Backward Design
&
Principles of Andragogy to Promote Successful, Equitable Learning for Online Condensed Courses

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What if we tried…

16 slices (weeks)

4 slices (weeks)

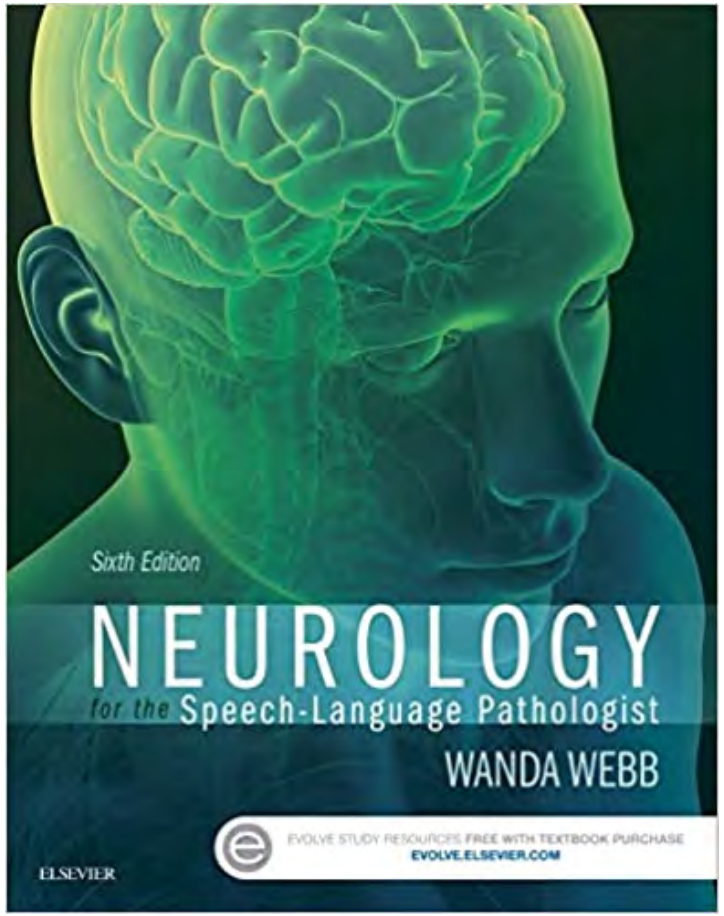
What if we tried…

16 slices (weeks)

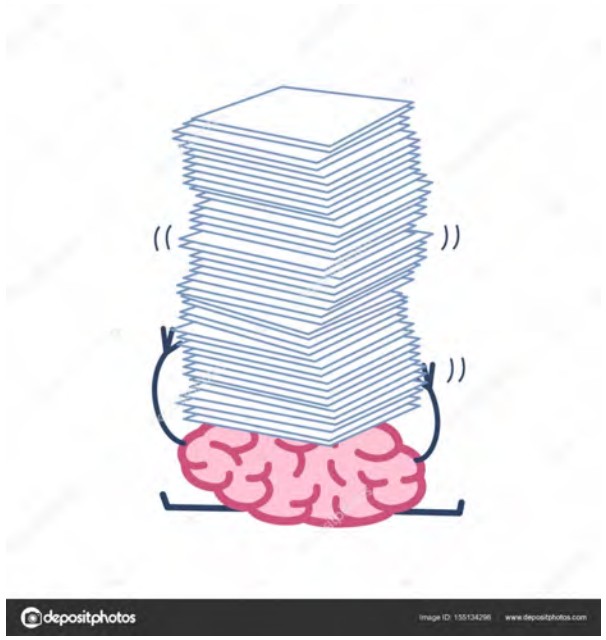
4 slices (weeks)

Something like this!

