Table 1 | List of the SDGs

|  |  |
| --- | --- |
| SDG 1 | No Poverty |
| SDG 2 | Zero Hunger |
| SDG 3 | Good Health and Well-being |
| SDG 4 | Quality Education |
| SDG 5 | Gender Equality |
| SDG 6 | Clean Water and Sanitation |
| SDG 7 | Affordable and Clean Energy |
| SDG 8 | Decent Work and Economic Growth |
| SDG 9 | Industry, Innovation, and Infrastructure |
| SDG 10 | Reducing Inequality |
| SDG 11 | Sustainable Cities and Communities |
| SDG 12 | Responsible Consumption and Production |
| SDG 13 | Climate Action |
| SDG 14 | Life Below Water |
| SDG 15 | Life On Land |
| SDG 16 | Peace, Justice, and Strong Institutions |
| SDG 17 | Partnerships for the Goals |

Table 2 | Internal reliability of GPI

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Number of items** | **Cronbach alpha**  **(Pre-survey)** | **Cronbach alpha**  **(Post-survey)** |
| **Cognitive knowing** | 7 | 0.721 | 0.732 |
| **Cognitive knowledge** | 5 | 0.775 | 0.817 |
| **Intrapersonal identity** | 3 | 0.607 | 0.646 |
| **Intrapersonal affect** | 3 | 0.779 | 0.726 |
| **Interpersonal Social interaction** | 4 | 0.537 | 0.582 |

Table 3-1 | Level of enjoyment, perceived awareness and frequency of question-attempt

|  |  |  |
| --- | --- | --- |
|  | **Mean** | **SD** |
| **Level of Enjoyment** | 3.62 | 0.99 |
| **Perceived improvement of UN-SDG awareness** | 3.75 | 1.36 |
| **Frequency of question-attempt** | 145.0 | 74.7 |

Table 3-2 | Independent-sampled T-Test between students in 1st and 2nd eTournament

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Mean**  **(1st eTournament, N=99)** | **Mean**  **(2nd eTournament, N=118)** | **p-value** |
| **Level of Enjoyment** | 3.09 | 4.06 | 0.00 |
| **Perceived improvement of SDG awareness** | 2.98 | 4.40 | 0.00 |
| **Frequency of question-attempt** | 114.4 | 170.7 | 0.00 |

Table 4-1 | Paired-sampled T-test of Students’ Global perspectives in Pre- and Post-survey

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Mean-difference** | **t-value** | **p-value** |
| **Cognitive knowing** | -0.54 | 1.14 | 0.256 |
| **Cognitive knowledge** | 0.04 | -0.98 | 0.329 |
| **Intrapersonal identity** | 0.00 | 0.04 | 0.970 |
| **Intrapersonal affect** | -0.19 | 4.22 | 0.000 |
| **Interpersonal social interaction** | 0.04 | 0.73 | 0.456 |

Table 4-2 | Independent-sampled T-test of Students’ Global perspectives between 1st and 2nd eTournament

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Mean-difference before and after Tournament**  **(1st eTournament, N=99)** | **Mean-difference before and after Tournament**  **(2nd eTournament, N=111)** | **t-value** | **p-value** |
| **Cognitive knowing** | 0.105 | -0.188 | 3.26 | 0.00 |
| **Cognitive knowledge** | -0.059 | 0.058 | -1.56 | 0.12 |
| **Intrapersonal identity** | -0.074 | 0.024 | -1.12 | 0.26 |
| **Intrapersonal affect** | -0.498 | -0.225 | -2.85 | 0.01 |
| **Interpersonal social interaction** | -0.283 | 0.144 | -4.15 | 0.00 |

Table 5 | Correlation between students’ global perspective, level of enjoyment, improved SDG awareness and frequency of question-attempt

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Level of Enjoyment** | **Perceived improvement of SDG awareness** | **Frequency of question-attempt** |
| **Change of Cognitive knowing** | 0.002 | -0.078 | 0.095 |
| **Change of Cognitive knowledge** | 0.167\* | 0.124 | 0.250\* |
| **Change of Intrapersonal identity** | 0.067 | 0.079 | 0.167 |
| **Change of Intrapersonal affect** | 0.199\* | 0.111 | 0.265\* |
| **Change of Interpersonal social interaction** | 0.177\* | 0.239 | 0.211\* |

*Note.* (\*) p-value is less than or equal to 0.05