HCSB 2020-013c

Amendments to 2019-2020 NEFEC Professional Learning Catalog/Master Inservice Plan

School Board Approval for:

Addition of nine new professional learning components:

New Component	Number	Points
Language Reading Connection for Deaf/Hard of Hearing (PDA)	2-100-024	10
Teaching Students with Disabilities for Physical Education (PDA)	2-100-025	20
Math Difficulties, Disabilities and Dyscalculia (PDA)	2-100-026	7
Computer Science Educator Certification Prep	3-003-001	60
Competency 1: Foundations of Reading Instruction 2025	1-013-023	60
Competency 2: Application of Research-Based Instructional Practices 2025	1-013-024	60
Competency 3: Foundations of Assessment 2025	1-013-025	60
Competency 4: Foundations and Applications of Differentiated Instruction 2025	1-013-026	60
Competency 5: Demonstration of Accomplishment 2025	1-013-027	60

New Reading Endorsement components are written for the revised eLearning Network courses. Title includes 2025 to denote the end of the endorsement renewal period, and a new component number has been assigned due to new coursework. In addition, the components have been written using the high-quality format.

APPROVED BY HAMILTON SCHOOL BOARD

ON 4/30/2020

APPROVED BY HAMBJON SCHOOL BOARD Superinter States

2020-2025 NEFEC Reading Endorsement Add-on Program

School Board Approval for Five-Year Renewal Period

The 2020-2025 NEFEC Reading Endorsement Add-on Program has received extensive revisions as an outcome of legislative mandates passed since 2017 requiring changes in reading curriculum, and additions of sections that are on the FLDOE endorsement add-on guidelines. Below is an outline of the changes with corresponding page numbers.:

Program Rationale and Purpose

p. 2 Narrative changed

Program Content/Curriculum p.3

Competencies

pp.3-4 Addition of 2025 to end of each competency title

Removed Section that was in 2014-2020 endorsement: District Add-On Reading Endorsement Plan Renewal (steps for renewal process) Not on the FLDOE endorsement add-on guidelines.

Added the following sections included on the FLDOE endorsement add-on guidelines:

- p.4 Specialization: 6A-4.0292 Specialization Requirements for the Reading Endorsement.
- pp.5-6 Nationally Recognized Guidelines

Update: Reading Endorsement Competency Paths 2020-2025

pp.6-7 Included organizations with approved Just Read, Florida! Matrix. Can only use approved vendors.

Added sections cont.:

Instructional Design and Delivery

- p.8 Includes description of the courses for the 5 Competencies and Instructional Strands chart w/new component #
- p.9 Inservice Codes
- p.10 Instructors description of requirements

pp.10-35 Training Components (see amendment to PLC for title and component numbers)

All new sections to the Reading Endorsement:

Program Completion Requirements p.36

- A. Program Completion
- B. Competency Demonstration
- C. Competency Verification

Program Evaluation p.37

- A. Evaluation Plan
- B. Annual Review

Program Management pp.37

- A. Candidate Application and Admission
- B. Advisement
- C. Attendance Requirement for Inservice Points
- D. Transfer and Utilization of Credit
- E. Certification of Completion

School Board Approval p.39

NEFEC 2020-2025 Reading Endorsement Alignment Matrix p.40

LANGUAGE READING CONNECTION FOR DEAF/HARD OF HEARING (PDA)

COMPONENT NUMBER: 2-100-024

Function: 2 Focus Area: 100

Local Sequence Number: 024

POINTS TO BE EARNED: 10

DESCRIPTION: This course provides a foundation for educators working with students who are deaf or hard of hearing. The purpose of this course is to provide teachers with the research, strategies, and resources to deliver specially designed literacy instruction specific to the needs of students who are Deaf/Hard of Hearing (DHH).

LINK(S) TO PRIORITY INITIATIVES: Identify the alignment of the targeted professional learning with key district priorities (select all that apply)

⊠Continuous Improvement practices

FLORIDA PD PROTOCOL STANDARDS SUPPORTED BY THIS COMPONENT

	Educator	School	District
Planning Learning Implementing Evaluating	■ 1.1.1■ 1.2.2, 1.2.5	□ 図 2.2.3, 2.2.5,	⋈ 3.1.3., 3.1.5⋈ 3.2.3., 3.2.5
	⊠ 1.3.1 □	⊠ 2.3.3 □	⊠ 3.3.3. □

IMPACT AREA(S):

Study leading to deep understanding of the practice (s), standard (s), and/or process(es) targeted

SPECIFIC LEARNER OUTCOMES:

Upon completion of this course, participants will understand or be able to do the following:

- complete formative, summative, and progress monitoring tools specific to oral, signing, and silent reading fluencies
- define signed, oral, and silent reading fluency as it applies to students who are deaf or hard of hearing (DHH)
- describe accessibility considerations for students who are deaf or hard of hearing
- describe and analyze elements of text complexity which most significantly impact students who are deaf or hard of hearing
- describe strategies to teach vocabulary
- explain the benefits of teaching morphology
- explain the importance of signed, oral, and silent reading fluency as a component of reading for

- students who are DHH
- explain the need for explicit vocabulary instruction
- explain why students who are deaf or hard of hearing often have challenges with figurative language and inferencing
- identify strategies for teaching students to answer evidence-based questions
- identify the barriers to independently access vocabulary for students who are deaf or hard-of-hearing (DHH)
- identify the kinds of words to teach students
- utilize strategies to increase reading comprehension
- utilize techniques for improving fluency in a variety of instructional environments (classroom, push-in, itinerant)

LEARNING PROCEDURES (METHODS): B: ELECTRONIC, INTERACTIVE

WHAT WILL OCCUR DURING THIS PROFESSIONAL DEVELOPMENT COMPONENT DELIVERY?

Participants will achieve mastery of the objectives by completing the online module, in its entirety, which includes the following directed activities appropriate to the various areas of content and referenced within the module:

- 1. Review all the course content, including additional resources, external links and videos. Pass the Check Your Knowledge quizzes at the end of each unit.
- 2. Complete a Reflection Journal.
- 3. Pass the final assessment with at least 80% accuracy.
- 4. Complete the follow-up activity options.

HOW WILL THE EXPERIENCES BE PROVIDED TO PARTICIPANTS DURING THE DELIVERY?

The course is offered in a digital online format. Participants are responsible for completing all online learning activities, and for reviewing all course content, including professional articles, videos and websites in the online course environment and as external links.

KEY ISSUES TO BE INCLUDED IN PARTICIPANT IMPLEMENTATION AGREEMENTS:

Participants must complete a pre assessment, review all unit content and any included videos, participate in any embedded activities, and pass a final assessment with at least 80% accuracy. They must have a commitment to completion of a follow-up implementation activity designed as an application of course objectives.

IMPLEMENTATION/MONITORING PROCEDURES: S: Electronic, Non-Interactive

Following successful completion of the module, participants must complete <u>one</u> of the follow-up activity options to demonstrate level of competency.

Follow-up Activity (Option 1, 2, 3 or 4) - For Certificate of Completion and in-service points:

 Option 1 - Complete a Signed Reading Fluency Rubric (original or modified) on a cold and warm reading of a passage for a student on your caseload.

- Option 2 Develop a literacy improvement plan for a student on your caseload. Use data
 collected from multiple sources to determine baseline performance and create a plan to
 increase the student's reading level at the intervention level (more than one year's growth in
 a year). Intervention plan should include collaboration with other teacher(s) and service
 providers to ensure cohesive implementation. Evidence of strategies or interventions learned
 in the course should be evident.
- Option 3 Complete a timed oral running record with at least three entries for a student in your class.
- Option 4 Complete a lesson plan related to vocabulary, comprehension, or fluency based on your students' current performance.

Verification of the completed follow-up activity is required by the participants' supervisor for a district to award 10 in-service points. Each school district or private school agency determines which professional development opportunities satisfy the content requirement for teaching students with disabilities credit (Renewal Credit in Teaching Students with Disabilities DPS 2014-12) for their employees. In-service points are awarded by the school districts through their Master In-service Plan (MIP). Those outside of a school district should follow the process set up by their agency.

IMPACT EVALUATION PROCEDURES: A: Changes in instructional or learning environment practices implemented in the classroom or directly with students (observed or measured impact on educator proficiency thru the district's instructional or school leader evaluation system indicators, components, and/or domains, and/or deliberate practice or IPDP/ILDP growth targets, and/or district or school level processes for tracking student progress.

Evaluation Methods for Staff Code: A-Changes in Instructional Practice, F-Changes in Observed Educator Proficiency

Evaluation Methods for Students Code: D-Observation of Student Performance

WHO WILL USE THE EVALUATION IMPACT DATA GATHERED?

Florida Diagnostic and Learning Resources System (FDLRS), Professional Learning and Development, and the Florida Department of Education will review the impact of the evaluation data gathered in the course's required participant satisfaction survey. Results are reviewed by FDLRS and shared with the Office of Professional Learning and Development.

