



National Alliance of Specialized Instructional Support Personnel Effective Specialized Instructional Support Services

RESEARCH BRIEF

The mission of the National Alliance of Specialized Instructional Support Personnel (NASISP) is to ensure all students have the supports, services and skills necessary to succeed in school and life.

NASISP is a coalition of national professional organizations whose members provide and support a variety of school-based prevention and intervention services to assist students in becoming effective learners and productive citizens. NASISP organizations represent more than one million members, including school counselors, school nurses, psychologists, school psychologists, social workers and school social workers; occupational therapists, physical therapists, art therapists, dance/movement therapists, and music therapists; speech-language pathologists; audiologists; teachers, students, parents, and administrators. NASISP promotes interdisciplinary practice and cooperation, and advocates for ensuring access to quality specialized instructional support services (i.e., pupil services and related services under ESEA and IDEA, respectively) for all students.

Specialized Instructional Support Personnel Perform Critical Tasks in Schools

- Supporting effective teaching and improved student learning and facilitating collaboration among school staff, families, and the community
- Providing a variety of prevention and intervention services in schools that promote effective classroom learning and teaching
- Working with teachers and administrators to develop a positive school climate, improving classroom management skills, providing behavioral interventions to reduce discipline infractions, improving school safety, and removing barriers to learning
- Providing educational programs and activities that support student learning and teaching, including consultation with teachers and families, assessments linked to instruction, individual and group counseling, problem-solving instruction, and remedial interventions
- Collaborating with teachers and school staff to ensure students receive high quality instruction responsive to the diverse and developmental needs of all students, creating a continuum of support services for all students, and providing various instructional strategies to facilitate learning in all classrooms
- Participating, as members of the school team, in professional development to ensure high quality learning
- Fostering collaboration not only between general and special education, but also between community and schools and schools and parents

Art Therapy Services

Art therapy services in the school setting can be tailored to support academic and social/emotional requirements. Students in individual art therapy may work toward improved cognitive growth, emotional control, the mastery of sensory-motor skills, and positive adjustment to the classroom experience. School art therapy services have been successfully used to facilitate students' ability to function as effectively as possible within the academic environment.

- ❖ **Art therapy services implemented for students in a ninth-grade English classroom of an urban high school were successful in reducing drop-out rates, decreasing school failure, and improving students' attitudes about school, family, and self.**
 - Rosal, M., McCulloch-Vislisis, S., & Neese, S. (1997). Keeping students in school: An art therapy program to benefit ninth grade students. *Art Therapy: Journal of the American Art Therapy Association*, 14, 30-36.
- ❖ **A 12-year-old female whose academic performance decreased after her parents divorced received art therapy treatment, which focused on problem solving and self-concept. Art therapy was found to be a useful school-based intervention, as results indicated a notable increase in both self-concept and academic performance.**
 - Pleasant-Metcalf, A., & Rosal, M. (1997). The use of art therapy to improve academic performance. *Art Therapy: Journal of the American Art Therapy Association*, 14, 23-29.
- ❖ **Twenty-five elementary school children who were victims of the Los Angeles earthquake in 1994 received art therapy services, which were instrumental in accessing the children's internal processes and helping them return to normal functioning.**
 - Roje, J. (1995). LA earthquake in the eyes of children: Art therapy with elementary school children who were victims of disaster. *Art Therapy: Journal of the American Art Therapy Association*, 12, 237-243.
- ❖ **Art therapy treatment implemented with two boys who had similar classroom behavior disorders was found to be effective in altering locus of control and in improving behavior.**
 - Rosal, M. (1993). Comparative group art therapy research to evaluate changes in locus of control in behavior disordered children. *The Arts in Psychotherapy*, 20, 231-241.
- ❖ **Pregnant adolescent females from economically and socially disadvantaged environments participated in a comprehensive treatment program enhanced by art therapy, which provided them with opportunities for positive self-growth.**
 - Stiles, G., & Mermer-Welly, M. (1998). Children having children: Art therapy in a community-based early adolescent pregnancy program. *Art Therapy: Journal of the American Art Therapy Association*, 15, 165-176.

❖ **A group of university professors helped graduate art therapy students and special education students facilitate the total educational, emotional, and physical development of the children in their classes.**

- Bloomgarden, J., & Schwartz, D. (1997). Creative art therapy/ Special education in higher education: Toward an interdisciplinary model. *Art Therapy: Journal of the American Art Therapy Association, 14*, 279-281.

