

Evaluating State-Sponsored Professional Development

The Effects of *STEPS* Training
Nebraska's Autism Spectrum Disorders Network
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The ASDN Purpose

“...[to be] an integral part of the statewide [educational] system and a means for ensuring quality educational opportunities for children with ASD [Autism Spectrum Disorders] in Nebraska.”

-Autism Spectrum Disorders:

Nebraska State Plan, p. 4

Autism Spectrum Disorder Network of Nebraska

**Nebraska Department of Education
Office of Special Populations**
-financial support

**Special Education Advisory Council (SEAC)
and Autism Ad Hoc Subcommittee**
-advisory

University of Nebraska-Lincoln
State-level grantee \$
-office space & administrative support

ASDN Administrative Team
-Monthly Meetings
-Long-term ASDN Goals
MEMBERS

ASDN State Coordinator
Project Director \$
-Web Manager
-Training Coordinator
-Conference Planner
-Regional Team Consultant
-STEPS Coordinator

**Regional Team Coordinators &
Regional SpEd Directors**
Regional grantee \$
-Local support
-Local coordination
-Nominator: STEPS Mentors/Trainees

NDE Low Incidence Coordinator
ASDN State Team Leader
- Financial officer

Regional ASDN Teams
Quarterly Meetings
- Provide local training to teachers/staff
- Local onsite student consultations
-STEPS Mentors

Regional School District and ESU Service Providers
-Local on-site teaching and service
for students and families
-STEPS Trainees

**Students with Autism Spectrum Disorders
In Nebraska Public Schools**

Professional Development Activities in the ASDN

State and/or regional coordinators oversee:

- Training for 5 Regional Teams
- Team consultation for local school professionals
- Regional workshops and local in-service training
- Annual statewide Autism Conference
- STEPS Training and Mentoring
- *District-level Leadership Training*

Goals of Evaluation Study

Evaluate the effects and sustainability of ASDN's efforts:

- ASDN administrators' perceptions of Network outcomes and goals
- Regional Team sustainability over 5 years
- *STEPS* Trainees' knowledge and application of learning over 18 months (2007-08 cohort)
- *STEPS* mentoring processes and components

Regional Team Sustainability

Pre-Post Survey comparisons (n = 86, 67)

- Overall, teams appear to have sustained and slightly improved their reported knowledge and skills of ASD and recommended practices, with no significant difference between regions.
- Most team members however, remain at a basic skill level; few rating self capable of training others

STEPS Training

*Strategies and Techniques for
Effective ASD Practices in Schools*

- Participants
 - STEPS Trainees (n=28/33) & Mentors (n=21)
 - 12 Trainee-Mentor pairs
- Activity:
 - 9 shared workshops
 - 4+ mentor meetings/observations
 - Entrance checklist of effective classroom practices
 - Pre-Post survey of ASDN knowledge and skills
 - Development/evaluation of 3+ action plans

ASDN Planned Evaluation

- Pre-Post survey of ASDN knowledge and skills
- Report of evaluation of 3+ action plans
- Participant evaluations of workshop sessions
- Trainee evaluation of Mentors
- Trainee portfolio of student data and efforts

= Certificate of Completion/ College credit

* No plan for entrance- exit observation of effective classroom practices

Evaluation Questions

- How much change occurred in Trainees' self-reported ASD knowledge and skills?
- How much change occurred in in Trainees' effective classroom practices?
- What relationship existed between Trainee self-reported knowledge & skills and Mentors' evaluation of effective classroom practices?
- What role did action plans play in changing Trainee effective practices?

Data Analyses

- Compare pre- and post survey results
- Compare Trainee- and Mentor-completed entrance-exit *Effective Practices Checklist* ratings
- Assess correlations between survey data, checklist data and action plans

Results-1

Trainee Survey of ASD Knowledge & Skills

4-pt Rating scale:

- 1 = little, no awareness
- 2 = basic knowledge
- 3= I can implement this
- 4 = comfortable providing training

○ Shift noted from:

- Basic knowledge level ($M=2.27$, $SD =.30$) to
Implementation level ($M=3.24$, $SD=.38$)
($p = .000$)

24/28 (86%) Trainees completed both pre- and post-survey

ASD Effective Practices Checklist

Item Domains

- Environmental Structure
- Individualize supports
- Systematic Instruction
- Behavioral Supports
- Teaming
- Student Communication Skills
- Student Social Skills
- Family Involvement

Item Rubrics

- 1-2 = not evident, not addressed, limited, reactive use
- 3-4 = desired practice evident optimal use of desired practice

Results-2

Entrance-Exit Effective Practices Checklist

Mean Ratings of Trainees and Mentors on *ASDN Effective Practices Checklists*

<i>Checklist domains</i>	Mean Ratings (<i>SD</i>)			
	Trainee Entrance- <i>Checklist</i> N = 9	Trainee Exit- <i>Checklist</i> N = 9	Mentor Entrance- <i>Checklist</i> N = 11	Mentor Exit- <i>Checklist</i> N = 11
Individualized Supports & Services	3.06 (.17)	3.61** (.30)	3.00 (.59)	3.76** (.19)
Systematic Instruction	2.94 (.84)	3.37 (.48)	3.06 (.51)	3.72* (.36)
Teaming	3.00 (.71)	3.00 (.58)	3.00 (.77)	3.39 (.42)
Environmental/ Program Structure	2.94 (.73)	3.53 (.46)	2.73 (.61)	3.77** (.39)
Communication Skills	2.63 (.63)	3.50* (.69)	2.77 (.55)	3.58* (.42)
Social Skills	3.28 (.57)	3.33 (.71)	3.14 (.55)	3.50 (.55)
Behavioral Supports	2.17 (.62)	2.92* (1.00)	2.10 (.93)	3.43* (.51)
Family Involvement	3.00 (.82)	3.71* (.49)	3.00 (1.05)	3.50 (.53)
Overall	2.85 (.33)	3.38* (.44)	2.82 (.44)	3.62** (.28)

* $p < .05$ ** $p < .005$

Results-2

Significant change noted for

- Trainee-completed Entrance-Exit reflections
- Mentor-Completed Entrance-Exit observations

No significant differences noted for:

- Trainee-Mentor ratings at Entrance or Exit

Reliability for Mentor-Naïve Observer ratings

- Contiguous: 90-91% agreement
- Categorical: 69%-91% agreement
- Exact: 34%-48% agreement.

Results-3

Relationship of Variables

Trainee post-survey of ASD knowledge & skills and Mentor exit-checklist ratings

- Positively and significantly correlated ($r^2=.539$, $p=.047$)

Action Plan evaluations and exit checklist ratings

- No significant relationship

Evaluation Findings

1. Number of pairs with complete data limited analyses
 - Program assumes completion of entrance and pre-post completion
2. No exit-checklist of effective practices required but could be telling
3. Increased knowledge & skills noted in Trainees
4. Increased knowledge & skills = increased Mentor-observed classroom practices
5. *ASD Effective Practices Checklist* has reasonable reliability and promise

Recommendations

1. REQUIRE submission of pre-post surveys and entrance-exit checklists
2. Investigate use of action plans to guide and evaluate Trainees' efforts
3. Invest in psychometric analyses of *ASD Effective Practices Checklist*

Recommendations

4. Limit enrollment to *STEPS* cohorts to minimize drop-out rates and costs and maximize mentor availability
5. Screen *STEPS* graduates for future Mentor roles
6. Use *STEPS* student data as testimonials for accountability

Thank You