At the classroom level, individual educators will use the impact data to assess the level of student mastery of objectives and to determine the effectiveness of their instruction. Impact data will also inform decisions with regard to needed additional professional learning based upon reflective opportunities.

PROCEDURES FOR USE OF THE COMPONENT'S EVALUATION FINDINGS: describe what will be done with the data obtained through the evaluation processes

WHAT OTHER FORMS OF EVALUATION DATA WILL BE GATHERED:

a. What evaluation data addresses value of the PD design?

To evaluate the value of the PD design presented, an immediate evaluation form is either distributed or accessed electronically.

When appropriate to use, the NEFEC Professional Learning Evaluation includes a self-assessment of knowledge, a rating of facilitator quality, and commentary. The results of the evaluation are reviewed by the presenter, NEFEC instructional staff, and district stakeholders. This information is used as a metric in the NEFEC internal evaluation system.

Other evaluation data may be gathered and used as deemed appropriate by the school or district.

b. What evaluation data addresses quality of implementation of the PD?

To evaluate the quality of implementation of the professional development and student use of strategies, academic coaches, teacher support colleagues, and/or school administrators will conduct informal observations. Quality of professional development is also addressed by the following:

Discussion board entries, when relevant

Quality of participation in the NEFEC Professional Learning Support, when appropriate Alignment and quality of student artifacts that participants submit in tiered level of support Quality of instruction that teachers demonstrate

Development of implementation plan, reflection, journal entries, logs, surveys, and/or lesson plans

c. Who will use these aspects of PD evaluation data?

NEFEC, school-based, and/or district level stakeholders will examine evaluation data to determine the success of the PD. In addition, all stakeholders will review the results of state and district-developed assessments to evaluate the impact data. These stakeholders include school and district leaders, academic coaches, and educators. Stakeholders will adjust programs according to implementation feedback.

Spring 2020

Departments: FDLRS, Professional Learning and Development, NEFEC

REFERENCES:

- Unit 1: Vocabulary
- Allen, Janet. (2014). Tools for teaching academic vocabulary. Portland: Stenhouse.
- Allen, Janet. (1999). Words, words, words: Teaching vocabulary in grades 4-12. Portland: Stenhouse.
- Allen, Janet. (2007) Inside words: Teaching academic vocabulary, grades 4-12. Portland, ME: Stenhouse.
- Anderson, K. (2012). Brain Development & Hearing Loss. Retrieved from https://successforkidswithhearingloss.com/for-professionals/brain-development-hearing-loss/
- Antia, S., Creamer, C, Rivera, M, & Catalano, J. (n.d.) Vocabulary for success. Tuscon: University of Arizona. Retrieved April 4, 2019 from https://clad.education.gsu.edu/files/2017/03/ICED intervention Vocabulary final.pdf.
- Antia, S. (2017 July 17) CLAD webinar Session 7—Vocabulary Intervention for DHH Students. [Video file]. Retrieved April 4, 2019 from https://www.youtube.com/watch?v=7VMTe0PjcY8.
- Archer, A. L., & Hughes, C. A. (2011) Explicit instruction: Effective and efficient teaching. New York: Guilford Press.
- Archer, A. L. (2012 October 21). Explicit instruction: Key to prevention and intervention in reading. [Presentation slides]. Florida Reading Association Conference.
- Archer, A. L., Vachon, V., & Gleason, M. M. (n.d.). Voyager sopris REWARDS series. Dallas: Cambium Learning Group.
- Archer, A. L., Vachon, V., & Gleason, M. M. (n.d.). What is REWARDS? (n.d.). Retrieved from https://www.voyagersopris.com/literacy/rewards/overview.
- Baker, C. (2006). Foundations of Bilingual Education and Bilingualism. Multilingual Matters.
- Bavelier, D., Newport, E., & Supalla, T. (2003). Children Need Natural Languages, Signed or Spoken. Retrieved from http://www.dana.org/Cerebrum/Default.aspx?id=39306
- Beck, I. L., McKeown, M. G., and Kucan, L. (2002). Bringing words to life: Robust vocabulary instruction. New York: Guilford.
- Byrd, I. Challenge students with homographs & homonyms [Web Page]. Retrieved April 4, 2019 from http://www.byrdseed.com/homographs-homonyms/.
- Centers for Disease Control and Prevention. (2010). Identifying infants with hearing loss: United states, 1999-2007 [Morbidity and Mortality Weekly Report]. Retrieved April 4, 2019 from https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5908a2.htm.
- Center on Literacy and Deafness. (2019) Vocabulary 4 success. Georgia State University. Retrieved April 4, 2019 from https://clad.education.gsu.edu/curriculum/vocabulary/.
- Czubek, T. A. and Diperri, K. A. (2015) Bilingual grammar curriculum: ASL & English. Bedrock Literacy and Educational Services, LLC for Deaf and Hard of Hearing Students.
- DiPerri, K. A. (2002). Picture this: Figurative language in English context. Hillsboro, OR: Butte Publications.
- DiPerri, K. A. (2002). Picture this: Multiple meanings in English context. Hillsboro, OR: Butte Publications.
- Florida Department of Education. (n.d.). English Language Arts: Florida Standards Implementation Guide (PDF). Retrieved from http://www.fldoe.org/core/fileparse.php/7539/urlt/FLStdsImpGuide.pdf on August 1, 2019.

- Gale, E. and Easterbrooks, S. Writing as a reading instructional tool. [PowerPoint slides]. Retrieved April 4, 2019 from http://www.deafed.net/ContentResources/wr/writetoread.ppt.
- Hall, W. C., Levin, L. L., & Anderson, M. L. (2017). Language deprivation syndrome: a possible neurodevelopmental disorder with sociocultural origins. Social psychiatry and psychiatric epidemiology, 52(6), 761–776. doi:10.1007/s00127-017-1351-7
- Hearing Matters (n.d.). Why LSL Matters. Retrieved from https://hearingfirst.org/en/lsl/why-lsl-matters
- Kovelman, I., Shalinsky, M. H., Berens, M., & Petitto, L. A. (2014). Words in Bilingual Brain: fNIRS Brain Imaging Investigation of Lexical Repetition in Sign-Speech Bimodal Bilinguals. Frontiers in Human Neuroscience. 8:606. doi: 10.3389/fnhum.2014.00606.
- Kovelman, I., Baker, S.A., & Petitto, L. A. (2008). Bilingual and Monolingual brains compared: An fMRI investigation of syntactic processing and a possible "neural signature" of bilingualism. Journal of Cognitive Neuroscience, 20(1), 153-169.
- Marzano, R. J. (2011) Art and science of teacher evaluation model learning map [PDF]. West Palm Beach, FL: Learning Sciences International. Retrieved April 4, 2019 from https://www.uvstorm.org/Downloads/Marzano Causal Teacher Rubric Roadmap.pdf.
- McEwan, E. K. (2017, December 01). Root Words, Roots and Affixes. Retrieved April 4, 2019 from http://www.readingrockets.org/article/root-words-roots-and-affixes.
- Michigan Integrated Behavior and Learning Support Initiative (MIBLSI). Retrieved April 4, 2019 from https://miblsi.org/training-materials/miblsi/tier-1-secondary-content-area-reading-strategies. Mitchell, R. E., Karchmer, M. A. (2002, May 6). Chasing the mythical ten percent: Parental hearing status of deaf and hard of hearing students in the united states [PDF]. Sign Language Studies. Washington, D. C.: Gallaudet Research Institute. Published in 2004, 4(2), 138-163. Retrieved April 4, 2019 from https://research.gallaudet.edu/Demographics/SLS Paper.pdf.
- Nielsen, D. C., Luetke, B., and Stryker, S. D. (2011, January 26). The importance of morphemic awareness to reading achievement and the potential of signing morphemees to supporting reading development. The Journal of Deaf Studies and Deaf Education, Volume 16, Issue 3, 275-288. Retrieved April 4, 2019 from https://academic.oup.com/jdsde/article/16/3/275/430405.
- Oticon (2019). It's your brain that hears, not your ears: Oticon BrainHearing. Retrieved from https://www.oticon.com/your-hearing/hearing-health/brainhearing-technology
- Petitto, L.A., Langdon, C., Stone, A., Andriola, D., Kartheiser, G., & Cochran, C. (2016). Visual sign phonology: Insights into human reading and language from a natural soundless phonology. WIREs Cognitive Science. doi: 10.1002/wcs.1404.
- Rasinski, T. V. (2005). Daily word ladders: Grades 2-3. New York: Scholastic.
- Rasinski, T. V. (2008). Greek and Latin word roots: Keys to building vocabulary. Huntington Beach, CA: Shell Education.
- Rochester Institute of Technology (n.d.). Deaf Education: A New Philosophy. Retrieved from https://www.rit.edu/showcase/index.php?id=86&fbclid=lwAR1xEX9m0HU_MM-OZqdMjkOmOPvJRpSgTAn8Q_ZzTZ6Pgt0FOCjT2FR3Rb0
- Schick, B. (2015, July 15). Fingerspelling & Literacy for DHH students [Video file]. Retrieved on February 8, 2019 from https://vimeo.com/album/4281389/video/133582114.
- Sight Words. (2019). Retrieved from https://sightwords.com