Dance/Movement Therapy Services

Since 1974 Dance/movement therapists have provided services to children in regular and special education classes in schools and agencies across the country. Dance/movement therapy is used to enhance learning, improve physical skills, and address emotional and social difficulties through the nonverbal medium. Increasing these aspects of a child's development assists children to take full advantage of the learning environment. Research supports the unique contribution of Dance/movement therapy to children, families, and teachers.

❖ **Dance/movement therapy techniques utilized to foster parenting skills resulted in positive changes in awareness of nonverbal interaction, increased quality of interactions, and increased coping skills to aid in infant-parent conflict.**

- Murphy, J. (1998). Nonverbal interventions with infants and their peers. *American Journal of Dance Therapy, 20*, 37-54.

❖ **Dance/movement therapy sessions were integrated into the curriculum of children in regular and special education classes after a successful pilot project in Madison, WI. Reduction of violence and better resolution of conflict assisted children to feel safe and secure.**

- Kornblum, R. (2000). *Disarming the playground: Violence prevention through movement and pro-social skills*. Bethany, OK: Woods & Barnes Publishing.

❖ **An eight-year research project describes the use of measuring progress of child development through the use of this movement profile.**

- Amighi, J. K., Loman, S., Lewis, P., & Sossin, K. M. (1999). *The meaning of movement: developmental and clinical perspectives of the Kestenberg Movement Profile*. New York: Bruner-Routledge.

❖ **Successful measurement of educational progress of children in a multi-cultural setting.**

- Wengrower, H. (2001). Arts therapies in educational settings: An intercultural encounter. *The Arts in Psychotherapy, 28*, 109-115.

Music Therapy Services

Music Therapy is an established health profession in which music is used to address physical, emotional, cognitive, behavioral and/or social functioning. Music therapy can facilitate development in communication and sensorimotor skills, promote learning and skill acquisition, stimulate attention, and increase motivation to participate more fully in other aspects of the educational setting. Recognized as a related service, music therapy serves as an integral component in helping the child with special needs attain educational goals identified by his/her IEP team, either through direct or consultant services.

❖ **Music therapy for children with autism spectrum disorders engages and fosters their capacity for flexibility, creativity, variability and tolerance of change, creating a balance with the more structured and behaviorally driven education required in school settings. Music therapy interventions are an effective method for increasing joint attention skills.**

- Gold, C., Wigram, T., & Cochavit, E. (2006). Music therapy for autistic spectrum disorder. *Cochrane Database of Systematic Reviews*, 2.
- Reitman, M. R., Lim, N., Roca, C., & Padilla, A. (2005). Effectiveness of music therapy interventions on joint attention in children diagnosed with autism: A pilot study. Retrieved from <http://www.cadenzacenter.com/APA%20Poster.pdf>
- Wigram, T. (2002). Indications in music therapy. *British Journal of Music Therapy*, 16, 11-28.

❖ **Research demonstrates the efficacy of music used in the curriculum to enhance literacy skills. Musical cueing is effective to improve word recognition, logo identification, print concepts and prewriting skills of children in early intervention programs. Shared reading paired with song rehearsal of text facilitates greater text accuracy than spoken rehearsal with kindergarten students.**

- Colwell, C. M. (1994). Therapeutic applications of music in the whole language kindergarten. *Journal of Music Therapy*, 31, 238-247.
- Register, D. (2001). The effects of an early intervention music curriculum on pre-reading/writing. *Journal of Music Therapy*, 38, 239-248.
- Standley, J., & Hughes, J. (1997). Evaluation of an early intervention music curriculum for enhancing pre-reading/writing skills. *Music Therapy Perspectives*, 15, 79-86.

