2.7)	7.2 (2.5)	5.4 (2.5)	---	---	---
Orchid	6.9 (2.7)	7.7 (2.5)	6.2 (2.7)	---	---	---
Magnolia	6.3 (2.4)	6.6 (2.5)	5.9 (2.1)	---	---	---
Tulip	7.5 (2.9)	7.7 (2.9)	7.3 (2.8)	---	---	---
Honeysuckle	8.4 (2.1)	8.5 (2.0)	8.4 (2.1)	---	---	---
Violet	9.4 (2.1)	9.4 (2.1)	9.4 (2.0)	9.6 (2.1)	9.4 (2.0)	9.4 (1.9)

Interest (subject-related)

B7Q2E32 - When I do math, I sometimes get totally absorbed.

B7Q2G34 - Math is important to me personally.

B7Q2J37 - Because doing math is fun, I wouldn't want to give it up.

Note:

* #cases less than 50

** #cases less than 30

Descriptives B7 Verb (Interest subject-related)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	8.6 (2.9)	8.0 (2.8)	9.0 (2.9)	7.9 (3.2)**	8.3 (2.9)	9.2 (2.6)
Aster	8.1 (3.0)	7.0 (3.0)	8.9 (2.7)	7.9 (2.5)*	8.3 (3.1)	7.7 (2.9)*
Buttercup						
Carnation	8.7 (3.0)	7.9 (2.9)	9.3 (2.9)	8.6 (3.0)	8.6 (3.0)	9.1 (2.8)
Cornflower	7.8 (3.1)	6.5 (2.8)	9.1 (2.9)	7.8 (2.9)**	7.7 (3.1)	8.3 (3.3)*
Crocus	8.3 (2.8)	7.0 (2.8)	9.5 (2.4)	7.6 (3.2)**	8.4 (2.8)	8.9 (2.9)**
Cuckooflower	8.3 (3.0)	7.2 (2.9)	9.4 (2.6)	8.3 (3.0)	8.2 (3.0)	8.6 (2.9)
Daffodil	7.6 (2.9)	6.1 (2.4)	9.3 (2.4)	7.9 (2.8)	7.9 (2.9)	6.8 (2.7)**
Dahlia	8.2 (3.0)	7.2 (2.9)	9.3 (2.6)	---	---	---
Daisy	7.9 (3.0)	---	---	---	---	---
Dandelion	8.2 (3.0)	7.8 (3.0)	8.9 (3.0)	7.6 (3.5)**	8.3 (3.0)	8.3 (3.4)*
Fresia	8.4 (2.7)	7.7 (2.6)	9.1 (2.5)	6.8 (2.7)**	8.6 (2.7)	7.9 (2.5)**
Gladiola	8.6 (2.4)	8.5 (2.4)	8.6 (2.4)	8.8 (2.2)	8.5 (2.5)	8.8 (2.3)
Iris						
Jasmine	8.2 (3.2)	7.0 (3.1)	9.3 (2.9)	9.2 (2.5)**	7.7 (3.2)	9.1 (3.2)
Lily	8.5 (2.9)	8.2 (2.9)	8.8 (2.9)	8.3 (3.2)	8.5 (2.8)	9.1 (2.8)*
Poppy	8.3 (3.0)	7.5 (3.0)	9.0 (2.9)	8.6 (3.0)**	8.1 (3.1)	8.8 (2.7)
Rose	8.0 (2.7)*	8.1 (2.8)**	7.9 (2.6)**	---	---	---
Snowdrop	7.6 (2.6)	7.3 (2.6)	8.0 (2.5)	---	---	---
Sunflower	8.1 (2.9)	7.1 (2.9)	9.0 (2.7)	---	---	---
Orchid	8.3 (2.7)	7.7 (2.5)	8.9 (2.8)	---	---	---
Magnolia	7.7 (3.0)	6.7 (2.9)	8.8 (2.7)	---	---	---
Tulip	8.5 (3.0)	8.0 (3.1)	9.0 (2.8)	---	---	---
Honeysuckle	9.4 (2.0)	8.9 (1.9)	9.7 (2.0)	---	---	---
Violet	9.9 (1.9)	9.6 (2.1)	10.2 (1.8)	10.1 (1.8)	9.9 (2.0)	9.9 (2.0)

B7Q2D31 - Because reading is fun, I wouldn't want to give it up.

B7Q2F33 - I read in my spare time.

B7Q2I36 - When I read, I sometimes get totally absorbed.

Note:

* #cases less than 50

** #cases less than 30

Descriptives: D2-2 (Control expectation)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	10.9 (2.7)	11.3 (2.8)	10.6 (2.7)	11.6 (2.4) *	10.6 (7.3)	11.2 (2.9)
Aster	10.8 (2.6)	10.5 (2.7)	10.9 (2.6)	10.6 (3.3) *	10.7 (2.5)	11.6 (2.7) *
Buttercup						
Carnation	11.8 (2.8)	11.9 (2.7)	11.6 (2.9)	11.7 (2.6)	11.5 (2.9)	12.3 (2.9)
Cornflower	11.5 (2.8)	11.5 (2.8)	11.4 (2.8)	11.2 (2.5) **	11.3 (2.9)	12.2 (2.4) *
Crocus	10.4 (2.6)	10.0 (2.6)	10.6 (2.6)	9.9 (2.6) **	10.3 (2.5)	11.1 (2.8) *
Cuckooflower	11.4 (2.5)	11.5 (2.4)	11.3 (2.5)	10.4 (2.7)	11.3 (2.5)	12.1 (2.1)
Daffodil	10.7 (2.7)	10.9 (2.6)	10.4 (2.8)	10.6 (2.8)	10.5 (2.7)	11.4 (2.7)
Dahlia	10.8 (2.5)	10.9 (2.6)	10.6 (2.5)	---	---	---
Daisy						
Dandelion	11.4 (2.8)	11.4 (2.6)	11.2 (3.0)	11.1 (3.3) **	11.3 (2.7)	12.1 (2.5) *
Fresia	11.4 (2.4)	11.4 (2.4)	11.4 (2.4)	11.5 (2.5) **	11.5 (2.3)	11.5 (2.4) *
Gladiola	10.7 (2.9)	10.8 (2.8)	10.6 (2.9)	10.1 (3.0)	10.8 (2.7)	10.6 (3.2)
Iris						
Jasmine	10.5 (2.5)	10.9 (2.5)	10.3 (2.5)	10.3 (3.3) **	10.4 (2.4)	10.6 (2.4)
Lily	11.1 (2.6)	11.1 (2.3)	11.0 (2.7)	11.1 (2.7)	11.1 (2.4)	11.4 (2.7) *
Poppy	11.9 (2.6)	12.2 (2.7)	11.6 (2.6)	11.9 (2.8) **	11.9 (2.7)	12.4 (2.3)
Rose	11.9 (2.6) *	11.6 (2.7) **	12.2 (2.5) **	---	---	---
Snowdrop	11.2 (2.8)	11.3 (2.8)	11.0 (2.8)	---	---	---
Sunflower	11.3 (2.5)	11.9 (2.6)	10.8 (2.4)	---	---	---
Orchid	10.3 (2.6)	10.7 (2.7)	10.0 (2.6)	---	---	---
Magnolia	10.3 (2.8)	10.8 (2.7)	9.6 (2.8)	---	---	---
Tulip	12.0 (3.0)	11.9 (2.9)	12.1 (3.0)	---	---	---
Honeysuckle	12.5 (2.6)	12.6 (2.6)	12.5 (2.6)	---	---	---
Violet	11.5 (2.7)	11.6 (2.7)	11.4 (2.8)	10.9 (2.7)	11.6 (2.7)	11.5 (2.9)

Control expectation

- D2Q4I31 - When I sit myself down to learn something really hard, I can learn it.
- D2Q4J32 - If I decide not to get any bad grades, I can really do it.
- D2Q4K33 - If I decide not to get any problems wrong, I can really do it.
- D2Q4L34 - If I want to learn something well, I can.

