



How McMaster's Problem-Based Learning Program in SLP Works

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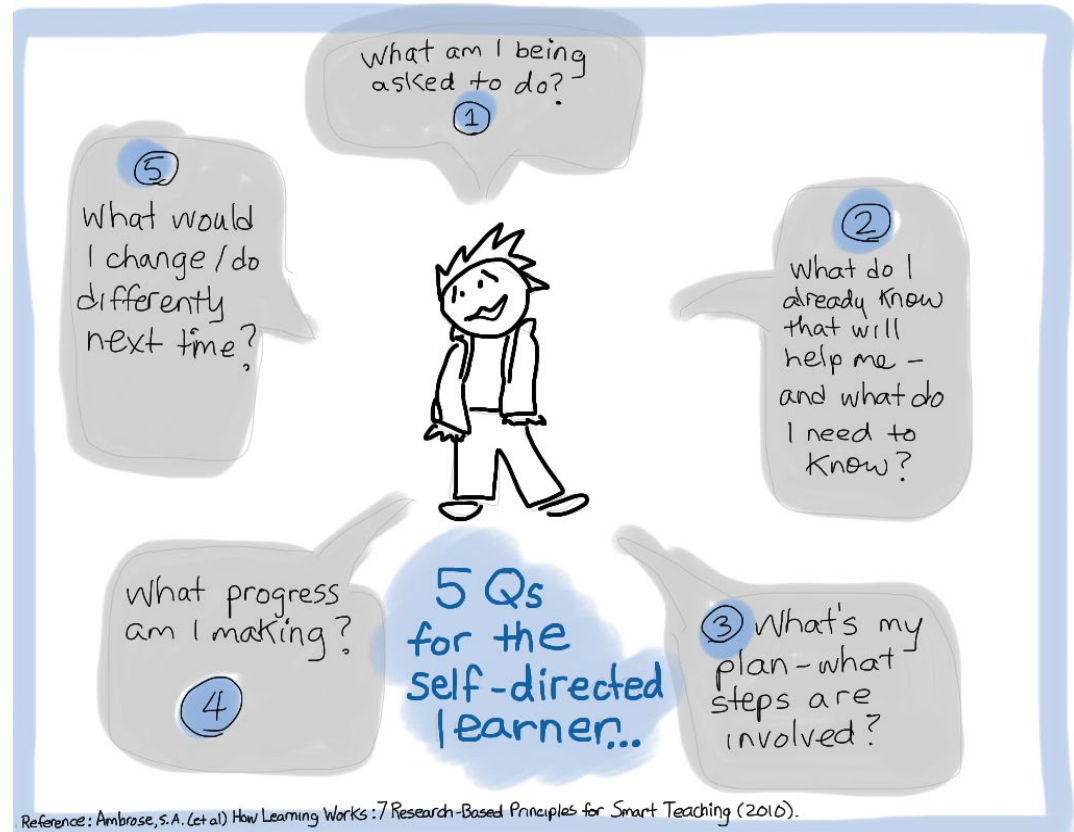
[Click here for article about Mac SLP in ASHA Journal Academy](#)

Our clinical community told us that these characteristics define the “ideal” future SLP:

- Communicates effectively and respectfully with clients, families, other providers, community organizations, and colleagues
- Has “deep” knowledge of the discipline and understands the impact of contextual factors on clinical practice
- Can think critically and problem-solve creatively
- Is a reflective practitioner
- Advocates for the role of SLP and for the needs of clients and families/caregivers
- Is flexible and adaptable in a changing health/education context
- Engages in evidence-informed practice
- Learns to grow as a leader in consultation, collaboration, education, and clinical practice
- Approaches clinical practice and their role with the spirit of curiosity and inquiry; is a life-long learner

