



Emphasizing Learning How to Learn in a Nursing Course

Belinda Deal, PhD, RN, Zhaomin He, PhD,
& Katy Zagurski, Undergraduate student
The University of Texas at Tyler - College of Nursing and Health Sciences

INTRODUCTION

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).

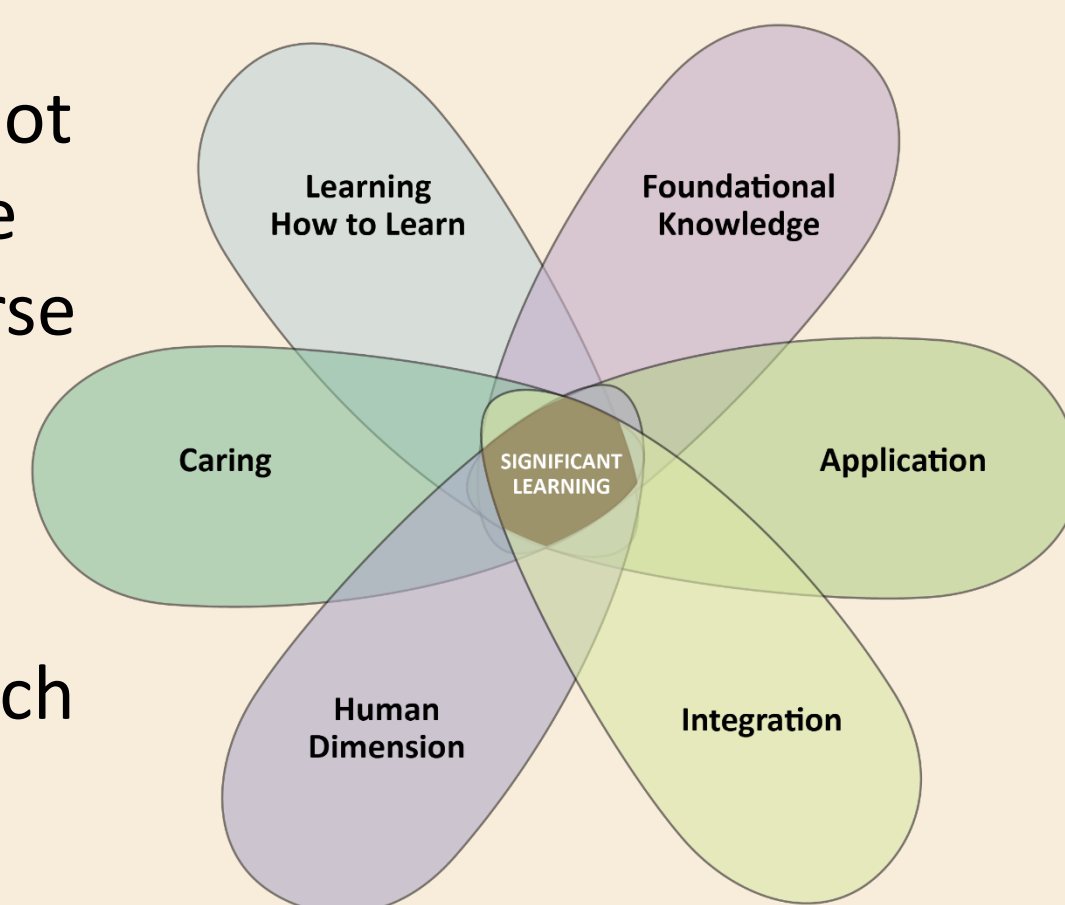


Figure 1. The Taxonomy of Significant Learning

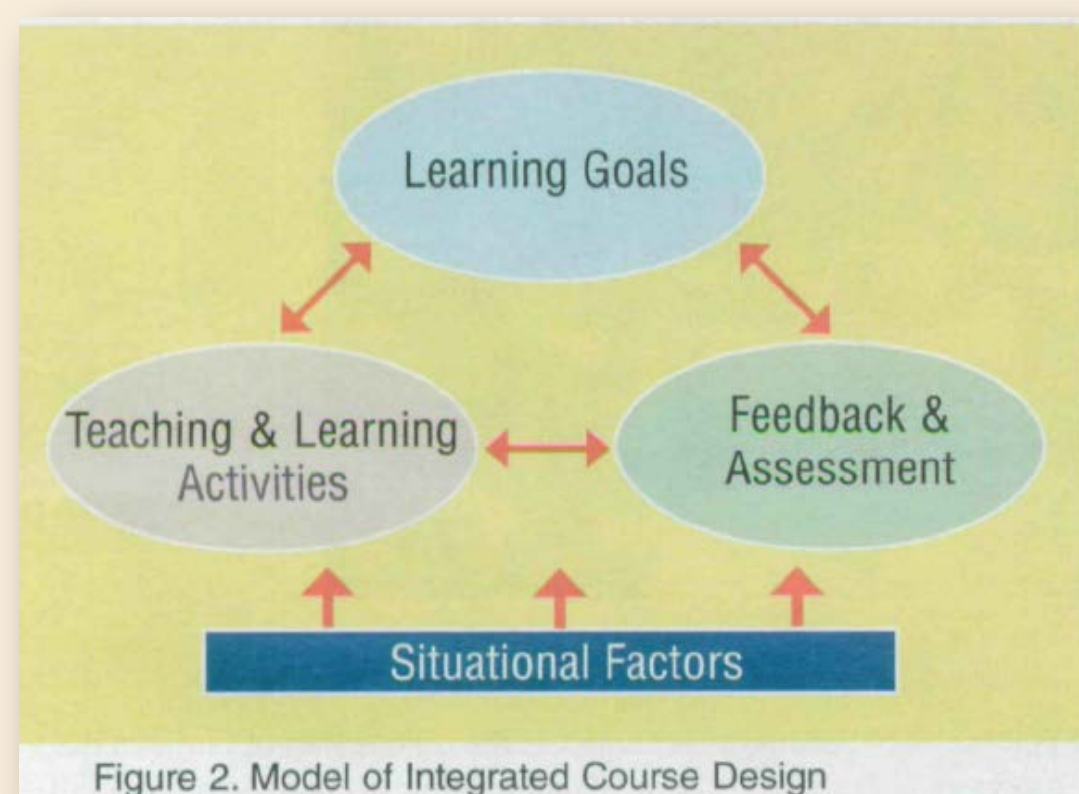


Figure 1 & 2 source Fink, L.D. (2010). The joy and responsibility of teaching. The ASHA Leader, 2010 Aug 31; 15 (10): 10-3

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)

Table 1. Participants' Demographics: M(SD)/Frequency(%)

GENDER/AGE		RACE	
Female	14 (100%)	White	11 (78.6%)
Age	28.64 (11.64)	Hispanic	2 (14.3%)
DEGREE		DEPENDENTS	
Associate	3 (21.4%)	None	12 (85.7%)
Bachelor	9 (64.3%)	1-2	1 (7.1%)
Master's	1 (7.1%)	2+	1 (7.1%)
Doctoral	1 (7.1%)		

The Self-Directed Learning Readiness Scale for Nursing Education (SDLRSNE; Fisher & King, 2010)

