Content validity for a Rubric to Assess Learning Resources Using Principles of Design and Learning, an Addition to Instructional Designers' Toolbox

Research Apprenticeship Project(RAP)

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What is the purpose of this study?

- The purpose of this research study is to develop and establish content validity for a Rubric to assessing Learning Resources Using Principles of Design and Learning, an Addition to Instructional Designers' Toolbox.
- The rubric was developed using principles from three established learning theories: generative learning, cognitive flexibility, and reflection.
- These three theories holistically describe learning and the conditions necessary to prompt deep learning. Theoretically, to reach deep levels of learning, learning resources must prompt learners to interact physically with and engage mentally in thinking about content, experience content in multiple and flexible ways, and reflect on the uses and value of content.

Why is this study important?

- There is a plethora of learning resources of all sorts now available physically and online. Learning Resources refer to any person(s) or any material (whether acquired or locally produced) with instructional content or function that is used for formal or informal teaching/learning purposes.
- The range of ways in with these materials produced and consumed makes instructional designers hard to provide pedagogical and technological support to university faculty who secure, create, and adapt learning resources to support student learning.

The literature reveals a number of studies that developed a rubric to assess learning resources:

- Multimedia Education Resource for Learning and Online Teaching (MERLOT)
- Learning Object Review Instrument (LORI)
- Rubric to evaluate OER objects (Achieve, 2011)

…

However, these instruments mainly focus on the quality of a specific type of online learning resources. This study was designed to assess the potential of the learning resources' abilities to prompt deep learning.

A brief statement of proposed study

- Thus, an empirically validated rubric developed to support instructional designers in using key instructional design principles to design and assess learning resources tool would support the effective and efficient selection of learning resources to meet faculty's expectations and students' needs.
- When talking about content validity, the documentation source of the rubric content and the review by experts of this content are included.

Research questions

1. Does the rubric have content validity for measuring learning resources as determined by expert instructional designers' opinions?

2. How do expert instructional designers perceive the utility of this rubric when evaluating samples of learning resources?

Term:

Content validity defines to what extent a sample of items taken together represents a sufficient operational definition of a latent construct (Polit &Beck, 2006).

The methodological approach

Phase 1:

Static observation on how they use the rubric to access the sample of learning resources

- Document analysis
- Observe how participants use the rubric

Phase 2:

One-on-one Semi-structured interviews

- Seeking feedback on usability on design
- Probing them to describe their understanding while using the rubric
- Seeking feedback on indicators and dimensions
- Computing scores of evaluation and seeking thoughts on how the rubric supported them to evaluate the quality of the learning resources

Expert instructional Designers

Phase 3:

Static observation on how they use the rubric to access the sample of learning resources

- Static observation on how they use the rubric to access the sample of learning resources
- Observe how participants use the rubric

Phase 4:

Focus group interview

- Seeking feedback on usability on design
- Probing them to describe their understanding while using the rubric
- Seeking feedback on indicators and dimensions
- Computing scores of evaluation and seeking thoughts on how the rubric supported them to evaluate the quality of the learning resources

Instructional Designers

My interactive protocol: one-on-one semi-structured interviews

- Ask 7 experts on the draft of this instrument
- Use open-ended questions to obtain their input after they use the rubric to assess a sample of learning resources
- Provide detailed and in-depth information from participants
- Have a better control over the questions I proposed to ask
- Equipment: recording, notebooks…

Descriptions of expert instructional designers

- Doctoral degree in Instructional Design or a related field
- Minimum 6 years of instructional design/development experience.
- Have a deep understanding of human learning methodology
- Have expertise on the concept, theory, and/or knowledge of instrument development

Descriptions of instructional designers

- Master’s degree in Instructional Design, development and evaluation at SU
- Minimum some instructional design/development experience.
- Have some understanding of human learning methodology, concept, theory, and/or knowledge of instrument development
- The goal will be centered on collecting shared understanding for several individuals and individual opinions.
- A 'training' protocol---observation calibration training to assist IDs…

Document analysis

- Especially valuable in my study because I will use sample learning materials
- Highlighted notes? Rich text data?