- Tremblay, K. L., Scollie, S., Abrams, H. B., Sullivan, J. R., & McMahon, C. M. (2014). Hearing aids and the brain. International journal of otolaryngology, 2014, 518967. doi:10.1155/2014/518967
- Tyle, L. B. (2004). Everything your 1st grader needs to know. Hauppauge, NY: Barron's.
- United States Department of Health and Human Services National Institute on Deafness and Other Communication Disorders. (2018, October 5). Quick statistics about hearing. Retrieved April 4, 2019 from https://www.nidcd.nih.gov/health/statistics/quick-statistics-hearing.
- Viera, Patricia. (2018). Fairview learning systems [presentation slides]. Kissimmee, FL: RMTC-D/HH Working with the Experts.
- Visual Language and Visual Learning Science of Learning Center. (2010, July). The Importance of Fingerspelling for Reading. (Research Brief No. 1). Washington, DC: Sharon Baker. Retrieved April 4, 2019 from http://vl2.gallaudet.edu/research/research-briefs/english/importance-fingerspelling-reading/.
- Visual Language and Visual Learning Science of Learning Center. (2011, June). Reading Research and Deaf Children (Research Brief Nos. 1-10). Washington, DC
- Vohr B. (2003). Overview: Infants and children with hearing loss part 1. Developmental Disabilities Research Reviews [Special Issue], Vol 9, Issue 2, 62–64.
- Unit 2: Comprehension
- Allen, Janet. More for teaching content literacy. Portland, ME: Stenhouse Publishers, 2008. Print.
- Allen, Janet. Tools for teaching content literacy. Portland, ME: Stenhouse Publishers, 2004. Print.
- Archer, A. L., & Hughes, C. A. (2011). Explicit instruction: Effective and efficient teaching. New York: Guilford press.
- Ariza, E. N. (2002). Why tesol?: Theories and issues in teaching English as a second language with k-12 focus. Location unavailable: Kendall Hunt Pub.
- Baker, S. (2010, July). Visual language & visual learning research brief: The importance of fingerspelling for reading. Retrieved April 10, 2019 from http://vl2.gallaudet.edu/research/research-briefs/english/importance-fingerspelling-reading/.
- Beers, K., & Probst, R. (2019, June 03). Embolden Readers & Writers: Houghton Mifflin Harcourt. Training presented in FL, Jacksonville.
- Bell, L. (n.d.). Mrs. Arnold's class. Retrieved October 11, 2011 from http://freyelementary.typepad.com/mrs arnold/unravel-stratety-use-as-your-guide-for-success.html.
- Cotton, K., Kirton, S., and Linn, C. (n.d.). SWEEP strategy. Okeechobee, FL: North Elementary School.
- DiPerri, K. A., and Czubek McEwan, Elaine K. 7 strategies of highly effective readers: Using cognitive research to boost K-8 achievement. Thousand Oaks: Corwin Press, 2004. Print.
- Fisher, D., Frey, N., & Hattie, J. (2017). Teaching literacy in the visible learning classroom. Corwin Literacy.
- Florida Department of Education. (2015 and beyond). Expanded skills: 9-12 [Web Page]. CPalms. Retrieved April 4, 2019 from http://www.cpalms.org/Public/PreviewCourse/Preview/5151.
- Fountas, I., & Pinnell, G. S. (2015). Ten characteristics related to text complexity [Graphic organizer]. Portsmouth, NH: Heinemann. Retrieved April 9, 2019 from https://twitter.com/fountaspinnell/status/659890569804648448.
- Gallagher, K. (2009). Readicide: How schools are killing reading and what you can do about it. Portland, MD: Stenhouse Publishers.

- Hempenstall, K. (2012 November 5). Literacy and mental health [Blog]. National Institute for Direct Instruction. Updated 2016 August 19 and 2018 December 6. Retrieved April 9, 2019 from https://www.nifdi.org/news-latest-2/blog-hempenstall/404-literacy-and-mental-health.
- Laurent Clerc National Deaf Education Center. (2015). The 15 principles for reading to deaf children; Learning from deaf adults [Web page]. Washington, DC: Gallaudet University. Retrieved April 10, 2019 from https://www3.gallaudet.edu/clerc-center/info-to-go/literacy/literacy-it-all-connects/reading-to-students.html.
- Lenz, K. (n.d.). Reading comprehension. Lawrence, KS: The University of Kansas. Retrieved April 8, 2019 from http://www.specialconnections.ku.edu/?q=instruction/reading comprehension.
- Mayer, C. and Trezek, B. (2011 October 7-8) New (?) answers to old questions: Literacy development in DHH learners [Presentation slides]. Resource Materials and Technology Center for the Deaf or hard of Hearing Working with the Experts Conference. St. Augustine, FL: Florida School for the Deaf/Blind.
- Miller, C. P. (n.d.) Opening the door: Teaching students to use visualization to improve comprehension. Education World. Retrieved April 10, 2019 from https://www.educationworld.com/a curr/profdev/profdev094.shtml.
- National Assessment Governing Board. (2008). Reading framework for the 2009 national assessment of educational progress. Washington, DC: U.S. Government Printing Office.
- Padden, C., & Ramsey, C. (2000). American Sign Language and reading ability of deaf children in C. Chamberlain, J.P. Morford & R. I. Mayberry (Eds.) Language acquisition by eye (pp. 165-189). Mahwah, NJ: Lawrence Erlbaum.
- Puig, E. (2013). Teaching to the Core Series [Conference proceedings]. Orlando, FL: University of Central Florida.
- Rasinski, T. (2015). Building the reading foundation: Word knowledge and fluency are keys to comprehension. Secondary Reading Council of Florida. Davie, FL: Secondary Reading Council of Florida.
- Reading Rockets. (n.d.). Paragraph shrinking [Web page]. Retrieved April 10, 2019 from http://www.readingrockets.org/strategies/paragraph_shrinking.
- Schleper, D. R. (1997). Reading to Deaf Children: Learning from Deaf Adults. Washington, DC: Laurent Clerc National Deaf Education Center at Gallaudet University. (ISBN 0-88095-212-1)
- Webb, Norman L. and others. "Web Alignment Tool" 24 July 2005. Wisconsin Center of Educational Research. University of Wisconsin-Madison. 2 Feb. 2006. Wright, D. B. (2003). SQ3R: Method of study. Retrieved October 29, 2011, from http://www.pent.ca.gov/acc/Sq3Rmethodofstudy.pdf.
- Unit 3: Fluency
- Archer, A. L., & Hughes, C. A. (2011). Explicit instruction: Effective and efficient teaching. New York: Guilford press.
- Baer, J., & Osbrink, R. (2015). Developing ASL text in the bilingual classroom. Washington, D.C.: Gallaudet University.
- Easterbrooks, S. & Scheetz, N. 10 Things You Should Know about Reading Fluency in Students who are Deaf and Hard of Hearing (PPT). http://www.deafed.net/PublishedDocs/9Fluency.ppt
- Easterbrooks, S., & Huston, S. (2007). The signed reading fluency of students who are deaf/hard of hearing. Oxford, UK: Oxford University Press.

- Herzig, M., & Malzkuhn, M. (2015). Bilingual storybook apps: An interactive reading experience for children. Washington, D.C.: Gallaudet University.
- Luckner, J. & Urbach, J. (2012). Reading fluency and students who are deaf or hard of hearing: Synthesis of the research. Austin: Hammill Institute on Disabilities.
- Rasinski, T. & Padak, N. (2005). 3-Minute Reading Assessments. New York, NY: Scholastic Inc
- Rasinski, T. V. (2010). The fluent reader: Oral & silent reading strategies for building fluency, word recognition & comprehension. New York: Scholastic.
- Rasinski, T. V. & Griffith, L. (2010). Fluency through practice & performance. New York: Shell Education.
- Rasinski, T. V. (2012). Daily word ladders (grades K-1): 80+ word study activities that target key phonics skills to boost young learners reading, writing & spelling confidence. New York: Scholastic.
- Rasinski, T. V. (2008). Daily word ladders (grades 1-2): 150+ reproducible word study lessons that help kids boost reading, vocabulary, spelling and phonics skills! New York: Scholastic.
- Rasinski, T. V. (2005). Daily word ladders (grades 2-3): 100 reproducible word study lessons that help kids boost reading, vocabulary, spelling & phonics skills independently! New York: Scholastic.
- Rasinski, T. V. (2005). Daily word ladders (grades 4-6): 100 reproducible word study lessons that help kids boost reading, vocabulary, spelling & phonics skills independently! New York: Scholastic.
- Rasinski, T. V. (2015). Why fluency matters. Metairie: Center for Development & Learning.
- Rasinski, T. V. (2012). Why reading fluency should be hot! Medford: Wiley.
- Stone A, Kartheiser G, Hauser PC, PetittoL-A, Allen TE (2015) Fingerspelling as a novel gateway into reading fluency in deaf bilinguals. United Kingdom: Birkbeck College.

https://avenuepm.org/info/slash.html

https://avenuepm.org/info/maze.html

https://avenuepm.org/info/kidspeak.html

TEACHING STUDENTS WITH DISABILITIES FOR PHYSICAL EDUCATION (PDA)

COMPONENT NUMBER: 2-100-025

Function: 2 Focus Area: 100

Local Sequence Number: 025

POINTS TO BE EARNED: 20

DESCRIPTION: Teaching Students with Disabilities for Physical Education was written and developed for physical educators. This component is intended to be completed in its entirety. No partial credit will be granted. Teaching Students with Disabilities for Physical Education provides physical educators information about the foundations of exceptional student education; the provision of services for students with disabilities; and instructional practices that can be used not only for students with disabilities, but with all students.

