

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

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## Case Base Learning

The CA-LEND and WI LEND programs have both utilized a specific case-based learning approach that is **interdisciplinary, family-centered, culturally sensitive, and incorporates Life Course theory**. This method was originally adapted from models developed for single disciplines (primarily medical residents), and has now been shown to be effective for interprofessional training (references below).

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<sup>10</sup>
- Interprofessional CBL is a valuable learning initiative<sup>1,11</sup> and is effective for:
  - Teaching complex health competencies<sup>4</sup>
  - Building capacity for role clarity and communication between disciplines<sup>2,3,6</sup>
  - Improving patient-centered care<sup>1</sup>
  - Enhancing collaboration and clinical decision making<sup>5,7</sup>
- 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<sup>8,9</sup>

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"collaborating with experts in other fields is a great way to get you closer to the "best solution"

"recognizing the strengths of each discipline"

## Trainee Feedback



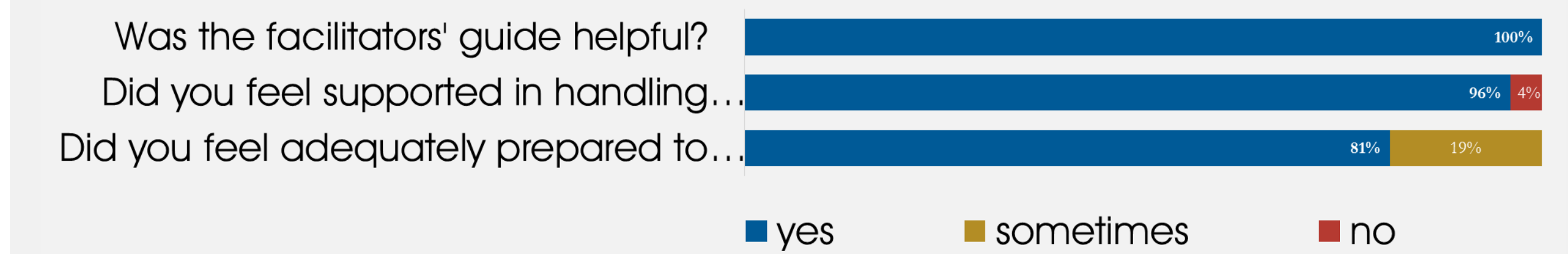
"the most valuable thing I've learned is that there is always something new to learn from other professionals"

## Facilitator Feedback

A survey was conducted with staff and advanced (2<sup>nd</sup> year) trainees who served as co-facilitators for case-based learning in the last 3 years (2014-2017). The purpose of the survey was to obtain facilitator feedback on their roles and the process, their satisfaction with case-based learning as a LEND activity, and what they felt were important training outcomes. A total of 25 responses were obtained – 13 from California and 12 from Wisconsin, representing these disciplines:

**Audiology Family Human Development Nursing Nutrition Occupational Therapy Pediatrics Physical Therapy Psychology Public Health Special Education Speech Language Pathology**

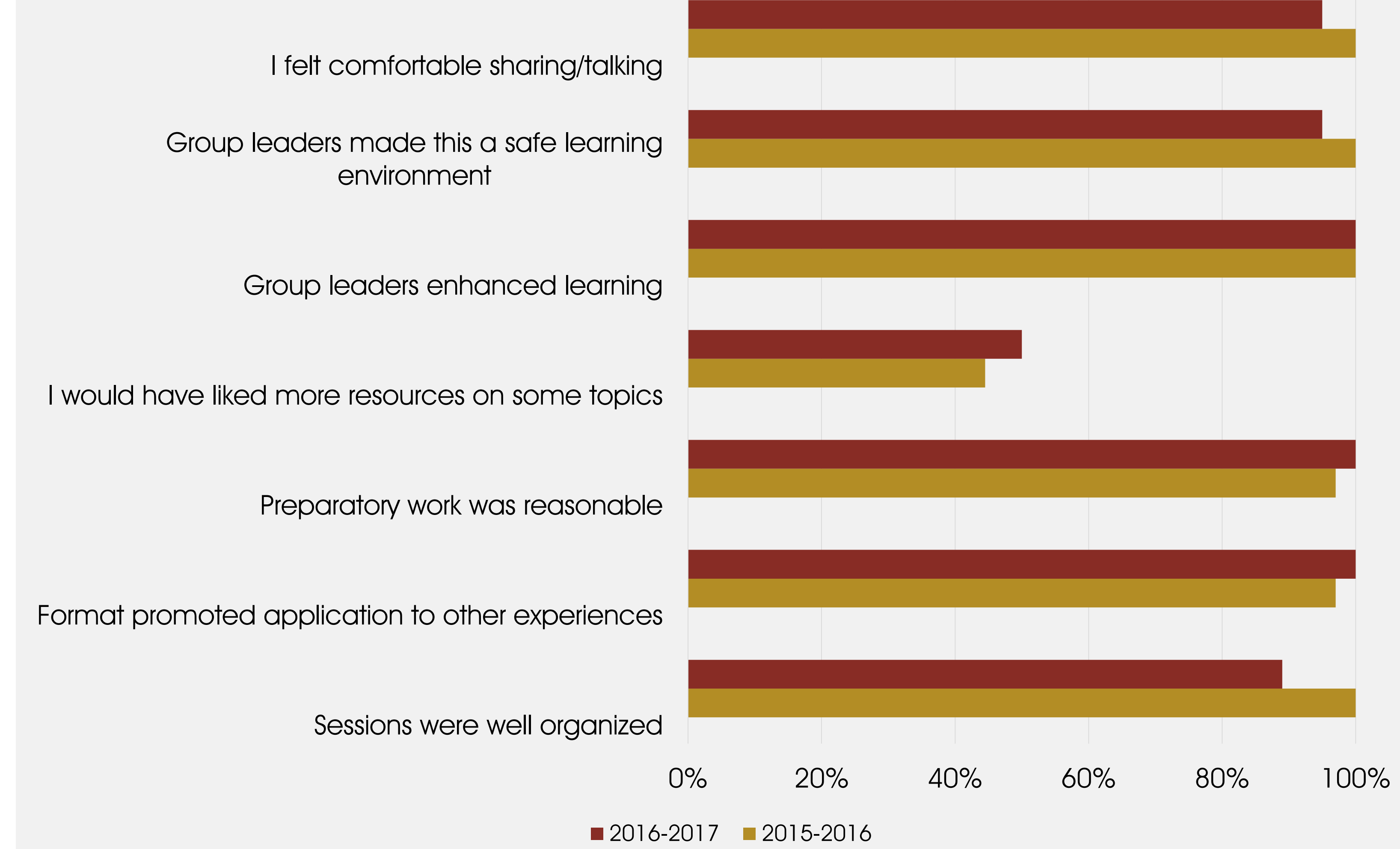
### Facilitator Preparation (n=25)



