**Introduction**

Visual literacy - the ability to comprehend and communicate using images is one of the vital skills needed to become a good scientist or researcher. There are national calls for instructors to explicitly teach visualization skills to help students develop their visual literacy.¹

**Hypothesis:** We predict that if Bloom's taxonomy is indeed hierarchical, students who perform well on HOCs questions will perform equally well on LOCS questions.

**Methods**

1. Bloomed and organized into visualization types
2. Student performance data for each visualization question
3. Analyzed in Excel

**Variable** | **Definition**
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AvgHOCs | Total points on (overall, unit 2 and unit 3) HOCs visualization questions divided by the total points possible on all HOCs visualization questions
AvgLOCS | Total points on (overall, unit 2 and unit 3) LOCS visualization questions divided by the total points possible on all LOCS visualization questions

**Relevant Performance Variables**

**Results**

- BIOC 460 assesses at all Bloom's levels, but predominately at the lower three levels.
- Majority of visualization-based assessment items make use of symbolic and schematic representations.
- Analysis level visualization items mainly utilize graphs.

**Discussion and Further Directions**

- Future work will be done to further examine whether Bloom's taxonomy is a useful framework for assessing visualization skills.

**Select References**


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