LINK(S) TO PRIORITY INITIATIVES:

- **⊠**Continuous Improvement practices
- □ Learning environment (as per FEAPS standards)
- ☑ Multi-tiered System of Supports (MTSS)
- ⊠Needs Assessments/Problem Solving supporting improvement planning (SIP, IPDP, DP)
- ⊠ Regulatory or compliance requirements

FLORIDA PD PROTOCOL STANDARDS SUPPORTED BY THIS COMPONENT

	Educator	School	District
Planning	⊠ 1.1.1		⊠ 3.1.3
Learning	☑ 1.2.2, 1.2.3, 1.2.5	☑ 2.2.3, 2.2.5,	☑ 3.2.3, 3.2.5
Implementing	☑ 1.3.1	☑ 2.3.3	⊠ 3.3.3.
Evaluating			

IMPACT AREA(S):

⊠Study leading to deep understanding of the practice (s), standard (s), and/or process(es) targeted

SPECIFIC LEARNER OUTCOMES:

Upon completion of this course, participants will understand or be able to do the following:

- Compare adaptive tools and other technology.
- Compare characteristics of pre-assessment, formative assessment, and summative assessment.
- Describe the eligibility criteria for each of Florida's disability categories.

- Describe the five major federal laws that have impacted the education of students with disabilities.
- Describe the steps that must be included in the exceptional student education process.
- Describe the three levels of support in a multi-tiered system of supports.
- Identify six instructional delivery components that can be used to make instruction more intensive.
- Identify six instructional design components that can be used to make instruction more explicit.
- Identify the guidelines of differentiated instruction used to maximize achievement for all students.
- Identify the principles and guidelines of Universal Design for Learning in order to eliminate barriers to learning.
- Identify things to consider when creating your grading practices.
- Identify tools and strategies that can be used to help students organize, learn, and retain information.
- List the range of placement options when providing services for students with disabilities.
- Provide examples of informal assessments.
- Understand the typical development and characteristics (e.g., language, cognitive-academic, social-emotional, sensory, physical-motor) of children.
- Understand ways to differentiate assignments.

LEARNING PROCEDURES (Methods): B: Electronic, Interactive

WHAT WILL OCCUR DURING THIS PROFESSIONAL DEVELOPMENT COMPONENT DELIVERY?

Participants will complete required – "Check Your Knowledge" activities in each unit of the course. Participants will be required to complete a final post-assessment at the end of the course and must score a minimum of 80% in order to continue to the follow-up options.

Participants are given unlimited trials to achieve an 80% passing rate, with a mandatory wait time of 24 hours between each retake.

HOW WILL THE EXPERIENCES BE PROVIDED TO PARTICIPANTS DURING THE DELIVERY?

The course is offered in a digital online format. Participants are responsible for completing all online learning activities, and for reviewing all course content, including professional articles, videos and websites in the online course environment and as external links.

KEY ISSUES TO BE INCLUDED IN PARTICIPANT IMPLEMENTATION AGREEMENTS:

Participants wanting to earn in-service points are required to complete one of two follow-up activity options in addition to the course content.

IMPLEMENTATION/MONITORING PROCEDURES: S: Electronic, Non-Interactive

Follow-Up Options: Following successful completion of the course, participants must complete one of the follow-up activity options to demonstrate level of competency.

Follow-up Activity (Option 1or 2) - For Certificate of Completion and in-service points:

Option 1 - Instructional Plan

- Identify what is most important for your students to know, understand, and be able to do for a unit of instruction.
- Give a formal pre-assessment that will yield a numerical score and give you information for differentiating your instruction.
- Develop a written instructional plan for a minimum of two weeks. Using information from the course, include specific strategies/techniques that will be integrated to ensure that students with disabilities will achieve the targeted goals of the plan.
- After completing the instruction, give a summative assessment. The assessment should measure the same goal(s) as the pre-assessment and should align with what you identified as most important for students to know, understand, and be able to do.

Option 2 - Written Reflection

Review an IEP of a student with disabilities and write a reflection of at least 600 words on how
the content from Teaching Students with Disabilities for Physical Education course would assist
an educator in meeting the needs of the student and help them to achieve academic success.
 Remember not to identify the student by name in your reflection.

Verification of the completed follow-up activity is required by the participants' supervisor for a district to award 10 in-service points. Each school district or private school agency determines which professional development opportunities satisfy the content requirement for teaching students with disabilities credit (Renewal Credit in Teaching Students with Disabilities DPS 2014-12) for their employees. In-service points are awarded by the school districts through their Professional Learning Catalog (PLC), formally Master Inservice Plan (MIP). Those outside of a school district should follow the process set up by their agency.

IMPACT EVALUATION PROCEDURES: A: Changes in instructional or learning environment practices implemented in the classroom or directly with students (observed or measured impact on educator proficiency thru the district's instructional or school leader evaluation system indicators, components, and/or domains, and/or deliberate practice or IPDP/ILDP growth targets, and/or district or school level processes for tracking student progress.

Evaluation Methods for Staff Code: A-Changes in Instructional Practice, F-Changes in Observed Educator Proficiency

Evaluation Methods for Students Code: D-Observation of Student Performance

Who will use the evaluation impact data gathered?

Florida Diagnostic and Learning Resources System (FDLRS), Professional Learning and Development, and the Florida Department of Education will review the impact of the evaluation data gathered in the

course's required participant satisfaction survey. Results are reviewed by FDLRS and shared with the Office of Professional Learning and Development.

At the classroom level, individual educators will use the impact data to assess the level of student mastery of objectives and to determine the effectiveness of their instruction. Impact data will also inform decisions with regard to needed additional professional learning based upon reflective opportunities.

PROCEDURES FOR USE OF THE COMPONENT'S EVALUATION FINDINGS:

What other forms of evaluation data will be gathered:

a. What evaluation data addresses value of the PD design?

To evaluate the value of the PD design presented, an immediate evaluation form is either distributed or accessed electronically.

When appropriate to use, the NEFEC Professional Learning Evaluation includes a self-assessment of knowledge, a rating of facilitator quality, and commentary. The results of the evaluation are reviewed by the presenter, NEFEC instructional staff, and district stakeholders. This information is used as a metric in the NEFEC internal evaluation system.

Other evaluation data may be gathered and used as deemed appropriate by the school or district.

b. What evaluation data addresses quality of implementation of the PD?

To evaluate the quality of implementation of the professional development and student use of strategies, academic coaches, teacher support colleagues, and/or school administrators will conduct informal observations. Quality of professional development is also addressed by the following:

Discussion board entries, when relevant

Quality of participation in the NEFEC Professional Learning Support, when appropriate Alignment and quality of student artifacts that participants submit in tiered level of support Quality of instruction that teachers demonstrate

Development of implementation plan, reflection, journal entries, logs, surveys, and/or lesson plans

c. Who will use these aspects of PD evaluation data?

NEFEC, school-based, and/or district level stakeholders will examine evaluation data to determine the success of the PD. In addition, all stakeholders will review the results of state and district-developed assessments to evaluate the impact data. These stakeholders include school and district leaders, academic coaches, and educators. Stakeholders will adjust programs according to implementation feedback.

