**POOLS v2.0 Expert Review**

**Overview of Item Review Results & Development Recommendations**

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**General Feedback to Consider**

* Most online courses and programs I've seen find their theoretical support from progressivism and constructivism. For a study of perceptions of online learning, it might be interesting to explore deeper the role of experience as well as discovery of knowledge as part of your constructs
* I cannot recall the stated purpose of the instrument, but some items pertaining to perceptions about the need for online learning, equity in online learning, and instruction for special populations/subject content may be considered, as they could provide insight into motivational for adopting or rejecting online learning as a viable instructional modality.
* I think that it depends on the type of online learning offered and the knowledge and flexibility of the instructor about online learning.

**Item-Construct Coherence**

We asked subject matter experts whether they agreed or disagreed that an item measured the reported construct. Below we have broken down the results as the proportion of experts who agreed with each statement. You will notice that some experts did not agree or disagree to some items, and in a few cases the expert gave qualitative information as to why. We will dive into this information later. But, for now, we present the coarse overview of how did expert think the items mapped onto the constructs of perceptions of online learning. All items with agreement less than 75% is marked with (!) for possible removal or major revision.

*Construct: Effectiveness of Learning*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item | Question | Agree | Total | Flag |
| 0 | CONSTRUCT DEFINITION | 2 | 3 |  |
| In your experience with traditional face-to-face (F2F) and online learning environments, when you compare F2F to online learning, you perceive that online learning... | | | | |
| 1 | permits students to acquire content knowledge. | 3 | 3 |  |
| 2 | permits students to develop conceptual understanding. | 3 | 3 |  |
| 3 | is effective for learning about the topics in the curriculum. | 3 | 3 |  |
| 4 | is effective for building knowledge. | 2 | 3 |  |
| 5 | supports student achievement. | 3 | 3 |  |
| 6 | prepares students for high stakes assessments. | 3 | 3 |  |
| 7 | prepares students for work. | 2 | 3 |  |
| 8 | accomplishes the goals of the curriculum. | 3 | 3 |  |
| 9 | promotes higher-ordered thinking skills such as analysis, synthesis, and evaluation. | 3 | 3 |  |
| 10 | effectively assesses student performance. | 2 | 3 |  |
| 11 | assessments provide teachers with reliable information on student progress. | 3 | 3 |  |
| 12 | encourages academic integrity and adherence to intellectual property standards. | 2 | 3 |  |

Items to remember as possibly needing to be removed or revised:

*Construct: Student Centeredness*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item | Question | Agree | Total | Flag |
| 0 | CONSTRUCT DEFINITION | 1 | 3 |  |
| In your experience with traditional face-to-face (F2F) and online learning environments, when you compare F2F to online learning, you perceive that online learning... | | | | |
| 1 | is student centered. | 3 | 3 |  |
| 2 | offers students choices. | 3 | 3 |  |
| 3 | permits differentiation based on student needs. | 3 | 3 |  |
| 4 | supports flexible pacing for students. | 3 | 3 |  |
| 5 | supports learner-customized pacing. | 3 | 3 |  |
| 6 | aligns instruction to individual learning goals. | 3 | 3 |  |
| 7 | is personalized and adaptive. | 3 | 3 |  |
| 8 | encourages individualized assessment (as compared to standardized assessment). | 3 | 3 |  |

Items to remember as possibly needing to be removed or revised:

*Construct: Interactiveness (or Interactivity) of Learning*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item | Question | Agree | Total | Flag |
| 0 | CONSTRUCT DEFINITION | 2 | 3 |  |
| In your experience with traditional face-to-face (F2F) and online learning environments, when you compare F2F to online learning, you perceive that online learning. | | | | |
| 1 | supports student-to-student interaction. | 3 | 3 |  |
| 2 | permits students to collaborate on learning tasks. | 3 | 3 |  |
| 3 | provides a space for students to work in teams. | 3 | 3 |  |
| 4 | permits one-on-one interaction with the teacher. | 3 | 3 |  |
| 5 | builds community among students. | 3 | 3 |  |
| 6 | encourages academic dialogue. | 3 | 3 |  |
| 7 | is collaborative. | 3 | 3 |  |
| 8 | facilitates interaction with course content. | 3 | 3 |  |

Items to remember as possibly needing to be removed or revised:

*Construct: Enagedness of Learning*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item | Question | Agree | Total | Flag |
| 0 | CONSTRUCT DEFINITION | 2 | 3 |  |
| In your experience with traditional face-to-face (F2F) and online learning environments, when you compare F2F to online learning, you perceive that online learning... | | | | |
| 1 | connects learning to real work situations. | 3 | 3 |  |
| 2 | supports project-based learning. | 3 | 3 |  |
| 3 | supports creative thinking and innovation. | 3 | 3 |  |
| 4 | engages student in self-directed learning. | 3 | 3 |  |
| 5 | helps students transfer learning to novel situations. | 3 | 3 |  |
| 6 | builds time management skills. | 3 | 3 |  |
| 7 | requires time commitment. | 3 | 3 |  |
| 8 | engages student autonomy. | 3 | 3 |  |

Items to remember as possibly needing to be removed or revised:

**Subscale Feedback and Suggestions**

For each subscale below, we outline some of the specific feedback given. Here, we are looking for general information about whether the SME had specific advice or comments that we would consider for each construct. When given, we incorporate feedback at the item level.