- ❖ **Selected verbal language and speech skills are enhanced through music activities in special education populations. Musical presentation of new vocabulary words results in an increased number of words learned and transferred in elementary school-age children. Music is effective as a prompt and reinforcer to increase verbal response in preschool-age children with limited verbal communication.**
 - Braithwaite, M., & Sigafoos, J. (1998). Effects of social versus musical antecedents on communication responsiveness in five children with developmental disabilities. *Journal of Music Therapy, 35*, 88-104.
 - Buday, E. M. (1995). The effects of signed and spoken words taught with music on sign and speech imitation by children with autism. *Journal of Music Therapy, 32*, 189-202.
- ❖ **An overall positive direction is noted in meta-analytic reviews of the literature on the subject of music therapy and autism in terms of an array of outcomes related to both therapeutic and specific educational goals.**
 - Standley, J. M. (1996). A meta-analysis on the effects of music as reinforcement for education/therapy objectives. *Journal of Research in Music Education, 44*, 105-133.
 - Whipple, J. (2004). Music in intervention for children and adolescents with autism: A meta-analysis. *Journal of Music Therapy, 41*, 90-106.
- ❖ **Music-facilitated interactions and structured instrument playing are effective techniques for improving social skills and problem solving skills in school-age populations.**
 - Bryan, T., Sullivan-Burstein, K., & Mathur, S. (1998). The influence of affect on social-information processing. *Journal of Learning Disabilities, 31*, 418-426.
 - Kern, P., Wolery, M., & Aldridge, D. (2007). Use of songs to promote independence in morning greeting routines for young children with autism. *Journal of Autism and Developmental Disorders, 37*, 1264-1271.
 - Ulfarsdottir, L., & Erwin, P. (1999). The influence of music on social cognitive skills. *The Arts in Psychotherapy, 26*, 81-84.
- ❖ **Research supports the use of music to structure and organize information in order to increase learning and retention of number concepts. Sequential verbal information, such as telephone numbers and multiplication tables, set to melodic and rhythmic patterns are more effectively memorized and recalled than through non-music presentation.**
 - Claussen, D., & Thaut, M. (1997). Music as a mnemonic device for children with learning disabilities. *Canadian Journal of Music Therapy, 5*, 55-66.
 - Peterson, D. A., Thaut, M. H., Sena, K. M., O'Shea, G., & McIntosh, G. C. (2005). Music modulates neural network synchronizations in verbal learning. *Proceedings of the Society for Neuroscience, 192*, 20.
 - Thaut, M. H., Peterson, D. A., & McIntosh, G. C. (2005). Temporal entrainment of cognitive function: Musical mnemonics induce brain plasticity and oscillatory synchrony in neural networks underlying memory. *Annals of the New York Academy of Sciences, 1060*, 243-254.

Occupational Therapy Services

School-based occupational therapy focuses on helping students engage in important learning activities, or “occupations,” needed to participate successfully in school activities and routines. Services include evaluation and assessment, intervention, prevention, and health and wellness promotion, and address students’ underlying motor, process and communication/interaction skills and their impact on performance. Occupational therapists work with students individually and in small groups and consult with parents, teachers and other school personnel to help raise student achievement and school success.

❖ A variety of occupational therapy interventions may improve children’s handwriting skills.

- Case-Smith, J. (2002). Effectiveness of school-based occupational therapy intervention on handwriting. *American Journal of Occupational Therapy, 56*, 17–25.
- Mackay, N., McCluskey, A., & Mayes, R. (2010). The Log Handwriting Program improved children’s writing legibility: A pretest–posttest study. *American Journal of Occupational Therapy, 64*, 30–36.
- Ratzon, N. Z., Efraim, D., & Bart, O. (2007). A short-term graphomotor program for improving writing readiness skills of first-grade students. *American Journal of Occupational Therapy, 61*, 399–405.
- Weintraub, N., Yinon, M., Hirsch, I., & Parush, S. (2009). Effectiveness of sensorimotor and task-oriented handwriting intervention in elementary school-aged students with handwriting difficulties. *OTJR: Occupation, Participation & Health, 29*, 125-134.

❖ Occupational therapists have unique skills valuable to transition planning, particularly in areas of daily living skills, work, and leisure, and community participation.

- Kardos, M., & White, B. P. (2005). The role of the school-based occupational therapist in secondary education transition planning: A pilot survey. *American Journal of Occupational Therapy, 59*, 173–180.
- Kardos, M. R., & White, B. P. (2006). Evaluation options for secondary transition planning. *American Journal of Occupational Therapy, 60*, 333–339.
- Michaels, C. A., & Orentlicher, M. L. (2004). The role of occupational therapy in providing person-centered transition services: Implications for school-based practice. *Occupational Therapy International, 11*, 209-228.

❖ Interventions using sensory integration strategies can be effective in reducing behaviors that interfere with function and participation.

- Hall, L., & Case-Smith, J. (2007). The effect of sound-based intervention on children with sensory processing disorders and visual–motor delays. *American Journal of Occupational Therapy, 61*, 209–215.
- Miller, L. J., Coll, J. R., & Schoen, S. A. (2007). A randomized controlled pilot study of the effectiveness of occupational therapy for children with sensory modulation disorder. *American Journal of Occupational Therapy, 61*, 228–238.

