School Diagnosis Chart

**Group-oriented activities:**
1. Classroom activities are going well.
2. My feelings are understood in the classroom.
3. The class activities are interesting.

**Relationship with friends**
4. My friend may worry when I am absent from school without notice.
5. My friend admits my goodness.
6. My friend understands me when I make a mistake.

**Relationship with teachers**
7. Teachers understand me when I make a mistake.
8. My teacher likes me.
9. My teacher accepts me warmly.

**Help-seeking behaviors related to learning subject matter**
10. I ask my friend when I could not understand something.
11. I ask my family when I could not understand something.
12. I ask teachers when I could not understand something.

**Social class**
13. After returning home from school and on my days off, I often play outside.
14. I talk with my family about what I have learned at school.
15. I read scientific articles and watch science TV programs.
16. I read newspapers and watch the TV news.
17. I use books or dictionaries when I study.

**Attitude (Motivation) toward Math**
18. Math is one of my favorite subjects.
19. I can get good marks in math.
20. I can understand math classes.
21. Learning math is interesting.
22. I would like to tackle harder math problems.
23. I want to continue learning math even after becoming an adult.
Learning styles (Meta-cognitive ability): Math

24 When math class is difficult, I try to figure out the reason.
25 I know how to overcome my weak sides in math.
34 I can set up learning goal in math.

Learning Strategy (Memory-Oriented): Math

35 In math classes, Rote learning is important.
36 Repetition is important part in math learning.
37 I try to copy down everything that was written on the blackboard by teacher.

Learning Strategy (Elaboration-Oriented): Math

38 I try to organize my notebook to understand meaningfully what I learned in math classes.
39 When I learn a new idea in math, I try to make concrete image of it.
40 I try to understand topics not only by memorizing but also by inferring the meaning.

Learning Strategy (Organization-Oriented): Math

41 When I organize my math notes, I try to integrate the material.
42 I try to create a new conceptual category in which different topics could be grouped.
43 I try to connect what I learn in math classes to daily life.

Attitude (Motivation) toward Science

44 Science is one of my favorite subjects.
45 I can get a good marks in science.
46 I can understand science classes.
47 Learning science is interesting.
48 I would like to tackle harder science problems.
49 I want to continue learning science even after becoming an adult.

Learning styles (Meta-cognitive ability): Science

50 When science class is difficult, I try to figure out the reason.
51 I know how to overcome my weak points in science.
52 I can set up a learning goal in science.

Learning Strategy (Memory-Oriented): Science

54 In science classes, Rote learning is important.
55 Repetition is an important part in science learning.
56 I try to copy down everything that was written on the blackboard by teacher.
Learning Strategy (Elaboration-Oriented): Science

57 I try to organize my notebook to understand meaningfully what I learned in science classes.
58 When I learn new idea in science, I try to make concrete image of that.
59 I try to understand topics not only by memorizing but also by inferring the meaning.

Learning Strategy (Organization-Oriented): Science

60 When I organize my science notes, I try to integrate the material.
61 I try to create a new conceptual category in which different topics could be grouped.
62 I try to connect what I learn in science classes to daily life.

Table. Standardized Cronbach’s alpha

<table>
<thead>
<tr>
<th>Scale</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group oriented</td>
<td>0.788</td>
</tr>
<tr>
<td>Friends</td>
<td>0.927</td>
</tr>
<tr>
<td>teachers</td>
<td>0.872</td>
</tr>
<tr>
<td>Help-seeking</td>
<td>0.495</td>
</tr>
<tr>
<td>Social class</td>
<td>0.664</td>
</tr>
<tr>
<td>Motivation (Math)</td>
<td>0.901</td>
</tr>
<tr>
<td>Motivation (SCI)</td>
<td>0.904</td>
</tr>
<tr>
<td>Meta-cognitive (Math)</td>
<td>0.827</td>
</tr>
<tr>
<td>Meta-cognitive (SCI)</td>
<td>0.812</td>
</tr>
<tr>
<td>MOLS (Math)</td>
<td>0.510</td>
</tr>
<tr>
<td>MOLS (SCI)</td>
<td>0.559</td>
</tr>
<tr>
<td>EOLS (Math)</td>
<td>0.793</td>
</tr>
<tr>
<td>EOLS (SCI)</td>
<td>0.759</td>
</tr>
<tr>
<td>OOLS (Math)</td>
<td>0.682</td>
</tr>
<tr>
<td>OOLS (SCI)</td>
<td>0.735</td>
</tr>
</tbody>
</table>

The questionnaire consisted of study-subject
- independent scales (5) and subject-dependent scales
(Math & Science)(5)