Note:

- * #cases less than 50
- ** #cases less than 30

Descriptives D2-3^a (Self efficacy)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	10.3 (2.6)	10.6 (2.4)	10.0 (2.7)	10.4 (2.0)*	10.1 (2.5)	10.7 (2.9)
Aster	10.0 (2.5)	10.2 (2.4)	9.8 (2.5)	10.0 (3.0)*	9.9 (2.3)	10.7 (2.9)*
Buttercup						
Carnation	10.9 (2.8)	11.2 (2.9)	10.5 (2.6)	10.8 (2.8)	10.7 (2.8)	11.5 (2.5)
Cornflower	11.3 (2.8)	11.5 (3.0)	11.0 (2.6)	10.8 (2.9)**	11.2 (3.0)	11.8 (2.4)*
Crocus	8.8 (2.2)	9.0 (2.3)	8.6 (2.0)	8.9 (1.9)**	8.6 (2.1)	9.4 (2.6)*
Cuckooflower	9.9 (2.5)	10.6 (2.4)	9.5 (2.4)	9.8 (2.6)	9.6 (2.3)	10.8 (2.7)
Daffodil	10.1 (2.6)	10.6 (2.7)	9.7 (2.4)	10.3 (2.7)	10.0 (2.4)	10.6 (3.1)
Dahlia	10.3 (2.4)	10.7 (2.4)	9.8 (2.4)	---	---	---
Daisy						
Dandelion	10.3 (2.6)	10.8 (2.3)	9.6 (2.8)	10.7 (2.6)**	10.0 (2.4)	11.5 (2.5)*
Fresia	10.4 (2.3)	10.4 (2.3)	10.4 (2.3)	10.1 (1.7)**	10.3 (2.1)	10.6 (2.1)*
Gladiola	8.9 (2.7)	9.0 (2.6)	8.9 (2.9)	8.0 (2.2)	9.1 (2.8)	8.9 (3.1)
Iris						
Jasmine	10.1 (2.4)	10.8 (2.5)	9.6 (2.3)	9.7 (2.5)**	10.0 (2.4)	10.1 (2.4)
Lily	10.2 (2.4)	10.8 (2.3)	9.8 (2.4)	10.6 (2.4)	10.3 (2.3)	10.1 (2.5)*
Poppy	10.4 (2.8)	11.1 (2.8)	9.7 (2.7)	10.0 (2.7)**	10.3 (2.9)	11.3 (2.5)
Rose	10.6 (2.4)*	10.5 (2.7)**	10.7 (2.1)**	---	---	---
Snowdrop	10.0 (2.7)	10.4 (2.7)	9.5 (2.6)	---	---	---
Sunflower	10.3 (2.5)	10.9 (2.5)	9.6 (2.3)	---	---	---
Orchid	9.5 (2.4)	10.1 (2.3)	8.9 (2.4)	---	---	---
Magnolia	9.9 (2.7)	10.1 (2.3)	8.9 (2.4)	---	---	---
Tulip	11.1 (3.0)	11.3 (3.0)	11.0 (2.9)	---	---	---
Honeysuckle	10.9 (2.6)	10.9 (2.7)	10.9 (2.5)	---	---	---
Violet	11.5 (2.5)	11.5 (2.6)	11.4 (2.5)	11.2 (2.5)	11.6 (2.6)	11.6 (2.5)

D2Q4N36 - I'm certain I can understand the most difficult material presented in readings.

D2Q4P38 - I'm confident I can understand the most complex material presented by the teacher.

D2Q4Q39 - I'm confident I can do an excellent job on assignments and tests.

D2Q4S41 - I'm certain I can master the skills being taught.

Note:

* #cases less than 50

** #cases less than 30

Descriptives D3 (Self-concept verbal)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	9.1 (2.2)	8.9 (2.1)	9.3 (2.3)	9.4 (2.2)*	9.0 (2.1)	9.2 (2.3)
Aster	8.9 (2.2)	8.5 (2.1)	9.3 (2.1)	9.5 (2.0)*	8.8 (2.1)	9.6 (2.3)*
Buttercup						
Carnation	9.5 (2.1)	9.1 (2.3)	9.9 (2.0)	9.4 (2.3)	9.4 (2.1)	10.0 (2.1)
Cornflower	8.4 (2.5)	7.8 (2.3)	9.1 (2.5)	7.7 (2.4)**	8.5 (2.6)	8.6 (2.4)*
Crocus	8.4 (2.1)	7.8 (2.0)	8.8 (2.1)	7.9 (1.8)**	8.3 (2.1)	8.9 (2.2)*
Cuckooflower	9.7 (2.0)	9.3 (2.1)	10.1 (1.9)	9.1 (1.9)	9.7 (2.0)	10.5 (1.8)
Daffodil	8.7 (2.3)	8.0 (2.3)	9.2 (2.2)	8.7 (2.2)	8.7 (2.3)	9.1 (2.3)
Dahlia	8.9 (2.3)	8.4 (2.4)	9.3 (2.1)	---	---	---
Daisy						
Dandelion	9.4 (2.2)	9.7 (2.1)	9.1 (2.1)	8.8 (2.3)**	9.4 (2.4)	9.4 (2.0)**
Fresia	9.6 (2.1)	9.2 (2.2)	10.0 (1.9)	9.2 (2.0)**	9.4 (2.0)	9.8 (2.1)**
Gladiola	7.2 (2.3)	7.2 (2.3)	7.2 (2.3)	6.1 (2.0)	7.3 (2.3)	7.7 (2.4)
Iris						
Jasmine	8.8 (2.4)	8.5 (2.4)	8.9 (2.3)	8.5 (2.3)**	9.0 (2.3)	8.8 (2.3)
Lily	9.0 (2.2)	9.1 (2.1)	8.9 (2.2)	9.1 (2.5)	8.9 (2.1)	9.6 (1.7)*
Poppy	9.0 (2.3)	8.7 (2.3)	9.3 (2.3)	8.3 (2.0)**	8.8 (2.3)	10.0 (1.8)
Rose	9.1 (2.2)**	9.0 (2.5)**	9.2 (2.0)**	---	---	---
Snowdrop	9.4 (2.2)	8.8 (2.2)	9.9 (2.1)	---	---	---
Sunflower	9.1 (2.1)	8.9 (2.2)	9.4 (2.0)	---	---	---
Orchid	8.4 (2.2)	8.1 (2.1)	8.6 (2.2)	---	---	---
Magnolia	8.5 (2.4)	8.6 (2.2)	8.5 (2.6)	---	---	---
Tulip	9.5 (2.2)	9.1 (2.3)	9.7 (2.1)	---	---	---
Honeysuckle	9.4 (2.1)	9.0 (2.2)	9.7 (2.0)	---	---	---
Violet	8.9 (2.2)	8.7 (2.1)	9.2 (2.2)	8.7 (2.1)	9.0 (2.2)	9.1 (2.1)

Self-concept verbal

- D3Q3A01 - I'm hopeless in English classes (R).
- D3Q3J10 - I learn things quickly in English classes.
- D3Q3R18 - I get good marks in English.

