

# Development of an Advanced Neuro Course for Pediatrics

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## Description of DCE Site

- The Neuro Specialist Institute is a non-profit organization founded in Los Angeles, California
- Highly skilled team of health care professionals
- Continuing education provider
- Mission: to improve health outcomes for individuals living with neurological conditions and treat multiple systems



## Summary of Needs Assessment

- Development of cerebral palsy curriculum within an advanced pediatric continuing education course
- Explore current evidence-based practice and interventions
- Increase literacy through learning from lived experiences
- Expand marketing for the Neuro Specialist Institute

## Learning Objectives

- Obtained pedagogical skills by developing a pediatric continuing education course at the Neuro Specialist Institute.
- Obtained clinical knowledge on the neurological population and CP.
- Expanded marketing for the Neuro Specialist Institute

## Literature Review

- Competency can lead to better performance in the workforce, which is directly linked to the quality of health services (Panteli et al., 2019)
- Continuing education programs are rated as one of the most valuable forms of professional development activities therapists seek to ensure competency (Coffelt & Gabriel, 2017)
- There is a gap between research and practice as 30-40 percent of interventions have no evidence based and another 20 percent of interventions provided are ineffective, unnecessary, or harmful (Novak et al., 2013)
- Early intervention services (birth to 36 months of age) and school age services (3 to 21 years of age) can help manage symptoms for individuals with CP, but there are currently no best practices for all children with CP (CDC, 2021)

## Project Description



- Completed literature review to determine best practices and interventions
- Interviewed professionals working with children with cerebral palsy to determine current gaps
- Accumulated information and research to create curriculum for the pediatric course
- Completed Certified Neuro Specialist Institute Certification Course to gain knowledge and skills to provide effective interventions for the neurological population
- Interviewed individuals with cerebral palsy to gain knowledge on the condition and lived experiences
- Created marketing strategies to advertise the course to the public

## Evaluation and Outcomes

To evaluate the course, a pre-evaluation form was created by the site mentor and doctorate student to assess the course content based on sections of AOTA's approved provider guidelines.

1.2.3 Organization and Management
X Follows an outline for course
X Clearly explains the learning objectives for course
X Presents content in a logical sequence
X Presents material appropriate to stated learning objectives
X Allocates appropriate time for each portion of course material
X Integrates text/resource materials

1.2.3.4 Professional Competence
X Demonstrates current and thorough command of subject matter
X Gives "real-world" applications to illustrate concepts
X Explains subject matter clearly and accurately
X Differentiates and emphasizes major points

1.2.3.4 Instructional Methods
X Engages participant learning
X Presents material in a variety of ways (e.g., lecture group discussion, lab, cases study) to appeal to the diverse learning styles of each audience
X Manages course discussion and questions effectively
X Displays wide variety of instructional strategies
X Demonstrates flexibility and responsiveness
X The delivery format (e.g., Live, Distance Learning) is appropriate for the given content and support the identified learning outcomes.

1.2.3.4 Evidence
X Supported by the most current literature and resources, and highest level of support

1.2.3.4 Learning Outcomes
X Learning outcomes provide the basis for providing periodic feedback, measuring progress, and conducting a final assessment of learning
X Learning outcomes are congruent with the learning outcome assessment method
X Learning outcomes specify what participants will know, be able to do, or be able to demonstrate when completing the learning outcome assessment
X Learning outcomes specify an action by the student that must be observable, measurable, and demonstrable, and must be assessed beyond self-report and/or self-reflection
X Learning outcomes are realistic and appropriate in number for the planned activity.
X Learning outcomes reflects the educational level assigned to the personal development activity

Total Score: Students must receive a minimum of 50% of possible points at the midterm  
Points: 55/ 104  
Percentage: 52%

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Total Score: Students must receive a minimum of 75% of possible points at the final  
Points: 84/ 104  
Percentage: 80%

- Likert scale evaluation
- Assessed five areas including (1) organization and management, (2) professional competence, (3) instructional methods, (4) evidence, and (5) learning outcomes
- Course content evaluated in the middle and end of DCE
- Student demonstrated improvements creating a pediatric course
- Student met institute's and site mentor's satisfaction in course content matching AOTA guidelines

## Implications

- Results and outcomes implies:
  - course content is organized and follows a logical sequence
  - student demonstrated professional competency creating the course
  - methods for teaching the course will be delivered and appeal to a diverse group of learning styles
  - course content is evidence based and reflects best practice
  - course outlines learning outcomes well with room for improvement as course is finalized
  - course is projected to be AOTA approved and offered in 2023

## Scholarly Deliverables

Deliverables given to the Neuro Specialist Institute include multimedia, course book, and marketing materials produced.



## Acknowledgements

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## References

References available upon request