

## Scaffolding Clinical Experiences for First Year Graduate Students

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### Disclosure Statement

- The presenters have no relevant financial or non-financial relationships to disclose.

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### Initial Clinical Practicum Assignment: Sink or Swim?



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### Rationale for “Dive-Right-In” Model

- Hours
- Active Learning Opportunities
- Student expectations

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### Problems

Ethical considerations

- Client experience
- Student learning experience

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### Realization: Collecting Hours →

Not a Race!

#### ACU Program Expectations for Clinical Clock Hours

Semester	Range of Hours
I – Fall	10 - 25
II – Spring	50 - 75
III – Summer (7 wk full time externship)	100 +
IV – Fall	100 +
V – Spring (7 wk full time externship)	100 +
*Opportunities for additional hours: During winter breaks, extension of summer externship	Varies according to need

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We can make time. . . for carefully designed and managed clinical learning!



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### Cognitive Load Theory and Clinical Learning



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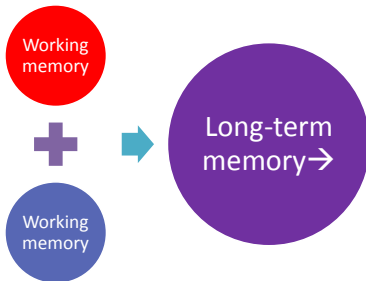
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### The Architecture of Learning



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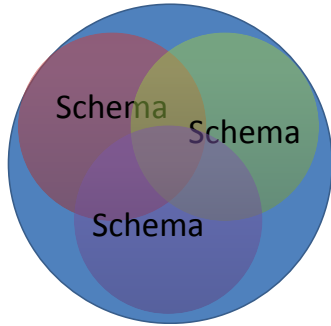
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Long-Term Memory →  
 Schema Storage → Expertise




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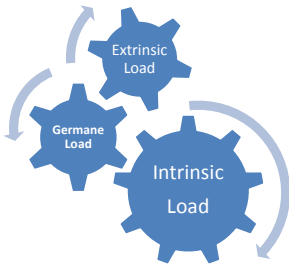
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Cognitive Load in  
 the Process of Learning




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Purpose: Manage Cognitive Load to  
 Support Schema-Building  
 (van Merriënboer & Sweller, 2010)

Intrinsic Load	Germane Load	Extrinsic Load
Simple – to –complex ordering of learning tasks	Apply "contextual interference"	Reduce redundancy
Work from low – to – high fidelity environments	Increase variability over tasks	Employ goal-free tasks (worked examples, completion tasks)
	Evoke self-explanation (reflection)	Use multiple modalities

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## Scaffolded Clinical Experiences: Key Components

- Front-loading of foundational academic content
- Clinical assignments of graduated difficulty (integrated into coursework)
  - Simulated patients, computer simulation,
  - Single client assessment/intervention experience (last half of the semester)
- Debriefing and individual reflection with feedback

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## Semester Snapshot: Part 1 -- Assessment

Foundational Knowledge: ComP 659 Seminar in Diagnostic and Therapeutic Theory		
Weeks 1 – 2	(12 hours of instruction)	Ethical Practice Principles of Assessment Fundamentals of Assessment Standardized & Informal Measures Case history collection/interviewing
Week 3	(6 hours)	Assessment of Speech Mechanism Assessment of Speech Sound Disorders (pediatric)
Weeks 4 – 5	(12 hours)	Assessment of Child Language
Week 6	(6 hours)	Screening: Voice and Fluency Specialized Assessment Strategies Intellectual Disability Autism
Week 8	(6 hours)	Assessment to Intervention, EBP