- Smith, S. A., Press, B., Koenig, K. P., & Kinnealey, M. (2005). Effects of sensory integration intervention on self-stimulating and self-injurious behaviors. *American Journal of Occupational Therapy, 59*, 418–425.
- ❖ **Occupational therapy treatment can help improve children’s visual-motor skills.**
- Dankert, H. L., Davies, P. L., & Gavin, W. J. (2003). Occupational therapy effects on visual-motor skills in preschool children. *American Journal of Occupational Therapy, 57*, 542–549.
 - Gomi, C. F., Taras, H. & Granet, D. B. (2007). Can occupational therapy improve vision skills associated with reading/writing? *Journal of AAPOS, 11*, 79.
- ❖ **Occupational Therapy interventions can be beneficial to children with and without disabilities.**
- Bazyk, S., Michaud, P., Goodman, G., Papp, P., Hawkins, E., & Welch, M. A. (2009). Integrating occupational therapy services in a kindergarten curriculum: A look at the outcomes. *American Journal of Occupational Therapy, 63*, 160–171.
 - Bundy, A. C., Luckett, T., Naughton, G. A., Tranter, P. J., Wyver, S. R., Ragen, J. . . . Spies, G. (2008). Playful interaction: Occupational therapy for all children on the school playground. *American Journal of Occupational Therapy, 62*, 522–527.
- ❖ **Occupational therapists’ knowledge of and skill with the psychosocial and social participation needs of people position them to be critical members of the team for addressing the mental health needs of children in school settings.**
- Barnes, K. J., Vogel, K. A., Beck, A. J., Schoenfeld, H. B., & Owen, S. V. (2008). Self-regulation strategies of children with emotional disturbance. *Physical & Occupational Therapy in Pediatrics, 28*, 369-387.
 - Chu, S. & Reynolds, F. (2007) Occupational therapy for children with attention deficit hyperactivity disorder (ADHD), part 2: A multicentre evaluation of an assessment and treatment package. *British Journal of Occupational Therapy, 70*, 439-448.
 - Milliken, B., Goodman, G., Bazyk, S., & Flinn, S. (2007). Establishing a case for occupational therapy in meeting the needs of children with grief issues in school-based settings. *Occupational Therapy in Mental Health, 23*, 75-100.

School Psychological Services

School psychologists provide services to children, adolescents, families, and school staff by drawing on their expertise in the science and practice of both psychology and education. They provide a range of psychological services including assessment; intervention; prevention; crisis preparation and response; individual, group, and family counseling; teacher consultation; health promotion, and program development and evaluation., Their special focus is the developmental processes of children and youth within the context of schools, families, and other systems.

- ❖ **School psychologists work with students, their families, and school staff to support the development of students’ social, emotional, and behavioral health skills, and research has shown that such interventions help students achieve better academically in school.**

- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*, 405-432.
 - Fleming, C. B., Haggerty, K. P., Brown, E. C., Catalano, R. F., Harachi, T. W., Mazza, J. J., & Gruman, D. H. (2005). Do social and behavioral characteristics targeted by preventive interventions predict standardized test scores and grades? *Journal of School Health, 75*, 342-349.
 - Zins, J. E., Bloodworth, M. R., Weissberg, R. P., & Walberg, H. J. (2004). The scientific base linking social and emotional learning to school success. In J. Zins, R. Weissberg, M. Wang, & H. J. Walberg (Eds.), *Building academic success on social and emotional learning: What does the research say?* (pp. 3–22). New York: Teachers College Press.
- ❖ **School psychologists work with parents to encourage effective parenting and discipline strategies, and there is substantial research evidence for the effectiveness of interventions designed to prevent the development of aggressive and antisocial behavior and related problems.**
- National Research Council and Institute of Medicine. (2009). *Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities*. Washington, DC: The National Academies Press.
- ❖ **School psychologists provide services via school-based early childhood programs, and such services for low-income children are associated with a wide range of positive outcomes, including higher rates of school completion, higher levels of educational attainment, lower rates of depressive symptoms, and lower rates of felony arrests in adulthood.**
- Reynolds, A. J., Temple, J. A., Ou, S.-R., Robertson, D. L., Mersky, J. P., Topitzes, J. W., & Niles, M. D. (2007). Effects of a school-based, early childhood intervention on adult health and well-being. *Archives of Pediatrics & Adolescent Medicine, 161*, 730-739.
- ❖ **School psychologists work to design and implement comprehensive school mental health programs, and such programs in elementary schools have been found to reduce special education referrals; improve aspects of the school climate; and reduce conduct disordered behavior, attention deficit/hyperactivity, and depression among children with severe emotional and behavioral problems.**
- Bruns, E. J., Walrath, C., Glass-Siegel, M., & Weist, M. D. (2004). School-based mental health services in Baltimore: Association with school climate and special education referrals. *Behavior Modification, 28*, 491-512.
 - Hussey, D. L., & Guo, S. (2003). Measuring behavior change in young children receiving intensive school-based mental health services. *Journal of Community Psychology, 31*, 629-639
- ❖ **School psychologists provide consultation for other educators, and evidence has shown that such practices help remediate academic and behavior problems for children; change teacher's and parent's behavior, knowledge, attitudes, and perceptions; and reduce referrals for psycho-educational assessments.**