Spring 2019

Departments: FDLRS, Professional Learning and Development, NEFEC

REFERENCES:

- 6A-6.03028: Provision of Free Appropriate Public Education (FAPE) and Development of Individual Educational Plans for Students with Disabilities Florida Administrative Rules, Law, Code, Register FAC, FAW, eRulemaking. (n.d.). Retrieved from https://www.flrules.org/gateway/ruleNo.asp?ID=6A-6.03028
- 6A-6.0331: General Education Intervention Procedures, Identification, Evaluation, Reevaluation and the Initial Provision of Exceptional Education Services Florida Administrative Rules, Law, Code, Register FAC, FAW, eRulemaking. (n.d.). Retrieved from https://www.flrules.org/gateway/ruleNo.asp?ID=6A-6.0331
- 6 Major principles of IDEA. (n.d.). Retrieved from http://quizlet.com/1113877/6-major-principles-of-idea-flash-cards/
- 10 Basic Steps in Special Education. (n.d.). *National Dissemination Center for Children with Disabilities* (NICHCY). Retrieved from http://nichcy.org/schoolage/steps
- Archer, A., Hughes, C. (2011) Explicit instruction: effective and efficient teaching. New York, NY: The Guilford Press.
- Beech, M. (2012). Developing quality individual educational plans: A guide for instructional personnel and families (3rd ed.). Tallahassee, FL: Florida Department of Education.
- Bender, W. (2002). Differentiated Instruction Using Technology. Thousand Oaks, CA: Corwin Press.
- Benjamin, A. (2002). *Differentiated Instruction: A Guide for Middle and High School Teachers*. Larchmont, NY: Eye on Education, Inc.
- Benjamin, A. (2005). *Differentiated Instruction: Using Technology*. Larchmont, NY: Eye on Education, Inc.
- Black, P., & William, D. (2001). *Inside the Black Box: raising standards through classroom assessment.*London: School of Education, King's College London.
- Black, P., Harrison, C., Lee, C. S., Marshall, B., & William, D. (2004). *The Nature and Value of Formative Assessment for Learning*. London: King's College School of Education.
- Black, P. J., Harrison, C., Lee, C., Marshall, B., & William, D. (2003). Assessment for Learning: putting it into practice. New York: Open University Press.
- Brookhart, S. M. (2007). Feedback that Fits. Educational Leadership, 65(4).
- Brookhart, S. M. (2008). How to Give Effective Feedback to Your Students. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD).
- Brookhart, S. M. (2009). Exploring Formative Assessment. Alexandria, VA: ASCD.
- Brookhart, S. M. (2009). Feed Up, Back, Forward. Educational Leadership, 67(3).
- Categories of disabilities under IDEA. (n.d.). National Dissemination Center for Children with Disabilities (NICHCY). Retrieved from http://nichcy.org/disability/categories
- Carnine, D., Silbert, J., Kame'enui, E. & Tarver, S. (2009). *Direct Instruction Reading (5th ed.). Upper Saddle River, NJ*: Pearson Merrill Prentice Hall.
- Carnine, D., Silbert, J., Kame'enui, E. (2006). *Teaching Struggling and At-risk Readers: A direct instruction approach*. Upper Saddle River, New Jersey: Pearson Education.
- Center for Applied Special Technology. (n.d.). *Universal Design for Learning (UDL) Guidelines* Version 2.0. Retrieved from http://www.udlcenter.org/aboutudl/udlguidelines/downloads
- Child Development Basics. (n.d.). *Child Development Institute*. Retrieved from http://childdevelopmentinfo.com/child-development.shtml

- Clarification of consent and evaluation requirements when determining eligibility for special education. (n.d.). Retrieved from http://www.florida-rti.org/ docs/ConsentEvaluationRequirements.pdf
- Considering LRE in Placement Decisions. (n.d.). *National Dissemination Center for Children with Disabilities*. Retrieved from http://nichcy.org/schoolage/placement/placement-lre
- Contents of the IEP. (n.d.). *National Dissemination Center for Children with Disabilities (NICHCY)*. Retrieved from http://nichcy.org/schoolage/iep/iepcontents
- Developmental milestones. (n.d.). *National Dissemination Center for Children with Disabilities* (NICHCY). Retrieved from http://nichcy.org/disability/milestones
- Early childhood. (n.d.). Retrieved from http://www.brightfutures.org/bf2/pdf/pdf/EC.pdf
- Edyburn, D.L. (2005). Universal Design for Learning. Special Education Technology Practice, 7 (5), 16-22.
- Evaluating Children for Disability. (n.d.). *National Dissemination Center for Children with Disabilities* (NICHCY). Retrieved from http://nichcy.org/schoolage/evaluation
- ESE Program Development and Services. (n.d.). *Florida Department of Education*. Retrieved from http://www.fldoe.org/ese/ese-home.asp
- Florida Department of Education. (n.d.). *Accommodations for Florida's Statewide Student Assessments*. (n.d.). Retrieved from http://www.fldoe.org/core/fileparse.php/7690/urlt/0070069-accommeducator.pdf
- Florida Department of Education. (n.d.). Florida Course Code Directory. Retrieved from http://www.fldoe.org/articulation/CCD/1314.asp
- Florida Department of Education. (n.d.). *Legislative History of Florida's ESE Program*. Retrieved from http://www.fldoe.org/core/fileparse.php/7690/urlt/0070081-dha-resource2010.pdf
- Florida Department of Education. (n.d.). *FL/DOE Inclusion Brief*. Retrieved from http://www.fldoe.org/core/fileparse.php/7690/urlt/0070123-clu-brief.pdf
- Florida Department of Education. (2007). *Mediation in Special Education* [Brochure]. FL: Author. Retrieved from http://www.fldoe.org/core/fileparse.php/7690/urlt/0070129-mediate.pdf
- Florida Department of Education. (n.d.). *Notice of Procedural Safeguards for Parents of Students with Disabilities.* Retrieved from http://www.fldoe.org/core/fileparse.php/7690/urlt/0070135-procedural.pdf
- Florida Department of Education. (2013). Florida Statutes and State Board of Education Rules Excerpts for Special Programs. Retrieved from http://fldoe.org/core/fileparse.php/7567/urlt/1BTOC.PDF
- Florida Department of Education. (n.d.). Special Programs and Procedures for Exceptional Students.

 Retrieved from http://beess.fcim.org/sppDistrictDocSearch.aspx
- Florida Department of Education. (n.d.). *Technical Assistance Paper: The Family Educational Rights and Privacy Act (FERPA).* Retrieved from http://www.fldoe.org/ese/tap-home.asp
- Florida Department of Education. (n.d.). *Technical Assistance Paper: General education intervention procedures, child find, and the initial provision of exceptional education services to eligible students*. Retrieved from http://www.fldoe.org/ese/tap-home.asp
- Forsten, C., Grant, J., & Hollas, B. (2003). *Differentiating Textbooks*. Peterborough, NH: Crystal Springs Books.
- Forsten, C., Grant, J., & Hollas, B. (2002). Differentiated Instruction: Different strategies for different learners. Peterborough, NH: Crystal Springs Books.
- Gibson, V., Hasbrouck, J. (2008) *Differentiated Instruction: Grouping for success.* Hightstown, NJ: McGraw-Hill Higher Education.

- Gregory, G. (2003). Differentiated Instructional Strategies in Practice. Thousand Oaks, CA: Corwin Press.
- Hall, T., Vue, G., Strangman, N., & Meyer, A. (2003). Differentiated instruction and implications for UDL implementation. Wakefield, MA: National Center on Accessing the General Curriculum. (Links updated 2014). Retrieved October 2015 from
 - http://aem.cast.org/about/publications/2003/ncac-differentiated-instruction-udl.html
- Hall, T., & Vue, G. (2002). Explicit Instruction. Wakefield, MA: National Center on Accessing the General Curriculum. (Links updated 2014). Retrieved October 2015 from http://aem.cast.org/about/publications/2002/ncac-explicit-instruction.html
- Heward, W. L. (2009). Exceptional Children: An introduction to special education. Upper Saddle River, NJ: Merrill/Pearson.
- How a Child Develops Develop Skills. (n.d.). Retrieved from http://www.howkidsdevelop.com/developSkills.html
- Howell, K., & Nolet, V. (2000). *Curriculum-based Evaluation Teaching and Decision-making*. Belmont, CA: Wadsworth/Thomson Learning.
- IDEA The Individuals with Disabilities Education Act (n.d.). National Dissemination Center for Children with Disabilities (NICHCY). Retrieved from http://nichcy.org/laws/idea
- Individuals with Disabilities Education Improvement Act of 2004 and IDEA Regulations of 2006, Implications for Educators, Administrators, and Teacher Trainers, (2006). Focus on Exceptional Children, 39(1), 1-24.
- Individualized Education Program (IEP) Changes in Initial Evaluation and Reevaluation [Video]. (n.d.).

 Retrieved from
 - http://idea.ed.gov/explore/view/p/%2Croot%2Cdynamic%2CVideoClips%2C6%2C
- Kame'enui, E., Carnine, D. & Coyne, M. (2010). Effective Teaching Strategies That Accommodate Diverse Learners (4th ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall.
- Karger, J. (2005). Access to the general curriculum for students with disabilities: A discussion of the interrelationship between IDEA '04 and NCLB. Wakefield, MA: National Center on Accessing the General Curriculum. Retrieved October 2015 from http://aem.cast.org/about/publications/2005/ncac-curriculum-access-idea04-nclb.html
- Language Development in Children. (n.d.). Retrieved from http://www.childdevelopmentinfo.com/development/language_development.shtml
- Male, M. (2003). *Technology for Inclusion: meeting the special needs of all students.* San Jose State University: Pearson Education Group, Inc.
- Marzano, R. J. (2010). Formative assessment and standards-based grading. Bloomington, IN: Solution Tree.
- Marzano, R. J., Pickering, D., & Pollock, J. E. (2001). Classroom Instruction that Works: Research-based strategies for increasing student achievement. Alexandria, VA: ASCD.
- Marzano, R., Pickering, D., Heflebower, T. (2011) *The Highly Engaged Classroom*. Bloomington, IN: Marzano Research Laboratory.
- Multiple Disabilities in Your Classroom: 10 Tips for teachers. (n.d.). National Dissemination Center for Children with Disabilities (NICHCY). Retrieved from http://nichcy.org/multiple-disabilities-in-your-classroom
- Multiple Disabilities. (n.d.). National Dissemination Center for Children with Disabilities (NICHCY).