Note:

- * #cases less than 50
- ** #cases less than 30

Descriptives D4 (Self-concept math)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	7.7 (2.8)	8.5 (2.6)	7.1 (2.8)	7.5 (2.6)*	7.7 (2.8)	7.8 (2.9)*
Aster	7.1 (2.7)	7.3 (2.6)	7.0 (2.7)	6.9 (2.4)*	7.1 (2.7)	7.3 (3.0)*
Buttercup						
Carnation	8.1 (2.9)	8.4 (2.9)	7.9 (3.0)	7.8 (3.1)	8.0 (2.9)	8.7 (2.8)
Cornflower	8.4 (2.9)	9.0 (2.8)	7.7 (3.0)	8.4 (3.3)**	8.2 (2.9)	8.3 (3.0)*
Crocus	6.7 (2.5)	7.1 (2.6)	6.5 (2.5)	7.4 (2.7)**	6.8 (2.4)	7.0 (2.7)*
Cuckooflower	8.6 (3.0)	9.4 (2.6)	7.7 (3.1)	8.2 (3.0)	8.4 (3.1)	9.2 (2.6)
Daffodil	7.1 (3.2)	7.8 (3.1)	6.4 (3.2)	7.4 (3.3)	6.8 (3.2)	8.1 (3.3)
Dahlia	7.6 (2.9)	8.2 (2.8)	7.0 (2.9)	---	---	---
Daisy						
Dandelion	7.3 (2.9)	7.6 (2.9)	6.7 (2.9)	7.2 (2.4)**	7.4 (2.8)	7.1 (3.2)*
Fresia	7.3 (3.1)	7.3 (3.1)	7.3 (3.0)	7.9 (2.6)**	7.6 (3.2)	7.2 (3.2)*
Gladiola	6.4 (2.8)	6.6 (2.7)	6.2 (2.9)	5.7 (2.7)	6.5 (2.8)	6.5 (2.8)
Iris						
Jasmine	6.8 (3.1)	7.8 (3.0)	6.2 (3.0)	5.4 (2.6)**	6.9 (3.2)	7.1 (3.1)
Lily	7.7 (2.8)	8.0 (2.7)	7.4 (2.9)	7.9 (2.8)	7.6 (2.8)	8.4 (2.6)*
Poppy	6.8 (3.3)	7.6 (3.2)	6.0 (3.3)	5.3 (2.8)**	6.7 (3.3)	8.0 (3.3)
Rose	7.6 (2.9)*	7.7 (2.7)**	7.4 (3.1)**	---	---	---
Snowdrop	7.1 (2.9)	7.4 (2.9)	6.8 (2.9)	---	---	---
Sunflower	7.8 (3.0)	8.6 (2.7)	7.0 (3.0)	---	---	---
Orchid	6.9 (3.1)	8.2 (2.9)	5.7 (2.7)	---	---	---
Magnolia	7.1 (2.7)	7.5 (2.4)	6.5 (3.0)	---	---	---
Tulip	8.1 (3.1)	8.6 (2.9)	7.7 (3.1)	---	---	---
Honeysuckle	7.3 (2.7)	7.6 (2.6)	7.1 (2.7)	---	---	---
Violet	7.8 (2.8)	7.8 (2.7)	7.7 (2.8)	7.8 (2.6)	7.8 (2.7)	7.9 (3.0)

Self-concept math

D4Q3F06 - I get good marks in mathematics.

D4Q3K11 - Mathematics is one of my best subjects.

D4Q3P16 - I have always done well in mathematics.

Note:

* #cases less than 50

** #cases less than 30

Descriptives D5 (Self-concept academic)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	8.8 (2.0)	8.9 (1.7)	8.7 (2.1)	9.2 (1.5)*	8.6 (2.0)	9.1 (2.0)
Aster	8.4 (1.9)	8.1 (1.9)	8.7 (1.9)	8.5 (2.1)*	8.5 (1.8)	8.3 (2.4)*
Buttercup						
Carnation	9.1 (2.2)	9.1 (2.2)	9.2 (2.1)	9.1 (2.1)	9.0 (2.1)	9.5 (2.3)
Cornflower	9.6 (1.9)	9.8 (1.9)	9.5 (1.8)	8.8 (2.1)**	9.7 (1.8)	9.8 (1.7)*
Crocus	8.1 (2.1)	8.0 (2.2)	8.3 (2.0)	8.7 (1.6)**	8.1 (2.1)	8.5 (2.1)*
Cuckooflower	9.2 (2.1)	9.2 (2.0)	9.1 (2.1)	8.8 (2.4)	9.1 (1.9)	9.8 (2.0)
Daffodil	8.3 (2.4)	8.5 (2.3)	8.2 (2.5)	8.5 (2.2)*	8.4 (2.3)	8.6 (2.8)
Dahlia	8.5 (2.0)	8.6 (1.9)	8.4 (2.0)	---	---	---
Daisy						
Dandelion	9.1 (2.2)	9.2 (2.1)	9.0 (2.3)	8.4 (2.1)**	9.0 (2.3)	9.5 (2.2)*
Fresia	8.5 (2.2)	8.3 (2.1)	8.8 (2.3)	8.5 (2.4)**	8.4 (2.3)	9.1 (1.9)**
Gladiola	6.9 (2.0)	6.9 (2.1)	6.8 (1.8)	6.2 (1.7)	7.1 (2.0)	7.0 (2.0)
Iris						
Jasmine	8.8 (2.1)	9.4 (1.9)	8.5 (2.2)	8.0 (2.5)**	8.9 (2.0)	8.9 (1.8)
Lily	8.9 (2.0)	9.1 (1.8)	8.7 (2.1)	9.1 (2.0)	8.7 (1.9)	9.3 (2.0)*
Poppy	8.5 (2.5)	8.9 (2.4)	8.2 (2.7)	7.8 (2.7)**	8.5 (2.4)	9.6 (2.2)
Rose	8.1 (2.3)*	8.8 (2.2)**	7.3 (2.1)**	---	---	---
Snowdrop	8.7 (2.4)	8.5 (2.3)	8.8 (2.4)	---	---	---
Sunflower	8.7 (1.7)	8.9 (1.6)	8.5 (1.8)	---	---	---
Orchid	7.7 (2.2)	8.2 (2.2)	7.3 (2.2)	---	---	---
Magnolia	8.4 (2.1)	8.7 (1.9)	8.1 (2.2)	---	---	---
Tulip	9.1 (2.3)	9.2 (2.2)	9.1 (2.4)	---	---	---
Honeysuckle	8.4 (2.2)	8.5 (2.0)	8.2 (2.4)	---	---	---
Violet	9.1 (2.2)	8.9 (2.2)	9.2 (2.1)	9.1 (2.2)	9.2 (2.1)	8.9 (2.3)

Self-concept academic

D5Q3E05 - I learn things quickly in most school subjects.

D5Q3N14 - I do well in tests in most school subjects.

D5Q3V22 - I'm good at most school subjects.

