INTRODUCTION
As the outcome of a successful graduate program, electronic theses and dissertations signal current trends of research emerging from graduate programs as well as the quality of research a student may continue into their post-graduate career. These manuscripts codify sources of scholarship necessary for both the work at hand and for future studies in the field. As students increasingly rely on digital sources of scholarship, these sources play a role in transforming both the content and the form of student scholarship. In light of a larger study of ETD citations, this project looks at URL citations of Digital Library items in UNT ETDs for a preliminary analysis of how digital scholarship may be used.

RESEARCH QUESTIONS
• What disciplines are citing UNT Digital Library items through ETDs?
• What types of digital library items are being cited in UNT ETDs?
• How has UNT Digital Library scholarship cited by ETDs changed over time?

METHODOLOGY
Criteria for Corpus Selection
Since the Portal to Texas History was online by the end of 2004, the earliest ETD that can cite anything from the oldest UNT's digital contents would be 2005. Therefore, we examined ETDs produced from 2005 – 2016.

Corpus

Criteria for Identifying UNT Digital Library Items
Target string derived from URLs of two collections facilitated by the UNT Digital Library:
The Portal to Texas History: https://texashistory.unt.edu
The UNT Digital Library: https://digital.library.unt.edu

RESULTS
The number of UNT ETDs citing UNT Digital Library items represents nearly 2% of the institution's total ETD output during this time range.

Table 1: Number of ETDs citing UNT Digital Library items

<table>
<thead>
<tr>
<th>Corpus Breakdown</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETDs from 2005-2016</td>
<td>4,621</td>
</tr>
<tr>
<td>ETDs citing DL items</td>
<td>62</td>
</tr>
<tr>
<td>ETDs citing PTHH items</td>
<td>22</td>
</tr>
<tr>
<td>ETDs citing both DL and PTHH items</td>
<td>2</td>
</tr>
<tr>
<td>% of ETDs citing DL or PTHH items</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

As the average graduate program can take between 2-6 years to complete, we did not expect to see many citations to the newly launched Portal to Texas History until 2007, at the earliest. However, we found substantial growth in both the number of overall citations and types of resources over the past 7 years.

Table 2: Number of ETDs citing Digital Library and Portal to Texas History items over 4-year periods

<table>
<thead>
<tr>
<th>Year Range</th>
<th>ETDs citing DL items</th>
<th>ETDs citing PTHH items</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-2016</td>
<td>43</td>
<td>15</td>
</tr>
<tr>
<td>2009-2012</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td>2005-2008</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

These 84 ETDs cited the following resource types:
• Audio
• ETDs
• Books
• Legislation
• Collections
• Maps
• Newspapers
• Letters
• Photos
• Posters
• Pamphlets

Figure 1: Use of Top 5 Resource Types Cited in UNT ETDs produced from 2008-2016

RESULTS, cont.
We also found a greater variety of disciplines citing DL items than PTHH items. These disciplines strongly favor the humanities and social sciences.

Figure 2: Disciplines citing Digital Library or Portal to Texas History items with size corresponding to number of items.

Table 3: Number of ETDs citing Digital Library or Portal to Texas History items separated by degree level and type of degree

<table>
<thead>
<tr>
<th>Doctoral Degree</th>
<th>ETDs</th>
<th>Masters Degree</th>
<th>ETDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>31</td>
<td>MA</td>
<td>22</td>
</tr>
<tr>
<td>EdD</td>
<td>6</td>
<td>MS</td>
<td>20</td>
</tr>
<tr>
<td>DMA</td>
<td>4</td>
<td>MFA</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>Total</td>
<td>43</td>
</tr>
</tbody>
</table>

DISCUSSION
As the number of UNT ETDs citing Digital Library or the Portal to Texas History only make up 1.8% of UNT's total ETD output during that period, this methodology does not support substantial impact of UNT Digital Library resources on research conducted for the creation of a thesis or dissertation at UNT. However, students may have cited it as a print source, particularly for government documents, or may have used it further research without directly referencing the item's URL in their manuscript. The large number of ETDs citing other ETDs may also be attributed to students working within the same lab and citing their peers' research. It may also point to a need for more models from their peers of how to create and complete their manuscript.

FUTURE DIRECTIONS
For a further examination of this topic, a citation analysis of print sources should be conducted, cross-referenced with available digital resources to understand the number of items used that were also available through UNT Digital Libraries.

CONTACT
Pamela Andrews, pamela.andrews@unt.edu
Janette Klein, Janette.Klein@unt.edu
Karen Harker, Karen.Harker@unt.edu
Daniel Alemneh, Daniel.Alemneh@unt.edu