*Effectiveness of Learning*

General comments related to the *Effectiveness of Learning* subscale:

* These seem to be good items. While I read the description of the assessment, I'm not sure what your RQs or your hypotheses are. So, it's difficult for me to know if you have the right items in the assessment. But these do seem to be relevant to online education.
* If you are going to measure aspects of academic integrity, I think you need a few more items that get at some of the most concerning behaviors (i.e., cheating on assignments & exams through various means)

Item level feedback:

Items that we previously flagged are

|  |  |  |
| --- | --- | --- |
| Item | Question | Feedback |
| 0 | CONSTRUCT DEFINITION | * Combining acquisition of knowledge and application of it includes cognitive and behavioral domains of learning. Good. * How is "masterfully acquired" operationalized? |
| In your experience with traditional face-to-face (F2F) and online learning environments, when you compare F2F to online learning, you perceive that online learning... | | |
| 1 | permits students to acquire content knowledge. |  |
| 2 | permits students to develop conceptual understanding. |  |
| 3 | is effective for learning about the topics in the curriculum. |  |
| 4 | is effective for building knowledge. |  |
| 5 | supports student achievement. |  |
| 6 | prepares students for high stakes assessments. |  |
| 7 | prepares students for work. | * future employment |
| 8 | accomplishes the goals of the curriculum. |  |
| 9 | promotes higher-ordered thinking skills such as analysis, synthesis, and evaluation. |  |
| 10 | effectively assesses student performance. | * allows for the effective assessment of student performance |
| 11 | assessments provide teachers with reliable information on student progress. |  |
| 12 | encourages academic integrity and adherence to intellectual property standards. | * this does not appear to be as directly tied to instruction and assessment as the other items. |

*Construct: Student Centeredness*

General comments related to the *Student Centeredness* subscale:

* I'm not a huge fan of this item, as it seems to set up a false dichotomy. Both modalities of instruction have the "potential" for all these things, but the question seems to infer that these things are inherent within a specific modality. In other words, the way the stem is worded seems to imply that the choices are a part of f2f learning, and the respondent is being asked if they think it is as inherent in online instruction. The reality is that it is equally possible in both modalities, but the question, I would think, is in which one does the respondent feel it is most easily accomplished.

Item level feedback:

Items that we previously flagged are

|  |  |  |
| --- | --- | --- |
| Item | Question | Feedback |
| 0 | CONSTRUCT DEFINITION | * This definition is a little confusing. I'm not sure what student direction-student is. The hyphens may be throwing me off. It may be helpful to define student-centered in comparison to teacher-centered or subject-centered approaches. * I think student needs and interests should be in this definition. |
| In your experience with traditional face-to-face (F2F) and online learning environments, when you compare F2F to online learning, you perceive that online learning... | | |
| 1 | is student centered. |  |
| 2 | offers students choices. |  |
| 3 | permits differentiation based on student needs. |  |
| 4 | supports flexible pacing for students. |  |
| 5 | supports learner-customized pacing. | * Ok, this item should be in favor of online every time. Does this present a bias? |
| 6 | aligns instruction to individual learning goals. |  |
| 7 | is personalized and adaptive. |  |
| 8 | encourages individualized assessment (as compared to standardized assessment). |  |

*Construct: Interactiveness (or Interactivity) of Learning*

General comments related to the *Interactiveness (or Interactivity) or Learning* subscale:

* I have similar issues with this item as the previous. Maybe ask if they "perceive that online learning can..." or "perceive that online learning is equal to or better than f2f for..."

Item level feedback:

Items that we previously flagged are

|  |  |  |
| --- | --- | --- |
| Item | Question | Feedback |
| 0 | CONSTRUCT DEFINITION | * You could add a fourth domain, which would include experiential learning, student-context. In other words, what does one's context bring to bear on the interactivity within a course? |
| In your experience with traditional face-to-face (F2F) and online learning environments, when you compare F2F to online learning, you perceive that online learning... | | |
| 1 | supports student-to-student interaction. |  |
| 2 | permits students to collaborate on learning tasks. |  |
| 3 | provides a space for students to work in teams. |  |
| 4 | permits one-on-one interaction with the teacher. |  |
| 5 | builds community among students. |  |
| 6 | encourages academic dialogue. |  |
| 7 | is collaborative. |  |
| 8 | facilitates interaction with course content. |  |

*Construct: Enagedness of Learning*

General comments related to the *Engagedness of Learning* subscale:

* Maybe the affective domain is present in time and autonomy, but I'm still not seeing a strong connection. Of course Krathwohl and co. had a hard enough time with their taxonomy 60 years ago!
* Same as previous items. It is unclear if you are trying to determine if respondents perceive online as a viable instructional method (i.e., "can" online do the things that should happen in f2f) or if it is an equal or better modality than f2f.

