|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Knowledge | | | Thinking | Attitude |
| Student 1 | 1 | 1 | 0 | 0 | 1 |
| Student 2 | 0 | 0 | 0 | 0 | 0 |
| Student 3 | 1 | 2 | 1 | 2 | 1 |
| Student 4 | 1 | 0 | 0 | 0 | 0 |
| Student 5 | 1 | 0 | 0 | 0 | 0 |
| Student 6 | 1 | 0 | 0 | 0 | 0 |
| Student 7 | 1 | 0 | 0 | 0 | 0 |
| Student 8 | 1 | 0 | 0 | 1 | 1 |
| Student 9 | 1 | 0 | 0 | 2 | 1 |
| Student 10 | 1 | 0 | 0 | 0 | 0 |
| Student 11 | 1 | 0 | 0 | 1 | 1 |
| Group Total = | 10 | 3 | 1 | 6 | 5 |
| maximum= | 11 | 22 | 11 | 22 | 11 |

There were three knowledge questions with point allocation 1, 2, and 1 respectively. Questions 2 & 3 required more advanced numerical skill and thinking. Only one student received full points on these. There was one question in each of the categories “thinking” and “attitude” with point allocation 2 and 1 respectively. Performance was considerably higher for these questions.

The very low scores on knowledge questions 2 & 3 were somewhat surprising given that computing relative risk was discussed extensively earlier in the term, as was its connection to conditional probability. The assessment was given in the last week of the term and was not announced in advance. After initial instruction, students were told they would not see risk-type questions on tests. Perhaps students compartmentalized this knowledge as “not for immediate use”.

The instructional material may have been effective in helping students appreciate the need to understand both types of risk, as indicated by the higher scores on the latter questions, but not as effective in helping students compute the relative risk. It seems, additional instruction, tailored to this purpose, is needed. I think the assessment instrument captures what I’d like students to take away from this lesson and I would reuse it mostly “as is”