Assessing First-Year Student Understanding of "Authority is Constructed and Contextual"

Assessing First-Year Student Understanding of "Authority is Constructed and Contextual"
Jill Becker & Natalie Mahan
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Background

Information literacy has been a learning outcome for the University of Kansas' first-year experience program since 2012. Among the many first-year experience initiatives offered is a 2-credit hour orientation course reaching nearly 700 students across 50 sections. To better scale the library's human resources, and to ensure the learning outcome was met, a 3-day information literacy unit was developed by librarians for inclusion in all sections of the course. Library staff utilized the "Authority is Constructed and Contextual" frame from the

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Methods

This research compared pre and post-test data from the Threshold Achievement Test for Information Literacy (TATIL). The data consist of 24 responses from students enrolled in University 101. All participants were first-year, first-time students (true freshmen). Participation in this research study was voluntary, but completing the information literacy unit was not. Students who agreed to participate completed the pre-test within the first six weeks of the fall 2018 semester and prior to completion of the information literacy unit. The post-test was

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Results

Figure 1: Outcome 1.1

There was no statistically significant change (t = -0.062, p = 0.9508) in Outcome 1.1 from pre-test to post-test.

Figure 2: Outcome 1.2

There is a meaningful change (t = 2.3309, p = 0.0290) in Outcome 1.2. The positive intercept change indicates that the scores may have been improved by the intervention. However, the

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Discussion & Limitations

Discussion
- Based on the data, we are rejecting our hypothesis that the mean score for the post-test would be greater than the mean score for the pre-test.
- While we are rejecting the hypothesis, it is still interesting to consider that the unit may have an effect on students who start at the lower end of the scale because UNIV 101 tends to enroll students with middle to low academic abilities. Therefore, the information literacy unit may help students with less experience evaluating information sources to begin with.
- Based on these results, we are concluding that the TATIL is not the best assessment tool for our particular assessment needs (measuring the effectiveness of an educational intervention in one course).

Limitations
TATIL was not required for the course which resulted in
- a small sample size
- quick completion (indicating minimal effort)
- students completing the pre-test but not completing the post-test.

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Threshold Achievement Test for Information Literacy (TATIL)

Module 1: Evaluating Process & Authority

Outcome 1.1: Apply knowledge of source creation processes and context to evaluate the authority of a source.

Outcome 1.2: Apply knowledge of authority to analyze others' claims and to support one's own claims.

Takeaways

- TATIL may be better administered at a cohort level (freshman, sophomore, junior, senior).
- TATIL should be required in order to increase participation.
- Pre-test/post-test comparisons must be computed at the local level. TATIL does not provide this level of analysis in their report.
- TATIL is a good assessment tool with great potential, it just wasn't the right tool for our assessment project.

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Presented at the Association of College and Research Libraries Conference on April 11, 2019

Interactive iPoster: https://bit.ly/2KhyrBP

This poster shares the findings of a pilot assessment project that utilized the Threshold Achievement Test for Information Literacy (TATIL) Module 1: Evaluating Process & Authority. This assessment was administered to a small cohort of first-year students prior to and after completion of an information literacy unit in an orientation seminar. Since this assessment tool is relatively new and not yet appearing in the library literature, these results should be interesting to librarians from many institutions as they look for new methods for assessing student learning.

BACKGROUND

Information literacy has been a learning outcome for the University of Kansas' first-year experience program since 2012. Among the many first-year experience initiatives offered is a 2-credit hour orientation course reaching nearly 700 students across 50 sections. To better scale the library's human resources, and to ensure the learning outcome was met, a 3-day information literacy unit was developed by librarians for inclusion in all sections of the course. Library staff utilized the "Authority is Constructed and Contextual" frame from the *ACRL Framework for Information Literacy in Higher Education*, to shape the unit. This unit has been included in the seminar's curriculum since the fall of 2016. In the fall of 2018, librarians elected to pilot the Threshold Achievement Test for Information Literacy (TATIL) with a small cohort of students as both a pre-test and a post-test, to measure growth in learning as a result of the information literacy unit.