 Retrieved from http://nichcy.org/disability/specific/multiple

- Multi-Tiered System of Supports (MTSS) and the IDEA Child Find Requirements: *How to ensure compliance with the RtI culture.* (n.d.). Retrieved from http://www.florida-rti.org/docs/Follow-up to AMM 2011.pdf
- NCLB | The No Child Left Behind Act. (n.d.). *National Dissemination Center for Children with Disabilities* (NICHCY). Retrieved from http://nichcy.org/laws/nclb
- Placement, short-and-sweet. (n.d.). *National Dissemination Center for Children with Disabilities* (NICHCY). Retrieved from http://nichcy.org/schoolage/placement/overview
- Popham, W. J. (2008). Transformative Assessment. Alexandria, VA: ASCD.
- Questions and answers about IDEA: Purposes and key definitions. (n.d.). National Dissemination Center for Children with Disabilities (NICHCY). Retrieved from http://www.nichcy.org/InformationResources/Documents
- Resolving disputes between parents and schools. (n.d.). *National Dissemination Center for Children with Disabilities(NICHCY)*. Retrieved from http://nichcy.org/schoolage/disputes
- Section 504 of the Rehabilitation Act of 1973. (n.d.). *National Dissemination Center for Children with Disabilities (NICHCY)*. Retrieved from http://nichcy.org/laws/section504
- Six Major Principles of IDEA | Education.com. (n.d.). An Education & Child Development Site for Parents, Parenting & Educational Resource. Retrieved from http://www.education.com/reference/article/six-major-principles-idea/
- Special Education Caselaw Law Library Wrightslaw. (n.d.). Wrightslaw Special Education Law and Advocacy. Retrieved from http://www.wrightslaw.com/caselaw.htm
- Specific Disabilities. (n.d.). *National Dissemination Center for Children with Disabilities (NICHCY).*Retrieved from http://nichcy.org/disability/specific
- Sprenger, M. (2003). *Differentiation Through Learning Styles and Memory*. Thousand Oaks, CA: Corwin Press.
- Stiggins, R., & Chappuis, J. (2006). What a Difference a Word Makes: Assessment for learning rather than assessment of learning helps students succeed. Journal of Staff Development, 27(1).
- The Individuals with Disabilities Education Improvement Act of 2004 | Education.com. (n.d.). An Education & Child Development Site for Parents, Parenting & Educational Resource. Retrieved from http://www.education.com/reference/article/individuals-disabilities-education/
- The short-and-sweet IEP overview. (n.d.). *National Dissemination Center for Children with Disabilities* (NICHCY). Retrieved from http://nichcy.org/schoolage/iep/overview
- The IEP team, short and sweet. (n.d.). *National Dissemination Center for Children with Disabilities* (NICHCY). Retrieved from http://nichcy.org/schoolage/iep/team
- The whole child ABCs of child development. (n.d.). *PBS: Public Broadcasting Service*. Retrieved from http://www.pbs.org/wholechild/abc/index.html
- Tomlinson, C., & Eidson, C. (2003). *Differentiation in Practice*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Tomlinson, C. A. (2008). *Learning to Love Assessment*. Educational Leadership, 65(4), informative assessment, 8-13.
- Tomlinson, C. (2001). How to Differentiate Instruction in Mixed Ability Classrooms. Alexandria, VA: Association for Supervision and Curriculum Development.
- Typical Speech and Language Development. (n.d.). Retrieved from http://www.asha.org/public/speech/development/default.htm

- U.S., Department of Education. (n.d.). Archived: History of the IDEA: Thirty Years of Progress in Educating Children with Disabilities Through IDEA. Retrieved from http://www2.ed.gov/policy/speced/leg/idea/history30.html
- U.S., Department of Education. (n.d.). "Individualized Education Program (IEP)" in Building the Legacy: Idea 2004. Retrieved from http://idea.ed.gov/explore/view/p/,root,dynamic,TopicalBrief,10,
- U.S., Department of Education. (n.d.). "Individualized Education Program (IEP) Team Meetings and Changes to the IEP" in Building the Legacy: IDEA 2004. Retrieved from http://idea.ed.gov/explore/view/p/%2Croot%
- U.S., Department of Education. (n.d.). *Archived: History of the IDEA*. Retrieved from http://www.ed.gov/policy/speced/leg/idea/history.html
- U.S., Department of Education. (n.d.). Questions and Answers on Individualized Education Programs (IEPs), Evaluations and Reevaluations. Retrieved from http://idea.ed.gov/explore/view/p/%2Croot%2Cdynamic%2CQaCorner%2C3%2C)
- What is inclusion? (n.d.). Retrieved from http://www.floridainclusionnetwork.com/cue-cards/
- When the IEP team meets. (n.d.). *National Dissemination Center for Children with Disabilities (NICHCY)*. Retrieved from http://nichcy.org/schoolage/iep/meetings

MATH DIFFICULTIES, DISABILITIES AND DYSCALCULIA (PDA)

COMPONENT NUMBER: 2-100-026

Function: 2 Focus Area: 100

Local Sequence Number: 026

POINTS TO BE EARNED: 7

DESCRIPTION: Developed by the Personnel Development Support Project at the Florida Center for Interactive Media, in partnership with the Florida Department of Education as an online learning experience. This course is designed to provide participants with a better understanding of the characteristics of student mathematics challenges and the related instructional needs. It includes information intended to build the background knowledge and growth mindset of participants, so they are able to better meet the needs of students who face challenges with mastery in mathematics.

LINK(S) TO PRIORITY INITIATIVES:

- ☑ Instructional leadership (as per FPLS standards)
- ☑ Learning environment (as per FEAPS standards)
- ☑ Mastery of a specific instructional practice
- ☑ Multi-tiered System of Supports (MTSS)
- ☑ Needs Assessments/Problem Solving supporting improvement planning (SIP, IPDP, DP)

FLORIDA PD PROTOCOL STANDARDS SUPPORTED BY THIS COMPONENT

	Educator	School	District
Planning	⊠ 1.1.1		⊠ 3.1.3
Learning	☑ 1.2.3, 1.2.5	☑ 2.2.3, 2.2.5,	⊠ 3.2.3, 3.2.5
Implementing	☑ 1.3.1, 1.3.3	☑ 2.3.3	⊠ 3.3.3.
Evaluating			

IMPACT AREA(S):

⊠Study leading to deep understanding of the practice (s), standard (s), and/or process(es) targeted

SPECIFIC LEARNER OUTCOMES:

Upon completion of this course, participants will understand or be able to do the following:

- Define the terminology commonly associated with math difficulties and disabilities
- Identify the characteristics of dyscalculia
- Recognize the language and neurobiological basis of a math disability
- Summarize current research on dyscalculia
- Recognize instructional best practices that will support students in math facing challenges

- Define the terminology commonly associated with math difficulties and disabilities
- Identify the characteristics of dyscalculia
- Recognize the language and neurobiological basis of a math disability
- Summarize current research on dyscalculia
- Recognize instructional best practices that will support students in math facing challenges
- Define the terminology commonly associated with math difficulties and disabilities
- Identify the characteristics of dyscalculia
- Recognize the language and neurobiological basis of a math disability
- Summarize current research on dyscalculia
- Recognize instructional best practices that will support students in math facing challenges
- Describe the three elements of the CRA approach
- Explain some practices and strategies of instruction that are supported by utilizing the CRA approach
- Describe the three elements of the CRA approach
- Explain some practices and strategies of instruction that are supported by utilizing the CRA approach

LEARNING PROCEDURES (METHODS): B: ELECTRONIC, INTERACTIVE

WHAT WILL OCCUR DURING THIS PROFESSIONAL DEVELOPMENT COMPONENT DELIVERY?

Participants will be responsible to completing a thorough review of all course content. Through independent study, they will complete a pre assessment, review web sites and professional articles, identify key terms, complete interactive quizzes and Teacher Toolkit reflection activities, view any included videos, and pass a final assessment with at least 80% accuracy.

HOW WILL THE EXPERIENCES BE PROVIDED TO PARTICIPANTS DURING THE DELIVERY?

The course is offered in a digital online format. Participants are responsible for completing all online learning activities, and for reviewing all course content, including relevant professional articles, videos and websites in the online course environment and as external links. As they work through the course participants will also complete Your Turn activities designed to assist them in the reflection and application of specific concepts provided in the course. Other activities include the thorough review of selected resources and related activities.