- Rosenfield, S., Silva, A., & Gravois, T. (2008). Bringing instructional consultation to scale: Research and development of IC and IC teams. In W. Erchul & S. Sheridan (Eds.), *Handbook of research in school consultation: Empirical foundations for the field* (pp. 203–223). New York: Erlbaum.
- Watkins, M. W., Crosby, E. G., & Pearson, J. L. (2007). Role of the school psychologist: Perceptions of school staff. *School Psychology International, 22*, 64–73.
- MacLeod, I. R., Jones, K. M., Somer, C. L., & Havey, J. M. (2001). An evaluation of the effectiveness of school-based behavioral consultation. *Journal of Educational and Psychological Consultation, 12*, 203-216.

❖ **School psychologists work with students and their families to enhance home–school collaboration, and research has demonstrated the power of such partnerships to positively impact children’s school success and their general well-being into adulthood.**

- Reynolds, A. J., Temple, J. A., Ou, S.-R., Robertson, D. L., Mersky, J. P., Topitzes, J. W., & Niles, M. D. (2007). Effects of a school-based, early childhood intervention on adult health and well-being. *Archives of Pediatrics & Adolescent Medicine, 161*, 730–739.
- Christenson, S. L. (2004). The family–school partnership: An opportunity to promote the learning competence of all students. *School Psychology Review, 33*, 83–104.

❖ **School psychologists work with teachers and administrators to create classroom environments and school climates that are conducive to learning, and research has shown that improving school climate is associated with increases in student performance in reading, writing, and mathematics, both in low- and high-performing schools.**

- Spier, E., Cai, C., & Osher, D. (2007, December). *School climate and connectedness and student achievement in the Anchorage School District*. Unpublished report, American Institutes for Research.
- Spier, E., Cai, C., Osher, D., & Kendziora, D. (2007, September). *School climate and connectedness and student achievement in 11 Alaska school districts*. Unpublished report, American Institutes for Research.

School Counseling Services

Professional school counselors develop comprehensive school counseling programs that promote and enhance student learning, utilize data to improve program implementation and identify students in need, and ensure all students are college/career-ready. Above all, school counselors are student advocates who work cooperatively with other individuals and organizations to promote the development of children, youth, and families in their communities. School counselors, as members of the educational team, consult and collaborate with teachers, administrators, and families to assist students to be successful academically, vocationally, and personally.

- ❖ **Comprehensive school counseling programs serve as a “central contributing factor to student academic success,” and also positively impact school safety and post-secondary outcomes.**
 - Lapan, R. T., Gysbers, N. C., & Petroski, G. F. (2001). Helping seventh graders be safe and successful: A statewide study of the impact of comprehensive guidance and counseling programs. *Journal of Counseling and Development, 79*, 320-330.
 - Lapan, R. T. Gysbers, N. C., & Sun, Y. (1997). The impact of more fully implemented guidance programs on the school experiences of students: A statewide evaluation study. *Journal of Counseling and Development, 75*, 292-302.
 - Otwell, P. S., & Mullis, F. (1997). Academic achievement and counselor accountability. *Elementary School Guidance and Counseling, 31*, 343-348.

- ❖ **Elementary school students do better on both national tests of academic knowledge and on state tests of academic achievement when there is a comprehensive developmental school counseling program in their school.**
 - Sink, C. A. & Stroh, H. R. (2003). Raising achievement test scores of early elementary school students through comprehensive school counseling programs. *Professional School Counseling, 6*, 350-364.