What if we tried…

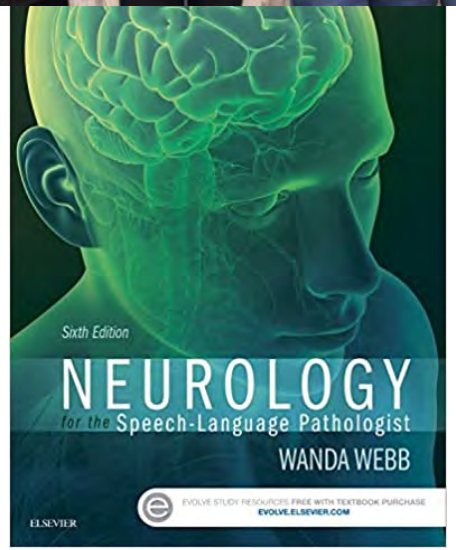


16 weeks



4 weeks…

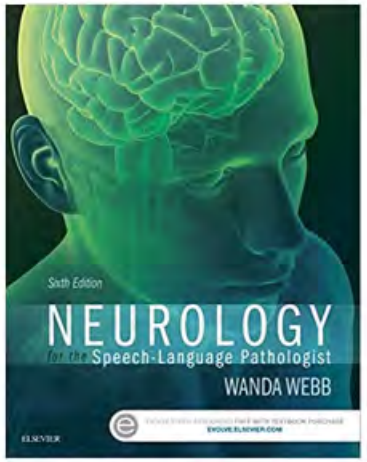
New cohort of Elmhurst University students…



16 weeks: distributed learning:
every Friday in person

4 weeks: condensed learning:
Tue, Wed + Thurs online…

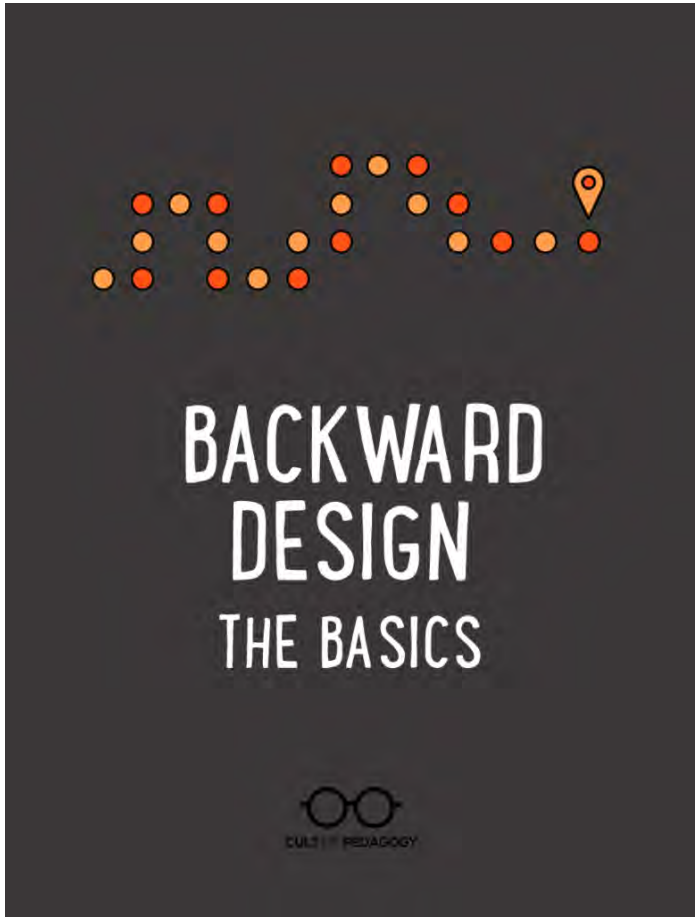
What if we tried…



16 weeks

4 weeks

Something like this!


BACKWARD
DESIGN
THE BASICS


learning
adult
Knowles
andragogy
matures
person
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Smith
becomes
toward
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Kearsley
Malcolm
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Educators
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USA

Backward Design

What should students learn/take away from this course?

Learning Goals

How will I know if students are learning what they need to know?

Feedback & Assessment

Plan learning experiences and instruction

Teaching & Learning

From Understanding by Design by Wiggins and McTighe

Comparison of Principles of Andragogy vs. Standard Pedagogy:

Differences from pedagogy[edit]

Here are some of the main differences between pedagogy and andragogy:[18][19]

	PEDAGOGY	ANDRAGOGY
Learner	• The learner is dependent on the instructor, the teacher schedules all the activities; determining how, when and where they should take place • Teacher is the one who is responsible for what is taught and how it is taught • Teacher evaluates the learning	• Learner is self-directed and moves towards independence • Learner is responsible for the learning • Self-evaluation is seen
Learner's experience	• There is little experience which could be gained from this kind of learning • Method is didactic	• There is large quantity of experience gained • Method used is problem solving, discussion, service-learning[20]
Readiness to learn	• Standardized curriculum set which will be based on societal needs	• Curriculum is more application based and it revolves around life
Orientation to learning	• Here, it is a process of acquiring subject matter	• Here learning is for performing tasks and solving problems
Motivation	• Motivation is by external pressure, and there is lot of competition for grades	• It is driven by internal motivation. Includes self-actualization, self-confidence etc.