More information about the information literacy unit can be found at
http://hdl.handle.net/1808/26655

METHODS

This research compared pre and post-test data from the Threshold Achievement Test for Information Literacy (TATIL). The data consist of 24 responses from students enrolled in University 101. All participants were first-year, first-time students (true freshmen). Participation in this research study was voluntary, but completing the information literacy unit was not. Students who agreed to participate completed the pre-test within the first six weeks of the fall 2018 semester and prior to completion of the information literacy unit. The post-test was completed after the information literacy unit. A paired sample t-test was used to compare pre-test and post-test scores. A regression analysis was conducted to investigate changes from pre to post-tests.

RQ: Do UNIV 101 student scores on the Threshold Achievement Test for Information Literacy (TATIL) improve after an information literacy intervention?

H_O : There is no difference between the means for the pre-test and post-test scores on the TATIL.

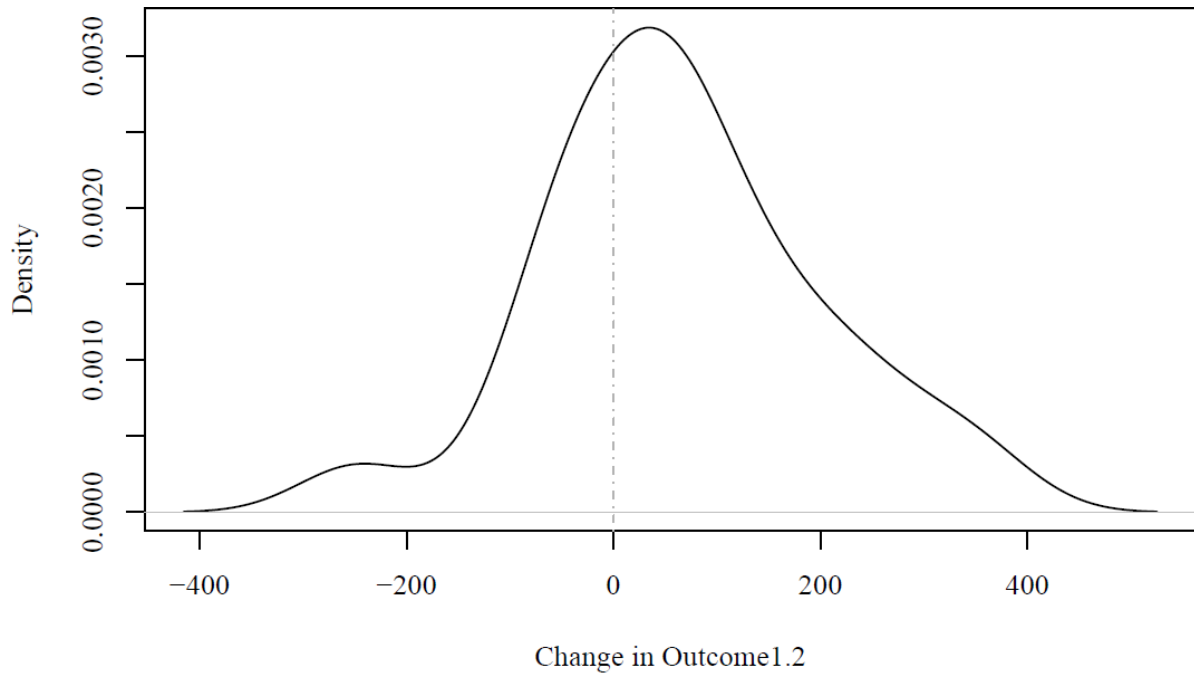H_A : The mean score for the post-test will be greater than the mean score for the pre-test on the TATIL.