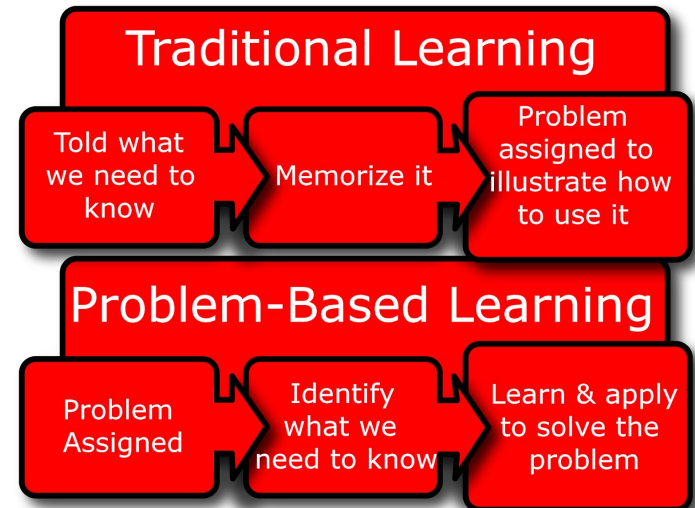
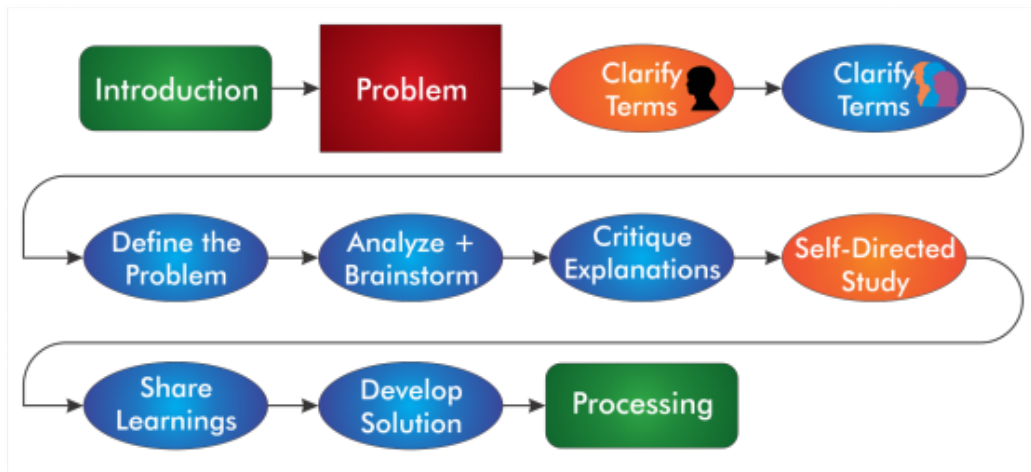
PROGRAM PHILOSOPHY:

Active & Self- Directed Learning



PROGRAM PHILOSOPHY:

Small Group, Problem-Based



Curriculum Overview

YEAR 1														
	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		
O - Week	Academic - Unit 1 Core Principles, Knowledge, & Skills 12 weeks			Clinical Placement 2 weeks	Break 2 weeks	Academic - Unit 2 Roles & Practice Settings; Assessment & Service Delivery Models 12 weeks			Clinical Placement 6 weeks	Break - 1 week	Academic - Unit 3 Children, Youth, & Young Adults 12 weeks		Break 5 weeks	
YEAR 2														
	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		
Break cont'd	Clinical Placement 6 weeks		Academic - Unit 4 Adults & Older Adults 12 weeks (9+3)		Break 2 weeks	Academic - Unit 4 cont'd Adults & Older Adults	Clinical Placement 6 weeks	Academic - Unit 5 Complex Practice & Professional Transition 10 weeks (6+4)		Break 2 weeks	Clinical Placement 8-9 weeks (flex week to obtain additional clinical hours as needed)	Flex Week	Academic - Unit 5 cont'd Complex Practice & Professional Transition	Finished

Each academic unit is comprised of 4 courses, with content delivered across all 4 courses in a themed, coordinated manner:

- Foundational Knowledge
- Inquiry Seminar (Units 1-3) / Evidence-Based Practice (Units 4-5)
- Clinical Skills Lab
- Problem-Based Tutorial

Foundational Knowledge (FK)

- Primarily lecture-format with quizzes and exams to assess knowledge
- Classes are 1.5 hours in length and occur 2x weekly
- Students are expected to **learn the facts** relating to normal and disordered communication and swallowing.

Inquiry Seminar (IS) (Units 1-3)

- Mix of lecture, student presentations, and small group analysis
- Classes are 1.5 hours in length and occur 2x weekly
- Knowledge is typically evaluated through scholarly papers, presentations, reflective writing assignments, and class participation
- Students are expected to learn the **foundations of evidence-based practice, models and theories relating to normal and disordered communication and swallowing, guiding principles for assessment and intervention, as well as integrating social determinants of health and other cornerstones of holistic, client-centred practice.**



Evidence-Based Practice (Units 4-5)

- Enables students to **critically analyze the literature and collaborate on a research project** relevant to speech-language pathology
- During the first term of this course in Unit 4, students are provided with information on study design, data acquisition, and data analysis. They acquire skills in searching the literature, analyzing and interpreting data, presenting results and making clinical decisions that incorporate best evidence, patient values, and clinical expertise.
- During the second term of the course in Unit 5, students work in teams to participate in an ongoing research project under the supervision of a faculty member and/or clinician.