- 40 questions, 3 subscales, rated on a 5-point response scale

- Cronbach's alphas: overall *SDL*=.92, *self-management*=.86, *desire for learning*=.85, and *self-control*=.83 (see Table 2 for α 's in this study).

Open-ended questions on student perception of factors that increased and decreased their SDL abilities.

Analyses:

- Descriptives
- Internal consistency coefficients
- Repeated-measure analysis of covariance (RM-ANCOVA)

RESULTS

Descriptives & Cronbach's alphas:

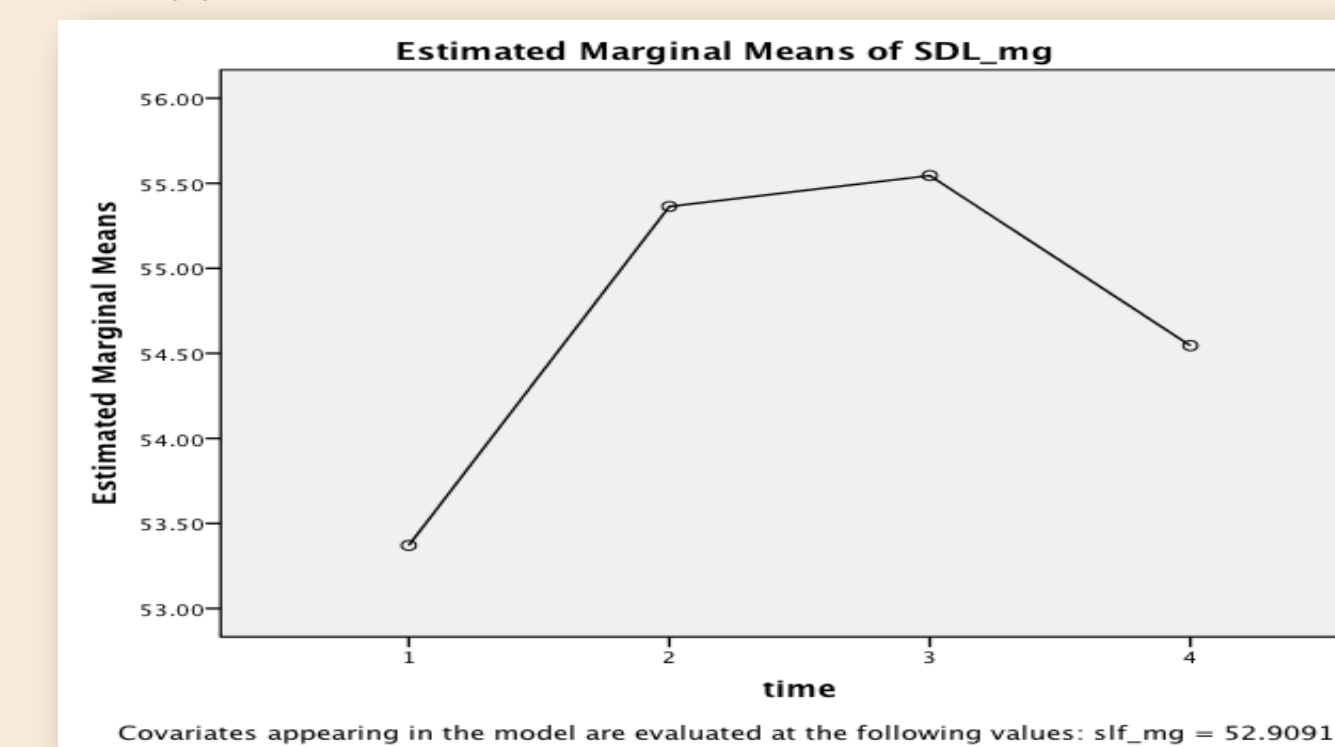
Table 2. Descriptives of Student SDL Across Time

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

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, $V = .722$, $F(3, 7)=6.07$ $p=.023$, $\eta^2=.72$, $power=.78$, 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.



Open Ended Questions

Students consistently reported the importance of a teacher who was available, encouraging, and clear in expression of expectations.

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