Note:

* #cases less than 50

** #cases less than 30

Descriptives E1 (Effort and persistence in learning: general)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	11.6 (2.8)	11.3 (2.8)	11.8 (2.7)	11.6 (2.6)**	11.3 (2.9)	12.0 (2.6)
Aster	11.7 (2.7)	11.4 (2.7)	11.9 (2.7)	11.7 (3.0)**	11.8 (2.7)	11.3 (2.5)*
Buttercup						
Carnation	10.9 (3.0)	10.4 (3.2)	11.4 (2.6)	10.7 (3.1)	10.9 (3.0)	11.0 (2.8)
Cornflower	11.6 (2.9)	11.0 (3.0)	12.3 (2.6)	12.1 (3.0)**	11.4 (2.9)	12.5 (2.7)*
Crocus	10.4 (2.7)	10.2 (2.6)	10.5 (2.7)	10.7 (2.8)**	10.5 (2.6)	9.5 (2.5)**
Cuckooflower	11.6 (2.5)	11.7 (2.5)	11.8 (2.5)	12.3 (2.2)	11.3 (2.5)	12.1 (2.3)
Daffodil	11.1 (2.8)	10.8 (2.8)	11.4 (2.7)	11.4 (2.8)*	11.0(2.8)	11.6 (2.9)*
Dahlia	11.1 (2.8)	10.7 (2.8)	11.6 (2.7)	---	---	---
Daisy						
Dandelion	11.3 (3.1)	11.0 (3.1)	11.9 (2.9)	11.6 (3.5)**	11.3 (3.0)	11.8 (2.9)**
Fresia	11.0 (2.7)	10.7 (2.5)	11.4 (2.9)	11.0 (3.1)**	10.7 (2.7)	10.5 (2.9)**
Gladiola	10.2 (2.8)	10.1 (2.8)	10.3 (2.8)	9.4 (2.4)	10.1 (2.7)	11.1 (3.1)
Iris						
Jasmine	10.9 (2.5)	10.7 (2.5)	11.0 (2.6)	10.7 (2.6)**	11.0 (2.3)	10.9 (2.7)
Lily	11.2 (2.7)	10.9 (2.6)	11.5 (2.8)	11.6 (3.0)	11.1 (2.4)	11.2 (3.2)*
Poppy	11.0 (3.0)	10.8 (2.9)	11.2 (3.0)	10.7 (2.8)**	11.0 (2.9)	11.1 (2.6)
Rose	10.8 (2.8)*	10.3 (3.0)**	11.4 (2.3)**	---	---	---
Snowdrop	11.1 (2.9)	11.0 (3.0)	11.3 (2.9)	---	---	---
Sunflower	11.6 (2.8)	11.4 (3.1)	11.8 (2.6)	---	---	---
Orchid	10.9 (2.6)	10.3 (2.7)	11.4 (2.5)	---	---	---
Magnolia	10.6 (3.1)	9.7 (3.2)	11.6 (2.6)	---	---	---
Tulip	11.3 (3.2)	10.8 (3.4)	11.7 (2.9)	---	---	---
Honeysuckle	11.6 (2.6)	11.1 (2.6)	12.0 (2.6)	---	---	---
Violet	11.9 (2.3)	11.8 (2.4)	12.0 (2.3)	11.8 (2.4)	12.0 (2.2)	12.2 (2.1)

Effort and Persistence in learning: general

E1Q5C03 - When studying, I work as hard as possible.

E1Q5E05 - When studying, I keep working even if the material is difficult.

E1Q5G07 - When studying, I try to do my best to acquire the knowledge and skills taught.

E1Q5I09 - When studying, I put forth my best effort.

Note:

* #cases less than 50

** #cases less than 30

Descriptives F2 (competitive learning)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	11.5 (3.0)	12.1 (2.7)	11.0 (3.1)	11.8 (2.7)**	11.2 (2.9)	11.8 (3.0)
Aster	10.1 (2.9)	10.5 (2.9)	9.7 (3.0)	10.9 (2.9)**	10.0 (2.9)	9.7 (2.9)*
Buttercup						
Carnation	11.4 (3.1)	12.2 (2.9)	10.6 (3.1)	11.4 (3.0)	11.5 (3.0)	11.5 (3.3)
Cornflower	11.6 (3.0)	12.2 (2.8)	11.0 (3.0)	11.6 (2.9)**	11.7 (3.0)	11.3 (3.1)*
Crocus	11.6 (2.4)	12.1 (2.5)	11.2 (2.3)	11.6 (2.3)**	11.6 (2.5)	11.8 (2.3)**
Cuckooflower	11.3 (2.9)	11.8 (2.9)	10.9 (3.1)	11.2 (2.9)	11.3 (3.0)	10.9 (3.1)
Daffodil	10.2 (3.0)	10.8 (2.9)	9.6 (3.0)	10.4 (2.8)	10.0 (3.1)	11.1 (2.9)*
Dahlia	10.9 (2.9)	11.1 (3.0)	10.7 (2.8)	---	---	---
Daisy						
Dandelion	11.4 (3.3)	11.9 (3.0)	10.6 (3.7)	11.4 (4.4)**	11.7 (3.1)	12.0 (2.9)**
Fresia	11.2 (3.3)	11.6 (3.2)	10.8 (3.3)	10.0 (3.3)**	11.2 (3.0)	11.5 (3.2)**
Gladiola	13.9 (1.9)	14.0 (1.9)	13.8 (1.9)	13.2 (2.5)	14.1 (1.7)	13.9 (2.0)
Iris						
Jasmine	10.4 (3.2)	10.7 (3.3)	10.1 (3.2)	10.9 (3.5)**	10.5 (3.1)	9.7 (3.3)
Lily	11.4 (2.8)	11.8 (2.7)	11.2 (2.9)	11.6 (2.9)	11.5 (2.8)	11.9 (2.7)*
Poppy	11.1 (3.2)	11.6 (3.2)	10.5 (3.1)	10.3 (3.3)**	11.2 (3.0)	11.5 (3.5)
Rose	11.9 (2.4)*	11.9 (2.6)**	12.0 (2.1)**	---	---	---
Snowdrop	11.2 (2.9)	11.6 (3.0)	10.9 (2.8)	---	---	---
Sunflower	10.2 (2.8)	10.9 (2.8)	9.8 (2.8)	---	---	---
Orchid	10.5 (3.2)	11.0 (3.3)	10.1 (3.0)	---	---	---
Magnolia	10.9 (3.3)	11.5 (3.2)	10.2 (3.3)	---	---	---
Tulip	11.5 (3.1)	11.9 (3.2)	11.1 (3.0)	---	---	---
Honeysuckle	12.6 (2.5)	12.6 (2.5)	12.6 (2.6)	---	---	---
Violet	9.8 (3.4)	10.4 (3.5)	9.3 (3.2)	9.7 (3.4)	9.7 (3.3)	10.5 (3.6)

Competitive learning

- F2Q6C13 - I like to try to be better than other students.
- F2Q6F16 - Trying to be better than others makes me work well.
- F2Q6H18 - I would like to be the best at something.
- F2Q6K21 - I learn faster if I'm trying to do better than the others.