Clinical Skills Lab (CSL)

- Direct teaching, followed by **guided practice and application of skills in small groups**, then sharing of and reflection on learning with the large group
- Classes are 3 hours in length and occur 2x weekly
- Clinical skills are typically evaluated by individual and group take-home assignments, presentations, timed tasks, and Objective Structured Clinical Examinations (OSCEs).

Problem-Based Tutorial (PBT)

- The heart of a problem-based learning program!
- Small groups examine clinical cases with the support and guidance of a speech-language pathologist tutor
- Classes are 2.5 hours long and occur 2x weekly; students brainstorm learning objectives for a new case, then have 3 days to do independent research, then return to share and compare their results and make final decisions
- Students are evaluated based on performance in-class and in open-book, cased-based exams. Requirements include **professional behaviour, contribution to group process, evidence-based practice, and clinical reasoning.**
- Positive and constructive feedback is given and received in the final 20+ minutes of every tutorial session.

Example of a Healthcare Problem in PBT

Stephan is a male, age 16 years, who is in the gifted program at his High School. According to his parents, Patricia and Yves, Stephan “never had great social skills” and struggled to make friends. Patricia and Yves saw a television special about Asperger Syndrome and wondered if Stephan had this, so they arranged for him to be tested at the community-based practice where you work. He was evaluated by a Pediatrician, you (an SLP), and a Psychologist.

Stephan was diagnosed with a Social Communication Disorder. Patricia and Yves have just received the test results and are here for an appointment with you to talk about treatment. They tell you they’ve never heard of this disorder and ask what “treatment” means. They say Stephan’s teenage friends are all “pretty weird”, and ask how you can sort out what’s normal.

How It Comes Together, Part A

During Unit 2 Theme of Voice Assessment:

- FK: students are in anatomy lab for hands-on work with human larynges; they also have lectures on anatomy/physiology
- IS: students learn about critical appraisal of research using articles relating to voice
- CSL: students have a class dedicated to using and analyzing perceptual voice rating tools and client self-rating tools; they also have a field trip to observe stroboscopy and Visi-Pitch
- PBT: case involves a teacher and recreational singer who develops vocal nodules – in Day 1 of the case, assessment methods are discussed and in Day 2, service delivery and intervention options

How It Comes Together, Part B

Voice across the Program:

- Unit 1: Anatomy, physiology, perceptual voice characteristics
- Unit 2: Voice assessment (instrumental, perceptual, self report)
- Unit 3: Pediatric voice intervention
- Unit 4: Adult voice intervention
- Unit 5: Gender-affirming voice intervention, chronic cough

Other Examples of Distributed Content

Developmental Language:

- Unit 1: Developmental and language milestones; language sampling and observation
- Unit 2: Formal and informal language assessment
- Unit 3: Language intervention
- Unit 4: Aging and developmental language
- Unit 5: Special populations

Speech Sound Disorders:

- Unit 1: Developmental speech milestones; transcription; intelligibility; acoustics
- Unit 2: Formal and informal speech assessment
- Unit 3: Speech intervention
- Unit 4: Adult speech disorders
- Unit 5: Childhood apraxia of speech; childhood dysarthria

Dysphagia:

- Unit 1: Head and neck anatomy; motor control
- Unit 2: Intro to deglutition; clinical swallowing evaluation; consequences of dysphagia
- Unit 3: Motor control
- Unit 4: Instrumental evaluation of swallowing; dysphagia management and therapy
- Unit 5: Pediatric dysphagia; trachs and vents; palliative care considerations

So, what to expect?

- In earlier units, students may or may not have had much (or any) academic course work directly relating to your practice setting (see the **Summary of Unit and Course Content** handout for details) and this can result in some angst in the early days of placement, **BUT**:
- Students will have related knowledge they can apply (e.g., if intervention is new, they could scaffold their learning about analyzing assessment results, setting goals, and the RTSS) if you point them in the right direction
- They will seek out new learning to help fill in gaps in academic knowledge and welcome your support to solidify this learning
- The clinical competencies rating scale explains what level of support is expected at each stage of progression through the program
- When the new content they learned with you comes up in class later, they will shine when sharing their expertise with other students 😊

In organizing the program this way, we hope that:

- Students have less opportunity to “forget” content learned because it keeps coming back unit after unit, in greater depth and breadth
- Students make more meaningful and lasting “ah ha” connections between learning across courses and between learning from course work and learning from placement
- Students are more actively engaged in the learning process and welcome feedback to continually elevate their skills
- Students are better prepared for the working world by having the skills to seek out and apply new knowledge any time an unfamiliar clinical scenario presents itself (which happens frequently!)
- We contribute meaningfully to developing the “ideal future SLP” that our clinical community requested 😊