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Clinical Skill Acquisition: During class time, out of class, and during Clinic Forum	
Week 1 - 2	<ul style="list-style-type: none"> <li>• Group analysis of an evaluation report (seeking answers to specific questions)</li> <li>• development of a cohort list of questions</li> </ul>
Week 3	<ul style="list-style-type: none"> <li>• In-class oral mechanism screenings (4 – 6)</li> <li>• Oral Anatomy 'check out' in Forum</li> <li>• Comprehensive OME of colleague with "identified" disorder or deviation written up as a report</li> <li>• Initiate 1<sup>st</sup> SimuCase evaluation (specific)</li> </ul>
Week 4	<ul style="list-style-type: none"> <li>• Submit completed SimuCase evaluation with reflection; Begin SimuCase 2 (choice)</li> </ul>
Week 5	<ul style="list-style-type: none"> <li>• Standardized test administration to peer (prepare podcast, submit summary/reflection; viewing log with reflections)</li> <li>• In class case studies: (pairs) MLU analysis, analysis using SALT software, narrative analysis</li> </ul>
Week 6	<ul style="list-style-type: none"> <li>• Preparation of assessment plan for client (pairs)</li> </ul>
Week 7	<ul style="list-style-type: none"> <li>• Conduct assessment: carry out all procedures and make adjustments, score/analyze all data, arrive at initial diagnosis, present at grand rounds</li> <li>• Submit report</li> <li>• Submit completed SimuCase 2 evaluation/reflect</li> </ul>

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## Part 2 -- Intervention

Foundational Knowledge: ComP 610	
<i>Advanced Study of Language Disorders in Children</i>	
Week 8 (6 hrs→)	Models of language impairment Neurobiological bases of language Principles of intervention; How therapy works
Week 9	Intervention at the prelinguistic; emerging language levels Introduction to intervention for language disorders in school-aged children
Week 10*	Intervention for school-aged children (*practicum begins)
Week 11	Intervention for school-aged children
Week 12	Language/learning disabilities
Week 13	Language disorders in adolescence
Week 14	Language/communication and autism; intellectual disabilities
Week 15	Language and hearing impairment
Week 16	Prevention of language disorders; ECI

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Clinical Skill Acquisition/Clinical Practicum	
Week 9	<ul style="list-style-type: none"> <li>• Pairs' creation of therapy plan for case study of child in emerging language stage; presentations</li> </ul>
Week 10	<ul style="list-style-type: none"> <li>• Baseline data collection for (actual) assigned school-aged client; (including children assessed and previously identified clients—one per student)</li> <li>• Creation of therapy plan (group and individual therapy)</li> </ul>
Week 11 - 14	<ul style="list-style-type: none"> <li>• Therapy program (2 hours per week outside of class); creation of weekly therapy plans, feedback and debriefing in class and forum</li> <li>• Weekly therapy documentation</li> </ul>
Week 15	<ul style="list-style-type: none"> <li>• Preparation of client progress reports/parent letters</li> <li>• Submission of Therapy Program Journal:                             <ul style="list-style-type: none"> <li>• All documentation</li> <li>• Reflection paper requiring responses to specific prompts regarding what was learned in areas such as: baseline collection, rapport establishment, documentation, etc.</li> </ul> </li> <li>• In groups: creation of therapy plan for case study of child with autism; presentation</li> </ul>

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## What's Different?

- Frontloading of key knowledge—BEFORE any actual client contact
- “Low stakes” opportunities to practice and acquire skills
- Single-client focus in short but intensive therapy program
- Required reflection and debriefing

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### Outcomes

- Client progress
- Student report of increased confidence in clinical service provision
- Enhanced retention of content and concepts covered in academic coursework

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### Challenges

- Organizing coursework in modules – necessary in order to allow for intensive instruction needed to prepare for practicum experience
- Identification of clients with communication impairment associated with current coursework (e.g. Language disorders)
  - Our unique setting
- Teaming with other faculty; sharing teaching time and supervision responsibilities

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### Generalizing to your program: Principles

- Plan for intensive instruction (faculty pairing)
  - Consider the Clinical Methods course
- Target a disorder area course where clinical practice can be integrated into the class as the “other half” of the pairing
- Design assignments that control for cognitive load
- Use low-risk, low – to – high fidelity contexts for clinical learning
- Focus on reflective learning with one client vs. short-term retention of information to serve multiple clients

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## Selected References

Posiask, F., Morrison, G., & Reid, K. (2013).  
Managing cognitive load while teaching human gait  
to novice health care science students. *Journal of  
Physical Therapy Education*, 27, 58 – 69.

van Merrienboer, J. and Sweller, J. (2010).  
Cognitive load theory in health professional  
education: Design principles and strategies. *Medical  
Education*, 44, 85 – 93.

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