KEY ISSUES TO BE INCLUDED IN PARTICIPANT IMPLEMENTATION AGREEMENTS:

Participants must complete a pre-assessment, review all unit content and any included videos, participate in any embedded activities, and pass a final assessment with at least 80% accuracy. They must have a commitment to completion of the Your Turn activities and a follow-up implementation activity designed as an application of course objectives.

IMPLEMENTATION/MONITORING PROCEDURES: S: ELECTRONIC, NON-INTERACTIVE

Participants completing this component will be required to complete the follow-up activity option designed as an application of the knowledge gained. In this course, there are three options. For the

follow-up activity, participants may choose to participate in a professional learning community (PLC) with fellow educators in the school/district, participate in a PLC with fellow math leaders in the school/district or present what is learned in the course to a group of colleagues.

Verification of completion of the follow-up activity by the participants' supervisor is required in order for a district to award the suggested in-service points. Follow-up activity information that can be used by the supervisor to ascertain successful completion of the activity is provided to the participant. The provided verification form must be uploaded into the course system as documentation before the participant can access a Certificate of Completion. This certificate, and any other information required by the district, may be presented to the district for potential in-service credits.

IMPACT EVALUATION PROCEDURES: A: Changes in instructional or learning environment practices implemented in the classroom or directly with students (observed or measured impact on educator proficiency thru the district's instructional or school leader evaluation system indicators, components, and/or domains, and/or deliberate practice or IPDP/ILDP growth targets, and/or district or school level processes for tracking student progress.

Evaluation Methods for Staff Code: A-Changes in Instructional Practice, F-Changes in Observed Educator Proficiency

Evaluation Methods for Students Code: D-Observation of Student Performance

Who will use the evaluation impact data gathered?

Florida Diagnostic and Learning Resources System (FDLRS), Professional Learning and Development, and the Florida Department of Education will review the impact of the evaluation data gathered in the course's required participant satisfaction survey. Results are reviewed by FDLRS and shared with the Office of Professional Learning and Development.

At the classroom level, individual educators will use the impact data to assess the level of student mastery of objectives and to determine the effectiveness of their instruction. Impact data will also inform decisions with regard to needed additional professional learning based upon reflective opportunities.

PROCEDURES FOR USE OF THE COMPONENT'S EVALUATION FINDINGS:

WHAT OTHER FORMS OF EVALUATION DATA WILL BE GATHERED:

a. What evaluation data addresses value of the PD design?

To evaluate the value of the PD design presented, an immediate evaluation form is either distributed or accessed electronically.

When appropriate to use, the NEFEC Professional Learning Evaluation includes a self-assessment of knowledge, a rating of facilitator quality, and commentary. The results of the evaluation are reviewed by the presenter, NEFEC instructional staff, and district stakeholders. This information is used as a metric in the NEFEC internal evaluation system.

Other evaluation data may be gathered and used as deemed appropriate by the school or district.

b. What evaluation data addresses quality of implementation of the PD?

To evaluate the quality of implementation of the professional development and student use of strategies, academic coaches, teacher support colleagues, and/or school administrators will conduct informal observations. Quality of professional development is also addressed by the following:

Discussion board entries, when relevant

Quality of participation in the NEFEC Professional Learning Support, when appropriate Alignment and quality of student artifacts that participants submit in tiered level of support Quality of instruction that teachers demonstrate

Development of implementation plan, reflection, journal entries, logs, surveys, and/or lesson plans

c. Who will use these aspects of PD evaluation data?

NEFEC, school-based, and/or district level stakeholders will examine evaluation data to determine the success of the PD. In addition, all stakeholders will review the results of state and district-developed assessments to evaluate the impact data. These stakeholders include school and district leaders, academic coaches, and educators. Stakeholders will adjust programs according to implementation feedback.

Spring 2020

Departments: FDLRS, Professional Learning and Development, NEFEC

References

- Allsopp, D., McHatton, P.A., Estock, S.N., & Farmer, J.L. (2010). Mathematics RTI: A problem-solving approach to creating an effective model. Five Anchors for Differentiating Tiered Instruction in Mathematics. *LD Association of Ontario*
- American Psychiatric Association. (2013). Anxiety Disorders. In Diagnostic and statistical manual of mental disorders (5th ed.). https://doi.org/10.1176/appi.books.9780890425596.dsm05
- Ball, D.L. (2003). Mathematical proficiency for all students: Toward a strategic research and development program in mathematics education. https://www.rand.org/pubs/monograph_reports/MR1643.html.
- Cunningham, B. (2019). What's the difference between RtI and MTSS? Understood.

 https://www.understood.org/en/school-learning/special-services/rti/whats-the-difference-between-rti-and-mtss
- Foundations for Success: The Final Report of the National Mathematics Advisory Panel, U.S. Department of Education: Washington, DC, 2008.
- Garnett, K. (1998). Math learning disabilities. Division for Learning Disabilities Journal of CEC.
- Geary, D.C. (2013). Early foundations for mathematics learning and their relations to learning disabilities. *Curr. Dir. Psychol. Sci.* (22). 23–27.
- Geary, D.C., Hoard, M. K., Nugent, L., & Bailey, D. H. (2012). Mathematical Cognition Deficits in Children with Learning Disabilities and Persistent Low Achievement: A Five Year Prospective Study. *Journal of Educational Psychology*, 104, 206-223.
- Mazzocco, M. M., & Thompson, R. E. (2005). Kindergarten predictors of math learning disability. Learning Disabilities Research & Practice, 20(3), 142-155.
- Nation's Report Card, Math. National Assessment of Educational Progress (NAEP). 2017.
- NCTM. (2000). The National Council of Teachers of Mathematics (NCTM) Principles and Standards for School Mathematics. p.12.
- NCTM: Research Clips, Principles to Actions. https://www.nctm.org/Research-and-Advocacy/Research-and-Advocac
- Public Law 114-95 (Dec. 10, 2015). https://www.congress.gov/114/plaws/publ95/PLAW-114publ95.pdf
 Rourke, B. P. (2001). Neuropsychological and psychosocial subtyping: A review of investigations within the University of Windsor laboratory. Canadian Psychology/Psychologie Canadienne, 41(1), 34.
- Sharma, M. (1997). Improving mathematics instruction for all. Fourth Lecture in Colloquium "Improving Schools from Within: Your Role. P 2-12.
- Soares, N, Evans, T., and Patel, D.R. Translational Pediatrics. Specific learning disability in mathematics: A comprehensive review. 2018 Jan; 7(1): 48-62
- State Board of Education Rule 6A-6.03018. https://www.flrules.org/gateway/ruleNo.asp?id=6A-6.03018. <a href="https://www.flrules.org/gateway/rules.org/gateway/rules.org/gateway/rules.org/gateway/rules.org/gateway/rules.org/gateway/rules.org/gateway/rules.org/gateway/rules.org/gateway/rules.org/gat
- The Every Student Succeeds Act (ESSA) Section 8101 (21)(A)

COMPUTER SCIENCE EDUCATOR CERTIFICATION PREP

COMPONENT NUMBER: 3-003-001

Function: 3 – Integration/Digital Learning Support

Focus Area: 003 – Computer Science/Technology Education

Local Sequence Number: 001

POINTS TO BE EARNED: MAXIMUM 60

DESCRIPTION: This course will prepare teachers K-12 to take and pass the Florida Teacher Certification Exam (FTCE) for the Computer Science (CS) K-12 subject area. Additionally, this professional development will provide certified educators in other content areas the core knowledge and pedagogical skills to teach CS both in the content course and as a stand-alone course. Teachers will be highly-qualified in their core area PLUS computer science.

LINKS TO PRIORITY INITIATIVES

- ☑Continuous Improvement practices
- ☑ Digital Learning/Technology Infusion
- Mastery of a specific instructional practice: Computer Science

FLORIDA PD PROTOCOL STANDARDS SUPPORTED BY THIS COMPONENT

	Educator	School	District
Planning	☑ 1.1.1	⊠ 2.1.1	⊠ 3.1.5
Learning	☑ 1.2.2, 1.2.5	⊠ 2.2.5	⊠ 3.2.5
Implementing	☑ 1.3.1, 1.3.3	☑ 2.3.1, 2.3.3	⊠ 3.3.3
Evaluating	☑ 1.4.2	☑ 2.4.2	⊠ 3.4.5

IMPACT AREA(S):

Study leading to deep understanding of the practice(s), standard(s), and/or process(es) targeted

SPECIFIC LEARNER OUTCOMES:

Educators will:

Competency 1—Knowledge of computational thinking and problem solving

- 1. Analyze a problem and apply appropriate solution strategies.
- 2. Apply the steps of algorithmic problem solving when designing solutions to problems.
- 3. Apply the stages of the software development life cycle (i.e., problem definition, analysis, design, testing, implementation, maintenance).
- 4. Determine and select an appropriate algorithm for a given problem.
- 5. Predict outputs of algorithms for a given input.
- 6. Identify an appropriate set of data necessary for testing a computer solution.

Competency 2—Knowledge of data types and structures

- 1. Distinguish between constants and variables and between local and global identifiers.
- 2. Distinguish between integer, real number, character, string, Boolean, and object data types.