Optimal learning

1. Smith, M. K. (1996; 1999, 2010) 'Andragogy', the encyclopedia of informal education. Retrieved: 9/24/2015
2. ^ *Yazdani, Shahram. "Pedagogy, Andragogy, and Heutagogy".*
3. ^ *Risley, L.; McKee, S. "Andragogical Methods Applied to Adult Learning Environments: Adult Education for Adult Learners in and out of the Traditional Classroom" (PDF). Archived from the original (PDF) on July 27, 2014.*

From Wikipedia:

Asynchronous + Synchronous Learning

Asynchronous + Synchronous Learning

Asynchronous Learning: Friday - Monday

1. Flipped Classroom:
   3 pre-recorded
   .ppt lectures / week

2. "Jigsaw" group projects

3. Research projects

Asynchronous Learning: Friday - Monday

1. Flipped classroom environment

   3 pre-recorded .ppt lectures
   received Friday afternoon
   tasked with review / study before class on Tuesdays

   - Early class session (before 1st set) devoted to discussing varying approaches to individual consumption
   - Self-paced
   - Builds learning independence

Asynchronous Learning: Friday - Monday

2. "jigsaw" group projects

Students collaborate to learn then teach
a portion of course content (e.g. testing 1 cranial nerve)
to peer "jig-saw" groups

- Builds learning independence
- Builds confidence
- Provides opportunity for social connections
- Provides another measure of learning outcomes

Asynchronous Learning: Friday - Monday

3. Research Projects:

Choose 5 articles on topic of interest

Create outline based on provided template

- Provides foundational familiarity w research article formats (consumption + creation)
- Provides opportunity to begin thinking about eventual topic of Master's thesis
- Fosters development of internal motivation
- Provides another measure of learning outcomes

Asynchronous Learning: Friday - Monday

1. Flipped Classroom
2. “Jigsaw” group projects
3. Research projects

Asynchronous + Synchronous Learning

Synchronous Learning: Tuesday - Thursday

1. Pretest - Posttest

2. Small group work

3. Class work

4. One-on-One meetings

Synchronous Learning: Tuesday - Thursday

Tuesday	Wednesday	Thursday
1. **Formative pre-test**	1. **Data-driven teaching + learning**	1. **Summative post-test**
2. **Self evaluation with small group review or pre-test**		2. **Group work** jigsaw project guided research paper outline
3. **Class feedback used to guide targeted instruction**		3. **Rotating Student-Professor meetings**
4. **Instructor analyses pretest outcomes**		

Tuesday	Wednesday	Thursday
1. **Formative pre-test** of flipped lectures		1. **Summative post-test**
-breathing exercises: reduce anxiety enhance focus stress management -immediate feedback w correction -results in participation points only -try on each question → all points -reduces test anxiety	**Data-driven** **Teaching + Learning**	2. **Group work** jigsaw project guided research paper outline
2. **Self evaluation with small group review** of pretest feedback -builds independence + group cohesion		3. **Rotating Student-Professor mtgs**
3. **Class feedback used to guide targeted instruction**: Collaborative class discussion of Wednesday learning plan		
4. **Instructor analyses pretest outcomes**: Item analysis further identify Wed targets		

Synchronous Learning: Tuesday - Thursday

Tuesday	Wednesday	Thursday
1. **Formative pre-test**	1. **Data-driven teaching + learning**	1. **Summative post-test**
2. **Self evaluation with small group review or pre-test**	- lecture focused on identified material that needed strengthening	2. **Group work** jigsaw project guided research paper outline
3. **Class feedback used to guide targeted instruction**	- came from: - collaborative Tue discussion - item analysis	3. **Rotating Student-Professor meetings**
4. **Instructor analyses pretest outcomes**	- focus on pinpointing roots of misunderstanding	

Synchronous Learning: Tuesday - Thursday

Tuesday	Wednesday	Thursday
1. **Formative pre-test**	1. **Data-driven teaching + learning**	1. **Summative post-test** -breathing exercises -immediate feedback w correction -independent review of feedback -results in earned score
2. **Self evaluation with small group review or pre-test**		2. **Group work** jigsaw project guided research paper outline
3. **Class feedback used to guide targeted instruction**		3. **Rotating Student-Professor meetings** -overall check-in -examine approach -positive reinforcement -corrections framed “I wonder…”
4. **Instructor analyses pretest outcomes**		

Rather than this…

We ended like this 💙

Thank you!!!

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