- ❖ **School-based programs designed to decrease students' aggressive behavior show considerable success in impacting behaviors, related feelings of safety, and disciplinary events.**
 - Wilson, S. J., Lipsey, M. W., & Derzon, J. H. (2003). The effects of school-based intervention programs on aggressive behavior: A meta-analysis. *Journal of Consulting and Clinical Psychology, 71*, 136-149.

- ❖ **School counseling practices improve social skills of students, particularly those who are at risk. Social skills training also has a positive effect on children with learning disabilities.**
 - Whiston, S. C., & Sexton, T. L. (1998). A review of school counseling outcome research: Implications for practice. *Journal of Counseling and Development, 76*, 412-425.

- ❖ **Students who participate in career development curriculum show significantly more understanding of career possibilities, more future orientation, and greater self-efficacy and increased school engagement.**
 - Dimmitt, C. (2007). *The Real Game evaluation results*. Washington, DC: America's Career Resource Network.
 - Lapan, R. T., Gysbers, N. C. Hughey, K. & Arni, T. J. (1993). Evaluating a guidance and language arts unit for high school juniors. *Journal of Counseling and Development, 71*, 444-451.

- ❖ **Career development strategies that are implemented by school counselors serve to prevent school drop out.**

- Herring, R. D. (1998). *Career counseling in schools: Multicultural and developmental perspectives*. Alexandria, VA: American Counseling Association.
- ❖ **School counselors play a significant role in the career planning of high school students. Studies show that career planning interventions by school counselors have a positive effect on students' career development/career plans and that services are effective for a wide range of students, including children with learning disabilities and minorities.**
 - Whiston, S. C., & Sexton, T. L. (1998). A review of school counseling outcome research: Implications for practice. *Journal of Counseling and Development, 76*, 412-425.
- ❖ **Career development programs and interventions by school counselors have been found to have a positive effect on the career goals, career planning skills, and attendance of students.**
 - Herring, R. D. (1998). *Career counseling in schools: Multicultural and developmental perspectives*. Alexandria, VA: American Counseling Association.
- ❖ **Career development programs promote student academic achievement, career development, and more supportive school climates.**
 - Herring, R. D. (1998). *Career counseling in schools: Multicultural and developmental perspectives*. Alexandria, VA: American Counseling Association.
- ❖ **School counselors can help students develop a “college mindset” to consider post-high school education options.**
 - Fallon (1997). The school counselor's role in first generations students' college plans. *The School Counselor, 44*, 384-393.
- ❖ **School counselors are also instrumental in the school to work transition.**
 - Blustein, D., Phillips, S., Jobin-Davis, K., Finkelberg, S., & Roarke, A. (1997). A theory-building investigation of the school-to-work transition. *The Counseling Psychologist, 25*, 364-402.

School Social Work Services

School social workers provide direct mental health services to students, including one to one counseling, group work, classroom presentations, crisis intervention, and assessment. School social workers work as part of a multidisciplinary team in providing special education services and determining eligibility for special education and related services. They work closely with other school personnel and consult with individual teachers and groups of teachers on issues related to behavior management, classroom management, and special concerns about individual students.

- ❖ **School social workers help schools adopt, implement, and evaluate positive behavior support and response to intervention initiatives.**

- Frey, A. J., Park, K. Ferrigno, T. & Korfhage, T. (2010). The social validity of program-wide positive behavior support. *Journal of Positive Behavior Supports and Interventions*, 12, 222-235.
- Frey, A., Lingo, A., & Nelson, C. M. (2010). Positive behavior support and response to intervention in elementary schools. In M. K. Shinn & H. Walker (Eds.), *Interventions for achievement and behavior problems III: Preventive and remedial approaches* (pp. 397-434). Bethesda, MD: National Association for School Psychologists.
- Frey, A. (2009). Positive behavior supports and interventions in early childhood education. *National Head Start Association Dialog*, 12, 71-74.
- Frey, A. J., Boyce, C. A., & Tarullo, L. B. (2009). Implementing positive behavior support in Head Start. In W. Sailor, G. Dunlap, G. Sugai & H. F. Horner (Eds.), *Handbook of positive behavior support: Special issues in clinical child psychology* (pp.125-148). New York: Springer.
- Frey, A., Young, S., Gold, A., & Trevor, E. (2008). Utilizing positive behavior support to achieve integrated mental health services. *National Head Start Association Dialog*, 11, 135-156.
- Frey, A.J., Faith, T., Elliott, A., & Royer, B. (2006). Evaluation of a positive behavior support model within Head Start. *School Social Work Journal*, 30, 22-44.

