Library Staff Presentations & Publications

Library

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Formative Assessment: Identifying and Supporting Student Success in Information Literacy Processes

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Sharpening Intellect | Deepening Christian Faith | Inspiring Action

Messiah University is a Christian university of the liberal and applied arts and sciences. Our mission is to educate men and women toward maturity of intellect, character and Christian faith in preparation for lives of service, leadership and reconciliation in church and society.

Formative Assessment: Identifying and Supporting Student Success in Information Literacy Processes

American Library Association's 2019 Annual Conference

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MESSIAH COLLEGE

Sequencing of Early Information Literacy for Pre-Service Teachers

Why?
- Discipline-specific information and applications

1st yr
- Writing intensive courses
- Info Literacy objectives

2nd yr
- Ed Psych, Ed in American Soc
- Scholarly writing

Sequencing of Information Literacy Training for Evidence-Based Practices

Workshop ONE

Instructor Led
- **What and Why of Effective Practices**
- **Statistics & Data**
- **Strategies to Read & Evaluate Articles**

Workshop TWO

Librarian Led
- Data-bases & resources
- Citations
- Research strategies

Workshop THREE

Student Led
- Peer Feedback
- First Drafts
- Using Rubric Checklist

PARTICIPANTS
- 66 pre-service teachers

Highlighted Results: Correlations

Factors co-occurring, not causation.

CORRELATIONS:

- Number of information literacy experiences and self-efficacy for Evidence-Based Solutions ($r=.346$, $p<.01$)
- Self-efficacy for information literacy and demonstrated citation skills ($r=.301$, $p<.05$)
- Self-efficacy for information literacy and overall behaviors of information literacy ($r=.270$, $p<.05$)
- Verbal reasoning and end-of-semester self-efficacy for Evidence-Based Solutions ($r=.330$, $p<.01$)
  - *Student ability to verbally explain their information literacy process, find and evaluate sources, and cite sources are related to self-efficacy for information literacy and self-efficacy for evidence-based solutions in teaching.*

Highlighted Results: Covariance

While covariance is not causation, it is predictive.

COVARIANCE:

- 16% of variance in the post-self-efficacy for Evidence Based Solutions is explained by variance in verbal reasoning $F(4,61)=2.85$, $p<.05$. $R^2=.16$
- 32% of the variance in gains in self-efficacy for Evidence-Based Solutions is explained by variance in overall information literacy $F(12,53)=2.11$, $p<.05$. $R^2= .32$
- 25% of the variance in assignment grades were explained by variance in information seeking, $F(6,59)=3.36$, $p<.01$. $R^2=.25$
- 43% of the variance in assignment grades were explained by variance in early self-efficacy for Evidence-Based Solutions $F(15,50)=2.55$, $p<.01$. $R^2=.43$

Find full details of study at:

Burchard, M.S. and Myers, S. (2019). Early information literacy experience matters to self-efficacy and performance outcomes in teacher education. *Journal of College Reading and Learning*, 49(2). doi: 10.1080/10790195.2019.1582372

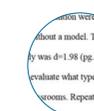## Student Performance Sequence

- **Survey– MTISES Evidence-Based Solutions**
- **Survey– Info Literacy Experiences & Perceptions**
- **Screencast – Searching, Citing, Reasoning**
- **Peer feedback**
- **Teaching Practices Critique**
- **Summary Handout presented to peers**

Formative Assessment

"...in-process evaluations of student comprehension, learning needs, and academic progress during a lesson, unit, or course."
Glossary of Education Reform

Significant Data Analyzed

- ✓ Survey of Information Literacy Perceptions and Experiences
  - ✓ Self-Efficacy for Information Literacy
  - ✓ Number of Experiences
- ✓ Rubric Scores of Screencast for
  - ✓ Information Seeking
  - ✓ Citations
  - ✓ Verbal Reasoning
  - ✓ Overall Information Literacy Behaviors
- ✓ Self-Efficacy for Evidence-Based Solutions
  - ✓ Pre and Post and Gains
- ✓ Grades on Teaching Practices Critique