| Evaluation vs Intervention |               |               |                 |             |                 |  |
|----------------------------|---------------|---------------|-----------------|-------------|-----------------|--|
|                            | Practice      | Tool          | Colleagues      | Instructors | Evaluation      |  |
| Grades                     | [1] [2] [3]   | [2] [3]       | [1] [4] [5] [6] | [4] [5]     | [7] [8] [6] [3] |  |
| Participation              | [2] [9] [10]  | [2] [10]      | [9] [11]        | [12]        |                 |  |
| Opinion                    | [13] [10] [3] | [13] [10] [3] | [14] [15] [5]   | [14] [5]    | [16] [17] [3]   |  |
| Deep                       | [10]          | [10]          | [14] [15]       | [14]        | [16]            |  |
| Feedback                   |               |               |                 |             |                 |  |

| <b>Evaluation vs Intervention</b> |          |      |            |             |            |  |
|-----------------------------------|----------|------|------------|-------------|------------|--|
|                                   | Practice | Tool | Colleagues | Instructors | Evaluation |  |
| Grades                            | 3        | 2    | 4          | 2           | 4          |  |
| Participation                     | 3        | 2    | 2          | 1           | 1          |  |
| Opinion                           | 3        | 3    | 3          | 2           | 3          |  |
| Deep Feedback                     | 1        | 1    | 2          | 1           | 1          |  |

Donulation vs Evaluation

| Population vs Evaluation |                 |                   |               |                |  |  |
|--------------------------|-----------------|-------------------|---------------|----------------|--|--|
|                          | Grades          | Participation O   | pinion        | Deep           |  |  |
|                          |                 |                   |               | Feedback       |  |  |
| K-12                     | [1] [4] [8] [3] | [9]               | .3] [3]       |                |  |  |
| Undergraduate            | [2] [7] [5] [6] | [2] [12] [10] [1  | .6] [14] [15] | [16] [14] [15] |  |  |
|                          |                 | [11]              | .7] [5] [10]  | [10]           |  |  |
| First time               | [2] [6]         | [2] [12] [10] [1  | .6] [10]      | [16] [10]      |  |  |
| programmers              |                 | [11]              |               |                |  |  |
| Educators                |                 |                   | .3]           |                |  |  |
| Race                     | [4] [3]         | [12]              |               |                |  |  |
| Gender                   | [8] [5]         | [12] [10] [11] [1 | .7] [5] [10]  | [10]           |  |  |

Population vs Evaluation

| i opalation vs Evaluation |                      |   |         |          |  |  |  |
|---------------------------|----------------------|---|---------|----------|--|--|--|
|                           | Grades Participation |   | Opinion | Deep     |  |  |  |
|                           |                      |   |         | Feedback |  |  |  |
| K-12                      | 4                    | 1 | 2       | 0        |  |  |  |
| Undergraduate             | 4                    | 4 | 6       | 4        |  |  |  |
| First time programmers    | 2                    | 4 | 2       | 2        |  |  |  |
| Educators                 | 0                    | 0 | 1       | 0        |  |  |  |
| Race                      | 2                    | 1 | 1       | 0        |  |  |  |
| Gender                    | 2                    | 3 | 3       | 1        |  |  |  |

Population vs Intervention

| Population vs intervention |                  |          |                   |               |                   |  |
|----------------------------|------------------|----------|-------------------|---------------|-------------------|--|
|                            | Practice         | Tool     | Colleagues        | Instructors   | Evaluation        |  |
| K-12                       | [1] [9] [13] [3] | [13] [3] | [1] [9] [4]       | [4]           | [8] [3]           |  |
| Undergraduate              | e[2] [10]        | [2] [10] | [14] [15] [5] [6] | [12] [14] [5] | [16] [7] [17] [6] |  |
|                            |                  |          | [11]              |               | [11]              |  |
| First time                 | e [2] [10]       | [2] [10] | [6] [11]          | [12]          | [16] [6] [11]     |  |
| programmers                |                  |          |                   |               |                   |  |
| Educators                  | [13]             | [13]     |                   |               |                   |  |
| Race                       | [3]              | [3]      | [4]               | [12] [4]      | [3]               |  |
| Gender                     | [10]             | [10]     | [5] [11]          | [12] [5]      | [17] [8] [11]     |  |
|                            | I .              |          |                   |               |                   |  |

Population vs Intervention

|                        | Practice | Tool | Colleagues | Instructors | Evaluation |
|------------------------|----------|------|------------|-------------|------------|
| K-12                   | 4        | 2    | 3          | 1           | 2          |
| Undergraduate          | 2        | 2    | 5          | 3           | 5          |
| First time programmers | 2        | 2    | 2          | 1           | 3          |
| Educators              | 1        | 1    | 0          | 0           | 0          |
| Race                   | 1        | 1    | 1          | 2           | 1          |
| Gender                 | 1        | 1    | 2          | 2           | 3          |

[1] [n. d.]. Test Article. ([n. d.]).
[2] [n. d.]. Test Article. ([n. d.]).
[3] [n. d.]. Test Article. ([n. d.]).
[4] [n. d.]. Test Article. ([n. d.]).
[5] [n. d.]. Test Article. ([n. d.]).
[6] [n. d.]. Test Article. ([n. d.]).
[7] [n. d.]. Test Article. ([n. d.]).
[8] [n. d.]. Test Article. ([n. d.]).
[9] [n. d.]. Test Article. ([n. d.]).
[10] [n. d.]. Test Article. ([n. d.]).
[11] [n. d.]. Test Article. ([n. d.]).
[12] [n. d.]. Test Article. ([n. d.]).
[13] [n. d.]. Test Article. ([n. d.]).
[14] [n. d.]. Test Article. ([n. d.]).

[16]