RESULTS

Figure 1: Outcome 1.1
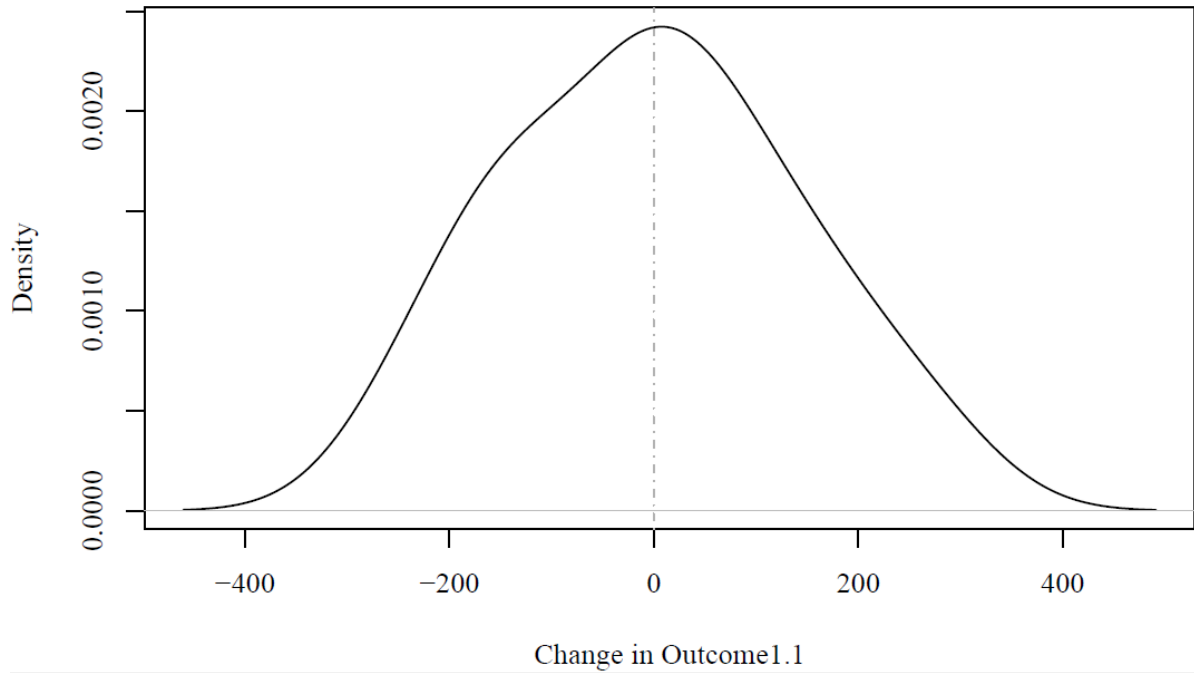
There was no statistically significant change (t = -0.062, p = 0.9508) in Outcome 1.1 from pre-test to post-test.

Figure 2: Outcome 1.2

There is a meaningful change (t = 2.3309, p = 0.0293) in Outcome 1.2. The positive intercept change indicates that the scores may have been improved by the intervention. However, the slope is smaller than 1, which indicates that the intervention may not have been equally beneficial for all of the students.