Item level feedback:

Items that we previously flagged are

|  |  |  |
| --- | --- | --- |
| Item | Question | Feedback |
| 0 | CONSTRUCT DEFINITION | * In your next to last sentence, I believe you need a "by" after the word "influenced." |
| In your experience with traditional face-to-face (F2F) and online learning environments, when you compare F2F to online learning, you perceive that online learning... | | |
| 1 | connects learning to real work situations. |  |
| 2 | supports project-based learning. |  |
| 3 | supports creative thinking and innovation. |  |
| 4 | engages student in self-directed learning. | * word being defined is in the item. Is there an alternative to "engage?" |
| 5 | helps students transfer learning to novel situations. |  |
| 6 | builds time management skills. |  |
| 7 | requires time commitment. | * Make 2 items: greater time commitment/less time commitment |
| 8 | engages student autonomy. |  |

**Scale Revisions: Perceptions of Online Learning Scale (v2.1)**

Q2.1 In your experience with traditional face-to-face (F2F) and online learning environments, when you compare F2F to online learning, you perceive that online learning...

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Item Response Format | | | | |
|  | Definitely less than F2F (1) | Somewhat less than F2F (2) | About the same as F2F (3) | Somewhat more than F2F (4) | Definitely more than F2F (5) |
| permits students to acquire content knowledge. |  |  |  |  |  |
| permits students to develop conceptual understanding. |  |  |  |  |  |
| is effective for learning about the topics in the curriculum. |  |  |  |  |  |
| is effective for building knowledge. |  |  |  |  |  |
| supports student achievement. |  |  |  |  |  |
| prepares students for high stakes assessments. |  |  |  |  |  |
| prepares students for work. |  |  |  |  |  |
| accomplishes the goals of the curriculum. |  |  |  |  |  |
| promotes higher-ordered thinking skills such as analysis, synthesis, and evaluation. |  |  |  |  |  |
| effectively assesses student performance. |  |  |  |  |  |
| assessments provide teachers with reliable information on student progress. |  |  |  |  |  |
| encourages academic integrity and adherence to intellectual property standards. |  |  |  |  |  |

End of Block: Effective Learning

Start of Block: Student Centered

Q3.1 In your experience with traditional face-to-face (F2F) and online learning environments, when you compare F2F to online learning, you perceive that online learning...

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Item Response Format | | | | |
|  | Definitely less than F2F (1) | Somewhat less than F2F (2) | About the same as F2F (3) | Somewhat more than F2F (4) | Definitely more than F2F (5) |
| is student centered. |  |  |  |  |  |
| offers students choices. |  |  |  |  |  |
| permits differentiation based on student needs. |  |  |  |  |  |
| supports flexible pacing for students. |  |  |  |  |  |
| supports learner-customized pacing. |  |  |  |  |  |
| aligns instruction to individual learning goals. |  |  |  |  |  |
| is personalized and adaptive. |  |  |  |  |  |
| encourages individualized assessment (as compared to standardized assessment). |  |  |  |  |  |

End of Block: Student Centered

Start of Block: Interactive

Q4.3 In your experience with traditional face-to-face (F2F) and online learning environments, when you compare F2F to online learning, you perceive that online learning...

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Item Response Format | | | | |
|  | Definitely less than F2F (1) | Somewhat less than F2F (2) | About the same as F2F (3) | Somewhat more than F2F (4) | Definitely more than F2F (5) |
| supports student-to-student interaction. |  |  |  |  |  |
| permits students to collaborate on learning tasks. |  |  |  |  |  |
| provides a space for students to work in teams. |  |  |  |  |  |
| permits one-on-one interaction with the teacher. |  |  |  |  |  |
| builds community among students. |  |  |  |  |  |
| encourages academic dialogue. |  |  |  |  |  |
| is collaborative. |  |  |  |  |  |
| facilitates interaction with course content. |  |  |  |  |  |

End of Block: Interactive

Start of Block: Engaging

Q5.3 In your experience with traditional face-to-face (F2F) and online learning environments, when you compare F2F to online learning, you perceive that online learning...

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Item Response Format | | | | |
|  | Definitely less than F2F (1) | Somewhat less than F2F (2) | About the same as F2F (3) | Somewhat more than F2F (4) | Definitely more than F2F (5) |
| connects learning to real work situations. |  |  |  |  |  |
| supports project-based learning. |  |  |  |  |  |
| supports creative thinking and innovation. |  |  |  |  |  |
| engages student in self-directed learning. |  |  |  |  |  |
| helps students transfer learning to novel situations. |  |  |  |  |  |
| builds time management skills. |  |  |  |  |  |
| requires time commitment. |  |  |  |  |  |
| engages student autonomy. |  |  |  |  |  |