Note:

- * #cases less than 50
- ** #cases less than 30

Reliability analysis: A1 (Memorising)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	0.77	0.77	0.78	0.83**	0.78	0.74
Aster	0.72	0.73	0.73	0.76*	0.71	0.64*
Buttercup						
Carnation	0.78	0.80	0.75	0.82	0.76	0.80
Cornflower	0.83	0.78	0.84	0.86**	0.81	0.84
Crocus	0.68	0.71	0.64	0.70**	0.66	0.78*
Cuckooflower	0.64	0.68	0.59	0.65*	0.61	0.51*
Daffodil	0.70	0.74	0.62	0.72	0.66	0.71*
Dahlia	0.82	0.83	0.81	---	---	---
Daisy	0.56	---	---	---	---	---
Dandelion	0.75	0.75	0.75	0.78**	0.74	0.70*
Fresia	0.60	0.59	0.61	0.78**	0.60	0.56
Gladiola	0.67	0.72	0.65	0.72	0.72	0.55
Iris						
Jasmine	0.66	0.67	0.65	0.00**	0.71	0.66
Lily	0.69	0.68	0.70	0.64	0.74	0.63*
Poppy	0.79	0.81	0.77	0.60**	0.78	0.80
Rose	0.63	0.68**	0.59**	---	---	---
Snowdrop	0.75	0.76	0.73	---	---	---
Sunflower	0.71	0.65	0.74	---	---	---
Orchid	0.69	0.68	0.70	---	---	---
Magnolia	0.69	0.72	0.67	---	---	---
Tulip	0.77	0.79	0.75	---	---	---
Honeysuckle	0.73	0.71	0.75	---	---	---
Violet	0.64	0.66	0.63	0.56	0.63	0.74

Memorising

- A1Q1A01 - When I study, I try to memorise everything that might be covered.
- A1Q1H08 - When I study, I memorise as much as possible.
- A1Q1N14 - When I study, I memorise all new material so that I can recite it.
- A1Q1T20 - When I study, I practice by saying the material to myself over and over.

Note:

- * #cases less than 50
- ** #cases less than 30

Reliability analysis: A2-1 (Elaboration)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	0.78	0.80	0.76	0.82**	0.79	0.78
Aster	0.77	0.70	0.81	0.59*	0.77	0.77*
Buttercup						
Carnation	0.80	0.83	0.77	0.82	0.81	0.83
Cornflower	0.76	0.81	0.70	0.70**	0.78	0.69
Crocus	0.76	0.77	0.75	0.86**	0.74	0.82*
Cuckooflower	0.76	0.77	0.75	0.76	0.77	0.75
Daffodil	0.77	0.82	0.70	0.70	0.75	0.83*
Dahlia	0.72	0.74	0.70	---	---	---
Daisy	0.71	---	---	---	---	---
Dandelion	0.75	0.77	0.73	0.80**	0.80	0.61*
Fresia	0.81	0.78	0.84	0.91**	0.80	0.82**
Gladiola	0.71	0.72	0.69	0.72	0.72	0.67
Iris						
Jasmine	0.73	0.62	0.80	0.62**	0.70	0.80
Lily	0.76	0.80	0.72	0.73	0.77	0.76*
Poppy	0.77	0.79	0.75	0.68**	0.78	0.73
Rose	0.79*	0.86**	0.60**	---	---	---
Snowdrop	0.81	0.82	0.78	---	---	---
Sunflower	0.71	0.75	0.69	---	---	---
Orchid	0.71	0.70	0.71	---	---	---
Magnolia	0.78	0.83	0.71	---	---	---
Tulip	0.82	0.84	0.81	---	---	---
Honeysuckle	0.69	0.70	0.68	---	---	---
Violet	0.65	0.71	0.57	0.61	0.62	0.77

Elaboration

- A2Q1D04 - When I study, I try to relate new material to things I have learned in other subjects.
A2Q1K11 - When I study, I figure out how the information might be useful in the real world.
A2Q1Q17 - When I study, I try to understand the material better by relating it to things I already know.
A2Q1W23 - When I study, I figure out how the material fits in with what I have learned.

Note:

- * #cases less than 50
** #cases less than 30

Reliability analysis: A3 (Control strategies)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	0.81	0.78	0.83	0.89**	0.84	0.75
Aster	0.62	0.65	0.59	0.41*	0.61	0.75*
Buttercup						
Carnation	0.80	0.81	0.78	0.85	0.82	0.72
Cornflower	0.77	0.76	0.70	0.81**	0.81	0.70*
Crocus	0.75	0.78	0.68	0.85**	0.72	0.84*
Cuckooflower	0.65	0.67	0.63	0.56*	0.72	0.55
Daffodil	0.78	0.79	0.75	0.82	0.71	0.82*
Dahlia	0.71	0.74	0.67	---	---	---
Daisy	0.65	---	---	---	---	---
Dandelion	0.78	0.74	0.83	0.78**	0.80	0.72*
Freesia	0.62	0.66	0.55	0.67**	0.61	0.50**
Gladiola	0.71	0.74	0.67	0.59	0.71	0.77
Iris						
Jasmine	0.70	0.68	0.70	0.10**	0.70	0.74
Lily	0.79	0.83	0.74	0.80	0.79	0.81*
Poppy	0.73	0.77	0.69	0.42**	0.74	0.72
Rose	0.81*	0.81**	0.80**	---	---	---
Snowdrop	0.75	0.76	0.73	---	---	---
Sunflower	0.72	0.64	0.77	---	---	---
Orchid	0.75	0.74	0.76	---	---	---
Magnolia	0.78	0.80	0.75	---	---	---
Tulip	0.83	0.85	0.78	---	---	---
Honeysuckle	0.73	0.76	0.71	---	---	---
Violet	0.65	0.67	0.62	0.56	0.66	0.62

Control strategies

- A3Q1AA27- When I study, I start by figuring out what, exactly, I need to learn.
- A3Q1B02 - When I study, I force myself to check to see if I remember what I have learned.
- A3Q1I09 - When I study, I try to figure out, as I read, which concepts I still haven't really understood.
- A3Q1P16 - When I study, I make sure that I remember the most important things.
- A3Q1V22 - When I study, and I don't understand something, I look for additional information to clarify the point.

Note:

- * #cases less than 50
- ** #cases less than 30

Reliability analysis: B2 (Instrumental motivation)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	0.84	0.79	0.87	0.84**	0.84	0.84
Aster	0.77	0.73	0.80	0.58*	0.77	0.84*
Buttercup						
Carnation	0.84	0.83	0.84	0.87	0.81	0.86
Cornflower	0.86	0.86	0.85	0.85**	0.87	0.82**
Crocus	0.81	0.83	0.79	0.81**	0.77	0.91*
Cuckooflower	0.70	0.74	0.67	0.80*	0.71	0.74*
Daffodil	0.80	0.81	0.77	0.77	0.77	0.86*
Dahlia	0.84	0.84	0.83	---	---	---
Daisy	0.79	---	---	---	---	---
Dandelion	0.84	0.85	0.82	0.74**	0.87	0.88*
Freesia	0.83	0.82	0.83	0.89**	0.82	0.78**
Gladiola	0.67	0.67	0.67	0.62	0.66	0.69
Iris						
Jasmine	0.78	0.75	0.79	0.50**	0.75	0.86
Lily	0.86	0.86	0.86	0.80	0.87	0.87*
Poppy	0.80	0.87	0.72	0.91**	0.82	0.78
Rose	0.76*	0.57**	0.87**	---	---	---
Snowdrop	0.83	0.85	0.82	---	---	---
Sunflower	0.77	0.73	0.81	---	---	---
Orchid	0.75	0.74	0.77	---	---	---
Magnolia	0.64	0.77	0.40	---	---	---
Tulip	0.81	0.82	0.81	---	---	---
Honeysuckle	0.77	0.79	0.75	---	---	---
Violet	0.71	0.79	0.60	0.64	0.66	0.75

Instrumental motivation

B2Q1C03 - I study to increase my job opportunities.

B2Q1J10 - I study to ensure that my future will be financially secure.

B2Q1R18 - I study to get a good job.