Figure 3: Outcome 1.2
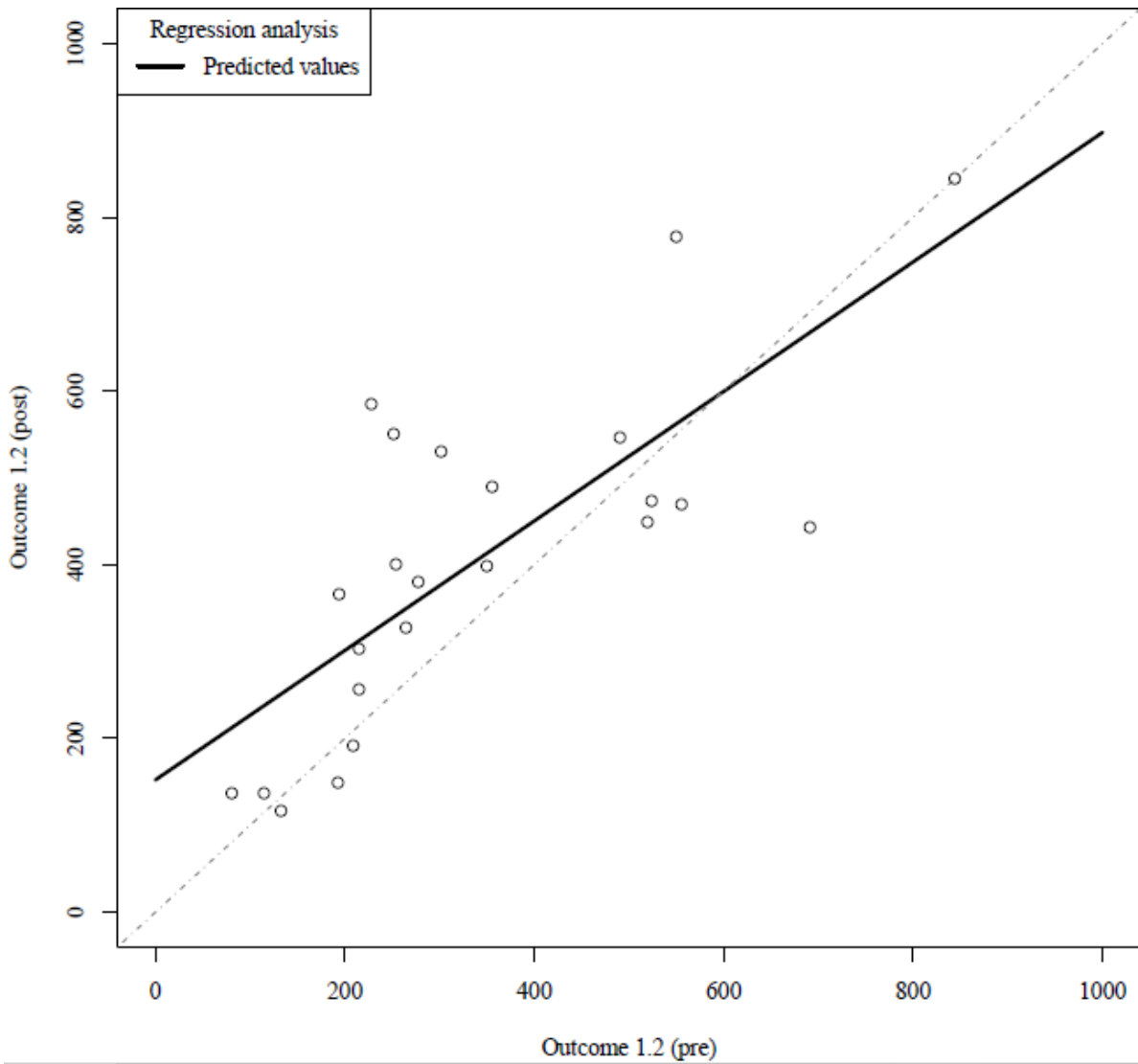
In Figure 3, the difference between pre and post measurement of Outcome 1.2 is emphasized. The dotted line represents the value that would be observed if there were no change in scores between the pre and post measurements. The solid line summarizes the predictive relationship that was observed in this study. The line shifts "up" on the left side, which one may interpret as an improvement in outcomes that is notable for the left side of the graph. Simply put, the intervention may help students on the lower end of the scale, but have minimal impact on the ones who had high scores in the pre-test.

DISCUSSION & LIMITATIONS

<u>Discussion</u>

- Based on the data, we are rejecting our hypothesis that the mean score for the post-test would be greater than the mean score for the pre-test.

- While we are rejecting the hypothesis, it is still interesting to consider that the unit may have an effect on students who start at the lower end of the scale because UNIV 101 tends to enroll students with middle to low academic abilities. Therefore, the information literacy unit may help students with less experience evaluating information sources to begin with.

- Based on these results, we are concluding that the TATIL is not the best assessment tool for our particular assessment needs (measuring the effectiveness of an educational intervention in one course).

Limitations

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THRESHOLD ACHIEVEMENT TEST FOR INFORMATION LITERACY (TATIL)

Module 1: Evaluating Process & Authority

Outcome 1.1: Apply knowledge of source creation processes and context to evaluate the authority of a source.

Outcome 1.2: Apply knowledge of authority to analyze others' claims and to support one's own claims.

More information about TATIL can be found at: https://thresholdachievement.com

TAKEAWAYS

- TATIL may be better administered at a cohort level (freshman, sophomore, junior, senior).

- TATIL should be required in order to increase participation.

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