❖ **School social workers embrace evidence-based practice.**

- Kelly, M. S., Raines, J. C., Stone, S. & Frey, A. (2010). *School social work: An evidence-informed framework for practice*. New York: Oxford University Press.

❖ **School social workers help students succeed in school by increasing the connection between the student's family and school personnel. Family outreach and case management services provided by school social workers are associated with positive academic progress for students in school.**

- Bowen, N. K. (1999). A role for school social workers in promoting student success through school-family partnerships. *Social Work in Education*, 21, p 34-47.

❖ **School social work services can be cost effective in the reduction of problem behaviors and school exclusion. School social workers initiate programs to improve children's social development and reduce challenging behaviors.**

- Bagley, C. & Pritchard, C. (1998). The reduction of problem behaviors and school exclusion in at-risk youth: An experimental study of school social work with cost-benefit analyses. *Child and Family Social Work*, 3, 219-226.
- Butcher, D. A. (1999). Enhancing social skills through school social work interventions during recess: Gender differences. *Social Work in Education*, 21, 249-262.
- De Anda, D. (1999). Project peace: The evaluation of a skill-based violence prevention program for high school adolescents. *Social Work in Education*, 21, 137-147.
- Diehl, D., & Frey, A. J. (2008). Evaluation of a community-school social work model. *School Social Work Journal*, 32, 1-20.
- Frey, A. (2008). Mental health services in Head Start. *National Head Start Association Dialog*, 11, 173-186.
- Frey, A. J. (2001). Educational placement for children with behavioral and/or emotional disorders: Overlooked variables contributing to placements in restrictive settings. *Journal of School Social Work*, 11, 51-66.

- Frey, A. J., & Nichols, N. G. (2003). Intervention practices for children with emotional or behavioral disorders: Using research to inform school social work practice. *Children & Schools, 25*, 97-104.
- Whitfield, Gary (1999). Validating school social work: An evaluation of a cognitive-behavioral approach to reduce school violence. *Research on Social Work Practice, 9*, 399-246.
- Woody, D. (2001). A Comprehensive School-Based Conflict-Resolution Model. *Children in Schools, 23*, 115-119.

❖ **School social workers address school policy issues.**

- Antle, B., Frey, A. J., Barbee, A., Frey, Grisham-Brown, J., Cox, M & Frey, S. (2008). Child care subsidy and program quality revisited. *Early Education and Development, 19*, 560-573.
- Frey, A. & Wilson. M. (2009). The reintegration of public schools. *Children & Schools, 31*, 79-86.
- Frey, A. J. (2002). Predictors of placement recommendations for children with emotional or behavioral disorders. *Behavioral Disorders, 27*, 126-136.
- Frey, A. J., Lingo, A., & Nelson, C.M. (2008). Positive behavior support. A call for leadership. *Children & Schools, 30*, 5-14.
- Frey, A. J. & Walker, H. M. (2005). Education policy for children, youth, and families. In J. M. Jenson & M. W. Fraser (Eds.), *Social policy for children & families: A risk and resilience perspective* (pp. 67-92). Thousand Oaks, CA: Sage Publications.

❖ **The presence of a school social worker at Individual Family Service Plan meetings resulted in more family assessment and family-centered data on the Individual Family Service Plan.**

- Sabatino, C. A. (2001). Family-centered sections of the IFSP and school social work participation. *Children & Schools, 23*, 241-252.

School Nurse Services

School nurses are extensions of the public health system and a vital component of the care of children with chronic health conditions and disabilities. School nurses provide risk management of student health and safety; health promotion and disease prevention; episodic care of student illness and injury; and case management related to chronic health conditions and academic access. A significant proportion of health care in the United States is provided daily in schools. Many of the children school nurses see are not served by the traditional health care system. School nurses connect students to CHIP, and families to Medicaid. They help many of the school children who live every day in the margins of society to connect to a medical home. Often times, the school nurse provides the only health care accessible to some school aged children.

❖ **School nurses influence attendance, which influences achievement and graduation rates.**

- Repeated studies have identified that school nurses reduce absenteeism (Maughan, 2003.) and the literature shows a higher nurse-to-student ratio is related to better attendance rates (Pennington & Delaney, 2008).
- African- American students with asthma in schools with full time school nurses, missed significantly fewer school days than children in school with part time nurses (Telljohann, Dake, & Price, 2004).

