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

Melinda S. Burchard Ph.D.
Sarah Myers

Follow this and additional works at: https://mosaic.messiah.edu/libstaff_pub

Part of the Education Commons, and the Information Literacy Commons
Permanent URL: https://mosaic.messiah.edu/libstaff_pub/17

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

Sarah Myers, M.S.L.S., Collection Development Librarian
Melinda Burchard, Ph.D., Associate Professor of Special Education
smyers@messiah.edu  mburchard@messiah.edu  Messiah College

PARTICIPANTS
• 66 pre-service teachers

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:

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.

Highlights

• 25% of the variance in assignment grades were explained by variance in 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

Survey of Information Literacy
Pre and Post and Gains
Peer feedback

Using Rubric
Searching
Info Literacy
Student ability to verbally explain
Citations
Self
Self
Verbal Reasoning
25% of the variance in assignment grades
Self
Citations
Survey of Information Literacy
Pre and Post and Gains
Peer
32% of the variance in gains in self
16% of variance in the post
Strategies to Read
yr
What and Why of
yr
Overall Information Literacy
Number of Experiences
Statistics & Data
Information Seeking
Verbal reasoning and end
Self
Data
Rubric Scores of Screencast for
First Drafts
Research

Why?
• Discipline-specific information and applications
• Writing intensive courses
• Info Literacy objectives
• Ed Psych, Ed in American Soc
• Scholarly writing

1st yr
• Sequencing of Early Information Literacy for Pre-Service Teachers
• 1st yr

2nd yr
• 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

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

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

Student Performance Sequence

Survey– MTISES Evidence-Based Solutions

Survey– Info Literacy Experiences & Perceptions

Screencast – Searching, Citing, Reasoning

Peer feedback

Summary Handout presented to peers