Note:

* #cases less than 50

** #cases less than 30

Reliability analysis: B7 Math (Interest subject-related)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	0.84	0.83	0.85	0.82**	0.83	0.85
Aster	0.77	0.69	0.82	0.74*	0.81	0.75*
Buttercup						
Carnation	0.83	0.80	0.85	0.81	0.84	0.83
Cornflower	0.80	0.79	0.81	0.75**	0.83	0.72*
Crocus	0.79	0.81	0.75	0.65**	0.77	0.83*
Cuckooflower	0.85	0.83	0.88	0.81*	0.88	0.83*
Daffodil	0.85	0.87	0.83	0.86	0.84	0.92*
Dahlia	0.85	0.84	0.86	---	---	---
Daisy	0.80	---	---	---	---	---
Dandelion	0.74	0.74	0.73	0.59**	0.75	0.85*
Freesia	0.71	0.73	0.69	0.55**	0.72	0.83**
Gladiola	0.79	0.77	0.81	0.74	0.79	0.82
Iris						
Jasmine	0.80	0.74	0.84	0.56**	0.83	0.80
Lily	0.81	0.77	0.84	0.86	0.81	0.80*
Poppy	0.80	0.79	0.79	0.73**	0.80	0.85
Rose	0.83*	0.89**	0.72**	---	---	---
Snowdrop	0.81	0.79	0.80	---	---	---
Sunflower	0.85	0.78	0.87	---	---	---
Orchid	0.83	0.81	0.83	---	---	---
Magnolia	0.62	0.71	0.46	---	---	---
Tulip	0.82	0.81	0.82	---	---	---
Honeysuckle	0.60	0.61	0.59	---	---	---
Violet	0.52	0.53	0.52	0.57	0.49	0.47

Interest (subject-related)

B7Q2E32 - When I do math, I sometimes get totally absorbed.

B7Q2G34 - Math is important to me personally.

B7Q2J37 - Because doing math is fun, I wouldn't want to give it up.

Note:

* #cases less than 50

** #cases less than 30

Reliability analysis: B7 Verb (Interest subject-related)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	0.86	0.83	0.87	0.87**	0.85	0.86
Aster	0.88	0.89	0.86	0.79*	0.90	0.88*
Buttercup						
Carnation	0.89	0.86	0.90	0.86	0.89	0.89
Cornflower	0.88	0.84	0.88	0.88**	0.87	0.90*
Crocus	0.83	0.83	0.74	0.93**	0.81	0.85**
Cuckooflower	0.85	0.85	0.81	0.84*	0.85	0.87*
Daffodil	0.86	0.80	0.80	0.81	0.87	0.84*
Dahlia	0.87	0.85	0.85	---	---	---
Daisy	0.87	---	---	---	---	---
Dandelion	0.83	0.81	0.83	0.90**	0.81	0.92*
Fresia	0.77	0.76	0.75	0.59**	0.79	0.57**
Gladiola	0.80	0.81	0.80	0.68	0.84	0.80
Iris						
Jasmine	0.87	0.83	0.86	0.69**	0.88	0.89
Lily	0.86	0.88	0.85	0.88	0.86	0.91*
Poppy	0.85	0.84	0.85	0.85**	0.87	0.82
Rose	0.74*	0.75**	0.74**	---	---	---
Snowdrop	0.75	0.75	0.75	---	---	---
Sunflower	0.89	0.86	0.89	---	---	---
Orchid	0.81	0.76	0.83	---	---	---
Magnolia	0.85	0.84	0.82	---	---	---
Tulip	0.87	0.89	0.83	---	---	---
Honeysuckle	0.59	0.45	0.65	---	---	---
Violet	0.60	0.62	0.56	0.56	0.63	0.67

Interest (subject-related)

B7Q2D31 - Because reading is fun, I wouldn't want to give it up.

B7Q2F33 - I read in my spare time.

B7Q2I36 - When I read, I sometimes get totally absorbed.

Note:

* #cases less than 50

** #cases less than 30

Reliability analysis: D2-2 (Control expectation)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	0.83	0.83	0.82	0.71*	0.82	0.86
Aster	0.77	0.80	0.76	0.87*	0.72	0.82*
Buttercup						
Carnation	0.84	0.83	0.85	0.78	0.85	0.87
Cornflower	0.81	0.81	0.69**	0.82	0.81	0.81*
Crocus	0.77	0.77	0.78	0.86**	0.74	0.85*
Cuckooflower	0.77	0.73	0.80	0.77*	0.78	0.79
Daffodil	0.84	0.82	0.86	0.83	0.83	0.87*
Dahlia	0.77	0.78	0.77	---	---	---
Daisy						
Dandelion	0.78	0.75	0.81	0.88**	0.76	0.73*
Freesia	0.69	0.71	0.67	0.61**	0.66	0.70*
Gladiola	0.83	0.82	0.84	0.83	0.81	0.89
Iris						
Jasmine	0.75	0.76	0.74	0.86**	0.71	0.78
Lily	0.80	0.73	0.84	0.80	0.78	0.82*
Poppy	0.78	0.79	0.77	0.75**	0.80	0.73
Rose	0.78*	0.83**	0.70**	---	---	---
Snowdrop	0.84	0.84	0.84	---	---	---
Sunflower	0.79	0.80	0.76	---	---	---
Orchid	0.78	0.76	0.80	---	---	---
Magnolia	0.79	0.76	0.81	---	---	---
Tulip	0.83	0.83	0.84	---	---	---
Honeysuckle	0.78	0.78	0.78	---	---	---
Violet	0.74	0.72	0.76	0.73	0.72	0.80

Control expectation

- D2Q4I31 - When I sit myself down to learn something really hard, I can learn it.
- D2Q4J32 - If I decide not to get any bad grades, I can really do it.
- D2Q4K33 - If I decide not to get any problems wrong, I can really do it.
- D2Q4L34 - If I want to learn something well, I can.

Note:

- * #cases less than 50
- ** #cases less than 30

Reliability analysis: D2-3^a (Self efficacy)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	0.81	0.79	0.82	0.65*	0.80	0.83
Aster	0.78	0.75	0.80	0.88*	0.72	0.86*
Buttercup						
Carnation	0.82	0.84	0.79	0.82	0.82	0.79
Cornflower	0.83	0.84	0.83	0.85**	0.83	0.81*
Crocus	0.75	0.8	0.68	0.60**	0.73	0.80*
Cuckooflower	0.81	0.81	0.79	0.78*	0.77	0.85
Daffodil	0.84	0.85	0.82	0.86	0.79	0.92
Dahlia	0.81	0.80	0.82	---	---	---
Daisy						
Dandelion	0.75	0.66	0.81	0.72**	0.71	0.79*
Freesia	0.67	0.64	0.71	0.01**	0.65	0.54*
Gladiola	0.78	0.75	0.81	0.66	0.78	0.85
Iris						
Jasmine	0.79	0.81	0.76	0.79**	0.78	0.80
Lily	0.80	0.78	0.80	0.82	0.79	0.83*
Poppy	0.83	0.81	0.83	0.82**	0.84	0.80
Rose	0.73*	0.78**	0.64**	---	---	---
Snowdrop	0.83	0.82	0.82	---	---	---
Sunflower	0.78	0.78	0.76	---	---	---
Orchid	0.78	0.72	0.80	---	---	---
Magnolia	0.79	0.73	0.83	---	---	---
Tulip	0.85	0.87	0.82	---	---	---
Honeysuckle	0.78	0.81	0.75	---	---	---
Violet	0.71	0.73	0.69	0.68	0.72	0.76

D2Q4N36 - I'm certain I can understand the most difficult material presented in readings.

D2Q4P38 - I'm confident I can understand the most complex material presented by the teacher.