- 3. Recognize and convert between binary, decimal, and hexadecimal number systems.
- 4. Identify characteristics and uses of data structures, including arrays, linked lists, stacks, queues, and sets.
- 5. Distinguish between instance, class, and local variables in an object-oriented design.
- 6. Identify components of class declarations for an object-oriented program and distinguish between public and private access specifiers.

Competency 3—Knowledge of programming logic

- 1. Distinguish between error types (e.g., syntax, runtime, logic) and apply principles of debugging.
- 2. Identify principles, characteristics, and uses of internal and external program documentation.
- 3. Analyze the characteristics and functions of object-oriented and procedural languages.
- 4. Select the appropriate algorithmic sequence, conditional, iteration, and recursive constructs for a given purpose.
- 5. Analyze characteristics and applications of searching (i.e., sequential, binary) and sorting (i.e., selection, insertion, merge) algorithms.
- 6. Analyze the characteristics and applications of propositional logic (e.g., De Morgan's laws).

Competency 4—Knowledge of programming languages

- 1. Identify characteristics and apply concepts of the Scratch^{™1} programming language learning environment from the MIT Media Library.
- 2. Analyze segments of Java®2 code containing sequential, conditional, or iteration statements.
- 3. Analyze segments of Java® code involving methods, interacting objects, or passing parameters.
- 4. Apply principles of data types and data manipulation (e.g., string methods, arithmetic operations) in the Java® programming language.
- 5. Apply principles of abstraction, encapsulation, inheritance, and polymorphism in the Java® programming language.

Competency 5—Knowledge of computer hardware, software, and networking

- 1. Identify the hardware components of a computer system and their functions (e.g., input, output, processing, storage).
- Analyze the advantages, disadvantages, or both of various data storage technologies.
- 3. Identify the characteristics and uses of various types of software (e.g., system, application).
- 4. Apply features and functions of application and productivity software (e.g., word processing, spreadsheet, database, multimedia authoring, Web development software).
- 5. Identify concepts and terminology related to networks (e.g., network protocols, Open Systems Interconnection model, client-server, cloud computing).
- 6. Identify characteristics and uses of network devices (e.g., servers, routers, switches, access points, workstations).

Competency 6—Knowledge of the historical aspects and social issues related to computer technologies

1. Identify examples of appropriate use (e.g., software license types, archival copying, fair use of copyrighted materials) and misuse (e.g., plagiarism, music and video piracy) of intellectual property.

- 2. Identify milestones in the historical development of computer technology and important contributions of individuals or groups to the development of computer technology.
- 3. Analyze cultural, legal, and ethical issues and responsibilities of digital citizens, organizations, and government entities (e.g., privacy issues related to Internet use, data protection).
- 4. Analyze issues related to malicious software, social engineering, and security awareness.
- 5. Identify concepts and terminology related to security countermeasures (e.g., firewalls, antivirus programs, filtering software, encryption) that prevent, detect, and correct breaches.
- 6. Analyze security issues related to maintaining the confidentiality, integrity, and availability of information.

Competency 7—Knowledge of computer science pedagogy

- Apply appropriate and effective classroom management strategies for teaching computer science (e.g., laboratory work, cooperative learning, electronic communications).
- Apply appropriate and effective instructional strategies for teaching computer science (e.g., independent learning, case studies, role-playing, manipulatives, visualizations, simulations, modeling, team software development).
- 3. Apply appropriate and effective formative and summative assessment strategies for teaching computer science (e.g., rubrics, portfolios).
- 4. Apply appropriate and effective accommodations, adaptations, and strategies that ensure the equitable use of technology for diverse student populations (e.g., students with exceptionalities, English language learners, students from various socioeconomic levels).
- 5. Determine characteristics and apply uses of instructional technologies (e.g., collaborative online tools, social networking, computer-based learning, mobile devices).
- 6. Recognize opportunities, skills, and paths related to college and career readiness in the field of computer science.
- 7. Apply practices for planning and developing curricula that meet state and national standards and recognize resources for ongoing professional support and development.

LEARNING PROCEDURES (METHODS):

Participants will be engaged in one or more of the following types of professional learning activities. **Learning Methods Code:** A-Knowledge Acquisition, B-Electronic Interactive, C-Electronic Non-Interactive, D-Learning Community, H-Implementation of High Effect Practices, I-Job Embedded Training, J-Deliberate Practice

WHAT WILL OCCUR DURING THIS PROFESSIONAL DEVELOPMENT COMPONENT DELIVERY?

Educators will:

- Participate in discussions based on instructor's presentation
- Discuss and apply research-based practices
- Engage in research for web-based resources
- Create collaborative learning activities
- Utilize collaborative practices within various contexts

Engage in activities that use interactive technology

HOW WILL THE EXPERIENCES BE PROVIDED TO PARTICIPANTS DURING THE DELIVERY?

Blended content delivery, as appropriate

KEY ISSUES TO BE INCLUDED IN PARTICIPANT IMPLEMENTATION AGREEMENTS:

Educators will participation in an online learning community in which participants will share student work, reflect on implementation, discuss challenges, and share best practices.

IMPLEMENTATION/MONITORING PROCEDURES

Implementation/Monitoring Code: M-Structured Coaching/Mentoring, O-Collaborative Planning, P-Participant Product, R-Electronic (interactive), S-Electronic (non-interactive)

Implementation Support: Information gathered from meeting minutes and threaded discussion forums will be reviewed and analyzed to determine what organizational supports are required for successful implementation.

Monitoring Procedures: Structured coaching support provides ongoing feedback to participants; feedback reports on implementation are shared with administrators; participation and implementation progress is shared with district personnel.

IMPACT EVALUATION PROCEDURES: A: Changes in instructional or learning environment practices implemented in the classroom or directly with students (observed or measured impact on educator proficiency thru the district's instructional or school leader evaluation system indicators, components, and/or domains, and/or deliberate practice or IPDP/ILDP growth targets, and/or district or school level processes for tracking student progress.

Evaluation Methods for Staff Code: A-Changes in Instructional Practice, B-Changes in instructional leadership or faculty development practices, C-Changes in student services/support practices, D-Other changes in practice supporting effective implementation of job responsibilities

Evaluation Methods for Students Code: D-Observation of Student Performance, F-Other Performance Assessment

WHO WILL USE THE EVALUATION IMPACT DATA GATHERED?

At the classroom level, individual educators will use the impact data to assess the level of student mastery of objectives and to determine the effectiveness of their instruction. Impact data will also inform decisions with regard to needed additional professional learning based upon reflective opportunities.

Through school and district instituted support of data reflection, all stakeholders will review the results of state and district-developed assessments to evaluate the impact data. These stakeholders include school and district leaders, teacher support colleagues, academic coaches, and educators.

PROCEDURES FOR USE OF THE COMPONENT'S EVALUATION FINDINGS:

(describe what will be done with the data obtained through the evaluation processes)

WHAT OTHER FORMS OF EVALUATION DATA WILL BE GATHERED:

WHAT EVALUATION DATA ADDRESSES VALUE OF THE PD DESIGN?

To evaluate the value of the PD design presented, an immediate evaluation form is either distributed or accessed electronically.

When appropriate to use, the NEFEC Professional Learning Evaluation includes a self-assessment of knowledge, a rating of facilitator quality, and commentary. The results of the evaluation are reviewed by the presenter, NEFEC instructional staff, and district stakeholders. This information is used as a metric in the NEFEC internal evaluation system.

Other evaluation data may be gathered and used as deemed appropriate by the school or district.

WHAT EVALUATION DATA ADDRESSES QUALITY OF IMPLEMENTATION OF THE PD?

During the professional learning sessions, participants will be observed to verify the quality and fidelity of delivery. Additionally, discussion boards will be monitored to address participant needs and instruction will be modified, if necessary, to assure the participants are mastering the content and pedagogy skills presented. Data gathered from the online professional learning feedback form will be analyzed and used to inform instruction for future delivery of the course.

Teacher success in passing the Florida Computer Science K 1/4 12 Subject area Certification Exam aspects and social issues related to computer technologies:

- 1. Competency
- 2. Knowledge of computer science pedagogy
- 3. Learn to incorporate CT/CS in other disciplines, especially in their primary educator certification area.
- 4. Apply CT to their teaching practice

Quality of professional development is also addressed by the following:

- Discussion board entries, when relevant
- Alignment and quality of student artifacts that participants submit in tiered level of support
- Quality of instruction that teachers demonstrate
- Development of implementation plan, reflection, journal entries, logs, surveys, and/or lesson plans

WHO WILL USE THESE ASPECTS OF PD EVALUATION DATA?

NEFEC, school-based, and/or district level stakeholders will examine evaluation data to determine the success of the PD. In addition, all stakeholders will review the results of state and district-developed assessments to evaluate the impact data. These stakeholders include school and district leaders, academic coaches, and educators. Stakeholders will adjust programs according to implementation feedback.

Developed by NEFEC Spring 2020