When School is Work: Learning Goals for Education PhD Students

Lindsay Roberts
Assistant Professor
University of Colorado Boulder, USA
Acknowledgement

My thanks to the PhD students and faculty member at the School of Education, University of Colorado Boulder who were willing to explore learning goals with me and share their experiences!
Theoretical Framework

- Workplace information literacy (Lloyd, 2004, 2013)
- Goal-setting theory (Locke & Latham, 2002; Schunk, 1990)
- Metaliteracy (Mackey & Jacobson, 2014)
- Self-efficacy (Bandura, 1977) and information literacy self-efficacy (Bronstein, 2014; Kurbanoglu, 2003)
- Mixed Methods (Creswell, 2015)
Research Questions

- What issues motivate graduate students to further their own information literacy practices?
- How can librarians teaching adult learners or graduate students make use of students’ life experiences and goals to increase motivation during information literacy sessions?
- And how can information literacy instructors use learning goals as a motivational teaching tool?
Research Design

Explanatory sequential mixed methods design with interventions
Data

- Structured reflections and learning goals from PhD students in education
  - Pre-activity learning goal setting
  - Mid-semester check-in
  - Post-activity goal setting reflections
- Information Seeking Self-Efficacy Scale (IRSES) (Bronstein, 2014)
- Brief focus group to reflect on self-set learning goals & the evolution of their information literacy practices
Context

- First and second year PhD students in education, math and science curriculum and instruction track
- Most are former educators
- Students’ career aspirations included tenure track positions, research positions or the ability to continue doing original research, and curriculum development work
- Three research workshops during spring semester
### Workshop Content

<table>
<thead>
<tr>
<th>Workshop</th>
<th>Goal: Help students quickly scan literature, gather background research, identify gaps for them to contribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Workshop</td>
<td>Work on keywords, review subject headings</td>
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<tr>
<td>Second Workshop</td>
<td>Goal: Processes</td>
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<td></td>
<td>Comprehensive searching and tracking literature including citation chaining, citation managers, notetaking and organization</td>
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<tr>
<td>Third Workshop</td>
<td>Goal: Synthesis</td>
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<tr>
<td></td>
<td>Discuss synthesis in literature review. Librarian and instructor facilitate discussion on students’ research processes, what students perceive they still need to learn, revisiting their self-set goals</td>
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Pre-Activity Themes

Finding the Information:
- Searching specific journals
- Citation chaining
- Scoping
- Searching with databases
- Known item search
- Over-relying on known scholars

Processing the Information:
- Evaluating
- Visualizing
- Connecting
- Synthesizing
- Structuring/Organizing
- Annotating

Pre-activity Choice Themes

Affective & Metacognitive Awareness:
- Valuing understanding the field
- Hoping
- Feeling overwhelmed/doubting/worrying
- Recognizing gaps in knowledge/skills
- Valuing working efficiently
- Wanting confidence in search thoroughness
<table>
<thead>
<tr>
<th>Bandura’s Dimension</th>
<th>Pre-test Min</th>
<th>Pre-test Mean (Std.)</th>
<th>Pre-test Max</th>
<th>Post-test Min</th>
<th>Post-test Mean (Std.)</th>
<th>Post-test Max</th>
<th>Mean Difference (Std.)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Evaluation</td>
<td>2.9</td>
<td>3.4 (.4)</td>
<td>4</td>
<td>2.8</td>
<td>3.8 (.6)</td>
<td>4.2</td>
<td>-0.32 (.4)</td>
<td>-2.4</td>
<td>0.0502</td>
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<tr>
<td>Comparisons</td>
<td>1</td>
<td>2.2 (.8)</td>
<td>3.3</td>
<td>1.3</td>
<td>2.5 (.9)</td>
<td>4</td>
<td>-0.28 (.3)</td>
<td>-2.3</td>
<td>0.0514</td>
</tr>
<tr>
<td>Physiological</td>
<td>1</td>
<td>2.5 (1.1)</td>
<td>4</td>
<td>1</td>
<td>2.7 (.9)</td>
<td>3.6</td>
<td>-0.25 (.7)</td>
<td>-0.97</td>
<td>0.3656</td>
</tr>
<tr>
<td>Social Comparisons</td>
<td>1.8</td>
<td>2.7 (.5)</td>
<td>3</td>
<td>2</td>
<td>2.9 (.5)</td>
<td>3.6</td>
<td>-.2</td>
<td>-1.9</td>
<td>0.1036</td>
</tr>
</tbody>
</table>
Post-Activity Themes:

Metacognition

“Setting goals got me thinking about what I have been doing well, what has been working for me, and mainly, what tools are out there that I hadn't even been trying to access.”
Post-Activity Themes:

Changes to approaches/ behavior

“I am more comfortable with my search options, not limited to Google Scholar, and following trails from one paper to another. I really liked options you presented us for visually organizing our literature, like Coggle, even if I do mainly use notecards still.”
Post-Activity Themes:

Establishing Goals

“I think the process of setting the goals, and remaining aware of them during this semester, has made me more cognizant of what resources are available, even if I don't feel that I gained a great deal of additional skill for using those resources. Just being more aware of their existence means I'm in a better place to know what to seek help with in the future.”
Recommendations for practice

Talk about learning vs. performance goals
Recommendations for practice

Help students set superordinate goals with specific sub-goals
Recommendations for practice

Make sure goals are important to students
Recommendations for practice

Check in regularly about goals and allow for revision. If time, offer personalized suggestions or strategies for each student.
Recommendations for practice

Discuss expectations of efficiency and affective ups-and-downs
Recommendations for practice

Remember IL is a social practice
References