- School nurses are significantly less likely to dismiss a student from school early than non-licensed personnel (Pennington & Delaney, 2008; Wyman, 2005).
- ❖ **Through case management of chronic illness, school nurses play a pivotal role in the health and well-being of children and contribute to improved health and education outcomes.**
 - School nurses case management of asthma resulted in significantly more students with needed medication at school (Taras, Wright, Brennan, Campana & Lofgren, 2004) and fewer exacerbations resulting in visits to the school nurse office (Erickson, Splett, Mullett, Jensen, Belseth, 2006; Splett, Erickson, Belseth, & Jensen, 2006).
 - School nurses caring for children with diabetes resulted in better monitoring of blood glucose levels and a lower A1c and were more likely to detect low blood glucose levels (Nguyen, Mason, Sanders, Yazdani, & Hetulla, 2008).
- ❖ **School nurses are an essential arm of public health promoting wellness and preventing injury.**
 - Registered nurses in schools are correlated with increasing immunization rates (Ferson, MJ, Fitzsimmons, G, Christie, D, & Woollett, H, 1995; Salmon et al., 2005).
 - Salmon et al. (2005) found parents were significantly less likely to request an exemption from immunizations than school personnel without health care training. Unlicensed school personnel were unaware of the seriousness of vaccine-preventable diseases, as well as the susceptibility of the unimmunized children (Salmon et al., 2004).
- ❖ **School nurses are among the specialized instructional support services personnel beneficial to the mental health of students.**
 - School nurses spend 32% of their time providing mental health services (SAMHSA, 2005).

Speech-Language Pathology Services

Speech-language pathologists provide services for students with speech, language, and swallowing disorders and provide services to students with other disabilities such as learning disabilities, autism, cerebral palsy, and mental retardation/developmental disabilities. Other important roles for speech-language pathologists involve collaborating with teachers to develop and provide intervention strategies to enhance literacy skills and intervention to improve social communication skills for all students.

- ❖ **Teachers and parents recognize the benefits of speech-language pathology services.**
- ❖ **Speech-language pathology services are an important determinant of students' eventual communicative functioning.**
- ❖ **Caseload characteristics appear to play a role in influencing student outcomes. Larger caseloads limit the range of service delivery options.**
 - American Speech-Language-Hearing Association. (2000). National data report 1999–2000: National Outcomes Measurement System. Rockville, MD: Author.
 - Russ, S., Chiang, B., Rylance, B., & Bongers, J. (2001). Caseload in special education: An integration of research findings. *Exceptional Children*, 67, 161–172.

❖ **Research supports a link between instructional group size and student engagement for students with moderate disabilities.**

- American Speech-Language-Hearing Association. (2002). A workload analysis approach for establishing speech-language caseload standards in the schools (technical report). Rockville, MD: Author.
- Algozzine, B., Hendrickson, J., Gable, R., & White, R. (1993). Caseloads of teachers of students with behavioral disorders. *Behavioral Disorders, 18*, 103–109.
- Thurlow, M., Ysseldyke, J., Wotruba, J., & Algozzine, B. (1993). Instruction in special education classrooms under varying student-teacher ratios. *Elementary School Journal, 93*, 305–321).

❖ **A relationship exists between instructional group size and academic achievement.**

- Algozzine, B., Hendrickson, J., Gable, R., & White, R. (1993). Caseloads of teachers of students with behavioral disorders. *Behavioral Disorders, 18*, 103–109.
- Gottlieb, J., & Alter, M. (1997). An evaluation study of the impact of modifying instructional group sizes in resource rooms and related service groups in New York City. New York: New York University. (ERIC Document Reproduction Service No. ED 414 373).
- Thurlow, M., Ysseldyke, J., Wotruba, J., & Algozzine, B. (1993). Instruction in special education classrooms under varying student-teacher ratios. *Elementary School Journal, 93*, 305–321).

❖ **Evidence suggests that students served in smaller instructional groups have improved performance and achievement. Smaller size instructional groups allow more opportunities to practice verbal communication. Communication skills appear to be positively influenced by small treatment group size.**

- American Speech-Language-Hearing Association. (2002). A workload analysis approach for establishing speech-language caseload standards in the schools (technical report). Rockville, MD: Author.
- McCabe, J., Jenkins, J., Mills, P., Dale, P., Cole, K., & Pepler, L. (1996). Effects of play group variables on language use by preschool children with disabilities. *Journal of Early Intervention, 20*, 329–340.

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