Fink (2003, 2013) proposes taxonomy for significant learning where learning goes beyond foundational learning and students become reflective learners. When teachers help students learn how to learn, students can take that skill into their academic, professional, and personal life (Fink, 2013).

The gap: Studies have not focused on the impact of course redesign on students longitudinally. Further research is needed to understand self-directed learning teaching strategies for nurse and to investigate the factor validity of the self-directed learning readiness scale for nursing education (SDLRSNE) (Fisher & King, 2010).

### Purpose

**Purpose:** To determine if course redesign assists students to become self directed learners over time.

**The question:** What is the effect of redesigning a health assessment course using Fink’s Taxonomy of Significant Learning strategies in a student’s ability to “Learn How to learn?”

### Methods

**Design:** longitudinal, one-group, quasi-experimental

**Participants:** Nursing bachelor students in the accelerate program (n=14)

### Results

**Descriptives & Cronbach’s alphas:**

<table>
<thead>
<tr>
<th>Time Points</th>
<th>α</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Summer 2014-pre</td>
<td>.87</td>
<td>12</td>
<td>167.70</td>
<td>10.49</td>
</tr>
<tr>
<td>2. Summer 2014-post</td>
<td>.96</td>
<td>13</td>
<td>169.87</td>
<td>14.80</td>
</tr>
<tr>
<td>3. Fall 2014</td>
<td>.87</td>
<td>14</td>
<td>173.07</td>
<td>10.85</td>
</tr>
<tr>
<td>4. Spring 2015</td>
<td>.89</td>
<td>13</td>
<td>175.69</td>
<td>11.40</td>
</tr>
<tr>
<td>5. Summer 2015</td>
<td>.94</td>
<td>13</td>
<td>170.77</td>
<td>13.47</td>
</tr>
</tbody>
</table>

**RM-ANCOVA**

**Assumptions:** Normality was evaluated but not included due to the small sample size. Sphericity was met with non-significant Mauchly’s test results for all four main effect analyses. The main effect test results showed significant difference across time in students’ SDLRSNE for the self-management, V =.722, F(3, 7)=6.07 p=.023, η2=.72, power=.78, but non-significant for the overall SDL, self-control, and desire to learn, for which the observed power were .54, .21, and .27 respectively, suggesting probabilities of Type II error.

### Discussion & Conclusions

- The consistent reliability across time provided confirmatory psychometric evidence for the SDLRSNE.
- Significant difference over time in self-management indicated:
  - The course designs encouraged increased time management of lecture and study materials by the students
  - This was confirmed by student responses in the open-ended questions
- Non-significant change in other aspects of learning as well as overall SDL over time may be due to the fact that:
  - Many students (84.6%) had already demonstrated self-directed learning abilities by obtaining a bachelor’s degree or higher
  - The sample size was small
- Transforming a nursing course to include strategies for significant learning (Fink, 2013) can effectively facilitate self-directed learning
- Faculty can positively affect a student’s ability to learn by:
  - Being available and responsive
  - Being motivating and encouraging
  - Presenting clear expectations

### Future Research

- Future research includes a general first semester sample with a minimum of 30 participants. Specific educational interventions will be determined.
- It is recommended to include student learning outcomes variables such as exam scores and GPA