D2Q4Q39 - I'm confident I can do an excellent job on assignments and tests.

D2Q4S41 - I'm certain I can master the skills being taught.

Note:

* #cases less than 50

** #cases less than 30

Reliability analysis: D3 (Self-concept verbal)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	0.81	0.79	0.82	0.88*	0.82	0.86
Aster	0.82	0.75	0.85	0.66*	0.80	0.87*
Buttercup						
Carnation	0.76	0.76	0.74	0.77	0.77	0.69
Cornflower	0.84	0.77	0.89	0.77**	0.86	0.86*
Crocus	0.61	0.52	0.64	0.67**	0.58	0.72*
Cuckooflower	0.76	0.76	0.75	0.66*	0.77	0.79
Daffodil	0.84	0.80	0.84	0.77	0.85	0.88
Dahlia	0.81	0.86	0.75	---	---	---
Daisy						
Dandelion	0.76	0.75	0.77	0.90**	0.81	0.62**
Fresia	0.80	0.81	0.76	0.61**	0.77	0.81**
Gladiola	0.75	0.77	0.73	0.66	0.75	0.82
Iris						
Jasmine	0.82	0.83	0.81	0.77**	0.78	0.88
Lily	0.82	0.85	0.81	0.83*	0.84	0.81*
Poppy	0.76	0.77	0.74	0.64**	0.75	0.72
Rose	0.62**	0.62**	0.67**	---	---	---
Snowdrop	0.80	0.78	0.79	---	---	---
Sunflower	0.84	0.83	0.84	---	---	---
Orchid	0.78	0.77	0.79	---	---	---
Magnolia	0.79	0.70	0.87	---	---	---
Tulip	0.77	0.80	0.75	---	---	---
Honeysuckle	0.63	0.66	0.58	---	---	---
Violet	0.54	0.49	0.57	0.39	0.53	0.57

Self-concept verbal

- D3Q3A01 - I'm hopeless in English classes (R).
- D3Q3J10 - I learn things quickly in English classes.
- D3Q3R18 - I get good marks in English.

Note:

- * #cases less than 50
- ** #cases less than 30

Reliability analysis: D4 (Self-concept math)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	0.88	0.84	0.89	0.87*	0.88	0.90
Aster	0.88	0.87	0.88	0.85*	0.88	0.91*
Buttercup						
Carnation	0.84	0.84	0.83	0.84	0.84	0.84
Cornflower	0.90	0.89	0.90	0.95**	0.88	0.90*
Crocus	0.81	0.80	0.81	0.88**	0.77	0.88*
Cuckooflower	0.88	0.84	0.89	0.90*	0.90	0.80
Daffodil	0.95	0.94	0.95	0.94	0.95	0.95
Dahlia	0.88	0.88	0.88	---	---	---
Daisy						
Dandelion	0.83	0.82	0.84	0.55**	0.82	0.87*
Fresia	0.88	0.88	0.88	0.79**	0.89	0.92*
Gladiola	0.90	0.90	0.89	0.89	0.90	0.88
Iris						
Jasmine	0.90	0.89	0.89	0.89**	0.91	0.88
Lily	0.87	0.86	0.88	0.83	0.89	0.85*
Poppy	0.93	0.93	0.93	0.91**	0.93	0.94
Rose	0.84*	0.81**	0.87**	---	---	---
Snowdrop	0.88	0.88	0.87	---	---	---
Sunflower	0.91	0.90	0.90	---	---	---
Orchid	0.92	0.92	0.89	---	---	---
Magnolia	0.85	0.77	0.91	---	---	---
Tulip	0.87	0.87	0.86	---	---	---
Honeysuckle	0.80	0.81	0.79	---	---	---
Violet	0.78	0.79	0.76	0.71	0.75	0.88

Self-concept math

D4Q3F06 - I get good marks in mathematics.

D4Q3K11 - Mathematics is one of my best subjects.

D4Q3P16 - I have always done well in mathematics.

Note:

* #cases less than 50

** #cases less than 30

Reliability analysis: D5 (Self-concept academic)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	0.76	0.70	0.80	0.52*	0.78	0.78
Aster	0.78	0.71	0.82	0.84*	0.77	0.88*
Buttercup						
Carnation	0.77	0.75	0.79	0.74	0.76	0.81
Cornflower	0.84	0.85	0.82	0.87**	0.83	0.87*
Crocus	0.77	0.76	0.78	0.55**	0.75	0.84*
Cuckooflower	0.79	0.81	0.78	0.85*	0.77	0.77
Daffodil	0.87	0.85	0.89	0.86*	0.87	0.91
Dahlia	0.78	0.79	0.78	---	---	---
Daisy						
Dandelion	0.77	0.73	0.82	0.63**	0.85	0.74*
Fresia	0.77	0.75	0.80	0.82**	0.77	0.65**
Gladiola	0.77	0.82	0.71	0.68	0.77	0.76
Iris						
Jasmine	0.77	0.72	0.77	0.77**	0.73	0.71
Lily	0.76	0.70	0.79	0.70	0.76	0.84*
Poppy	0.83	0.82	0.85	0.82**	0.81	0.84
Rose	0.77*	0.74**	0.74**	---	---	---
Snowdrop	0.82	0.81	0.83	---	---	---
Sunflower	0.77	0.76	0.77	---	---	---
Orchid	0.84	0.87	0.80	---	---	---
Magnolia	0.79	0.72	0.85	---	---	---
Tulip	0.79	0.75	0.83	---	---	---
Honeysuckle	0.74	0.68	0.78	---	---	---
Violet	0.64	0.68	0.59	0.56	0.64	0.75

Self-concept academic

D5Q3E05 - I learn things quickly in most school subjects.

D5Q3N14 - I do well in tests in most school subjects.

D5Q3V22 - I'm good at most school subjects.

Note:

* #cases less than 50

** #cases less than 30

Reliability analysis: E1 (Effort and Persistence in learning: general)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	0.86	0.85	0.86	0.81**	0.87	0.87
Aster	0.77	0.74	0.80	0.82**	0.79	0.69*
Buttercup						
Carnation	0.87	0.87	0.84	0.88	0.87	0.84
Cornflower	0.86	0.88	0.83	0.91**	0.87	0.82*
Crocus	0.79	0.80	0.79	0.81**	0.78	0.81**
Cuckooflower	0.79	0.81	0.76	0.81*	0.77	0.76
Daffodil	0.82	0.81	0.82	0.84*	0.81	0.85*
Dahlia	0.81	0.80	0.80	---	---	---
Daisy						
Dandelion	0.84	0.85	0.81	0.84**	0.83	0.87**
Freesia	0.76	0.73	0.79	0.74**	0.74	0.82**
Gladiola	0.82	0.83	0.81	0.73	0.80	0.88
Iris						
Jasmine	0.80	0.79	0.82	0.84**	0.78	0.82
Lily	0.84	0.82	0.85	0.85	0.80	0.87*
Poppy	0.87	0.86	0.87	0.81**	0.85	0.82
Rose	0.78*	0.80**	0.69**	---	---	---
Snowdrop	0.84	0.86	0.82	---	---	---
Sunflower	0.84	0.87	0.81	---	---	---
Orchid	0.83	0.83	0.81	---	---	---
Magnolia	0.88	0.89	0.82	---	---	---
Tulip	0.88	0.89	0.86	---	---	---
Honeysuckle	0.76	0.76	0.76	---	---	---
Violet	0.69	0.67	0.71	0.70	0.64	0.61

Effort and Persistence in learning: general

E1Q5C03 - When studying, I work as hard as possible.

