Assessing OER Efficacy on Lifelong Learning Competencies: Summary of Progress June 2021

About this project

- This <u>IMLS funded research project</u> is seeking to create a research toolkit that measures the efficacy of Open Educational Resources (OER) on developing lifelong learning competencies.
- The toolkit will be available with an open license for anyone to measure the effect of OER on lifelong learning competencies of an adult population.

Research question

What competencies of lifelong learning can be measured through self-report data?

Definition

• "Lifelong learning encompasses all learning activities undertaken throughout life with the aim of improving knowledge, skills and competences, within personal, civic, social or employment-related perspectives." (EU, n.d.)

Literature Review

- Searched the literature for articles that quantitatively or qualitatively measure lifelong learning competencies. Selected 50 articles from 3,035 results. Found 6 different scales that were used in the articles. Added 1 rubric based on suggestion from research advisor
- Searched for reports from supranational organizations referred to in the literature that define lifelong learning competencies for purposes of assessment and creating policy.
- Listed competencies identified in scales and a qualitative study (47) and governing body reports (19) and one rubric (5) for a total of 71 competencies.

Card Sorting

- 2 Combined obvious duplicates to make 48 competences to meet the limitations of the card sorting software. Used KardSort, a free online card sorting software.
- The 4 person research team completed the card sorting twice with 46.8%-68.1% agreement for each participant's first and second round. The group had an average agreement of 61% when comparing each response one-on-one.

Results

- The card sorting resulted in 32 distinct competencies, grouped into 5 domains.
- The groupings were calculated by SynCaps 3. We selected the highest number of groupings in the SynCaps3 software that did not result in a single competency being by itself. This resulted in 5 domains, with 4 of the domains aligning with the seminal UNESCO lifelong learning document, commonly called the Delors Report (Delors, 1996).
- Since the 5 domains aligned with the Delors Report, we kept the terminology from this report to describe each domain: Learning to be, Learning to know, Learning to live together, Learning to do. The additional domain is Technical skills.

Next steps

- All items will be analyzed by experts using Lawshe's content validity ratio.
- Items will then be pilot-tested with a small group of students for readability.
- A larger pilot pre-test and post-test will provide data to conduct Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA) and test for test-retest reliability.
- These analyses will help the researchers determine the final items to be included in the research toolkit.