Problem Based Learning

MORAVIAN COLLEGE
Teaching as We Practice in Speech-Language Pathology

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Disclosures
All salaried employees of MORAVIAN COLLEGE

Learning Outcomes

1. Compare a problem based curriculum with that of a traditional curriculum.
2. Apply problem based learning practices.

Problem Based Learning

Constructivist learner centered instruction
Emphasizes knowledge as an emergent and socially constructed relationship to information
Acknowledges the value of active student participation in learning
Facilitates the bridging of the theory-practice gap in professional healthcare education

Give a person a fish, and feed them for a day. Teach a person to fish, and feed them for a lifetime.

PBL: Historical Context

Originated in the medical program of McMaster University, Canada in mid 1960’s
Spread quickly through medical programs and within a few years there were PBL medical programs in the Netherlands, Australia, Israel and the United States (starting with Harvard).

This trend has spread to programs of other health professionals:
- Physician assistant programs,
- Pharmacy programs,
- Physical Therapy programs,
- Occupational Therapy programs
- etc.

More recently, there has been a move towards PBL in the field of Speech-Language Pathology.
Traditional Lecture Based Model

- Didactic instruction
- Academic setting is separate to clinical setting
- Students learn material and outcomes are separately applied

Six semesters

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<th>Summer I: Introduction to Communication &amp; Swallowing Disorders</th>
<th>Fall I: Developmental Communication &amp; Swallowing: Disabilities</th>
<th>Spring I: Acquired Communication &amp; Swallowing: Disabilities</th>
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<td>Summer II: Complex Cases in Speech Language Pathology I</td>
<td>Fall II: Complex Cases in Speech Language Pathology II</td>
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Products

1) A group product
2) An individual reflection
3) A reference list
4) Scribes notes (i.e. the questions and answers discussed during the addressing of the problem)

What PBL Looks Like

- Students participating in PBL
- Collaboratively and actively critically analyze a situation or problem
- Construct appropriate responses, and make a solution
- Reflect on experiences
- Utilize diverse knowledge
- Currently analyze and evaluate information
Sample Problem Activity

John Jones, a 26-year-old male, was diagnosed with schizophrenia when he was 22. He has been taking antipsychotic medications since then. He also has a long history of epilepsy and has been on anticonvulsant medication for this, and so has not had a seizure in the last 10 years.

John has had recent medication changes that have resulted in a decline in community participation. John has been referred by his psychiatrist to the outpatient clinic, at which you work, for Physical therapy and Occupational therapy services. John is your neighbor and so you have become aware of his communication difficulties from your neighborhood and now waiting-room observations. You believe he may need a referral to Speech-Language Pathology services but you are also aware that the OT is treating cognition and feeding issues. Note: You do not have a good working relationship with this OT in your practice (recent turf arguments) and this treatment OT is also married to the referring psychiatrist. You are unsure how to proceed.

What do we know?

John Jones, a 26-year-old male, was diagnosed with schizophrenia when he was 22. He has been taking antipsychotic medications since then. He also has a long history of epilepsy and has been on anticonvulsant medication for this, and so has not had a seizure in the last 10 years.

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What we want to know?

Sam with a Stutter

- How are stutterers treated?
- What causes a stutterer?
- How do we assess it?
- What is a stutterer?
- Is stuttering contagious?
- Do stutterers have a lower IQ than the typical population?
- Is there a genetic basis for stuttering?
Apply Knowledge: Develop a Product

May range from an information video, leaflet, information packet, therapy session plan, therapy tool development etc. The more creative and practical the better!

When developing a product, make sure you identify a clear audience (e.g. client, family member, professionals, public) and choose an appropriate genre for getting information to this population (e.g. a brochure is more suitable than a research paper for public consumers).

The content, clarity and overall presentation of the product are important.

Likert Scale Self-evaluation

1. Communication Skills/Participation: Communicates clearly, concisely, and respectfully to all group members
2. Responsibility: demonstrates maturity and leadership in independent work and group contributions
4. Team Skills: Facilitates group discussion, demonstrates sensitivity to the level of understanding of all group members
5. Preparation: Comes to group thoroughly prepared to discuss learning issues
6. Resources: Uses and critiques a variety of appropriate resources
7. Clinical Reasoning: Seeks appropriate information to understand relevant problems and management; applies learning issues to case

Facilitator Evaluation of Students

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2. Responsibility: demonstrates maturity and leadership in independent work and group contributions
4. Team Skills: Facilitates group discussion; demonstrates sensitivity to the level of understanding of all group members
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Learner Outcomes for this Case

- Describe the communication, cognitive, and swallowing difficulties that may accompany schizophrenia
- Outline the side effects of popular antipsychotic and anticonvulsive medication on communication
- Demonstrate the ability to advocate for your profession.
- Discuss the importance of interprofessional relationships in healthcare
- What SLP assessment/intervention is recommended for individuals with schizophrenia
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Selected References

Sample case problem

John Jones, is a 26-year-old male that was diagnosed with schizophrenia when he was 22. He has been taking antipsychotic medications since then. He also has a long history of epilepsy and has been on anticonvulsive medication for this, and so has not had a seizure in the last 10 years.

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