



# **When School is Work: Learning Goals for Education PhD Students**

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# Acknowledgement

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# 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)



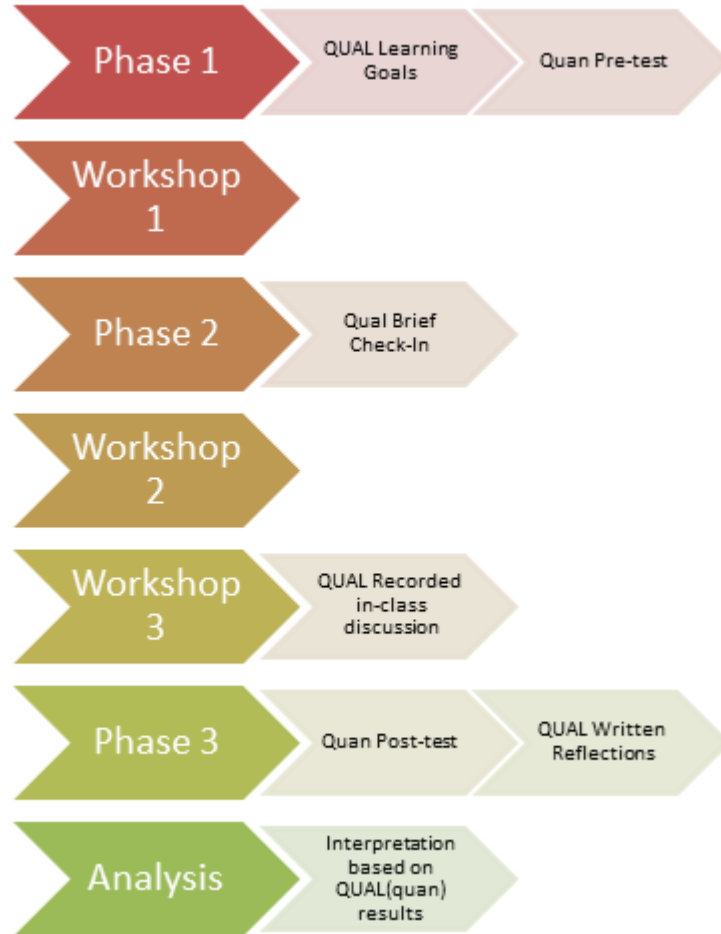
# Research Questions

- 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



First Workshop	<ul style="list-style-type: none"><li>● Goal: Help students quickly scan literature, gather background research, identify gaps for them to contribute<ul style="list-style-type: none"><li>○ Work on keywords, review subject headings</li></ul></li></ul>
Second Workshop	<ul style="list-style-type: none"><li>● Goal: Processes<ul style="list-style-type: none"><li>○ Comprehensive searching and tracking literature including citation chaining, citation managers, notetaking and organization</li></ul></li></ul>
Third Workshop	<ul style="list-style-type: none"><li>● Goal: Synthesis<ul style="list-style-type: none"><li>○ 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</li></ul></li></ul>



# Pre-Activity Themes



*coggle*

Searching specific journals  
made for free at [coggle.it](http://coggle.it)

Citation chaining

Scoping

Searching with databases

Known item search

Over-relying on known scholars

Finding the information

Pre-activity Choice Themes

Processing the information

Evaluating

Visualizing

Connecting

Synthesizing

Structuring/Organizing

Annotating

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

# IRSES Results (n=8)



<b>Bandura's Dimension</b>	<b>Pre test Min</b>	<b>Pre test Mean (Std.)</b>	<b>Pre test Max</b>	<b>Post test Min</b>	<b>Post test Mean (Std.)</b>	<b>Post test Max</b>	<b>Mean Difference (Std.)</b>	<b><i>t</i></b>	<b><i>p</i></b>
Self Evaluation	2.9	3.4 (.4)	4	2.8	3.8 (.6)	4.2	-0.32 (.4)	-2.4	0.0502
Comparisons	1	2.2 (.8)	3.3	1.3	2.5 (.9)	4	-0.28 (.3)	-2.3	0.0514
Physiological	1	2.5 (1.1)	4	1	2.7 (.9)	3.6	-0.25 (.7)	-0.97	0.3656
Social Comparisons	1.8	2.7 (.5)	3	2	2.9 (.5)	3.6	-.2	-1.9	0.1036

# 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



1

Talk about learning vs.  
performance goals

## Recommendations for practice



# 2

Help students set  
superordinate goals with  
specific sub-goals

## Recommendations for practice



# 3

Make sure goals are  
important to students



## Recommendations for practice



# 4

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

## Recommendations for practice



# 5

Discuss expectations of  
efficiency and affective ups-  
and-downs

## Recommendations for practice



# 6

Remember IL is a social  
practice

# References



# Thank you!

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