Learning Life Course Lessons in LEND Programs through an Interdisciplinary Case-Based Approach

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Case Base Learning

For these two LEND programs, characteristics of the model include:
- **Two co-facilitators** (faculty and advanced trainee or two faculty) from different disciplines
- **Interdisciplinary groups of 6-10 trainees per group**
- **Six "cases" per year** – taught in a developmental sequence covering different neurodevelopmental domains, content is related to LEND competency achievement
- **Multiple sessions per case** – total time per case is 180-220 minutes (2 sessions x 90 minutes or 3 sessions x 75 minutes), each session adds information about the child and family
- **Trainees conduct research** on topics of interest relevant to the case between sessions, bring the information back to the next session to share with their group

Interdisciplinary Team problem-solving to determine appropriate next steps and to allow trainees and faculty time to interact and learn from each other.

**Evidence Base for Case-Based Learning (CBL)**
- Case-based learning promotes self-directed learning, clinical reasoning, clinical problem-solving, and decision making. CBL provides an opportunity for interprofessional learning and collaboration[1][2] and is effective for:
  - Teaching complex health competencies
  - Building capacity for role clarity and communication between disciplines
  - Improving patient-centered care
  - Enhancing collaboration and clinical decision making.
- In LEND, CBL provides interprofessional learning opportunities in a supported environment, where trainees gain a deeper understanding of their discipline in the context of interdisciplinary teamwork[3][4][5][6].

**References**


Trainee Feedback

Wisconsin LEND Trainees agree:

- CBL is highly valuable...
- CBL is very helpful...
- Sessions were well organized
- I felt comfortable sharing/taking
- Group leaders made this a safe learning environment
- Preparatory work was reasonable
- Format promoted application to other experiences
- I would have liked more resources on some topics

California LEND Trainees agree:

- "The most valuable thing I’ve learned is that there is always something new to learn from other professionals.”
- "Collaborating with experts in other fields is a great way to get you closer to the "right" solution.”
- "I really helped me to realize the importance of interdisciplinary collaboration.”
- "Great discussions on tough topics.”
- "Wonderful ideas about what families might be going through in terms of psychosocial considerations.”

Wisconsin CBL Feedback

- Opportunity to practice problem-solving, family-centered skills
- Opportunity to practice on topics, real-life cases
- Experiences of individuals/families from various cultures
- Knowledge and roles of LEND disciplines
- Knowledge of programs & services effective for:
  - Include more systems of care, research, policy components
  - Include video clips to make it more interactive and relatable

Wisconsin CBL Facilitator Feedback

- Knowledge of neurodevelopmental disorders (DD) 100%
- Knowledge and roles of LEND disciplines 100%
- Awareness of different discipline perspectives 100%
- Knowledge of systems of care for children/youth with DD 100%
- Knowledge of programs & services 100%
- Completing recommended refresher on content for facilitators 44%
- Family-centered care 96%
- Experiences of individuals/families from various cultures 96%
- Family perspectives/experiences 96%
- Knowledge of how policy/regulations affect program/services 92%
- Role culture plays in families' perceptions of disability 92%
- Life Course Approach 89%
- Practice skills in becoming an effective team member 88%
- Need for professionals to get involved in policy setting 88%

**Lessons Learned**

- Most valuable aspects of CBL for trainees and faculty:
  - Interdisciplinary perspectives on topics, real-life cases
  - Continuous learning and increased knowledge
  - Opportunity to practice problem-solving, family-centered skills
  - Safe place to discuss and interact, typically not just one right answer, gives trainees a voice
  - Addresses LEND competencies (knowledge, clinical skills, family and cultural perspectives, advocacy, leadership)

**Suggestions for enhancing Case-Based Learning Experiences:**
- Maximize diversity of disciplines
- Include video clips to make it more interactive and relatable
- Include more systems of care, research, policy components

**Activities Facilitators Completed to Prepare**

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Review the facilitators guide</td>
<td>92%</td>
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<tr>
<td>Include more systems of care, research, policy components</td>
<td>88%</td>
</tr>
<tr>
<td>Include video clips to make it more interactive and relatable</td>
<td>89%</td>
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<td>Practice skills in becoming an effective team member</td>
<td>88%</td>
</tr>
<tr>
<td>Knowledge of how policy/regulations affect program/services</td>
<td>92%</td>
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<tr>
<td>Knowledge and roles of LEND disciplines</td>
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<tr>
<td>Knowledge of bio-behavioral health care</td>
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<tr>
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<td>Completed recommended refresher on content for facilitators</td>
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**Facilitator Perceptions of the Success of CBL for Trainee Learning**

<table>
<thead>
<tr>
<th>Facilitator</th>
<th>Perception</th>
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<tbody>
<tr>
<td>Was the facilitator guide helpful?</td>
<td>Yes</td>
</tr>
<tr>
<td>Did you feel supported in handling facilitator feedback?</td>
<td>Yes</td>
</tr>
<tr>
<td>Did you feel adequately prepared to be a facilitator?</td>
<td>Yes</td>
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