E1Q5E05 - When studying, I keep working even if the material is difficult.

E1Q5G07 - When studying, I try to do my best to acquire the knowledge and skills taught.

E1Q5I09 - When studying, I put forth my best effort.

Note:

* #cases less than 50

** #cases less than 30

Reliability analysis: F2 (Competitive learning)

	Total	Boys	Girls	Low ISEI	Mid ISEI	High ISEI
Anemone	0.81	0.78	0.82	0.78**	0.80	0.83
Aster	0.75	0.72	0.77	0.86**	0.75	0.67*
Buttercup						
Carnation	0.79	0.77	0.79	0.80	0.79	0.82
Cornflower	0.79	0.75	0.80	0.78**	0.77	0.82*
Crocus	0.60	0.63	0.55	0.51**	0.62	0.54**
Cuckooflower	0.77	0.79	0.79	0.74*	0.80	0.79
Daffodil	0.79	0.75	0.81	0.73	0.81	0.79*
Dahlia	0.72	0.74	0.71	---	---	---
Daisy						
Dandelion	0.79	0.73	0.85	0.87**	0.76	0.74**
Fresia	0.75	0.73	0.76	0.76**	0.67	0.77**
Gladiola	0.56	0.57	0.56	0.67	0.47	0.62
Iris						
Jasmine	0.75	0.75	0.75	0.82**	0.74	0.76
Lily	0.76	0.73	0.80	0.74	0.78	0.78*
Poppy	0.81	0.81	0.79	0.82**	0.78	0.85
Rose	0.48*	0.44**	0.58**	---	---	---
Snowdrop	0.74	0.77	0.72	---	---	---
Sunflower	0.73	0.68	0.76	---	---	---
Orchid	0.78	0.80	0.76	---	---	---
Magnolia	0.82	0.80	0.83	---	---	---
Tulip	0.77	0.79	0.77	---	---	---
Honeysuckle	0.67	0.69	0.66	---	---	---
Violet	0.71	0.72	0.67	0.68	0.70	0.77

Competitive learning

- F2Q6C13 - I like to try to be better than other students.
- F2Q6F16 - Trying to be better than others makes me work well.
- F2Q6H18 - I would like to be the best at something.
- F2Q6K21 - I learn faster if I'm trying to do better than the others.

Note:

- * #cases less than 50
- ** #cases less than 30

Correlations between the self-regulated learning scales and the achievement tests

	Mathematics	Reading	Science
A1 (4)	-0.07	-	-0.06
A1 ^a (3)	-0.06	-	-
A2-1 (4)	0.12	0.10	0.13
A2-2 (4)	-0.06	-	-
A3 (5)	0.11	0.17	0.13
			-
B2 (3)	-	0.04	-
B3 (3)	-	-0.06	-
B4 (4)	-0.05	-0.06	-
B4 ^a (3)	-	-0.05	-
B7 math (4)	0.19	-	0.06
B7 verb (4)	0.17	0.28	0.23
C1 (5)	0.17	0.16	0.17
C2 (4)	-	-0.05	-
D1 (5)	0.22	0.21	0.23
D2 (15)	0.34	0.28	0.32
D2-1 (3)	0.29	0.25	0.28
D2-2 (4)	0.21	0.19	0.21
D2-3 (8)	0.33	0.27	0.31
D2-3^a (4)	0.30	0.21	0.26
D3 (3)	0.13	0.25	0.19
D4 (3)	0.44	0.22	0.26
D5 (3)	0.33	0.30	0.32
D6 (4)	0.21	0.15	0.21
E1 (4)		0.16	
E2 math (3)		0.16	
E2 verb (3)		0.17	
F1 (4)		0.08	
F2 (4)		0.08	
G1 (3)		-0.16	
G2 (4)		-	
G2 ^a (3)		-	
G3 (4)		-	
G3 ^a (3)		-	
G (11)		-0.05	

`\section*{Estimation comparisons}`

I have compared different estimation methods and `robust' corrections to maximum likelihood (ML) estimates of a factor model for the E- and the F-scale simultaneously (i.e., correlated factors) of Korean data. The results in Table 1 show for the main parameters: ML-estimates, robust corrections for standard errors of ML-estimates, and weighted least squares estimates. The results hardly differs, both regarding parameter estimates, and corresponding estimated standard errors. `\|`

```

\begin{table}[h]
\begin{center}
\vsp{-5}
\caption{Comparing estimation methods in a factor
model.}\label{T11.1}
\vsp{7}
\small
\begin{tabular}{|c|c|c|c|c|}
\hline
Parameter$ & \multicolumn{2}{|c|}{ $ML$ } & $corrected~ML$ &
\multicolumn{2}{|c|}{ $WLS$ } \\
& \multicolumn{2}{|c|}{ $s.e.$ } & $s.e.$ & \multicolumn{2}{|c|}{ $s.e.$ } \\
\hline
\|
\|b_{e1}$ & .645 & .040 & .036 & .657 & .035 \\
\|b_{e2}$ & .512 & .043 & .042 & .522 & .041 \\
\|b_{e3}$ & .694 & .042 & .037 & .695 & .035 \\
\|b_{e4}$ & .670 & .039 & .034 & .681 & .032 \\
\|b_{f1}$ & .294 & .037 & .050 & .334 & .042 \\
\|b_{f2}$ & .456 & .052 & .052 & .439 & .048 \\
\|b_{f3}$ & .371 & .054 & .063 & .400 & .052 \\
\|b_{f4}$ & .319 & .046 & .055 & .303 & .048 \\
\|phi $ & .420 & .066 & .062 & .427 & .054 \\
\hline
\end{tabular}
\end{center}
\end{table}

```

```

\begin{table}[hb]
\begin{center}
\vsp{-5}
\caption{Comparing estimation methods in a factor
model.}\label{T11.1}
\vsp{7}
\small
\begin{tabular}{|c|c|c|c|}
\hline
$statistic$ & $ML$ & & $corrected~ML$ & & $WLS$ \\
\hline
\end{tabular}

```

```

\hline
$\chi_{19}$ & 22.54 (p=.26) & & & 18.56 (p=.49) \\
$\chi_{NWLS}$ & 23.06 (p=.24) & & & & \\
$\chi_{SB}$ & & & 20.064 (p=.39) & & \\
\\ $\chi_B$ & & & 18.788 (p=.47) & & \\
\\ $RMSEA$ & .024 & & .012 & & .000 \\
\\ $SRMR$ & .039 & & .029 & & .042 \\
\hline
\end{tabular}
\end{center}
\end{table}
\normalsize

```

\par

The results with regard to the fit of the model (Table 2), show the chi-square statistic for ML (χ_{df}), the normal theory weighted least square estimate (χ_{NWLS}), the robust Satorra-Bentler statistic (χ_{SB}), and a measure of Browne to correct for non-normality (χ_B). In addition, the root mean squared error of approximation (RMSEA) and the standardized root mean square error of residuals (SRMR) is shown. Despite small differences, the general conclusion regarding the fit of the model is not affected by the choice of the estimation method, nor by corrections to specific fit measures.

\par

Without having checked every single country it can rather safely be assumed that the choice of ML-corrected estimation would not have affected our general conclusions and decisions with respect to scale selection. Our check concerns a country with relatively large deviations from normality. Other countries are therefore not expected to do worse.

\par

The fact that WLS gives similar results compared to ML is also reassuring for the final model choice.

\par

A similar analysis of three B-scales for the Sweden data, gave comparable results.