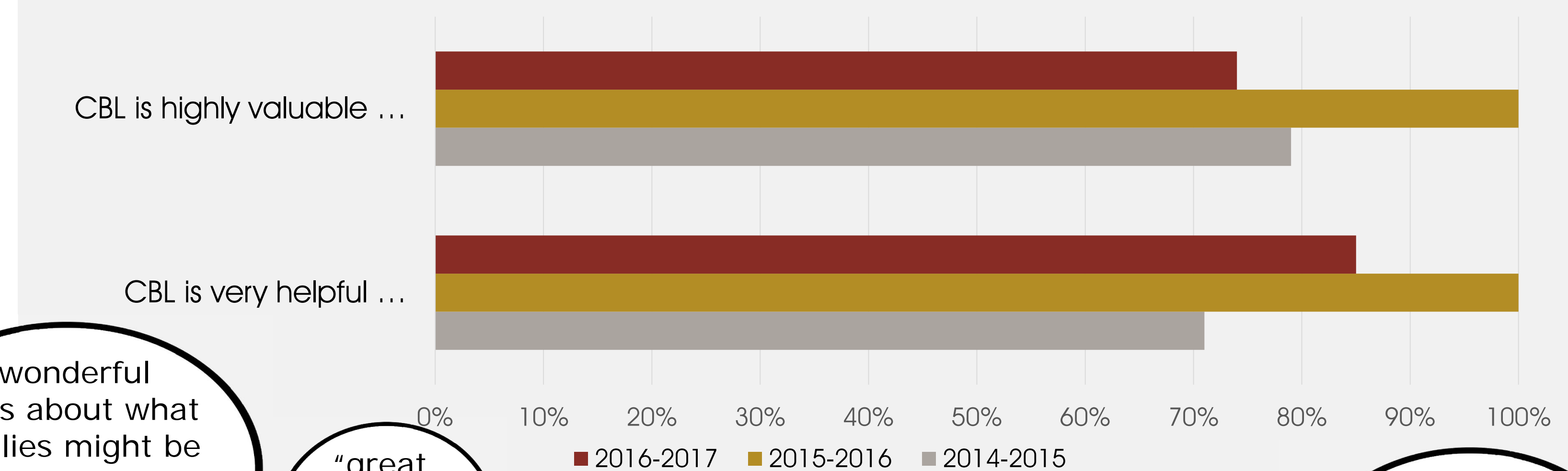
### Activities Facilitators Completed to Prepare Success of CBL for Trainee Learning

ACTIVITY	Percent	TOPIC	Percent
Review the facilitators guide	92%	Knowledge of neurodevelopmental disabilities (DD)	100%
Review the content on specific conditions/additional research	88%	Knowledge and roles of LEND disciplines	100%
Attended LEND seminar(s)	56%	Awareness of different discipline perspectives	100%
Completed recommended refresher on content for facilitators	44%	Knowledge of systems of care for children/youth with DD	100%
Complete or review the assignments given to trainees	40%	Knowledge of programs & services for DD	100%
		Family-centered care	96%
		Experiences of individuals/families from various cultures	96%
		Family perspectives/ experiences	96%
		Knowledge of how policy/regulations affect programs/services	92%
		Role culture plays in families' perceptions of disability	92%
		Life Course Approach	88%
		Practice/skills in becoming an effective team member	88%
		Need for professionals to get involved in policy setting	88%

### California LEND Trainees agree:



### Wisconsin LEND Trainees agree:



"wonderful ideas about what families might be going through in terms of psychosocial considerations"

"great discussions on tough topics"

"it really helped me to realize the importance of interdisciplinary collaboration"



## 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** sharing knowledge, team 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